# Infoblox

# Infoblox REST API

NIOS 8.6

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# Introduction

The Infoblox WAPI is an interface based on REST (REpresentational State Transfer), also called a RESTful web API. These are not dependent on any programming language.

It uses HTTP methods for operations and supports input and output in JSON and XML. It supports the primary or most-commonly-used HTTP verbs: POST, GET, PUT, and DELETE. These correspond to create, read, update, and delete (or CRUD) operations, respectively.

All API calls are encrypted using SSL/TLS and authenticated using HTTP basic authentication.

## General Syntax and Options

All WAPI requests consist of three parts: URL, Arguments and Data (body).

**URL**

The first part of the URL consists of the host IP address (or FQDN) to which all the calls will be directed. The second part of the URL identifies the requests as a WAPI request and specifies the expected version of WAPI.

The URL syntax is *<grid_IP>wapi/v<major.minor>*, e.g. x.x.x.x/wapi/v2.4/.
If you need to use a patch release, you can specify it as vx.x.x (like v2.6.1).
The current version of the API is **2.12**.

The Infoblox WAPI has a versioning scheme that is independent of the NIOS versioning scheme. A current WAPI version is backward compatible with WAPI releases that have the same major WAPI version or with designated earlier major versions.

The last part of the URL identifies the resource, such as a network, on which the request operates.

**Arguments**

Query arguments (after '?') can be used to specify general options and method specific options and data for the request. All options start with the character _ (underscore).

The general options are *_schema, _return_type, _return_fields* and *_method*.

With version 2.11, *_inheritance* is introduced. If this option is set to True, fields which support inheritance, will display data properly.

**Data (Body)**

Contains data that is dependent on the method. Only, PUT, and POST methods can have a Body on input. All methods have Body on output.

**Example**

GET https://172.26.1.2/wapi/v2.9/networkview?_return_type=xml-pretty&name=default

Grid Master IP address    Version    Resource          Arguments

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## Object Reference

Every WAPI Object is referenced by a unique Object Reference. WAPI returns this reference when an object is created, modified, deleted or read. This reference is used to identify the object for the same operations.

An object reference is a string with the following format, without spaces:

*wapitype* **/** *refdata* [ **:** *name1* [ { **/** *nameN* }... ] ]

**Example**

networkview/ZG5zLm5ldHdvcmtfdmlldyQw:default

| wapitype | refdata | name |

## Documentation

For more information, you can navigate to the WAPI documentation available at https://<grid_IP>/wapidoc

You can also find more information in the under NIOS in the Tech Docs section.

| NIOS | Online | PDF<br><br>**Note:** If your browser does not properly render the PDF, refresh the browser. |
| --- | --- | --- |
| **NIOS 8.6 Documentation** | | |
| NIOS 8.6 Documentation (includes Administrator, CLI, and CSV Reference guides) | HTML | PDF Adobe |
| WAPI Documentation (RESTful API) | Online version is available through Grid Manager | PDF Adobe |
| NetMRI 7.4.5 NIOS 8.5.2 Device Support List | HTML | PDF Adobe |
| **NIOS 8.5 Documentation** | | |
| NIOS 8.5 Documentation (includes Administrator, CLI, and CSV Reference guides) | HTML | PDF Adobe |
| WAPI Documentation (RESTful API) | Online version is available through Grid Manager | PDF Adobe |

# Common scenarios

This section will cover the most common scenarios that you may encounter in your day-to-day activities while working with the Infoblox grid.

***Please note that this document will cover the most common use cases. It will not cover all the APIs available. For any additional information, please refer to the official WAPI documentation.***

## Points to remember

- For each of the use cases, this document will cover the API call and corresponding cURL commands, alongwith a sample output.
- The cURL commands used here can be used on Linux-based systems. For Windows-based systems, the syntax may vary.
- The Sample Codes section contains sample Python, Powershell, Java and C# code.
- In the following WAPI Samples, the guide uses a base url referenced as <wapi_url>.
  Replace it with https://<grid_master_ip>/wapi/<wapi_version> or
  https://<grid_master_fqdn>/wapi/<wapi_version>. Example: https://x.x.x.x/wapi/v2.12 or
  https://this.is.a.test.com/wapi/2.12
  To get the latest version of WAPI supported by the Grid in your environment, refer to the Schema section. This is also available as part of the documentation.

- In the sample cURL commands, replace the text in <span style="color:red">red</span> with values specific to your environment.
- By default, all the fields are not returned during a GET request. You can use the _return_fields_ argument to get the desired data. You would have to explicitly mention the additional fields you require with a _return_fields+=<requiredfield>_
- You can set _return_as_object_ argument to 1. This will change the format of the JSON output to make it easy to parse by 3rd party libraries. It is recommended to set this as it standardizes the JSON format and is less error prone.
- Set the _max_results_ option to 1 when you need to stop a search on the first match. This results in a huge performance and speed improvement in large environments.
- When a search result yields a large number of results, you can use paging.
  - To start a paging request, the initial search request must have _paging_ and _return_as_object_ set to 1, and _max_results_ set to the desired page size.
  - The returned results object will contain the _next_page_id_ field and the result field set to the first page of results. Note that the _next_page_id_ field only contains URL-safe characters so it can be used as is and no quotation characters are required for subsequent requests.
  - To get the subsequent results, you can re-send GET requests to the original object and set _page_id_ to the ID string returned in the previous page of results.
  - For a sample request, refer to <u>Sample paging request</u>
- When making POST, or PUT requests, it is easier to send the data as 'application/json' in the body of the message, since it lets you send complex data structures in the payload.
- Field and argument values must be quoted according to where they are used.
  Examples:
  - URL args, x-www-form-urlencoded:
    Use %xx encoding for "%", ";", "/", "?", ":", "@", "&", "=", "+", "$", "," and " " (a space)
  - JSON Data:
    Use JSON quoting, as specified at <u>http://json.org</u>
  - XML Data:
    Use XML quoting (&amp; etc.) as needed for XML.
- In the following examples, '+' is encoded as %2B, ':' as %3A, '<' as 3C, '>' as 3E
- The following examples include a sample output for each API call. This data is only representative of the test environment. "…." indicates that there are more records returned than mentioned.
- By default, the output of POST, PUT, and DELETE contains the _ref_ of the concerned object.
- PUT and DELETE operations require _ref_ of the object you are working with.
  - In the following WAPI Samples, the text highlighted in <span style="color:green">green</span> indicates an object reference specific to the test environment. Please replace it with the object reference specific to your environment. Example: In
    {wapi_url}/<span style="color:green">record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default</span>
     replace with {wapi_url}/<span style="color:green"><_ref></span>
  - You can get the _ref_ by performing a GET operation.
- If a field is of type BOOLEAN, do not quote the word. Example: "is_default":true
- Some fields are associated with a corresponding boolean flag value that has the prefix _use__. For example, _ttl_ is associated with the flag _use_ttl_. In an object, the value of this field will only take effect when its use flag is _true_. Otherwise, the value will be inherited from a higher-level setting. With WAPI 2.12, you can get the inherited data by setting the _inheritance_ argument to _true_.
- While searching for network objects, you can filter the data using regular expressions. You would need to specify the ~ modifier to indicate you are querying with a regular expression.

o   A search argument can use the following modifiers

| Modifier | Explanation |
|---|---|
| ! | Negates the condition |
| : | Makes string matching case insensitive |
| ~ | Regular expression search. Expressions are unanchored |
| < | Less than or equal |
| > | Greater than or equal |

o   Only one of the following can be specified at a time: greater than, less than, and regular expressions.

o   Depending on the attribute type, following are modifiers supported by extensible attributes:

▪   integer and date support !, < and >.

▪   All other types behave like strings and support !, ~ and :.

●   When you need to update or create multiple records, you can store the data as fields in a CSV file and import it at once. This will be faster in comparison with updating or creating each object with a separate API call. The Import a CSV file section covers an example.

●   The *request* object allows the control of WAPI through a single-entry point. The Multiple Object Feature enables making multiple requests with one API call, thus simplifying an operation, and reducing the number of API calls to be made. You can find a few samples in the Multiple Object Body Feature using /request section.

## Access

WAPI uses HTTPS (HTTP over SSL/TLS) as the transport mechanism. You can access WAPIs using various methods.

1. Applications that allow you to make REST calls, like Insomnia and POSTMAN
2. Any programming language or utility, like curl and python (by importing the requests module)
3. Any third-party application that you want to integrate with, that supports REST methods, like ServiceNow and HP Operations Orchestrator.

## Authentication

The server certificate used for WAPI is the same certificate used by NIOS for the GUI.

WAPI supports only HTTP Basic Authentication. You can use the connection for issuing multiple requests. In the case of multiple requests, authentication is handled by supplying the cookie (ibapauth) that was returned after the initial authentication. The IBAPAUTH cookie is sent back by the server to avoid repeat authentication requests. It is sent as an HTTPONLY, SECURE cookie.
Example: set-cookie:
ibapauth="ip=127.0.0.1,client=API,group=admin-group,ctime=1446631868,timeout=600,mtime=1446631868,su
=1,auth=LOCAL,user=admin,NlxMltsoxDNvBWKrfOMy+uxUMWS3guCB4yU"
This cookie can be invalidated by sending a POST request to /wapi/v2.12/logout

WAPI supports the same underlying authentication methods that NIOS supports for username and password. This also applies to the cookie timeout which is the same value as the Grid UI timeout. All WAPI users must have permissions that grant them access to the API.

You can login with any API call. This will set the cookie.

| Operation | REST Method | API Call | Sample Body |
|-----------|-------------|----------|-------------|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| A sample API call (Get host records) to save the cookie generated to a file called cookies.txt | colspan | curl -k -u admin:infoblox -c cookies.txt -X GET "https://grid-master/wapi/v2.12/record:host?_return_as_object=1" | |
| | colspan | {"result": [{"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default", "ipv4addrs": [{ "_ref": "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjI2LjEuMjAwLg:172.26.1.200/host1.test.com/default", "configure_for_dhcp": false, "host": "host1.test.com", "ipv4addr": "172.26.1.200" }], "name": "host1.test.com", "view": "default" }, .... {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnByaW50ZXI:printer.info.com/default", "ipv4addrs": [{"_ref": "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ucHJpbnRlci4xNjAuMjAuMS4xMDAu:160.20.1.100/printer.info.com/default", "configure_for_dhcp": false, "host": "printer.info.com", "ipv4addr": "160.20.1.100" }], "name": "printer.info.com", "view": "default" }]} | |
| A sample API call (Get zones) to show how to use the generated cookie from cookies.txt | colspan | curl -k -b cookies.txt -X GET "https://grid-master/wapi/v2.12/zone_auth?_return_as_object=1" | |
| | colspan | {"result": [{"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS50ZXN0:test.com/default", "fqdn": "test.com", "view": "default" }]} | |
| Modify the session timeout | PUT | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox | {"security_setting": {"session_timeout": 60000}} |
| | colspan | curl -k -b cookies.txt -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_return_as_object=1&_return_fields%2B=security_setting" -d '{"security_setting":{"session_timeout": 60000}}' | |
| | colspan | {"result": {"_ref": "grid/b25lLmNsdXN0ZXIkMA:Infoblox", "security_setting": { "admin_access_items": [], "audit_log_rolling_enable": true, "http_redirect_enable": false, | |

| | | |
|---|---|---|
| | "lcd_input_enable": true,<br>"login_banner_enable": true,<br>"login_banner_text": "Disconnect NOW if you have not been expressly authorized to use this system.",<br>"remote_console_access_enable": false,<br>"security_access_enable": false,<br>"security_access_remote_console_enable": true,<br>"session_timeout": 600000,<br>"ssh_perm_enable": true,<br>"support_access_enable": false,<br>"support_access_info": "Not enabled"<br>}}} | |
| | POST | \<wapi_url\>/logout |
| Invalidate a cookie | curl -k -b cookies.txt -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/logout" | |

## Schema

The _schema argument returns the WAPI schema.

If a WAPI schema is requested without specifying the type of network object, an object with information about requested version of the WAPI schema, list of supported objects in the requested version, and list of all supported versions will be returned.

If you specify a network object while requesting WAPI schema, along with the above-mentioned information, you will get a list of cloud restrictions, list of fields of the object, list of object restrictions, requested object type, and actual requested version of the WAPI object schema.

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| | GET | \<wapi_url\>/?_schema |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/?_schema&_return_as_object=1" | |
| Get the overall WAPI Schema (supported versions and supported objects) | {"result":<br> {"requested_version": "2.12",<br>  "supported_objects":<br>   ["ad_auth_service",<br>   "admingroup",<br>   "adminrole",<br>   .....<br>   "zone_delegated",<br>   "zone_forward",<br>   "zone_rp",<br>   "zone_stub"<br>  ],<br>  "supported_versions":<br>  ["1.0","1.1","1.2","1.2.1", "1.3","1.4","1.4.1",<br>   .......<br>  "2.6","2.6.1","2.7", "2.7.1","2.7.2","2.7.3","2.8","2.9","2.9.1","2.9.5"<br> ]}} | | |
| | GET | \<wapi_url\>/record:host?_schema |
| Get schema of an object (*record:host* can be replaced with any other object) | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:host?_schema&_return_as_object=1" | |

```
{"result":
  {"cloud_additional_restrictions":
    ["function call"],
   "fields":
    [{"is_array": true,
      "name": "aliases",
      "standard_field": false,
      "supports": "rwu",
      "type": ["string"]
    },
    {"is_array": false,
      "name": "allow_telnet",
      "standard_field": false,
      "supports": "rwu",
       "type": ["bool"]
    },
    ……
    {"is_array": false,
      "name": "zone",
      "searchable_by": "=",
      "standard_field": false,
      "supports": "rs",
      "type": ["string"]
    }],
   "restrictions": [],
   "type": "record:host",
   "version": "2.12"
}}
```

## Extensible Attributes

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| | GET | <wapi_url>/extensibleattributedef | |
| | colspan | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/extensibleattributedef?_return_as_object=1" | |
| Get the definition of the Extensible Attributes | colspan | {"result":<br> [{ "_ref":<br>"extensibleattributedef/b25lLmV4dGVuc2libGVfYXR0cmlidXRlc19kZWYkLkJ1aWxkaW5n:Building",<br>    "default_value": null,<br>    "name": "Building",<br>    "type": "STRING"<br> },<br> ……<br> {"_ref":<br>"extensibleattributedef/b25lLmV4dGVuc2libGVfYXR0cmlidXRlc19kZWYkLlJlcG9ydGluZ1NpdGU:ReportingSite",<br>    "default_value": "site1",<br>    "name": "ReportingSite",<br>    "type": "ENUM"<br>}]} | |
| Create "Owner" Extensible Attribute of type String | POST | <wapi_url>/extensibleattributedef | {"name": "Owner",<br>"type": "STRING"} |

| | | | |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/extensibleattributedef?\_return_fields%2B=name,type&\_return_as_object=1" -d '{"name": "Owner","type": "STRING"}' | | |
| | {"result":<br>  {"\_ref":<br>"extensibleattributedef/b25lLmV4dGVuc2libGVfYXR0cmlidXRlc19kZWYkLk93bmVyVy:Owner",<br>  "default_value": null,<br>  "name": "Owner",<br>  "type": "STRING"<br>}} | | |
| Create a "Location" Extensible Attribute of type list with possible values Santa Clara, Tacoma, Bangalore, Mumbai | POST | \<wapi_url>/extensibleattributedef | {"name": "Location",<br>"type": "ENUM",<br>"list_values": [{"value": "Santa Clara"},<br>{"value": "Tacoma"},<br>{"value": "Bangalore"},<br>{"value": "Mumbai"}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/extensibleattributedef?\_return_fields%2B=name,type&\_return_as_object=1" -d '{"name": "Location","type": "ENUM","list_values": [{"value": "Santa Clara"},{"value": "Tacoma"},{"value": "Bangalore"},{"value": "Mumbai"}]}' | | |
| | {"result":<br>  {"\_ref":<br>"extensibleattributedef/b25lLmV4dGVuc2libGVfYXR0cmlidXRlc19kZWYkLkxvY2F0aW9u:Location",<br>  "default_value": null,<br>  "name": "Location",<br>  "type": "ENUM"<br>}} | | |

**Extensible Attributes Inheritance**

If inheritance is enabled for an extensible attribute, the following fields are supported in the extensible attribute value object:

| Field | Description/Supported Values | |
|---|---|---|
| value | Value of the EA | |
| inheritance_source | This is a read-only field. It is a reference to the object this EA is inheriting from. | |
| inheritance_operation | INHERIT \| DELETE \| OVERRIDE | |
| descendants_action | option_delete_ea | REMOVE \| RETAIN |
| | option_with_ea | CONVERT \| INHERIT \| RETAIN |
| | option_without_ea | INHERIT \| NOT_INHERIT |

Please note that for extensible attributes inheritance to work correctly with Host Record object (*record:host*) *use_for_ea_inheritance* should be set to *true* for one of its IP host addresses: IPv4 Host address object (*record:host_ipv4addr*) or IPv6 Host address object (*record:host_ipv6addr*).

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Add an extensible attribute with inheritance | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default | {"extattrs": {"Location": {"descendants_action": {"option_with_ea": "RETAIN", "option_without_ea": "NOT_INHERIT"}, "value": "Santa Clara"}}} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Q x:host1.test.com/default?_return_fields%2B=extattrs&_return_as_object=1" -d '{"extattrs":{"Location": {"descendants_action": {"option_with_ea": "RETAIN","option_without_ea":"NOT_INHERIT"},"value": "Santa Clara"}}}' | |
| | | {"result": {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default", "extattrs": {"Location": {"value": "Santa Clara"} }, "ipv4addrs": [{"_ref": "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjI2LjEuMjAwLg:172.26.1.200/host1.test.com/default", "configure_for_dhcp": false, "host": "host1.test.com", "ipv4addr": "172.26.1.200" }], "name": "host1.test.com", "view": "default" }} | |

## DNS-related scenarios

**Zones**

| Zone type | Operation | REST Method | API Call | Sample Body (for POST and PUT) |
|---|---|---|---|---|
| | | | **Sample cURL Command** | |
| | | | **Sample Output** | |
| Authoritative Zone | Fetch information | GET | <wapi_url>/zone_auth | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_auth?_return_as_object=1" | | |
| | | {"result": [{"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS50ZXN0:test.com/default", "fqdn": "test.com", "view": "default" }]} | | |
| | Create | POST | <wapi_url>/zone_auth | {"fqdn": "info.com"} |

| | | | | |
|---|---|---|---|---|
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/zone_auth?_return_fields%2B=fqdn&_return_as_object=1" -d '{"fqdn": "info.com"}' | | |
| | | {"result": <br> {"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default", <br> "fqdn": "info.com", <br> "view": "default" <br> }} | | |
| | Create IPV4 reverse mapping zone | POST | \<wapi_url\>/zone_auth | {"fqdn": "10.10.10.in-addr.arpa ", "zone_format":"IPV4"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/zone_auth?_return_fields%2B=fqdn&_return_as_object=1" -d '{"fqdn": "10.10.10.in-addr.arpa","zone_format":"IPV4"}' | | |
| | | {"result": <br> {"_ref": <br> "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmFycGEuaW4tYWRkci4xMC4xMC4xMA:10.10 <br> .10.0%2F24/default", <br> "fqdn": "10.10.10.0/24", <br> "view": "default" <br> }} | | |
| | Modify | PUT | \<wapi_url\>/zone_auth/ZG5zLnpvbm UkLl9kZWZhdWx0LmNvbS5pbmZv:i nfo.com/default | {"grid_primary":[{"name":"infoblox.localdom ain"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:i nfo.com/default?_return_fields%2B=fqdn,grid_primary&_return_as_object=1" -d '{"grid_primary":[{"name":"infoblox.localdomain"}]}' | | |
| | | {"result": <br> {"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default", <br> "fqdn": "info.com", <br> "grid_primary": <br> [{"name": "infoblox.localdomain", <br> "stealth": false <br> }], <br> "view": "default" <br> }} | | |
| | Delete | DELETE | \<wapi_url\>/zone_auth/ZG5zLnpvbm UkLl9kZWZhdWx0LmNvbS5pbmZv:i nfo.com/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:i nfo.com/default&?_return_as_object=1" | | |
| | | {"result": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default"} | | |
| Forward Zone | Fetch information | GET | \<wapi_url\>/zone_forward | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_forward?_return_as_object=1" | | |
| | | {"result": <br> [{"_ref": <br> "zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5mb3J3YXJkdGVzdA:forwardtest.co <br> m/default", <br> "forward_to": <br> [{"address": "172.26.1.10", <br> "name": "host.forwardtest.com" <br> }], | | |

| | | | | |
|---|---|---|---|---|
| | | | | "fqdn": "forwardtest.com",<br>"view": "default"<br>}]} |
| | **Create** | POST | &lt;wapi_url&gt;/zone_forward | {"fqdn":"infoblox.com",<br>"forward_to":[{"address":"10.10.10.11",<br>"name":"host.infoblox.com"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/zone_forward?_return_as_object=1" -d<br>'{"fqdn":"infoblox.com","forward_to":[{"address":"10.10.10.11","name":"host.infoblox.com"}]}' | | |
| | | {"result":<br> {"_ref":<br>"zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvYmxveA:infoblox.com/defaul<br>t",<br>  "forward_to":<br>  [{"address": "10.10.10.11",<br>   "name": "host.infoblox.com"<br>  }],<br>  "fqdn": "infoblox.com",<br>  "view": "default"<br>}} | | |
| | **Modify** | PUT | &lt;wapi_url&gt;/zone_forward/ZG5zLnpv<br>bmUkLl9kZWZhdWx0LmNvbS5pbmZvZ<br>vYmxveA:infoblox.com/default | {"forwarding_servers":<br>[{"name":"infoblox.localdomain"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbm<br>ZvYmxveA:infoblox.com/default?_return_fields%2B=forwarding_servers&_return_as_object=<br>1" -d '{"forwarding_servers": [{"name":"infoblox.localdomain"}]}' | | |
| | | {"result":<br> {"_ref":<br>"zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvYmxveA:infoblox.com/defaul<br>t",<br>  "forward_to":<br>  [{"address": "10.10.10.11",<br>   "name": "host.infoblox.com"<br>  }],<br>  "forwarding_servers":<br>  [{"forward_to": [],<br>   "forwarders_only": false,<br>   "name": "infoblox.localdomain",<br>   "use_override_forwarders": false<br>  }],<br>  "fqdn": "infoblox.com",<br>  "view": "default"<br>}} | | |
| | **Delete** | DELETE | &lt;wapi_url&gt;/zone_forward/ZG5zLnpv<br>bmUkLl9kZWZhdWx0LmNvbS5pbmZvZ<br>vYmxveA:infoblox.com/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE<br>"https://grid-master/wapi/v2.12/zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbm<br>ZvYmxveA:infoblox.com/default?_return_as_object=1" | | |
| | | {"result":<br>"zone_forward/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvYmxveA:infoblox.com/defaul<br>t"} | | |

| | | | | |
|---|---|---|---|---|
| Zone Delegation | Fetch information | GET | \<wapi_url>/zone_delegated | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_delegated?_return_as_object=1" | | |
| | | {"result":<br> [{"_ref":<br>"zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLnRlc3Q:test.info.com/default",<br>  "delegate_to":<br>  [{"address": "172.26.1.100",<br>    "name": "host.test.info.com"<br>  }],<br>  "fqdn": "test.info.com",<br>  "view": "default"<br>}]} | | |
| | Create | POST | \<wapi_url>/zone_delegated | {"fqdn":"demo.info.com",<br>"delegate_to":[{"address":"10.10.10.20",<br>"name":"host.demo.info.com"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/zone_delegated?_return_fields%2B=fqdn,delegate_to&_return_as_object=1" -d '{"fqdn":"demo.info.com","delegate_to":[{"address":"10.10.10.20","name":"host.demo.info.com"}]}' | | |
| | | {"result":<br>{"_ref":<br>"zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default",<br> "delegate_to":<br> [{"address": "10.10.10.20",<br>   "name": "host.demo.info.com"<br> }],<br> "fqdn": "demo.info.com",<br> "view": "default"<br>}} | | |
| | Modify | PUT | \<wapi_url>/zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default | {"locked":true} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default?_return_fields=locked&_return_as_object=1" -d '{"locked":true}' | | |
| | | {"result":<br> {"_ref":<br>"zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default",<br> "locked": true<br>}} | | |
| | Delete | DELETE | \<wapi_url>/zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/default?_return_as_object=1" | | |

{"result":
"zone_delegated/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8:demo.info.com/
default"}

**The most common record types**

| Record type | Operation | REST Method | API Call | Sample Body (for POST and PUT) |
|---|---|---|---|---|
| | | | **Sample cURL Command** | |
| | | | **Sample Output** | |
| HOST | Fetch information | GET | <wapi_url>/record:host | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host?_return_as_object=1" | | |
| | | {"result":<br>[{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default",<br>  "ipv4addrs":<br>  [{ "_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjI2LjEuMjAwLg:172.26.1.200/host1.test.com/default",<br>    "configure_for_dhcp": false,<br>    "host": "host1.test.com",<br>    "ipv4addr": "172.26.1.200"<br>  }],<br>  "name": "host1.test.com",<br>  "view": "default"<br>},<br>  ….<br> {"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnByaW50ZXI:printer.info.com/default",<br>  "ipv4addrs":<br>  [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ucHJpbnRlci4xNjAuMjAuMS4xMDAu:160.20.1.100/printer.info.com/default",<br>    "configure_for_dhcp": false,<br>    "host": "printer.info.com",<br>    "ipv4addr": "160.20.1.100"<br>  }],<br>  "name": "printer.info.com",<br>  "view": "default"<br>}]} | | |
| | Create | POST | <wapi_url>/record:host | {"name":"host.info.com", "ipv4addrs": [{"ipv4addr":"10.10.10.20"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1" -d '{"name":"host.info.com","ipv4addrs": [{"ipv4addr":"10.10.10.20"}]}' | | |
| | | {"result":<br> {"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Q:host.info.com/default",<br><br>  "ipv4addrs":<br>  [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaG9z | | |

| | | | | |
|---|---|---|---|---|
| | | | dC4xMC4xMC4xMC4yMC4:10.10.10.20/host.info.com/default",<br>  "configure_for_dhcp": false,<br>  "host": "host.info.com",<br>  "ipv4addr": "10.10.10.20"<br> }],<br>  "name": "host.info.com",<br>  "view": "default"<br>}} | |
| | Modify | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Q:host.info.com/default | {"name":"host1.info.com"} |
| | | colspan="3" | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Q:host.info.com/default?_return_fields%2B=name&_return_as_object=1" -d '{"name":"host1.info.com"}' | |
| | | colspan="3" | {"result":<br> {"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default",<br>  "ipv4addrs":<br>  [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaG9zdDEuMTAuMTAuMTAuMjAu:10.10.10.20/host1.info.com/default",<br>    "configure_for_dhcp": false,<br>    "host": "host1.info.com",<br>    "ipv4addr": "10.10.10.20"<br> }],<br>  "name": "host1.info.com",<br>  "view": "default"<br>}} | |
| | Delete | DELETE | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default | |
| | | colspan="3" | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default?_return_as_object=1" | |
| | | colspan="3" | {"result":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default"} | |
| A | Fetch information | GET | <wapi_url>/record:a | |
| | | colspan="3" | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:a?_return_as_object=1" | |
| | | colspan="3" | {"result":<br> [{"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sdGVzdC5ob3N0LDE3Mi4yNi4xLjEwMA:host.test.info.com/default",<br>  "ipv4addr": "172.26.1.100",<br>  "name": "host.test.info.com",<br>  "view": "default"<br>}]} | |
| | Create | POST | <wapi_url>/record:a | {"name":"server.info.com",<br>"ipv4addr":"10.10.10.2"} |

| | | | | |
|---|---|---|---|---|
| | | \<wapi_url\>/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:server.info.com/default | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:a?_return_fields%2B=name,ipv4addr&_return_as_object=1" -d '{"name":"server.info.com","ipv4addr":"10.10.10.2"}' | |

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST
"https://grid-master/wapi/v2.12/record:a?_return_fields%2B=name,ipv4addr&_return_as_obje
ct=1" -d '{"name":"server.info.com","ipv4addr":"10.10.10.2"}'

```
{"result":
  {"_ref":
"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:
server.info.com/default",
  "ipv4addr": "10.10.10.2",
  "name": "server.info.com",
  "view": "default"
}}
```

**Modify**

PUT | \<wapi_url\>/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:server.info.com/default | {"name":"server1.info.com"}

curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT
"https://grid-master/wapi/v2.12/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8
sc2VydmVyLDEwLjEwLjEwLjI:server.info.com/default?_return_fields%2B=name&_return_as_
object=1" -d '{"name":"server1.info.com"}'

```
{"result":
  {"_ref":
"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSwxMC4xMC4x
MC4y:server1.info.com/default",
  "ipv4addr": "10.10.10.2",
  "name": "server1.info.com",
  "view": "default"
}}
```

**Delete**

DELETE | \<wapi_url\>/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSwxMC4xMC4xMC4y:server1.info.com/default

curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE
"https://grid-master/wapi/v2.12/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8
sc2VydmVyMSwxMC4xMC4xMC4y:server1.info.com/default?_return_as_object=1"

```
{"result":
"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSwxMC4xMC4x
MC4y:server1.info.com/default"}
```

**AAAA**

**Fetch information**

GET | \<wapi_url\>/record:aaaa

curl -k -u admin:infoblox -X GET
"https://grid-master/wapi/v2.12/record:aaaa?_return_as_object=1"

```
{"result":
  [{"_ref":
"record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLnRlc3QsaG9zdCxmZDYwO
mU0NTplMzFiOjo:host.test.com/default",
    "ipv6addr": "fd60:e45:e31b::",
    "name": "host.test.com",
    "view": "default
}]}
```

**Create**

POST | \<wapi_url\>/record:aaaa | {"name":"server.info.com", "ipv6addr":"fd60:e32:f1b9::2"}

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST
"https://grid-master/wapi/v2.12/record:aaaa?_return_fields%2b=name,ipv6addr&_return_as_o
bject=1" -d '{"name":"server.info.com","ipv6addr":"fd60:e32:f1b9::2"}'

```
{"result":
  {"_ref":
```

| | | | | |
|---|---|---|---|---|
| | | | "record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLGZkNjA6ZTMyOmYxYjk6OjI:server.info.com/default",<br>  "ipv6addr": "fd60:e32:f1b9::2",<br>  "name": "server.info.com",<br>  "view": "default"<br>}} | |
| | Modify | PUT | <wapi_url>/record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLGZkNjA6ZTMyOmYxYjk6OjI:server.info.com/default | {"name":"server1.info.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLGZkNjA6ZTMyOmYxYjk6OjI:server.info.com/default?_return_fields%2B=name&_return_as_object=1" -d '{"name":"server1.info.com"}' | | |
| | | {"result":<br>  {"_ref":<br>"record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSxmZDYwOmUzMjpmMWI5Ojoy:server1.info.com/default",<br>  "ipv6addr": "fd60:e32:f1b9::2",<br>  "name": "server1.info.com",<br>  "view": "default"<br>}} | | |
| | Delete | DELETE | <wapi_url>/record:aaaa/record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSxmZDYwOmUzMjpmMWI5Ojoy:server1.info.com/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSxmZDYwOmUzMjpmMWI5Ojoy:server1.info.com/default?_return_as_object=1" | | |
| | | {"result":<br>"record:aaaa/ZG5zLmJpbmRfYWFhYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyMSxmZDYwOmUzMjpmMWI5Ojoy:server1.info.com/default"} | | |
| CNAME | Fetch information | GET | <wapi_url>/record:cname | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:cname?_return_as_object=1" | | |
| | | {"result":<br>  [{"_ref":<br>"record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS50ZXN0LnRlc3Q:test.test.com/default",<br>  "canonical": "cnametest.com",<br>  "name": "test.test.com",<br>  "view": "default"<br>}]} | | |
| | Create | POST | <wapi_url>/record:cname | {"name":"cnametest.demo.info.com",<br>"canonical":"demo.info.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:cname?_return_fields%2B=name,canonical&_return_as_object=1" -d '{"name":"cnametest.demo.info.com","canonical":"demo.info.com"}' | | |
| | | {"result":<br>  {"_ref":<br>"record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8uY25hbWV0ZXN0:cnametest.demo.info.com/default",<br>  "canonical": "demo.info.com", | | |

| | | | | |
|---|---|---|---|---|
| | | | "name": "cnametest.demo.info.com",<br>  "view": "default"<br>}} | |
| | Modify | PUT | &lt;wapi_url&gt;/record:cname/ZG5zLmJpbmRRf<br>Y25hbWUkLl9kZWZhdWx0LmNvbS5pbmZ<br>vLmRlbW8uY25hbWV0ZXN0:cnametest.d<br>emo.info.com/default | {"name":"cname.demo.info.com "} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvb<br>S5pbmZvLmRlbW8uY25hbWV0ZXN0:cnametest.demo.info.com/default?_return_fields%2B<br>=name&_return_as_object=1" -d '{"name":"cname.demo.info.com"}' | | |
| | | {"result":<br>  {"_ref":<br>"record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8uY25hb<br>WU:cname.demo.info.com/default",<br>  "canonical": "demo.info.com",<br>  "name": "cname.demo.info.com",<br>  "view": "default"<br>}} | | |
| | Delete | DELETE | &lt;wapi_url&gt;/record:cname/ZG5zLmJpbmRf<br>Y25hbWUkLl9kZWZhdWx0LmNvbS5pbmZ<br>vLmRlbW8uY25hbWU:cname.demo.info.c<br>om/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE<br>"https://grid-master/wapi/v2.12/record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvb<br>S5pbmZvLmRlbW8uY25hbWU:cname.demo.info.com/default?_return_as_object=1" | | |
| | | {"result":<br>"record:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvLmRlbW8uY25hb<br>WU:cname.demo.info.com/default"} | | |
| MX | Fetch information | GET | &lt;wapi_url&gt;/record:mx | |
| | | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:mx?_return_as_object=1" | | |
| | | {"result":<br>  [{"_ref":<br>"record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvb S50ZXN0Lm1haWwuaG9zdDEudGV<br>zdC5jb20uMQ:mail.test.com/default",<br>  "mail_exchanger": "host1.test.com",<br>  "name": "mail.test.com",<br>  "preference": 1,<br>  "view": "default"<br>}]} | | |
| | Create | POST | &lt;wapi_url&gt;/record:mx | {"mail_exchanger":"exchange.info.co<br>m",<br>"name":"mx.info.com","preference":1} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:mx?_return_fields%2B=mail_exchanger,name&_return_<br>as_object=1" -d<br>'{"mail_exchanger":"exchange.info.com","name":"mx.info.com","preference":1}' | | |
| | | {"result":<br>  {"_ref":<br>"record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvb S5pbmZvLm14LmV4Y2hhbmdlLmluZ<br>m8uY29tLjE:mx.info.com/default",<br>  "mail_exchanger": "exchange.info.com",<br>  "name": "mx.info.com", | | |

| | | | | |
|---|---|---|---|---|
| | | | | "preference": 1,<br>"view": "default"<br>}} |
| | | PUT | <wapi_url>/record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm14LmV4Y2hhbmdlLmluZm8uY29tLjE:mx.info.com/default | {"name":"mail.info.com "} |
| | Modify | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm14LmV4Y2hhbmdlLmluZm8uY29tLjE:mx.info.com/default?_return_fields%2B=name&_return_as_object=1" -d '{"name":"mail.info.com"}' | |
| | | | {"result":<br>  {"_ref":<br>"record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm1haWwuZXhjaGFuZ2UuaW5mby5jb20uMQ:mail.info.com/default",<br>   "mail_exchanger": "exchange.info.com",<br>   "name": "mail.info.com",<br>   "preference": 1,<br>   "view": "default"<br>}} | |
| | | DELETE | <wapi_url>/record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm1haWWwuZXhjaGFuZ2UuaW5mby5jb20uMQ:mail.info.com/default | |
| | Delete | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm1haWWwuZXhjaGFuZ2UuaW5mby5jb20uMQ:mail.info.com/default?_return_as_object=1" | |
| | | | {"result":<br>"record:mx/ZG5zLmJpbmRfbXgkLl9kZWZhdWx0LmNvbS5pbmZvLm1haWWwuZXhjaGFuZ2UuaW5mby5jb20uMQ:mail.info.com/default"} | |
| NS | Fetch information | GET | <wapi_url>/record:ns | |
| | | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:ns?_return_as_object=1" | |
| | | | {"result":<br>  [{"_ref":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmFycGEuaW4tYWRkci4xMjcuMC4wLi5jbHVzdGVy:cluster/0.0.127.in-addr.arpa/default",<br>   "name": "0.0.127.in-addr.arpa",<br>   "nameserver": "cluster",<br>   "view": "default"<br>  },<br>  {"_ref":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmFycGEuaXA2LjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMS4uY2x1c3Rlcg:cluster/1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa/default",<br>   "name": "1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa",<br>   "nameserver": "cluster",<br>   "view": "default"<br>  },<br>  ……<br>  {"_ref":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLnRlc3QuaG9zdC50ZXN0LmluZm8uY29t:host.test.info.com/test.info.com/default", | |

| | | | | |
|---|---|---|---|---|
| | | | "name": "test.info.com",<br>"nameserver": "host.test.info.com",<br>"view": "default"<br>}]} | |
| | Create | POST | &lt;wapi_url&gt;/record:ns | {"name":"info.com",<br>"nameserver":"infoblox.localdomain",<br>"addresses":[{"address":"192.168.11.0"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:ns?_return_fields%2B=name,nameserver,addresses&_return_as_object=1" -d<br>'{"name":"info.com","nameserver":"infoblox.localdomain","addresses":[{"address":"192.168.11.0"}]}' | | | |
| | | {"result":<br>  {"_ref":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5pbmZvYmxveC5sb2NhbGRvbWFpbg:infoblox.localdomain/info.com/default",<br>  "addresses":<br>  [{"address": "192.168.11.0",<br>    "auto_create_ptr": true<br>  }],<br>  "name": "info.com",<br>  "nameserver": "infoblox.localdomain",<br>  "view": "default"<br>}} | | | |
| | Modify | PUT | &lt;wapi_url&gt;/record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5pbmZvYmxveC5sb2NhbGRvbWFpbg:infoblox.localdomain/info.com/default | {"nameserver":"nios.info.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5pbmZvYmxveC5sb2NhbGRvbWFpbg:infoblox.localdomain/info.com/default?_return_fields%2B=name,nameserver&_return_as_object=1" -d '{"nameserver":"nios.info.com"}' | | | |
| | | {"result":<br>  {"_ref":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5uaW9zLmluZm8uY29t:nios.info.com/info.com/default",<br>  "name": "info.com",<br>  "nameserver": "nios.info.com",<br>  "view": "default"<br>}} | | | |
| | Delete | DELETE | &lt;wapi_url&gt;/record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5uaW9zLmluZm8uY29t:nios.info.com/info.com/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE<br>"https://grid-master/wapi/v2.12/record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5uaW9zLmluZm8uY29t:nios.info.com/info.com/default?_return_as_object=1" | | | |
| | | {"result":<br>"record:ns/ZG5zLmJpbmRfbnMkLl9kZWZhdWx0LmNvbS5pbmZvLi5uaW9zLmluZm8uY29t:nios.info.com/info.com/default"} | | | |
| PTR | Fetch information | GET | &lt;wapi_url&gt;/record:ptr | |
| | | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:ptr?_return_as_object=1" | | | |

| | | | | |
|---|---|---|---|---|
| | | | | {"result":<br>　[{"_ref":<br>"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTI3LjAuMC4xLmxvY2FsaG9zdA:1.0.0.127.in-addr.arpa/default",<br>　"ptrdname": "localhost",<br>　"view": "default"<br>　},<br>　{"_ref":<br>"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmlwNi4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjEuMC4wLmxvY2FsaG9zdA:1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa/default",<br>　"ptrdname": "localhost",<br>　"view": "default"<br>　},<br>　……<br>　{"_ref":<br>"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTcyLjI2LjEuMTAwLmhvc3QudGVzdC5pbmZvLmNvbQ:100.1.26.172.in-addr.arpa/default",<br>　"ptrdname": "host.test.info.com",<br>　"view": "default"<br>　}]} |
| | Create | POST | &lt;wapi_url&gt;/record:ptr | {"name":"2.10.10.10.in-addr.arpa",<br>"ptrdname":"server1.info.com",<br>"ipv4addr":"10.10.10.2"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:ptr?_return_fields%2B=name,ptrdname,ipv4addr&_return_as_object=1" -d '{"name":"2.10.10.10.in-addr.arpa",<br>"ptrdname":"server1.info.com","ipv4addr":"10.10.10.2"}' | | | |
| | | {"result":<br>　{"_ref":<br>"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default",<br>　"ipv4addr": "10.10.10.2",<br>　"name": "2.10.10.10.in-addr.arpa",<br>　"ptrdname": "server1.info.com",<br>　"view": "default"<br>　}} | | | |
| | Modify | PUT | &lt;wapi_url&gt;/record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default | {"ptrdname":"server.info.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default?_return_fields%2B=ptrdname&_return_as_object=1" -d '{"ptrdname":"server.info.com"}' | | | |
| | | {"result":<br>　{"_ref":<br>"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default",<br>　"ptrdname": "server.info.com",<br>　"view": "default"<br>　}} | | | |
| | Delete | DELETE | &lt;wapi_url&gt;/record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHI | |

| | | | | |
|---|---|---|---|---|
| | | | uMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default?_return_as_object=1" | | | |
| | | {"result": "record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5hcnBhLmluLWFkZHIuMTAuMTAuMTAuMi5zZXJ2ZXIuaW5mby5jb20:2.10.10.10.in-addr.arpa/default"} | | | |
| **TXT** | Fetch information | GET | `<wapi_url>`/record:txt | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:txt?_return_as_object=1" | | | |
| | | {"result": [{"_ref": "record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20udGVzdC5tYWlsLiJUaGlzIiAiYSIgIm1haWwiiICJzZXJ2ZXIi:mail.test.com/default", "name": "mail.test.com", "text": "This a mail server", "view": "default" }]} | | | |
| | Create | POST | `<wapi_url>`/record:txt | {"name":"server.info.com", "text":"This a host server"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:txt?_return_fields%2B=name,text&_return_as_object=1" -d '{"name":"server.info.com","text":"This a host server"}' | | | |
| | | {"result": {"_ref": "record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuIlRoaXMiIAiaG9zdCIgInNlcnZlciI:server.info.com/default", "name": "server.info.com", "text": "This a host server", "view": "default" }} | | | |
| | Modify | PUT | `<wapi_url>`/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuIlRoaXMiICJhIiAiaG9zdCIgInNlcnZlciI:server.info.com/default | {"text":"This is a test server"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuIlRoaXMiICJhIiAiaG9zdCIgInNlcnZlciI:server.info.com/default?_return_fields%2B=text&_return_as_object=1" -d '{"text":"This a test server"}' | | | |
| | | {"result": {"_ref": "record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuIlRoaXMiAidGVzdCIgInNlcnZlciI:server.info.com/default", "name": "server.info.com", "text": "This a test server", "view": "default" }} | | | |
| | Delete | DELETE | `<wapi_url>`/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuIlRoaXMiICJhIiAiaG9zdCIgInNlcnZlciI:server.info.com/default | |

| | | | | |
|---|---|---|---|---|
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuaWIlRoaXMiCJhIiAidGVzdCIgInNlcnZlciI:server.info.com/default?_return_as_object=1" | | |
| | | {"result": "record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20uaW5mby5zZXJ2ZXIuaWllRoaXMiCJhIiAidGVzdCIgInNlcnZlciI:server.info.com/default"} | | |

<table>
<tr><td rowspan="9">SRV</td><td rowspan="2">Fetch information</td><td>GET</td><td><wapi_url>/record:srv</td><td></td></tr>
<tr><td colspan="3">curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:srv?_return_as_object=1"</td></tr>
</table>

{"result":
  [{"_ref":
"record:srv/ZG5zLmJpbmRRfc3J2JC5fZGVmYXVsdC5jb20udGVzdC9fdGNwLl9zc2gvMS8xMC8yMi90ZXN0LmNvbQ:_ssh._tcp.test.com/default",
    "name": "_ssh._tcp.test.com",
    "port": 22,
    "priority": 1,
    "target": "test.com",
    "view": "default",
    "weight": 10
}]}

| | | | |
|---|---|---|---|
| POST | <wapi_url>/record:srv | {"name": "_ssh._tcp.info.com", "port": 22, "priority": 10, "target": "info.com", "weight": 10} | |

Create

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:srv?_return_fields%2B=name,target&_return_as_object=1" -d '{"name": "_ssh._tcp.info.com","port": 22,"priority": 10,"target": "info.com","weight": 10}'

{"result":
  {"_ref":
"record:srv/ZG5zLmJpbmRRfc3J2JC5fZGVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMTAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default",
    "name": "_ssh._tcp.info.com",
    "port": 22,
    "priority": 10,
    "target": "info.com",
    "view": "default",
    "weight": 10
}}

| | | |
|---|---|---|
| PUT | <wapi_url>/record:srv/ZG5zLmJpbmRRfc3J2JC5fZGVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMTAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default | {"priority": 20} |

Modify

curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:srv/ZG5zLmJpbmRRfc3J2JC5fZGVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMTAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default?_return_fields%2B=priority&_return_as_object=1" -d '{"priority": 20}'

{"result":
  {"_ref":
"record:srv/ZG5zLmJpbmRRfc3J2JC5fZGVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMjAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default",
    "name": "_ssh._tcp.info.com",
    "port": 22,

| | | | |
|---|---|---|---|
| | | "priority": 20,<br>"target": "info.com",<br>"view": "default",<br>"weight": 10<br>}} | |
| | Delete | DELETE | <wapi_url>/record:srv/ZG5zLmJpbmRfc3J2JC5fZGVVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMjAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/record:srv/ZG5zLmJpbmRfc3J2JC5fZGVVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMjAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default?_return_as_object=1" | |
| | | {"result":<br>"record:srv/ZG5zLmJpbmRfc3J2JC5fZGVVmYXVsdC5jb20uaW5mby9fdGNwLl9zc2gvMjAvMTAvMjIvaW5mby5jb20:_ssh._tcp.info.com/default"} | |

**Retrieve all the records in a zone**

The API function allrecords returns the following types of records within a particular zone:

- record:a
- record:aaaa
- record:cname
- record:dname
- record:host
- record:host_ipv4addr
- record:host_ipv6addr
- record:mx
- record:naptr
- record:ptr
- record:srv
- record:txt
- record:unknown
- sharedrecord:a
- sharedrecord:aaaa
- sharedrecord:mx
- sharedrecord:srv
- sharedrecord:txt

For the other types of records, it returns "UNSUPPORTED".

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Retrieve all records in a zone | GET | <wapi_url>/allrecords?zone=info.com |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/allrecords?zone=info.com&_return_as_object=1" |
| | | {"result":<br>[{"_ref":<br>"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX3NyYSQuX2RlZmF1bHQuY29tLmluZm8:",<br>m8:", |

```
                  "comment": "Auto-created by Add Zone",
                  "name": "",
                  "type": "UNSUPPORTED",
                  "view": "default",
                  "zone": "info.com"
                },
                {"_ref":
"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX25zJC5fZGVmYXVsdC5jb20uaW5mby
4uaW5mb2Jsb3gubG9jYWxkb21haW4:",
                  "comment": "Auto-created by Add Zone",
                  "name": "",
                  "type": "UNSUPPORTED",
                  "view": "default",
                  "zone": "info.com"
                },
                {"_ref":
"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5ob3N0JC5fZGVmYXVsdC5jb20uaW5mby5ob3
N0:host",
                  "comment": "",
                  "name": "host",
                  "type": "record:host_ipv4addr",
                  "view": "default",
                  "zone": "info.com"
                },
                {"_ref":
"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2EkLl9kZWZhdWx0LmNvbS5pbmZvL
HNlcnZlciwxMC4xMC4xMC4y:server",
                  "comment": "",
                  "name": "server",
                  "type": "record:a",
                  "view": "default",
                  "zone": "info.com"
                },
                {"_ref":
"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2FhYWEkLl9kZWZhdWx0LmNvbS5pb
mZvLHNlcnZlcixmZDYwOmUzMjpmMWI5Ojoy:server",
                  "comment": "",
                  "name": "server",
                  "type": "record:aaaa",
                  "view": "default",
                  "zone": "info.com"
                },
                {"_ref":
"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5ob3N0JC5fZGVmYXVsdC5jb20uaW5mby50ZX
N0:test",
                  "comment": "",
                  "name": "test",
                  "type": "record:host_ipv4addr",
                  "view": "default",
                  "zone": "info.com"
                }]]}
```

**Retrieve non-system generated records**

Records have a creator field. The possible values for this field are SYSTEM, STATIC and DYNAMIC. You
can either fetch STATIC and DYNAMIC records separately, or combine them in a Multiple Object Body
request as shown in the section Multiple Object Body Feature using */request*

Run a GET request on the records by passing creator as the parameter.

| Operation | REST Method | API Call |
|-----------|-------------|----------|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Retrieve non-system generated A records | GET | <wapi_url>/record:a?creator=STATIC |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:a?creator=STATIC&_return_fields%2B=creator&_return_as_object=1" | |
| | {"result":<br>  [{"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:server.info.com/default",<br>    "creator": "STATIC",<br>    "ipv4addr": "10.10.10.2",<br>    "name": "server.info.com",<br>    "view": "default"<br>  },<br>   {"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmRlbW8scHJpbnQsMTAuMTAuMTAuMjE:print.demo.com/default",<br>    "creator": "STATIC",<br>    "ipv4addr": "10.10.10.21",<br>    "name": "print.demo.com",<br>    "view": "default"<br>}]} | |
| Retrieve non-system generated records of all types within zone demo001.com | GET | <wapi_url>/allrecords?zone=demo001.com&creator=STATIC |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/allrecords?zone=demo001.com&creator=STATIC&_return_fields%2B=creator&_return_as_object=1" | |
| | {"result":<br>  [{"_ref":<br>"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5ob3N0JC5fZGVmYVVsdC5jb20uZGVtbzAwMS5ob3N0MDAx:host001",<br>    "comment": "",<br>    "name": "host001",<br>    "type": "record:host_ipv4addr",<br>    "view": "default",<br>    "zone": "demo001.com"},<br>   {"_ref":<br>"allrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2EkLl9kZWZhdWx0LmNvbS5kZW1vMDAxLGhvc3QwMDIsMTAuMC4wLjI:host002",<br>    "comment": "",<br>    "name": "host002",<br>    "type": "record:a",<br>    "view": "default",<br>    "zone": "demo001.com"}]} | |

## Search for a record based on some criteria

Run a GET request on host/A records by passing required criteria as the parameter

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Retrieve host by object reference | GET | `<wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default` |
| | | `curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default?_return_as_object=1"` |
| | | `{"result":`<br>`{"_ref":`<br>`"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default",`<br>`"ipv4addrs":`<br>`[{ "_ref":`<br>`"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjI2LjEuMjAwLg:172.26.1.200/host1.test.com/default",`<br>`"configure_for_dhcp": false,`<br>`"host": "host1.test.com",`<br>`"ipv4addr": "172.26.1.200"`<br>`}],`<br>`"name": "host1.test.com",`<br>`"view": "default"`<br>`}}` |
| Search host by name | GET | `<wapi_url>/record:host?name=host1.info.com` |
| | | `curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host?name=host1.info.com&_return_as_object=1"` |
| | | `{"result":`<br>`[{"_ref":`<br>`"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default",`<br>`"ipv4addrs":`<br>`[{"_ref":`<br>`"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaG9zdDEuMTAuMTAuMTAuMjAu:10.10.10.20/host1.info.com/default",`<br>`"configure_for_dhcp": false,`<br>`"host": "host1.info.com",`<br>`"ipv4addr": "10.10.10.20"`<br>`}],`<br>`"name": "host1.info.com",`<br>`"view": "default"`<br>`}]}` |
| Search host by EA (Location is set to Santa Clara) | GET | `<wapi_url>/record:host?_return_fields%2B=extattrs&*Location:=Santa%20Clara` |
| | | `curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host?_return_fields%2B=extattrs&*Location%3A=Santa%20Clara&_return_as_object=1"` |
| | | `{"result":`<br>`[{"_ref":`<br>`"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default",`<br>`"extattrs":`<br>`{"Location":`<br>`{"value": "Santa Clara"}` |

| | | |
|---|---|---|
| | ```<br>    },<br>    "ipv4addrs":<br>    [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyL<br>jI2LjEuMjAwLg:172.26.1.200/host1.test.com/default",<br>      "configure_for_dhcp": false,<br>      "host": "host1.test.com",<br>      "ipv4addr": "172.26.1.200"<br>    }],<br>    "name": "host1.test.com",<br>    "view": "default"<br>}]}<br>``` | |
| Search host by IP address range | GET    <wapi_url>/record:host?ipv4addr>=10.10.10.100&ipv4addr<=10.10.10.102 | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:host?ipv4addr>=10.10.10.100&ipv4addr<=10.10.10.102&_return_<br>as_object=1" | |
| | ```<br>{"result":<br>[{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5hYmMuaG9zdC0x:host-1.abc.com/default",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmFiYy5ob3N0LTEuMTAu<br>MTAuMTAuMTAxLg:10.10.10.101/host-1.abc.com/default",<br>     "configure_for_dhcp": false,<br>     "host": "host-1.abc.com",<br>     "ipv4addr": "10.10.10.101"}],<br>  "name": "host-1.abc.com",<br>  "view": "default" },<br>{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5hYmMuaG9zdC0y:host-2.abc.com/default",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmFiYy5ob3N0LTIuMTAuM<br>TAuMTAuMTAyLg:10.10.10.102/host-2.abc.com/default",<br>     "configure_for_dhcp": false,<br>     "host": "host-2.abc.com",<br>     "ipv4addr": "10.10.10.102" }],<br>  "name": "host-2.abc.com",<br>  "view": "default"},<br>{"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0Lm5ldC54eXoudGVzdA:test.xyz.net/default",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQubmV0Lnh5ei50ZXN0LjEwLjEwLj<br>EwLjEwMC4:10.10.10.100/test.xyz.net/default",<br>     "configure_for_dhcp": false,<br>     "host": "test.xyz.net",<br>     "ipv4addr": "10.10.10.100"}],<br>"name": "test.xyz.net",<br>"view": "default" }]}<br>``` | |
| Search host by subnet | GET    <wapi_url>/record:host?network=10.10.10.0/24 | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:host?network=10.10.10.0/24&_return_as_object=1" | |
| | ```<br>{"result":<br>[{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5hYmMuaG9zdC0x:host-1.abc.com/default",<br>``` | |

| | | |
|---|---|---|
| | | "ipv4addrs":<br>[{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmFiYy5ob3N0LTEuMTAu<br>MTAuMTAuMTAxLg:10.10.10.101/host-1.abc.com/default",<br>  "configure_for_dhcp": false,<br>  "host": "host-1.abc.com",<br>  "ipv4addr": "10.10.10.101"}],<br> "name": "host-1.abc.com",<br> "view": "default" },<br><br>…….<br>{"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0Lm5ldC54eXoudGVzdA:test.xyz.net/default",<br> "ipv4addrs":<br>[{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQubmV0Lnh5ei50ZXN0LjEwLjEwLj<br>EwLjEwMC4:10.10.10.100/test.xyz.net/default",<br>  "configure_for_dhcp": false,<br>  "host": "test.xyz.net",<br>  "ipv4addr": "10.10.10.100"}],<br>"name": "test.xyz.net",<br>"view": "default" }]} |

| Operation | REST Method | API Call |
|---|---|---|
| Get A record using object reference | GET | <wapi_url>/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLj<br>EwLjEwLjI:server.info.com/default |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmV<br>yLDEwLjEwLjEwLjI:server.info.com/default?_return_as_object=1" | |
| | {"result":<br>  {"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:server.info.<br>com/default",<br>  "ipv4addr": "10.10.10.2",<br>  "name": "server.info.com",<br>  "view": "default"<br>}} | |

The third example uses the _return_fields+ to specify the Extensible Attribute (EA) as an extra attribute. Also, prepend '*' to the front of the EA name.

## Search for network objects based on regular expressions

You can use regular expressions to search for most network objects.

The following example filters network objects based on a regular expression.

The first example lists all A records that contain *info.com* in their name. The second example lists all zones that start with an "i" and contain "lo". The regular expression for this will be ^i.*lo.*$

Remember to specify the ~ modifier to indicate you are querying with a regular expression.

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search for A records that contain | GET | <wapi_url>/record:a?name~=info.com&_return_fields=name |

| info.com in the name | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:a?name~=info.com&_return_fields=name&_return_as_object=1" |
|---|---|
| | {"result":<br>  [{"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjEwLjI:server.info.com/default",<br>    "name": "server.info.com"<br>  },<br>  {"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sdGVzdC5ob3N0LDE3Mi4yNi4xLjEwMA:host.test.info.com/default",<br>    "name": "host.test.info.com"<br>}]} |

| | GET | <wapi_url>/zone_auth?fqdn~=^i.*lo.*$&_return_fields=fqdn |
|---|---|---|
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_auth?fqdn~=^i.*lo.*$&_return_fields=fqdn&_return_as_object=1" | |
| Search for zones that start with an "i" and contain "lo" | {"result":<br>  [{"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvYmxveA:infoblox.com/default",<br>    "fqdn": "infoblox.com"<br>  },<br>  {"_ref":<br>"zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvcm1ibG94:informblox.com/default",<br>    "fqdn": "informblox.com"<br>  },<br>  {"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmdsbw:inglo.com/default",<br>    "fqdn": "inglo.com"<br>}]} | |

**Aliases for a host**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| | GET | <wapi_url>/record:host?_return_fields%2B=aliases&name=printer.info.com | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host?_return_fields%2B=aliases&name=printer.info.com&_return_as_object=1" | | |
| Get all the aliases on a host | {"result":<br>  [{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnByaW50ZXI:printer.info.com/default",<br>    "aliases":<br>    ["scanner.info.com"],<br>    "ipv4addrs":<br>    [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfaWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ucHJpbnRlci4xNjAuMjAuMS4xMDAu:160.20.1.100/printer.info.com/default",<br>      "configure_for_dhcp": false,<br>      "host": "printer.info.com",<br>      "ipv4addr": "160.20.1.100"<br>    }],<br>    "name": "printer.info.com",<br>    "view": "default"<br>}]} | | |

---

| | | | {"name":"wapialias.info.com", "ipv4addrs": [{"ipv4addr":"172.26.1.2"}], "aliases": [ "remote","pointer"]} |
|---|---|---|---|
| Add a host with aliases | POST | <wapi_url>/record:host | {"name":"wapialias.info.com", "ipv4addrs": [{"ipv4addr":"172.26.1.2"}], "aliases": [ "remote","pointer"]} |

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST
"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=aliases&_return_as_object=1" -d
'{"name":"wapialias.info.com","ipv4addrs": [{"ipv4addr":"172.26.1.2"}],"aliases": [ "remote","pointer"]}'

```
{"result":
 {"_ref":
"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/defau
lt",
  "aliases":
   ["remote.info.com",
    "pointer.info.com"
   ],
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaWFsaWFF
zLjE3Mi4yNi4xLjIu:172.26.1.2/wapialias.info.com/default",
     "configure_for_dhcp": false,
     "host": "wapialias.info.com",
     "ipv4addr": "172.26.1.2"
   }],
  "name": "wapialias.info.com",
  "view": "default"
}}
```

| Modify aliases on a host | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/default | {"aliases": ["local"]} |
|---|---|---|---|

curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT
"https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlh
cw:wapialias.info.com/default?_return_fields%2B=aliases&_return_as_object=1" -d '{"aliases":
["local"]}'

```
{"result":
 {"_ref":
"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/defau
lt",
  "aliases":
   ["local.info.com"],
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaWFsaWFF
zLjE3Mi4yNi4xLjIu:172.26.1.2/wapialias.info.com/default",
     "configure_for_dhcp": false,
     "host": "wapialias.info.com",
     "ipv4addr": "172.26.1.2"
   }],
  "name": "wapialias.info.com",
  "view": "default"
}}
```

| Remove aliases from a host | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/default | {"aliases": [ ]} |
|---|---|---|---|

| | |
|---|---|
| curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/default?_return_fields%2B=aliases&_return_as_object=1" -d '{"aliases": [ ]}' | |
| {"result":   {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGlhbGlhcw:wapialias.info.com/default",     "ipv4addrs":     [{"_ref": "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaWFsaWFzLjE3Mi4yNi4xLjIu:172.26.1.2/wapialias.info.com/default",       "configure_for_dhcp": false,       "host": "wapialias.info.com",       "ipv4addr": "172.26.1.2"     }],     "name": "wapialias.info.com",     "view": "default"   }} | |

**Change the IP address of a host**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Change IP address of a host | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbNvbS50ZXN0Lmhvc3Qx:host1.test.com/default | {"ipv4addrs": [{"ipv4addr": "172.26.1.21"}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx: host1.test.com/default?_return_fields%2B=ipv4addrs&_return_as_object=1" -d '{"ipv4addrs":[{"ipv4addr": "172.26.1.21"}]}' | | |
| | {"result":   {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default",     "ipv4addrs":     [{"_ref": "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyL jI2LjEuMjEu:172.26.1.21/host1.test.com/default",       "configure_for_dhcp": false,       "host": "host1.test.com",       "ipv4addr": "172.26.1.21"     }],     "name": "host1.test.com",     "view": "default"   }} | | |

## Add or remove IP addresses from a host

To add or remove IP address from a host record without altering the original list, use *ipv4addrs+* or *ipv4addrs-*

| Operation | REST Method | API Call | Sample Body |
|-----------|-------------|----------|-------------|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Add IP address to a host record | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default | {"ipv4addrs+": [{"ipv4addr": "192.168.1.21"}, {"ipv4addr": "10.10.10.21"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default?_return_fields%2B=ipv4addrs&_return_as_object=1" -d '{"ipv4addrs+":[{"ipv4addr":"192.168.1.21"},{"ipv4addr":"10.10.10.21"}]}' | |
| | | {"result": <br> {"_ref": <br> "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default", <br> "ipv4addrs": <br> [{"_ref": <br> "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjI2LjI2Lg2LjEuMju:172.26.1.21/host1.test.com/default", <br> "configure_for_dhcp": false, <br> "host": "host1.test.com", <br> "ipv4addr": "172.26.1.21" <br> }, <br> {"_ref": <br> "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTkyLjE2OC4xLjIxLg:192.168.1.21/host1.test.com/default", <br> "configure_for_dhcp": false, <br> "host": "host1.test.com", <br> "ipv4addr": "192.168.1.21" <br> }, <br> {"_ref": <br> "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTAuMTAuMTAuMjEu:10.10.10.21/host1.test.com/default", <br> "configure_for_dhcp": false, <br> "host": "host1.test.com", <br> "ipv4addr": "10.10.10.21" <br> }], <br> "name": "host1.test.com", <br> "view": "default" <br> }} | |
| Remove IP address from a host record | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default | {"ipv4addrs-": [{"ipv4addr": "192.168.1.21"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default?_return_fields%2B=ipv4addrs&_return_as_object=1" -d '{"ipv4addrs-":[{"ipv4addr":"192.168.1.21"}]}' | |
| | | {"result": <br> {"_ref": <br> "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default", <br> "ipv4addrs": <br> [{"_ref": | |

"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTcyLjl2LjEuMjEu:172.26.1.21/host1.test.com/default",
    "configure_for_dhcp": false,
    "host": "host1.test.com",
    "ipv4addr": "172.26.1.21"
  },
  {"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTAuMTAuMTAuMjEu:10.10.10.21/host1.test.com/default",
    "configure_for_dhcp": false,
    "host": "host1.test.com",
    "ipv4addr": "10.10.10.21"
  }],
  "name": "host1.test.com",
  "view": "default"
}}

## Add a host with the next available IP address from a network

Use the function *next_available_ip* by specifying it in the option *_function*. You can use it in the longhand form or the shorthand form(*func*). The following example also covers the different forms *func* supports in shorthand.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | | Sample cURL Command |
| | | | Sample Output |
| Add host with next available IP address from a network | POST | <wapi_url>/record:host | {"name":"wapi.info.com",<br>"ipv4addrs":<br>[{"ipv4addr":{"_object_function":"next_available_ip",<br>"_parameters":{"exclude":["10.10.10.1","10.10.10.2"]},<br>"_result_field":"ips",<br>"_object" : "network",<br>"_object_parameters":{"network":"10.10.10.0/24"}}}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d<br>'{"name":"wapi.info.com","ipv4addrs":[{"ipv4addr":{"_object_function":"next_available_ip","_parameters"<br>:{"exclude":["10.10.10.1","10.10.10.2"]},"_result_field":"ips","_object" :<br>"network","_object_parameters":{"network":"10.10.10.0/24"}}}]}' | | |
| | {"result":<br>  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",<br>    "ipv4addrs":<br>    [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xMC4xMC4xMC4zLg:10.10.10.3/wapi.info.com/default",<br>    "configure_for_dhcp": false,<br>    "host": "wapi.info.com",<br>    "ipv4addr": "10.10.10.3"<br>  }],<br>  "name": "wapi.info.com",<br>  "view": "default"<br>}} | | |
| | POST | <wapi_url>/record:host | {"name": "wapi.info.com",<br>"ipv4addrs":[{"ipv4addr":<br>"func:nextavailableip:10.10.10.0/24"}]} |

---

| | | | |
|---|---|---|---|
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d '{"name": "wapi.info.com","ipv4addrs":[{"ipv4addr":"func:nextavailableip:10.10.10.0/24"}]}' |

```
{"result":
  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",
   "ipv4addrs":
     [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xMC4
xMC4xMC4xLg:10.10.10.10/wapi.info.com/default",
       "configure_for_dhcp": false,
       "host": "wapi.info.com",
       "ipv4addr": "10.10.10.10"
    }],
   "name": "wapi.info.com",
   "view": "default"
}}
```

| POST | &lt;wapi_url&gt;/record:host | {"name":"wapi.info.com",<br>"ipv4addrs": [{"ipv4addr":<br>"func:nextavailableip:network/ZG5zLm5ldHdvcmskMTkyLjE2OC<br>4xLjAvMjQvMA:192.168.1.0/24/default"}]} |
|---|---|---|

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d<br>'{"name":"wapi.info.com","ipv4addrs":[{"ipv4addr":"func:nextavailableip:network/ZG5zLm5ldHdvcmskM<br>TkyLjE2OC4xLjAvMjQvMA:192.168.1.0/24/default "}]}'

```
{"result":
  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",
   "ipv4addrs":
     [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xOTI
uMTY4LjEuNS4:192.168.1.5/wapi.info.com/default",
       "configure_for_dhcp": false,
       "host": "wapi.info.com",
       "ipv4addr": "192.168.1.5"
    }],
   "name": "wapi.info.com",
   "view": "default"
}}
```

| POST | &lt;wapi_url&gt;/record:host | {"name": "wapi.info.com",<br>"ipv4addrs": [{"ipv4addr":<br>"func:nextavailableip:172.21.10.0/24,default"}]} |
|---|---|---|

curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d '{"name": "wapi.info.com","ipv4addrs": [{"ipv4addr":"func:nextavailableip:172.21.10.0/24,default"}]}'

```
{"result":
  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",
   "ipv4addrs":
     [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xNzIu
MjEuMTAuMS4:172.21.10.1/wapi.info.com/default",
       "configure_for_dhcp": false,
       "host": "wapi.info.com",
       "ipv4addr": "172.21.10.1"
    }],
   "name": "wapi.info.com",
```

| | | | |
|---|---|---|---|
| | | | "view": "default"<br>}} |
| | POST | \<wapi_url\>/record:host | {"name": "wapi.info.com",<br>"ipv4addrs": [{"ipv4addr":<br>"func:nextavailableip: 192.168.1.10-192.168.1.15"}]} |
| | colspan=3 | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d '{"name": "wapi.info.com","ipv4addrs": [{"ipv4addr":"func:nextavailableip:<br>192.168.1.10-192.168.1.15"}]}' | |
| | colspan=3 | {"result":<br> {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",<br>  "ipv4addrs":<br>  [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xOTI<br>uMTY4LjEuMTAu:192.168.1.10/wapi.info.com/default",<br>   "configure_for_dhcp": false,<br>   "host": "wapi.info.com",<br>   "ipv4addr": "192.168.1.10"<br>  }],<br>  "name": "wapi.info.com",<br>  "view": "default"<br>}} | |
| Add host with next available IP from a network using a complex search (using Extensible Attributes) and inherit the EAs | POST | \<wapi_url\>/record:host | {"name":"wapi.info.com",<br>"ipv4addrs":[{"ipv4addr" : {"_object_function":"next_available_ip",<br>"_result_field":"ips",<br>"_object":"network",<br>"_object_parameters":{"*Region" : "EMEA"},<br>"_parameters":{"exclude":["10.0.0.1","10.0.0.2"]}},<br>"use_for_ea_inheritance":true}]} |
| | colspan=3 | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1 "<br>-d<br>'{"name":"wapi.info.com","ipv4addrs":[{"ipv4addr":{"_object_function":"next_available_ip","_result_field":<br>"ips","_object":"network","_object_parameters":{"*Region" :<br>"EMEA"},"_parameters":{"exclude":["10.0.0.1","10.0.0.2"]}},"use_for_ea_inheritance":true}]}' | |
| | colspan=3 | {"result":<br> {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default",<br>  "ipv4addrs":<br>  [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xMC4<br>wLjAuMy4:10.0.0.3/wapi.info.com/default",<br>   "configure_for_dhcp": false,<br>   "host": "wapi.info.com",<br>   "ipv4addr": "10.0.0.3"<br>  }],<br>  "name": "wapi.info.com",<br>  "view": "default"<br>}} | |

Similarly, you can create an A record or AAAA record with the next available IP address from a network.

## Add a host with a fixed address

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Add a host with a fixed address | POST | <wapi_url>/record:host | {"name":"host.info.com", "ipv4addrs": [{"ipv4addr":"172.26.1.20", "mac":"aa:bb:cc:11:22:21"}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,ipv4addrs&_return_as_object=1" -d '{"name":"host.info.com","ipv4addrs":[{"ipv4addr":"172.26.1.20","mac":"aa:bb:cc:11:22:21"}]}' | | |
| | {"result": <br> {"_ref": <br> "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Q:host.info.com/default", <br>   "ipv4addrs": <br>   [{"_ref": <br> "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaG9zdC4xNzIuMjYuMS4yMC4:172.26.1.20/host.info.com/default", <br>     "configure_for_dhcp": true, <br>     "host": "host.info.com", <br>     "ipv4addr": "172.26.1.20", <br>     "mac": "aa:bb:cc:11:22:21" <br>   }], <br>   "name": "host.info.com", <br>   "view": "default" <br> }} | | |

## Add Extensible Attributes to an object

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Add an extensible attribute | PUT | <wapi_url>/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNv bS5pbmZvLndhcGk:wapi.info.com/default | {"extattrs": {"Site": {"value": "East"}}} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk: wapi.info.com/default?_return_fields%2B=extattrs&_return_as_object=1" -d '{"extattrs":{"Site": {"value": "East"}}}' | | |
| | {"result": <br> {"_ref": <br> "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLndhcGk:wapi.info.com/default", <br>   "extattrs": <br>   {"Site": {"value": "East"} <br>   }, <br>   "ipv4addrs": <br>   [{"_ref": <br> "record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ud2FwaS4xMC4wLjAuMy4:10.0.0.3/wapi.info.com/default", <br>     "configure_for_dhcp": false, <br>     "host": "wapi.info.com", <br>     "ipv4addr": "10.0.0.3" <br>   }], <br>   "name": "wapi.info.com", | | |

```
  "view": "default"
}}
```

## TTL

By default, the TTL is inherited from the Grid.

To override the default settings, while modifying TTL at the zone level, specify the TTL value in the *soa_default_ttl* field and also set the *use_grid_zone_timer* field to true. When this is set to *false*, the *soa_default_ttl* value indicates the default ttl.While modifying at the record level, remember to set the *use_ttl* flag to true. Otherwise, the value will be inherited from a higher-level setting.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Fetch the default grid-wide TTL value | GET | \<wapi_url>/grid:dns?_return_fields%2B=default_ttl | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/grid:dns?_return_fields%2B=default_ttl&_return_as_object=1" | | |
| | {"result": <br> [{"_ref": "grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox", <br>   "default_ttl": 28800 <br>}]} | | |
| Fetch TTL for a zone | GET | \<wapi_url>/zone_auth?fqdn=info.com&_return_fields%2B=use_grid_zone_timer,soa_default_ttl | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_auth?fqdn=info.com&_return_fields%2B=use_grid_zone_timer,soa_default_ttl&_return_as_object=1" | | |
| | {"result": <br> [{"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default", <br>   "fqdn": "info.com", <br>   "soa_default_ttl": 28800, <br>   "use_grid_zone_timer": false, <br>   "view": "default" <br>}]} | | |
| Modify TTL for a zone | PUT | \<wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default | {"use_grid_zone_timer":true, "soa_default_ttl":5000} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default?_return_fields%2B=use_grid_zone_timer,soa_default_ttl&_return_as_object=1" -d '{"use_grid_zone_timer":true,"soa_default_ttl":5000}' | | |
| | {"result": <br>  {"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZv:info.com/default", <br>   "fqdn": "info.com", <br>   "soa_default_ttl": 5000, <br>   "use_grid_zone_timer": true, <br>   "view": "default" <br>}} | | |
| Modify TTL for a record | PUT | \<wapi_url>/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20udGVzdC5tYWlsLiJUaGlzIiAiYSIgIm1haWwiICJzZXJ2ZXIi:mail.test.com/default | {"use_ttl": true, "ttl":3600} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20udGVzdC5tY... | | |

WlsLiJUaGlzIiAiYSIgIm1haWwiICJzZXJ2ZXIi:mail.test.com/default?_return_fields%2B=ttl&_return_as_object=1" -d '{"use_ttl": true,"ttl":3600}'

```
{"result":
 {"_ref":
"record:txt/ZG5zLmJpbmRfdHh0JC5fZGVmYXVsdC5jb20udGVzdC5tYWlsLiJUaGlzIiAiYSIgIm1haWwiICJzZXJ2ZXIi:mail.test.com/default",
  "name": "mail.test.com",
  "text": "This a mail server",
  "ttl": 3600,
  "view": "default"
}}
```

## Name Server Groups

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| | GET | <wapi_url>/nsgroup | |
| Fetch name server groups and its members | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/nsgroup?_return_fields%2B=grid_primary,grid_secondaries&_return_as_object=1" | |
| | | {"result": {"_ref": "nsgroup/ZG5zLm5zX2dyb3VwJFRlc3Qy:demo", "grid_primary": [{"name": "infoblox.localdomain", "stealth": false}], "name": "demo" }} | |
| Create a name server group | POST | <wapi_url>/nsgroup | {"name":"test", "grid_primary":[{"name":"infoblox.localdomain"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/nsgroup?_return_fields%2B=grid_primary&_return_as_object=1" -d '{"name":"test","grid_primary":[{"name":"infoblox.localdomain"}]}' | |
| | | {"result": {"_ref": "nsgroup/ZG5zLm5zX2dyb3VwJHRlc3Q:test", "grid_primary": [{"name": "infoblox.localdomain", "stealth": false}], "grid_secondaries": [], "name": "test" }} | |
| Add grid secondaries to the name server group | PUT | <wapi_url>/nsgroup/ZG5zLm5zX2dyb3VwJHRlc3Q:test | {"grid_secondaries":[{"name":"member1.localdomain"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/nsgroup/ZG5zLm5zX2dyb3VwJHRlc3Q:test?_return_fields%2B=grid_primary,grid_secondaries&_return_as_object=1" -d '{"grid_secondaries":[{"name":"member1.localdomain"}]}' | |
| | | {"result": {"_ref": "nsgroup/ZG5zLm5zX2dyb3VwJHRlc3Q:test", "grid_primary": [{"name": "infoblox.localdomain", "stealth": false }], | |

```
         "grid_secondaries":
          [{"enable_preferred_primaries": false,
            "grid_replicate": true,
            "lead": false,
            "name": "member1.localdomain",
            "preferred_primaries": [],
            "stealth": false
          }],
          "name": "test"
}}
```

## Zone Transfers

Zone transfers can be enabled and configured at the grid, member or zone level. While configuring at the zone level, in addition to the *allow_tranfer* flag, set the *use_allow_transfer* flag.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Enable and specify the zone transfer settings at the grid level | PUT | `<wapi_url>/grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox?_return_fields%2B=allow_transfer` | {"allow_transfer": [{ "_struct": "addressac", "address":"Any", "permission":"ALLOW"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox?_return_fields%2B=allow_transfer&_return_as_object=1"  -d '{"allow_transfer": [{ "_struct": "addressac","address":"Any","permission":"ALLOW"}]}' | |
| | | {"result": {"_ref": "grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox", "allow_transfer": [{"_struct": "addressac", "address": "Any", "permission": "ALLOW" }]}} | |
| Enable and specify the zone transfer settings at the member level | PUT | `<wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=allow_transfer` | {"allow_transfer": [{ "_struct": "addressac", "address":"10.10.0.0/16", "permission":"ALLOW"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=allow_transfer&_return_as_object=1"  -d '{"allow_transfer": [{ "_struct": "addressac","address":"10.10.0.0/16","permission":"ALLOW"}]}' | |
| | | {"result": {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:member1.localdomain", "allow_transfer": [{"_struct": "addressac", "address": "10.10.0.0/16", "permission": "ALLOW" }], "host_name": "member1.localdomain", "ipv4addr": "172.26.1.3" }} | |

| | PUT | <wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvNvbS5kZW1v:demo.com/default?_return_fields%2B=allow_transfer | {"use_allow_transfer":true, "allow_transfer": [{ "_struct": "addressac", "address":"192.168.0.1/24", "permission":"ALLOW"}]} |
|---|---|---|---|
| Enable and specify the zone transfer settings at the zone level | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=allow_transfer&_return_as_object=1"  -d '{"use_allow_transfer":true,"allow_transfer": [{ "_struct": "addressac","address":"192.168.0.0/24","permission":"ALLOW"}]}' | |
| | colspan | {"result": {"_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default",  "allow_transfer":  [{"_struct": "addressac",    "address": "192.168.0.0/24",    "permission": "ALLOW"  }],  "fqdn": "demo.com",  "view": "default" }} | |

## DNSSEC

DNSSEC can be enabled at the grid, member, view or zone level.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Enable DNSSEC at the zone level | PUT | <wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params | {"use_dnssec_key_params":true} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params&_return_as_object=1" -d '{"use_dnssec_key_params":true}' | |
| | colspan | {"result": { "_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default",   "fqdn": "demo.com",   "use_dnssec_key_params": true,   "view": "default" }} | |
| Disable DNSSEC at the zone level | PUT | <wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params | {"use_dnssec_key_params":false} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params&_return_as_object=1" -d '{"use_dnssec_key_params":false}' | |
| | colspan | {"result": { "_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default",   "fqdn": "demo.com",   "use_dnssec_key_params": false,   "view": "default" }} | |

| | | | | |
|---|---|---|---|---|
| Sign the zone | | POST | &lt;wapi_url&gt;/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_operation | {"operation":"SIGN"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_operation" -d '{"operation":"SIGN"}' | | |
| Get the zone key (key pair type can be ZSK or KSK) | Initiate the DNSSEC key download | POST | &lt;wapi_url&gt;/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_get_zone_keys | {"key_pair_type":"ZSK"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_get_zone_keys" -d '{"key_pair_type":"ZSK"}' | | |
| | | {"token": "eJytUMFOwzAMvedHtsvauqVdx22oTEJCm7QhcbTaJB3R2iYkHlr5ehyQuHLhEMfx8/NznpTWzej1\nWXCQdgrkr5KsFw7EUpqpt91gb4mddDw0Ox1E01KLR90LlwuJ2F3NQGZCFMpIEq4QS+XuxGmh b874\nGcmMeiFcKXZQlnmZVesSkhqKGgBEOC2ufmC4YsIbkQv3aQpZApsqybM8ySGNVVSG1yP szaDR2NTr\ndzRq1Rxe98+HbbPKCiigLnMOkPGdfoYLXvSMrjU+oRuxwjqKGcVZzVp/TeC2TSQo/iz nkDEnDexM\ne9Ypje7f1voxIcqgnqRVZjrHas56D0/7mBa/DaNV0UqI7jbbly0eH3fxXYpARwdVdB7W DPZGDyog\nWZR2dK3/ZtViHx3oWodmclfCD+2DsVPENox1yRdF36Jv\n",
 "url": "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-0313185231810852/zsk_key_pair.txt"
} | | | |
| | Download the zone key | GET | &lt;url_from_the_previous_output&gt; Example: https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-0313185231810852/zsk_key_pair.txt | |
| | | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/ req_id-DOWNLOAD-0313185231810852/zsk_key_pair.txt" -o "zsk_key_pair.txt" | | |
| | | The content of the file looks similar to this: Keytag: 61578 Size: 1024 demo.com. IN DNSKEY 256 3 8 AwEAAanEjBwnl/ftcaRD1R8NyXVhQwFFVzAxiFYUwanYKDJI3207eObhjb2FlNOgO9y98Ln0kmIzS peLtqYzye10Dxfm+Eg4YSA9NNDunMM26yvSR/UqXakxH2Yain+rvXYIQB98QnuzWxNkJnmkPmst gugfcCTLdvBHlECJS/C3XqcT Private-key-format: v1.2 Algorithm: 8 (RSASHA256) Modulus: {0}_{aes}_sAAAAO3ti1bn6M/m4oXt8f3LUuyxdAjKjucwWVCL/0w3oqirdHsimtiVLc1mLwR7eZ1TTCn PfQDOW6USdmUY384tk6hush/WjFrSpxwA2yPr1b2s0Lk5QkvK/bn/JHkO4nj2BJk4QWegKJJHTkU hQzRlewr9Kj11OXfzExgu+FzkLTxvp6wSrmkY5hs4FV6yIZPWGA3DStRWv0f/cZDqvDZNpZyfS/0W 4HarfTb1IUfLariT PublicExponent: {0}_{aes}_EAAAADPzg/q9WRyzpo50uikbF6g= PrivateExponent: {0}_{aes}_sAAAAG7ErDwDyxx4Xg171crlSdxCMOOKbZmO8JGsXO6qo5eDNvdEfxp4E4DUIaiCM6 4aHmshvS6J1ILwHipTwkfdLyXTi7IasLDFHNWi8csJCMGQSD7slPxp96Jy/d4OGaVWgeVdEtBaD4 BK+2g8/Z85eqvkvv/JCG+EHbiUYYWUwHMUqpgw/2QmiCT1NQAkUb6uiI9r3IE7gu9nGWJlx4s2u7 63UScbPtCfjOaRocAFcEaV Prime1: {0}_{aes}_YAAAAI9bl0lSOndVzocDRXWRBknU3qPBRY4wO2jIIzybdxgmXuPaBAW9CFK+JviUd+8 6JSEH5iMWay0NguohYK2d6Itg7y/Rnx3pTMJcjN0NrxzM9fRZFfJ7arb3ZEHn5pn7kA== Prime2: {0}_{aes}_YAAAACjERzXr9L/dNo9ZQld42jJmUKSMeBy3gC6Fr45W0iTJ6+PDawnknH1AlBDdbhkK dFDMMuM1ltHo44gYt5aLQPZlAq6GVMjPLX6vQnu/MOPXkkqrNL85BtNlyaZLkcR5Gg== | | |

| | | | | |
|---|---|---|---|---|
| | | | Exponent1:<br>{0}_{aes}_YAAAANmPwbRhwdBAkLQZHRD2seAC3YpYcHTgS7t7kSq48AF1wtfOmXKpcGeYg0Q4<br>gAeTtJl4ELbB0B1ZLRFSDq7UklY+LfrCnl3mZsrM1fKwTkqHwglxuPwSjNJoIAlJ5SxXDw==<br>Exponent2:<br>{0}_{aes}_YAAAAFVZPm9Y3k0nAnSI/NIGC7kqPmjgAFHV6FvklTgjEdD3Oq8S3vDZ1GOvl51i8htJt<br>4D/wvc6RCqP0kRYFISzSAPlFObN/HZtN69l8QtQU2x+k9zDiE0S4IPqAFZy8ndqzg==<br>Coefficient:<br>{0}_{aes}_YAAAAO3i/B+eJC8sD0esfl/7l8lp4x2t7UDwNQh0vWQEp/6a8una6PUHuzTPuin/n+Lrtak6<br>OFkx/xGLNAE7G8KHtHA34XBpDRMQ7L7Yw/3fWbVhvS5DcBXPYNefxiUolb9EeQ== | |
| | | POST | `<wapi_url>/fileop?_function=downloadcomplete` | {"token": "eJytUM..v\n"} |
| | Remove the stored file using the token | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJytUMFOwzAMvedHtsvauqVdx22oTEJCm7QhcbTaJB3R2iYkHlr5ehyQuHLhEMfx8/NznpTWzej1\nWXCQdgrkr5KsFw7EUpqpt91gb4mddDw0Ox1E01KLR90LlwuJ2F3NQGZCFMpIEq4QS+XuxGmh b874\nGcmMeiFcKXZQlnmZVesSkhqKGgBEOC2ufmC4YsIbkQv3aQpZApsqybM8ySGNVVSG1yP szaDR2NTr\ndzRq1Rxe98+HbbPKCiigLnMOkPGdfoYLXvSMrjU+oRuxwjqKGcVZzVp/TeC2TSQo/iz nkDEnDexM\ne9Ypje7f1voxIcqgnqRVZjrHas56D0/7mBa/DaNV0UqI7jbbly0eH3fxXYpARwdVdB7W DPZGDyog\nWZR2dK3/ZtViHx3oWodmclfCD+2DsVPENox1yRdF36Jv\n"}' | |
| Export trust anchor in DS format | Initiate the export | POST | `<wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_export&operation=EXPORT_DS` | |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_function=dnssec_export&operation=EXPORT_DS" | | |
| | | {"token":<br>"eJytUMFOwzAMvedHtsvauqVdx22oTEJCm7QhcbTaJB3R2iYkHlr5ehyQuHLhEMfx8/NznpTWzej1\nWXCQdgrkr5KsFw7EUpqpt91gb4mddDw0Ox1E01KLR90LlwuJ2F3NQGZCFMpIEq4QS+XuxGmh b874\nGcmMeiFcKXZQlnmZVesSkhqKGgBEOC2ufmC4YsIbkQv3aQpZApsqybM8ySGNVVSG1yP szaDR2NTr\ndzRq1Rxe98+HbbPKCiigLnMOkPGdfoYLXvSMrjU+oRuxwjqKGcVZzVp/TeC2TSQo/iz nkDEnDexM\ne9Ypje7f1voxIcqgnqRVZjrHas56D0/7mBa/DaNV0UqI7jbbly0eH3fxXYpARwdVdB7W DPZGDyog\nWZR2dK3/ZtViHx3oWodmclfCD+2DsVPENox1yRdF36Jv\n",<br> "url":<br>"https://grid-master/http_direct_file_io/req_id-DOWNLOAD-0502010716646241/ds_records.txt"<br>} | | |
| | Download the DS records | GET | `<url_from_the_previous_output>`<br>Example:<br>`https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-0502010716646241/ds_records.txt` | |
| | | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/ req_id- DOWNLOAD-0502010716646241/ds_records.txt" -o "ds_records.txt" | | |
| | | The content of the file looks similar to this:<br>demo.com. IN DS 31006 8 1 EBFDB0B60D074F196E78ABAEF837451FD2027EE6<br>demo.com. IN DS 31006 8 2<br>7650608506F1037C278C3DB123F3799F089AC8FFFE58835970A8FD570A4C7C52<br>department.demo.com. IN DS 43081 8 1 008A09A1F7890B5256FA552316FBF806C72940E6<br>department.demo.com. IN DS 43081 8 2<br>CC7116368234A1C139C23A98545C35F280AE04AB672FA496A25C9BEEBA83C7CE | | |
| | Remove the stored file using the token | POST | `<wapi_url>/fileop?_function=downloadcomplete` | {"token": "eJytUM..v\n"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJytUMFOwzAMvedHtsvauqVdx22oTEJCm7QhcbTaJB3R2iYkHlr5ehyQuHLhEMfx8/NznpTWzej1\nWXCQdgrkr5KsFw7EUpqpt91gb4mddDw0Ox1E01KLR90LlwuJ2F3NQGZCFMpIEq4QS+XuxGmh b874\nGcmMeiFcKXZQlnmZVesSkhqKGgBEOC2ufmC4YsIbkQv3aQpZApsqybM8ySGNVVSG1yP | | |

| | | |
|---|---|---|
| | | szaDR2NTr\ndzRq1Rxe98+HbbPKCiigLnMOkPGdfoYLXvSMrjU+oRuxwjqKGcVZzVp/TeC2TSQo/iznkDEnDexM\ne9Ypje7f1voxIcqgnqRVZjrHas56D0/7mBa/DaNV0UqI7jbbly0eH3fxXYpARwdVdB7WDPZGDyog\nWZR2dK3/ZtViHx3oWodmclfCD+2DsVPENox1yRdF36Jv\n"}' |
| Get a list of the zone keys | GET | <wapi_url>/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params,is_dnssec_enabled,dnssec_keys |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default?_return_fields%2B=use_dnssec_key_params,is_dnssec_enabled,dnssec_keys&_return_as_object=1" | |
| | {"result":<br>  { "_ref": "zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kZW1v:demo.com/default",<br>    "dnssec_keys":<br>    [{"algorithm": "8",<br>      "next_event_date": 1584039064,<br>      "public_key":<br>"AwEAAboElNe0pPpO+SXWII8JY05tPL1WKqJV2GcoJqbUbiGa6dgD4NDpZ8taFax7cpSp3TKEULJiwXCoQ+tpPD8f0IJO0LRtGYnn99VYIX8eNuQ+jH2oJl66hnarmzx99YWowZNlQ4UsJiLe1bo1+5Qt0vsgN8m0bLJHLgDnUBWga7BmNXsjVgXJD/QRHyfZdsSX5qbrvnogzZTjFYe+wsA2mZXvv5MhOE3qdCpOv3W4GkX//x3HaRU1R1ozKlmpQM6Rk4+EUjjNT9gGXt2EMGGZDNBgvhMbjzuBhuyu0GX5zqVi5ZkN++MOYQQUQ5EFKgJPW7oFJMtTYi4XmV7bwlZA/rM=",<br>      "status": "ACTIVE",<br>      "tag": 4654,<br>      "type": "KSK"<br>    },<br>    {"algorithm": "8",<br>      "next_event_date": 1555095064,<br>      "public_key":<br>"AwEAAd2v3QOi88A/SDjY62yX33euAHSqdp+ORs98xRv93GmYli3zVMGfbglgJdhQ8UvRiCNBu+rECpZBzV//xgRh+WVoHAAPILGpuKuoqy7g82a9fenQPhAC1fP61pVJpl06bVEGVNS8GsARgMnf6Lf084Dri32tq4WLfJdoj+rd4wir",<br>`      "status": "PUBLISHED",<br>      "tag": 49428,<br>      "type": "ZSK"<br>    },<br>    {"algorithm": "8",<br>      "next_event_date": 1555095064,<br>      "public_key":<br>"AwEAAanEjBwnl/ftcaRD1R8NyXVhQwFFVzAxiFYUwanYKDJI3207eObhjb2FlNOgO9y98Ln0kmIzSpeLtqYzye10Dxm+Eg4YSA9NNDunMM26yvSR/UqXakxH2Yain+rvXYIQB98QnuzWxNkJnmkPmstgugfcCTLdvBHlECJS/C3XqcT",<br>      "status": "ACTIVE",<br>      "tag": 61578,<br>      "type": "ZSK"<br>    }],<br>  "fqdn": "demo.com",<br>  "is_dnssec_enabled": true,<br>  "use_dnssec_key_params": true,<br>  "view": "default"<br>}} | |

## Response Policy Zones

DNS RPZs (Response Policy Zones), a technology developed by ISC (Internet System Consortium) for allowing reputable sources to dynamically communicate domain name reputation so you can implement policy controls for DNS lookups. You can configure RPZs and define RPZ rules to block DNS resolution for malicious

or unauthorized domain names, or redirect clients to a walled garden by substituting responses. You can assign actions to RPZ rules.

For example, abc.com can have an action of pass thru or substitute (domain) with the domain xyz.com. You can also configure a Grid member to act as a lead secondary that receives RPZ updates from external reputation sources and redistributes the updates to other Grid members.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Fetch RPZs | GET | <wapi_url>/zone_rp | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_rp?_return_fields%2B=rpz_policy&_return_as_object=1" | | |
| | {"result": <br> [{"_ref": "zone_rp/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5nb29nbC53d3c3d3c3d3c:www.googl.com/default", <br>   "fqdn": "www.googl.com", <br>   "rpz_policy": "NXDOMAIN", <br>   "view": "default" <br> }]} | | |
| Create a RPZ | POST | <wapi_url>/zone_rp | {"fqdn": "inblox.com", <br> "rpz_policy": "SUBSTITUTE", <br> "rpz_severity": "WARNING", <br> "substitute_name": "infoblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/zone_rp?_return_fields%2B=fqdn,rpz_policy,rpz_severity,substitute_name&_return_as_object=1" -d '{"fqdn": "inblox.com","rpz_policy": "SUBSTITUTE","rpz_severity": "WARNING","substitute_name": "infoblox.com"}' | | |
| | {"result": <br>   {"_ref": "zone_rp/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5pbmZvYmxvdw:inblox.com/default", <br>   "fqdn": "inblox.com", <br>   "rpz_policy": "SUBSTITUTE", <br>   "rpz_severity": "WARNING", <br>   "substitute_name": "infoblox.com" <br> }} | | |
| Add a substitution rule for DNS A records | POST | <wapi_url>/record:rpz:a | {"name": "server.inblox.com", <br> "ipv4addr":"1.1.1.156", <br> "rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:a?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"server.inblox.com","ipv4addr":"1.1.1.156","rp_zone":"inblox.com"}' | | |
| | {"result": <br>   {"_ref": <br> "record:rpz:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm9ibG93LHNlcnZlciwxLjEuMS4xNTY:server.inblox.com/default", <br>   "ipv4addr": "1.1.1.156", <br>   "name": "server.inblox.com", <br>   "rp_zone": "inblox.com", <br>   "view": "default" <br> }} | | |
| Add a substitution rule for DNS PTR records | POST | <wapi_url>/record:rpz:ptr | {"name": <br> "135.10.10.10.in-addr.arpa.inblox.com ", |

| | | | |
|---|---|---|---|
| | | | "ipv4addr":"10.10.10.135",<br>"ptrdname": "inblox.com",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:rpz:ptr?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name": "135.10.10.10.in-addr.arpa.inblox.com ","ipv4addr":"10.10.10.135","ptrdname": "inblox.com","rp_zone":"inblox.com"}' | | |
| | {"result":<br> {"_ref":<br>"record:rpz:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3cuYXJwYS5pbi1hZGRyyLjEwLjEwLjEwLjEzNS5pbmZvYmxvdy5jb20:135.10.10.10.in-addr.arpa.inblox.com/default",<br> "name": "135.10.10.10.in-addr.arpa.inblox.com",<br> "ptrdname": "inblox.com",<br> "rp_zone": "inblox.com",<br> "view": "default"<br>}} | | |
| Add a substitution rule for IP trigger policy | POST | <wapi_url>/record:rpz:a:ipaddress | {"name":"1.1.1.6.inblox.com",<br>"ipv4addr":"2.2.2.6",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:rpz:a:ipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"1.1.1.6.inblox.com","ipv4addr":"2.2.2.6","rp_zone":"inblox.com"}' | | |
| | {"result":<br> {"_ref":<br>"record:rpz:a:ipaddress/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm9ibG93LHJwei1pcC4xLjEuMS42LjMuLi4uMi4yLjY:1.1.1.6.inblox.com/default",<br> "ipv4addr": "2.2.2.6",<br> "name": "1.1.1.6.inblox.com",<br> "rp_zone": "inblox.com",<br> "view": "default"<br>}} | | |
| Add a Block Domain Name (No Such Domain) Rule | POST | <wapi_url>/record:rpz:cname | {"name":"test.inblox.com",<br>"canonical":"",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:rpz:cname?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"test.inblox.com","canonical":"","rp_zone":"inblox.com"}' | | |
| | {"result":<br> {"_ref":<br>"record:rpz:cname/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvYmxvdy50ZXN0:test.inblox.com/default",<br> "canonical": "",<br> "name": "test.inblox.com",<br> "rp_zone": "inblox.com",<br> "view": "default"<br>}} | | |
| Add a Block Domain Name (No Data) Rule | POST | <wapi_url>/record:rpz:cname | {"name":"demo.inblox.com",<br>"canonical":"*",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:rpz:cname?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"demo.inblox.com","canonical":"*","rp_zone":"inblox.com"}' | | |

| | | | |
|---|---|---|---|
| | {"result":<br> {"_ref":<br>"record:rpz:cname/ZG5zLmJpbmRfY25hbWUkl9kZWZhdWx0LmNvbS5pbmZvYmxvy5kZW1v:demo.inblox.com/default",<br>  "canonical": "*",<br>  "name": "demo.inblox.com",<br>  "rp_zone": "inblox.com",<br>  "view": "default"<br>}} | |
| **Add a Passthru Domain Name Rule** | POST | <wapi_url>/record:rpz:cname | {"name":"pass.inblox.com", "canonical":"pass.inblox.com", "rp_zone":"inblox.com"} |
| | colspan... | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"pass.inblox.com","canonical":"pass.inblox.com","rp_zone":"inblox.com"}' | |
| | {"result":<br> { "_ref":<br>"record:rpz:cname/ZG5zLmJpbmRfY25hbWUkl9kZWZhdWx0LmNvbS5pbmZvYmxvy5wYXNz:pass.inblox.com/default",<br>  "canonical": "pass.inblox.com",<br>  "name": "pass.inblox.com",<br>  "rp_zone": "inblox.com",<br>  "view": "default"<br>}} | | |
| **Add a Substitute Domain Name Rule** | POST | <wapi_url>/record:rpz:cname | {"name":"sub.inblox.com", "canonical":"test", "rp_zone":"inblox.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"sub.inblox.com","canonical":"test","rp_zone":"inblox.com"}' | |
| | {"result":<br> {"_ref":<br>"record:rpz:cname/ZG5zLmJpbmRfY25hbWUkl9kZWZhdWx0LmNvbS5pbmZvYmxvy5zdWI:sub.inblox.com/default",<br>  "canonical": "test",<br>  "name": "sub.inblox.com",<br>  "rp_zone": "inblox.com",<br>   "view": "default"<br>}} | | |
| **Add a Block Client IP Address (No Such Domain) Rule** | POST | <wapi_url>/record:rpz:cname:clientipaddress | {"name":"10.10.10.200.inblox.com", "canonical":"", "rp_zone":"inblox.com"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:clientipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"10.10.10.200.inblox.com","canonical":"","rp_zone":"inblox.com"}' | |
| | {"result":<br> {"_ref":<br>"record:rpz:cname:clientipaddress/ZG5zLmJpbmRfY25hbWUkl9kZWZhdWx0LmNvbS5pbmZvYmxvy5ycHotY2xpZW50LWlwLjEwLjEwLjEwLjIwMC4zMg:10.10.10.200.inblox.com/default",<br>  "canonical": "",<br>  "name": "10.10.10.200.inblox.com",<br>  "rp_zone": "inblox.com", | | |

| | | | |
|---|---|---|---|
| | | | "view": "default"<br>}} |
| Add a Block Client IP Address (No Data) Rule | POST | <wapi_url>/record:rpz:cname:clientipaddress | {"name":"10.10.10.210.inblox.com",<br>"canonical":"*",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:clientipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"10.10.10.210.inblox.com","canonical":"*","rp_zone":"inblox.com"}' | | |
| | {"result":<br>  {"_ref":<br>"record:rpz:cname:clientipaddress/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvYmxvdy5ycHotY2xpZW50LWlwLjEwLjEwLjEwLjIxMC4zMg:10.10.10.210.inblox.com/default",<br>    "canonical": "*",<br>    "name": "10.10.10.210.inblox.com",<br>    "rp_zone": "inblox.com",<br>    "view": "default"<br>}} | | |
| Add a Passthru Client IP Address Rule | POST | <wapi_url>/record:rpz:cname:clientipaddress | {"name":"10.10.10.220.inblox.com",<br>"canonical":"rpz-passthru",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:clientipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"10.10.10.220.inblox.com","canonical":"rpz-passthru","rp_zone":"inblox.com"}' | | |
| | {"result":<br>  {"_ref":<br>"record:rpz:cname:clientipaddress/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvYmxvdy5ycHotY2xpZW50LWlwLjEwLjEwLjEwLjIyMC4zMg:10.10.10.220.inblox.com/default",<br>    "canonical": "rpz-passthru",<br>    "name": "10.10.10.220.inblox.com",<br>    "rp_zone": "inblox.com",<br>    "view": "default"<br>}} | | |
| Add a Substitute Domain Name (Client IP Address) Rule | POST | <wapi_url>/record:rpz:cname:clientipaddressdn | {"name":"10.10.10.230.inblox.com",<br>"canonical":"test",<br>"rp_zone":"inblox.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:clientipaddressdn?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"10.10.10.230.inblox.com","canonical":"test","rp_zone":"inblox.com"}' | | |
| | {"result":<br>  {"_ref":<br>"record:rpz:cname:clientipaddressdn/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmZvYmxvdy5ycHotY2xpZW50LWlwLjEwLjEwLjEwLjIzMC4zMg:10.10.10.230.inblox.com/default",<br>    "canonical": "test",<br>    "name": "10.10.10.230.inblox.com",<br>    "rp_zone": "inblox.com",<br>    "view": "default"<br>}} | | |

| | | | |
|---|---|---|---|
| **Add a Block IP Address (No Such Domain) Rule** | POST | `<wapi_url>/record:rpz:cname:ipaddress` | {"name":"5.5.5.10.inblox.com", "canonical":"", "rp_zone":"inblox.com"} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:ipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"5.5.5.10.inblox.com","canonical":"","rp_zone":"inblox.com"}' | |
| | colspan | {"result": {"_ref": "record:rpz:cname:ipaddress/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmJvYmxvdy5yc HotaXAuNS41LjUuMTAuMzI:5.5.5.10.inblox.com/default", "canonical": "", "name": "5.5.5.10.inblox.com", "rp_zone": "inblox.com", "view": "default" }} | |

| | | | |
|---|---|---|---|
| **Add a Block IP Address (No Data) Rule** | POST | `<wapi_url>/record:rpz:cname:ipaddress` | {"name":"5.5.5.25.inblox.com", "canonical":"*", "rp_zone":"inblox.com"} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:ipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"5.5.5.25.inblox.com","canonical":"*","rp_zone":"inblox.com"}' | |
| | colspan | {"result": {"_ref": "record:rpz:cname:ipaddress/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmJvYmxvdy5yc HotaXAuNS41LjUuMjUuMzI:5.5.5.25.inblox.com/default", "canonical": "*", "name": "5.5.5.25.inblox.com", "rp_zone": "inblox.com", "view": "default" }} | |

| | | | |
|---|---|---|---|
| **Add a Passthru IP Address Rule** | POST | `<wapi_url>/record:rpz:cname:ipaddress` | {"name":"5.5.5.100.inblox.com", "canonical":"5.5.5.100", "rp_zone":"inblox.com"} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:ipaddress?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"5.5.5.100.inblox.com","canonical":"5.5.5.100","rp_zone":"inblox.com"}' | |
| | colspan | {"result": {"_ref": "record:rpz:cname:ipaddress/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmJvYmxvdy5yc HotaXAuNS41LjUuMTAwLjMy:5.5.5.100.inblox.com/default", "canonical": "5.5.5.100", "name": "5.5.5.100.inblox.com", "rp_zone": "inblox.com", "view": "default" }} | |

| | | | |
|---|---|---|---|
| **Add a Substitute Domain Name (IP Address) Rule** | POST | `<wapi_url>/record:rpz:cname:ipaddressdn` | {"name":"5.5.5.200.inblox.com", "canonical":"test", "rp_zone":"inblox.com"} |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/record:rpz:cname:ipaddressdn?_return_fields%2B=name,rp_zone&_return_as_object=1" -d '{"name":"5.5.5.200.inblox.com","canonical":"test","rp_zone":"inblox.com"}' | |
| | colspan | {"result": {"_ref": "record:rpz:cname:ipaddressdn/ZG5zLmJpbmRfY25hbWUkLl9kZWZhdWx0LmNvbS5pbmJvYmxvdy5 | |

| | | |
|---|---|---|
| | ycHotaXAuNS41LjUuMjAwLjMy:5.5.5.200.inblox.com/default",<br>"canonical": "test",<br>"name": "5.5.5.200.inblox.com",<br>"rp_zone": "inblox.com",<br>"view": "default"<br>}} | |

GET | <wapi_url>/allrpzrecords?zone=inblox.com

curl -k -u admin:infoblox -X GET
"https://grid-master/wapi/v2.12/allrpzrecords?zone=inblox.com&_return_fields%2B=rpz_rule&_return_as_object=1"

**Fetch all objects belonging to a RPZ**

{"result":
 [{"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2EkLl9kZWZhdWx0LmNvbS5pbmZvYmxveHycHotaXAuMS4xLjEuNi4zMiwyLjIuNi42:1.1.1.6",
  "comment": "",
  "name": "1.1.1.6",
  "rpz_rule": "SubstituteIPv4AddressRecord",
  "type": "record:rpz:a:ipaddress",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3gucnB6LWlwLjUuNS5ewLjMy:5.5.5.10",
  "comment": "",
  "name": "5.5.5.10",
  "rpz_rule": "BlockNxdomainIpaddr",
  "type": "record:rpz:cname:ipaddress",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3gucnB6LWlwLjUuNS5jI1LjMy:5.5.5.25",
  "comment": "",
  "name": "5.5.5.25",
  "rpz_rule": "BlockNoDataIpaddr",
  "type": "record:rpz:cname:ipaddress",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3gucnB6LWlwLjUuNS5ewMC4zOA:5.5.5.100",
  "comment": "",
  "name": "5.5.5.100",
  "rpz_rule": "PassthruIpaddr",
  "type": "record:rpz:cname:ipaddress",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3gucnB6LWlwLjUuNS5wMC4zOA:5.5.5.200",
  "comment": "",
  "name": "5.5.5.200",

    "rpz_rule": "SubstituteIPAddressCname",
    "type": "record:rpz:cname:ipaddressdn",
    "view": "default",
    "zone": "inblox.com"
   },
   {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3cuB6LWNsaWVudC1pcC4xMC4xMC4xMC4yMDAuMzI:10.10.10.200",
    "comment": "",
    "name": "10.10.10.200",
    "rpz_rule": "BlockNxdomainClientIpaddr",
    "type": "record:rpz:cname:clientipaddress",
    "view": "default",
    "zone": "inblox.com"
   },
   {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3cuB6LWNsaWVudC1pcC4xMC4xMC4xMC4yMTAuMzI:10.10.10.210",
    "comment": "",
    "name": "10.10.10.210",
    "rpz_rule": "BlockNoDataClientIpaddr",
    "type": "record:rpz:cname:clientipaddress",
    "view": "default",
    "zone": "inblox.com"
   },
   {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3cuB6LWNsaWVudC1pcC4xMC4xMC4xMC4yMjAuMzI:10.10.10.220",
    "comment": "",
    "name": "10.10.10.220",
    "rpz_rule": "PassthruClientIpaddr",
    "type": "record:rpz:cname:clientipaddress",
    "view": "default",
    "zone": "inblox.com"
   },
   {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYXVsdC5jb20uaW5mb2Jsb3cuB6LWNsaWVudC1pcC4xMC4xMC4xMC4yMzAuMzI:10.10.10.230",
    "comment": "",
    "name": "10.10.10.230",
    "rpz_rule": "SubstituteClientIPAddressCname",
    "type": "UNSUPPORTED",
    "view": "default",
    "zone": "inblox.com"
   },
   {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX3B0ciQuX2RlZmF1bHQuY29tLmluZm9ibG93LmFycGEuaW4tYWRkci4xMC4xMC4xMC4xMzUuaW5mb2Jsb3cuY29t:135.10.10.10.in-addr.arpa",
    "comment": "",
    "name": "135.10.10.10.in-addr.arpa",
    "rpz_rule": "SubstitutePTRRecord",
    "type": "record:rpz:ptr",
    "view": "default",
    "zone": "inblox.com"
   },

```
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYVVsdC5jb2
0uaW5mb2Jsb3cuZGVtbw:demo",
  "comment": "",
  "name": "demo",
  "rpz_rule": "BlockNoDataDomain",
  "type": "record:rpz:cname",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYVVsdC5jb2
0uaW5mb2Jsb3cucGFzcw:pass",
  "comment": "",
  "name": "pass",
  "rpz_rule": "SubstituteCName",
  "type": "record:rpz:cname",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2EkLl9kZWZhdWx0LmNvbS5pb
mZvYmxveCxzZXJ2ZXIsMS4xLjEuMTU2:server",
  "comment": "",
  "name": "server",
  "rpz_rule": "SubstituteARecord",
  "type": "record:rpz:a",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYVVsdC5jb2
0uaW5mb2Jsb3cuc3Vi:sub",
  "comment": "",
  "name": "sub",
  "rpz_rule": "SubstituteCName",
  "type": "record:rpz:cname",
  "view": "default",
  "zone": "inblox.com"
 },
 {"_ref":
"allrpzrecords/ZG5zLnpvbmVfc2VhcmNoX2luZGV4JGRucy5iaW5kX2NuYW1lJC5fZGVmYVVsdC5jb2
0uaW5mb2Jsb3cudGVzdA:test",
  "comment": "",
  "name": "test",
  "rpz_rule": "BlockNxdomainDomain",
  "type": "record:rpz:cname",
  "view": "default",
  "zone": "inblox.com"
}]
}
```

## DNS Traffic Control

| Resource type | Operation | REST Method | API Call | Sample Body (for POST and PUT) |
|---|---|---|---|---|
| | | | Sample cURL Command | |
| | | | Sample Output | |
| DTC Servers | Fetch information | GET | &lt;wapi_url&gt;/dtc:server | |
| | | colspan | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/dtc:server?_return_as_object=1" | |
| | | colspan | {"result": [{"_ref": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHNlcnZlcjE:server1", "host": "1.1.1.25", "name": "server1" }, {"_ref": "dtc:server/ZG5zLmlkbnNfc2VydmVyJGhvc3Q:host", "host": "10.10.10.20", "name": "host" }, {"_ref": "dtc:server/ZG5zLmlkbnNfc2VydmVyJFNFUlZFUl9URU1QTkFNRV8yMjEyNw:SERVER_TEMPNAME_22127", "host": "example.com", "name": "SERVER_TEMPNAME_22127" }]} | |
| | Create | POST | &lt;wapi_url&gt;/dtc:server | {"name": "test-server", "host": "2.2.2.56"} |
| | | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/dtc:server?_return_fields%2B=name,host&_return_as_object=1" -d '{"name": "test-server","host": "2.2.2.56"}' | |
| | | colspan | {"result": {"_ref": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server", "host": "2.2.2.56", "name": "test-server" }} | |
| DTC Pools | Fetch information | GET | &lt;wapi_url&gt;/dtc:pool | |
| | | colspan | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/dtc:pool?_return_as_object=1" | |
| | | colspan | {"result": [{"_ref": "dtc:pool/ZG5zLmlkbnNfcG9vbCRwb29sMQ:pool1", "name": "pool1" }, {"_ref": "dtc:pool/ZG5zLmlkbnNfcG9vbCRQT09MX1RFTVBOQU1FXzIyMTI3:POOL_TEMPNAME_22127", "name": "POOL_TEMPNAME_22127" }]} | |
| | Create | POST | &lt;wapi_url&gt;/dtc:pool | {"name": "test-pool", "availability": "ALL", "lb_preferred_method":"GLOBAL_AVAILABILITY", "monitors": ["dtc:monitor:icmp/ZG5zLmlkbnNfbW9uaXRvcl9pY21wJGljbXA:icmp"], "servers": |

| | | | [{"ratio": 4,<br>"server":<br>"dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"}]} |
|---|---|---|---|
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/dtc:pool?_return_fields%2B=name,servers&_return_as_object=1" -d '{"name": "test-pool","availability": "ALL","lb_preferred_method":"GLOBAL_AVAILABILITY","monitors": ["dtc:monitor:icmp/ZG5zLmlkbnNfbW9uaXRvcl9pY21wJGljbXA:icmp"],"servers": [{"ratio": 4,"server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"}]}' | |
| | | {"result":<br> {"_ref": "dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool",<br>  "name": "test-pool"<br>  "servers":<br>  [{"ratio": 4,<br>   "server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"<br> }]}} | |
| Modify to add another server | PUT | &lt;wapi_url&gt;/dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool | {"servers":<br> [{"ratio": 4,<br>  "server":<br>"dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"<br> },<br>  {"ratio": 4,<br>  "server":<br>"dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool?_return_fields%2B=name,servers&_return_as_object=1" -d '{"servers": [{"ratio": 4,"server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server" },{"ratio": 4,"server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2"}]}' | |
| | | {"result":<br> {"_ref": "dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool",<br>  "name": "test-pool",<br>  "servers":<br>  [{"ratio": 4,<br>   "server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"<br>  },<br>   {"ratio": 4,<br>   "server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2"<br> }]}} | |
| Modify the ratio | PUT | &lt;wapi_url&gt;/dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool | {"servers":<br> [{"ratio": 20,<br>  "server":<br>"dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server"<br> },<br>  {"ratio": 80,<br>  "server":<br>"dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool?_return_fields%2B=name,servers&_return_as_object=1" -d '{"servers": [{"ratio": 20,"server": | |

| | | | | |
|---|---|---|---|---|
| | | "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server" },{"ratio": 80,"server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2"}]}' | | |
| | | {"result": <br> {"_ref": "dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool", <br> "name": "test-pool", <br> "servers": <br> [{"ratio": 20, <br> "server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVy:test-server" <br> }, <br> {"ratio": 80, <br> "server": "dtc:server/ZG5zLmlkbnNfc2VydmVyJHRlc3Qtc2VydmVyMg:test-server2" <br> }]}}} | | |
| DTC Load Balanced Domain Name | Fetch information | GET      <wapi_url>/dtc:lbdn | | |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/dtc:lbdn?_return_as_object=1" | | |
| | | {"result": <br> [{"_ref": <br> "dtc:lbdn/ZG5zLmlkbnNfbGJkbiRMQkROX1RFTVBOQU1FXzIyMTI3:LBDN_TEMPNAME_22127", <br> "name": "LBDN_TEMPNAME_22127" <br> }]} | | |
| | Create | POST      <wapi_url>/dtc:lbdn | {"auth_zones": ["zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kGM:dtc.com/default"], "lb_method": "ROUND_ROBIN", "name": "test-lbdn", "patterns": ["server.dtc.com"], "pools": [{"ratio": 4, "pool":"dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool"}]} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/dtc:lbdn?_return_fields%2B=name,pools,auth_zones,patterns&_return_as_object=1" -d '{"auth_zones":["zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kGM:dtc.com/default"],"lb_method": "ROUND_ROBIN","name": "test-lbdn","patterns": ["server.dtc.com"],"pools": [{"ratio": 4,"pool":"dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool"}]}' | | |
| | | {"result": <br> {"_ref": "dtc:lbdn/ZG5zLmlkbnNfbGJkbiR0ZXN0LWxiZG4:test-lbdn", <br> "auth_zones": <br> ["zone_auth/ZG5zLnpvbmUkLl9kZWZhdWx0LmNvbS5kGM:dtc.com/default"], <br> "name": "test-lbdn", <br> "patterns": <br> ["server.dtc.com"], <br> "pools": <br> [{"pool": "dtc:pool/ZG5zLmlkbnNfcG9vbCR0ZXN0LXBvb2w:test-pool", <br> "ratio": 4 <br> }]}}} | | |

# IP address management related scenarios

**Add a network or container**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | \multicolumn — | **Sample cURL Command** | |
| | | **Sample Output** | |
| Add a network | POST | `<wapi_url>/network` | `{"network": "1.1.1.0/24"}` |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network?_return_fields%2B=network&_return_as_object=1 " -d '{"network": "1.1.1.0/24"}'  | | |
| | `{"result":`<br>` {"_ref": "network/ZG5zLm5ldHdvcmskMS4xLjEuMC8yNC8w:1.1.1.0/24/default",`<br>`  "network": "1.1.1.0/24",`<br>`  "network_view": "default"`<br>`}}` | | |
| Add a network and assign to a member | POST | `<wapi_url>/network` | `{"network": "2.2.2.0/24",`<br>`"members":`<br>`[{"_struct": "dhcpmember",`<br>`"ipv4addr":"172.26.1.3"}]}` |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network?_return_fields%2B=network,members&_return_as_object=1" -d '{"network": "2.2.2.0/24","members":[{"_struct": "dhcpmember","ipv4addr":"172.26.1.3"}]}' | | |
| | `{"result":`<br>` {"_ref": "network/ZG5zLm5ldHdvcmskMi4yLjIuMC8yNC8w:2.2.2.0/24/default",`<br>`  "members":`<br>`  [{"_struct": "dhcpmember",`<br>`    "ipv4addr": "172.26.1.3",`<br>`    "ipv6addr": null,`<br>`    "name": "member1.localdomain"`<br>`  }],`<br>`  "network": "2.2.2.0/24",`<br>`  "network_view": "default"`<br>`}}` | | |
| Add a network and automatically create the corresponding reverse lookup zone | POST | `<wapi_url>/network` | `{"network": "10.10.10.0/24",`<br>`"members":`<br>`[{"_struct": "dhcpmember",`<br>`"ipv4addr":"172.26.1.2"}],`<br>`"auto_create_reversezone":true}` |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network?_return_fields%2B=network,members&_return_as_object=1" -d '{"network": "10.10.10.0/24","members":[{"_struct": "dhcpmember","ipv4addr":"172.26.1.2"}],"auto_create_reversezone":true}' | | |
| | `{"result":`<br>` {"_ref": "network/ZG5zLm5ldHdvcmskMS4xLjEuMC8yNC8w:10.10.10.0/24/default",`<br>`  "members":`<br>`  [{"_struct": "dhcpmember",`<br>`    "ipv4addr": "172.26.1.2",`<br>`    "ipv6addr": null,`<br>`    "name": "infoblox.localdomain"`<br>`  }],`<br>`  "network": "10.10.10.0/24",` | | |

| | | | |
|---|---|---|---|
| | | | "network_view": "default"<br>}} |
| Add a network with DHCP options | POST | `<wapi_url>/network` | {"network":"192.168.0.0/24",<br> "options":<br>  [{"name": "domain-name-servers",<br>   "num": 6,<br>   "use_option": true,<br>   "value": "192.168.0.2",<br>   "vendor_class": "DHCP"},<br>  {"name": "routers",<br>   "num": 3,<br>   "use_option": true,<br>   "value": "192.168.0.1",<br>   "vendor_class": "DHCP"}],<br>"use_options":true} |
| | colspan="3" | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/network?_return_fields%2B=options&_return_as_object=1" -d<br>'{"network":"192.168.0.0/24","options":[{"name": "domain-name-servers","num": 6,"use_option":<br>true,"value": "192.168.0.2","vendor_class": "DHCP"},"name": "routers","num": 3,"use_option":<br>true,"value": "192.168.0.1","vendor_class": "DHCP"}],"use_options":true}' |
| | colspan="3" | {"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OS4wLjAvMjQvMA:192.168.0.0/24/default",<br> "network": "192.168.0.0/24",<br> "network_view": "default",<br> "options":<br>   [{"name": "dhcp-lease-time",<br>    "num": 51,<br>    "use_option": false,<br>    "value": "43200",<br>    "vendor_class": "DHCP"},<br>   {"name": "domain-name-servers",<br>    "num": 6,<br>    "use_option": true,<br>    "value": "192.168.0.2",<br>    "vendor_class": "DHCP"},<br>   {"name": "routers",<br>    "num": 3,<br>    "use_option": true,<br>    "value": "192.168.0.1",<br>    "vendor_class": "DHCP"}<br>]} |
| Add a network from next available network | POST | `<wapi_url>/network` | {"network":<br>"func:nextavailablenetwork:10.0.0.0/8,default,24",<br>"network_view":"default",<br>"extattrs":<br>{"Country":{"value":"UK"},<br>"Region":{"value":"EMEA"}}} |
| | colspan="3" | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/network?_return_fields%2B=network,members,extattrs&_return_as_object=1" -d '{"network": "func:nextavailablenetwork:10.0.0.0/8,default,24","network_view":<br>"default","extattrs": {"Country":{"value":"UK"},"Region":{"value":"EMEA"}}}' |
| | colspan="3" | {"result":<br> {"_ref": "network/ZG5zLm5ldHdvcmskMTAuMC4wLjAvMjQvMA:10.0.0.0/24/default",<br>  "extattrs":<br>   {"Country": {"value": "UK"}, |

```
    "Region": {"value": "EMEA"}
    },
    "members": [],
    "network": "10.0.0.0/24",
    "network_view": "default"
}}
```

The last example uses the function *next_available_network* by specifying it in the option *_function*, in the shorthand form.

## Search for a network

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search for a network | GET | <wapi_url>/network?network=172.21.10.0/24 |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/network?network=172.21.10.0/24&_return_as_object=1" |
| | | {"result": [{"_ref": "network/ZG5zLm5ldHdvcmskMTcyLjIxLjEwLjAvMjQvMA:172.21.10.0/24/default", "network": "172.21.10.0/24", "network_view": "default" }]} |
| Search for network(s) that begins with a certain value (192.168) | GET | <wapi_url>/network?network~=192.168 |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/network?network~=192.168&_return_as_object=1" |
| | | {"result": [{"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xLjAvMjQvMA:192.168.1.0/24/default", "network": "192.168.1.0/24", "network_view": "default" }, {"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMDEuMC8yNC8w:192.168.101.0/24/default", "network": "192.168.101.0/24", "network_view": "default" }]} |
| Search for network(s) based on the netmask (/27) | GET | <wapi_url>/network?network~=.0/27 |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/network?network~=.0/27&_return_as_object=1" |
| | | {"result": [{"_ref": "network/ZG5zLm5ldHdvcmskMTAuMTAuMTAwLjAvMjcvMA:10.10.100.0/27/default", "network": "10.10.100.0/27", "network_view": "default" }, {"_ref": "network/ZG5zLm5ldHdvcmskMS4xLjEuMC8yNy9kZw:1.1.1.0/27/demo", "network": "1.1.1.0/27", "network_view": "demo" }]} |
| Search by EA (Networks in the HQ) | GET | <wapi_url>/network?_return_fields%2B=extattrs&*Site:=HQ |
| | | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/network?_return_fields%2B=extattrs&*Site%3A=HQ&_return_as_object=1" |

| | | | |
|---|---|---|---|
| | {"result":<br>  [{"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xLjAvMjQvMA:192.168.1.0/24/default",<br>   "extattrs":<br>    {"Building": {"value": "Remote"},<br>     "Site": {"value": "HQ"}},<br>   "network": "192.168.1.0/24",<br>   "network_view": "default"<br>   },<br>   {"_ref":<br> "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMDAuMC8yNC8w:192.168.100.0/24/default",<br>   "extattrs":<br>    {"Building": {"value": "Main"},<br>     "Site": {"value": "HQ"}},<br>   "network": "192.168.100.0/24",<br>   "network_view": "default"<br>   }]} | | |
| Search by EA<br>(Networks in the HQ<br>but not in the Main<br>Building) | GET | &lt;wapi_url&gt;/network?_return_fields%2B=extattrs&*Site:=HQ | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/network?_return_fields%2B=extattrs&*Site%3A=HQ&*Building!=Main&_return_as_object=1" | | |
| | {"result":<br>  [{"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xLjAvMjQvMA:192.168.1.0/24/default",<br>   "extattrs":<br>    {"Building": {"value": "Remote"},<br>     "Site": {"value": "HQ"}},<br>   "network": "192.168.1.0/24",<br>   "network_view": "default"<br>   }]} | | |

**Get next available subnet**

Use the function *next_available_network* by specifying it in the option *_function*.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Create a network from the next available subnet from a network in the Region(EA) EMEA | POST | &lt;wapi_url&gt;/network | {"network":<br>  {"_object_function":<br>"next_available_network",<br>   "_result_field":"networks",<br>   "_object":"network",<br>   "_object_parameters":<br>   {"*Region" : "EMEA"},<br>   "_parameters":<br>   {"cidr":24}},<br>"network_view":"default"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/network?_return_fields%2B=network&_return_as_object=1 "<br>-d<br>'{"network":{"_object_function":"next_available_network","_result_field":"networks","_object":"network","_object_parameters":{"*Region" :<br>"EMEA"},"_parameters":{"cidr":24}},"network_view":"default"}' | | |
| | {<br>  "result": { | | |

```
        "_ref":
"network/ZG5zLm5ldHdvcmskMTkyLjE2OC4wLjAvMjQvMA:192.168.0.0/24/default",
        "network": "192.168.0.0/24",
        "network_view": "default"
    }
}
```

## Get next available address from a subnet

Use the function *next_available_ip* by specifying it in the option *_function*. For this operation you would need the *_ref* of the subnet you want to query.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Get the next available IP address in a subnet | POST | &lt;wapi_url&gt;/network/ZG5zLm5ldHdvcmskMTcyLjIxLjEwLjAvMjQvMA:172.21.10.0/24/default?_function=next_available_ip | {"num":1} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network/ZG5zLm5ldHdvcmskMTcyLjIxLjEwLjAvMjQvMA:172.21.10.0/24/default?_function=next_available_ip&_return_as_object=1" -d '{"num":1}' | | |
| | {"result": <br> {"ips": <br>  [ "172.21.10.1"] <br>}} | | |
| Get the next 5 available IP addresses in a subnet | POST | &lt;wapi_url&gt;/network/ZG5zLm5ldHdvcmskMTcyLjIxLjEwLjAvMjQvMA:172.21.10.0/24/default?_function=next_available_ip | {"num":5} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network/ZG5zLm5ldHdvcmskMTcyLjIxLjEwLjAvMjQvMA:172.21.10.0/24/default?_function=next_available_ip&_return_as_object=1" -d '{"num":5}' | | |
| | {"result": <br> {"ips": <br>  ["172.21.10.1", <br>   "172.21.10.2", <br>   "172.21.10.3", <br>   "172.21.10.4", <br>   "172.21.10.5" <br>]}} | | |

## Reparent subnets while deleting network container

This example uses the *remove_subnets* argument available with the network container DELETE operation. This will retain the networks within the container.

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Reparent subnets while deleting network container | DELETE | &lt;wapi_url&gt;/networkcontainer/ZG5zLm5ldHdvcmtfY29udGFpbmVyJDEwLjAuMC4wLzgvMA:10.0.0.0/8/default?remove_subnets=false |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/networkcontainer/ZG5zLm5ldHdvcmtfY29udGFpbmVyJDEwLjAuMC4wLzgvMA:10.0.0.0/8/default?remove_subnets=false&_return_as_object=1" | |

{"result":
 {"_ref":
"networkcontainer/ZG5zLm5ldHdvcmtfY29udGFpbmVyJDEwLjAuMC4wLzgvZefa
ult"}}

**Get all the addresses based on a search criteria**

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Get addresses in a subnet | GET | <wapi_url>/ipv4address?network=10.10.10.0/24 |
| | | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/ipv4address?network=10.10.10.0/24&_return_as_object=1" |
| | | {"result":<br> [{"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjUzLzA:10.10.10.1",<br>  "ip_address": "10.10.10.1",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "UNUSED",<br>  "types": [],<br>  "usage": []<br> },<br> {"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjU0LzA:10.10.10.2",<br>  "ip_address": "10.10.10.2",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "UNUSED",<br>  "types": [],<br>  "usage": []<br> },<br> ….<br> {"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjU1LzA:10.10.10.255",<br>  "ip_address": "10.10.10.255",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "USED",<br>  "types": ["BROADCAST"],<br>  "usage": []<br>}]} |
| Get addresses in a given range (10.10.10.252 - 10.10.10.254) | GET | <wapi_url>/ipv4address?ip_address>=10.10.10.252&&ip_address<=10.10.10.254 |
| | | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/ipv4address?ip_address%3E=10.10.10.252&ip_address%3C=10.10.10.254&_return_as_object=1" |

{"result":
 [{"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjUyLzA:10.10.10.252",
   "ip_address": "10.10.10.252",
   "is_conflict": false,
   "mac_address": "",
   "names": [],
   "network": "10.10.10.0/24",
   "network_view": "default",
   "objects": [],
   "status": "UNUSED",
   "types": [],
   "usage": []
 },
 {"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjUzLzA:10.10.10.253",
   "ip_address": "10.10.10.253",
   "is_conflict": false,
   "mac_address": "",
   "names": [],
   "network": "10.10.10.0/24",
   "network_view": "default",
   "objects": [],
   "status": "UNUSED",
   "types": [],
   "usage": []
 },
 {"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjU0LzA:10.10.10.254",
   "ip_address": "10.10.10.254",
   "is_conflict": false,
   "mac_address": "",
   "names": [],
   "network": "10.10.10.0/24",
   "network_view": "default",
   "objects": [],
   "status": "UNUSED",
   "types": [],
   "usage": []
 }]}

## Zone associations on a network

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| List zone associations on a network | GET | \<wapi_url>/network/ZG5zLm5ldHdvcmskMTAuMS4wLjAvMTYvMA:10.1.0.0/16/default | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/network/ZG5zLm5ldHdvcmskMTAuMS4wLjAvMTYvMA:10.1.0.0/16/default?_return_fields%2B=zone_associations&_return_as_object=1" | | |
| | {"result": {"_ref": "network/ZG5zLm5ldHdvcmskMTAuMS4wLjAvMTYvMA:10.1.0.0/16/default", "network": "10.1.0.0/16", "network_view": "default", "zone_associations": [{"fqdn": "info.com", "is_default": true, | | |

---

| | | | "view": "default"<br>}]}} |

| | PUT | <wapi_url>/network/ZG5zLm5ldHdvcmskMTcyLjI1xLjEwLjAvMjQvMA:172.21.10.0/24/default | {"zone_associations":<br>[{"fqdn":<br>"test.org","is_default":true}]} |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/network/ZG5zLm5ldHdvcmskMTcyLjI1xLjEwLjAvMjQvMA:172.21.10.0/24/default?_return_fields%2B=zone_associations&_return_as_object=1" -d<br>'{"zone_associations": [{"fqdn": "test.com","is_default":true}]}' | | |
| Add a zone association to<br>a network | {"result":<br>  {"_ref": "network/ZG5zLm5ldHdvcmskMTcyLjI1xLjEwLjAvMjQvMA:172.21.10.0/24/default",<br>   "network": "172.21.10.0/24",<br>   "network_view": "default",<br>   "zone_associations":<br>   [{"fqdn": "test.com",<br>     "is_default": true,<br>      "view": "default"<br>}]}} | | |

## Add a fixed address

A fixed address is a specific IP address that a DHCP server always assigns when a lease request comes from
a particular MAC address of the client.
For example, if you have a printer in your network, you can reserve a particular IP address to be assigned to it
every time it is turned on.

| Operation | REST<br>Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| | POST | <wapi_url>/fixedaddress | {"ipv4addr":"192.168.1.100",<br>"mac":"aa:bb:cc:11:22:21"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/fixedaddress?_return_fields%2B=ipv4addr,mac&_return_as_object=1" -d '{"ipv4addr":"192.168.1.100","mac":"aa:bb:cc:11:22:21"}' | | |
| Add a fixed address | {"result":<br>  {"_ref":<br>"fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC4xLjEwMC4wLi4:192.168.1.100/default",<br>   "ipv4addr": "192.168.1.100",<br>   "mac": "aa:bb:cc:11:22:21",<br>   "network_view": "default"<br>}} | | |
| | POST | <wapi_url>/fixedaddress | {"ipv4addr":"172.26.1.200",<br>"mac":"00:00:00:00:00:00"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/fixedaddress?_return_fields%2B=ipv4addr,mac&_return_as_object=1" -d '{"ipv4addr":"172.26.1.200","mac":"00:00:00:00:00:00"}' | | |
| Add a fixed address<br>reservation | {"result":<br>  {"_ref":<br>"fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTcyLjI2LjEuMjAwLjAuLg:172.26.1.200/default<br>",<br>   "ipv4addr": "172.26.1.200",<br>   "mac": "00:00:00:00:00:00", | | |

| | REST Method | API Call | |
|---|---|---|---|
| | | | {"ipv4addr": "func:nextavailableip:10.1.0.0/16", "mac":"ff:ff:ff:ff:ff:ff"} |
| Add a fixed address with next available IP | POST | <wapi_url>/fixedaddress?_return_fields=ipv4addr | |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fixedaddress?_return_fields%2B=ipv4addr,mac&_return_as_object=1" -d '{"ipv4addr":"func:nextavailableip:10.1.0.0/16","mac":"ff:ff:ff:ff:ff:ff"}' | |
| | | {"result": {"_ref": "fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTAuMS4wLjEuMC4u:10.1.0.1/default", "ipv4addr": "10.1.0.1", "mac": "ff:ff:ff:ff:ff:ff", "network_view": "default" }} | |
| Add an IPv6 fixed address | POST | <wapi_url>/ipv6fixedaddress | {"ipv6addr":"2001:0db8:85a3:0000:0000:8a2e:0370:7334", "duid":"00:02:00:01:02:03:04:05:07:a0"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/ipv6fixedaddress?_return_fields%2B=ipv6addr,duid&_return_as_object=1" -d '{"ipv6addr":"2001:0db8:85a3:0000:0000:8a2e:0370:7334","duid":"00:02:00:01:02:03:04:05:07:a0"}' | |
| | | {"result": {"_ref": "ipv6fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC4xLjEwMC4wLi4:2001:0db8:85a3:0000:0000:8a2e:0370:7334/default", "ipv4addr": "2001:0db8:85a3:0000:0000:8a2e:0370:7334", "duid": "00:02:00:01:02:03:04:05:07:a0", "network_view": "default" }} | |

**Search for a fixed address by MAC**

The following example uses the _return_fields+ to add the mac address to the list of fields that are returned.

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search fixed address by MAC | GET | <wapi_url>/fixedaddress?_return_fields%2B=mac&mac=aa:bb:cc:11:22:21 |
| | colspan | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/fixedaddress?_return_fields%2B=mac&mac=aa:bb:cc:11:22:21&_return_as_object=1" |
| | | {"result": [{"_ref": "fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC4xLjEwMC4wLi4:192.168.1.100/default", "ipv4addr": "192.168.1.100", "mac": "aa:bb:cc:11:22:21", "network_view": "default" }]} |

## Complex search for a fixed address by Microsoft Server

The following example uses the *_return_fields+* to add the Microsoft Server to the list of fields that are returned.
Since the search field is a structure, we pass it in the body of a PUT call.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Search for a fixed address by Microsoft Server | PUT | <wapi_url>/fixedaddress?_method=GET&_return_fields%2B=ipv4addr,mac,ms_server,name | {"ms_server": {"_struct": "msdhcpserver", "ipv4addr": "192.168.4.21"}} |

curl -k -u admin:infoblox -X PUT
"https://grid-master/wapi/v2.12/fixedaddress?_method=GET&_return_fields%2B=ipv4addr,mac,ms_server,name&_return_as_object=1" -d '{"ms_server":{"_struct":
"msdhcpserver","ipv4addr": "192.168.4.21"}}'

```
{"result":
[{"_ref":
"fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC40LjMuMC4xNy4:192.168.4.3/Company%201",
  "ipv4addr": "192.168.4.3",
  "mac": "12:34:56:78:91:23",
  "ms_server":
   {"_struct": "msdhcpserver",
    "ipv4addr": "192.168.4.21"},
  "name": "test",
  "network_view": "Company 1"
},
{"_ref":
"fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC40LjguMC4xNy4:192.168.4.8/Company%201",
  "ipv4addr": "192.168.4.8",
  "mac": "ca:fe:ca:fe:be:ef",
  "ms_server":
   {"_struct": "msdhcpserver",
    "ipv4addr": "192.168.4.21"},
  "name": "awo666",
  "network_view": "Company 1"
},
{"_ref":
"fixedaddress/ZG5zLmZpeGVkX2FkZHJlc3MkMTkyLjE2OC40Ljg1LjAuMTcu:192.168.4.85/Company%201",
  "ipv4addr": "192.168.4.85",
  "mac": "00:50:56:ba:01:ec",
  "ms_server":
   {"_struct": "msdhcpserver",
    "ipv4addr": "192.168.4.21"},
  "name": "192.168.4.85",
  "network_view": "Company 1"
}]}
```

## Get information about an IP address

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Query an IP address | GET | `<wapi_url>/ipv4address?ip_address=10.10.10.10` |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/ipv4address?ip_address=10.10.10.10&_return_as_object=1" | |
| | {"result":<br> [{"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMTAvMA:10.10.10.10",<br>  "ip_address": "10.10.10.10",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "UNUSED",<br>  "types": [],<br>  "usage": []<br>}]} | |

## Get unused IP addresses in a subnet

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Query for unused IP addresses in a subnet | GET | `<wapi_url>/ipv4address?network=10.10.10.0/24&status=UNUSED` |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/ipv4address?network=10.10.10.0/24&status=UNUSED&_return_as_object=1" | |
| | {"result":<br> [{"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMTcvMA:10.10.10.17",<br>  "ip_address": "10.10.10.17",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "UNUSED",<br>  "types": [],<br>  "usage": []<br> },<br> {"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMTgvMA:10.10.10.108",<br>  "ip_address": "10.10.10.108",<br>  "is_conflict": false,<br>  "mac_address": "",<br>  "names": [],<br>  "network": "10.10.10.0/24",<br>  "network_view": "default",<br>  "objects": [],<br>  "status": "UNUSED",<br>  "types": [], | |

| | "usage": [] |
| | }, |
| | …. |
| | ]} |

## Search for any object with an IP address

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search for objects by IP address | GET | <wapi_url>/ipv4address?status=USED&ip_address=10.10.10.20 |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/ipv4address?status=USED&ip_address=10.10.10.20&_return_as_object=1" | |
| | {"result":<br>[{"_ref": "ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjAvMA:10.10.10.20",<br>  "ip_address": "10.10.10.20",<br>  "is_conflict": false,<br>  "mac_address": "",<br>   "names": ["host1.info.com"],<br>   "network": "10.10.10.0/24",<br>   "network_view": "default",<br>   "objects":<br><br>["record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host1.info.com/default"],<br>   "status": "USED",<br>   "types": [ "HOST" ],<br>   "usage": [ "DNS" ]<br>}]} | |

## Search for an IP address

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search an IP address | GET | <wapi_url>/search?address=172.26.1.100 |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/search?address=172.26.1.100&_return_as_object=1" | |
| | {"result":<br>[{"_ref":<br>"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sdGVzdC5ob3N0LDE3Mi4yNi4yNi4<br>4xLjEwMA:host.test.info.com/default",<br> "ipv4addr": "172.26.1.100",<br> "name": "host.test.info.com",<br> "view": "default"<br>},<br>{"_ref": "network/ZG5zLm5ldHdvcmskMTcyLjI2LjEuMC8yNC8w:172.26.1.0/24/default",<br> "network": "172.26.1.0/24",<br> "network_view": "default"<br>}]} | |

## Delete an IP address

| Operation | REST Method | API Call |
|---|---|---|
| | | Sample cURL Command |
| | | Sample Output |
| Delete an IP | DELETE | <wapi_url>/ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjAvMA:10.10.10.20 |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X DELETE "https://grid-master/wapi/v2.12/ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjAvMA:10.10.10.20&_return_as_object=1" | |
| | {"result":"ipv4address/Li5pcHY0X2FkZHJlc3MkMTAuMTAuMTAuMjAvMA:10.10.10.20"} | |

## Network Views

DNS views provide the ability to serve one version of DNS data to one set of clients and another version to another set of clients. With DNS views, the appliance can provide a different answer to the same query, depending on the source of the query.

A network view is a single routing domain with its own networks and shared networks. A network view can contain both IPv4 and IPv6 networks. All networks must belong to a network view.

For example, network views can be used in cloud environments to isolate each of the tenant to their own respective view. This enables support of overlapping networks across different tenants, each in its own network view, thus enabling multi-tenancy in cloud environments.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Get all DNS views | GET | <wapi_url>/view | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/view?_return_as_object=1" | | |
| | {"result": [{"_ref": "view/ZG5zLnZpZXckLl9kZWZhdWx0:default/true", "is_default": true, "name": "default" }, {"_ref": "view/ZG5zLnZpZXckLjE:default.test/false", "is_default": false, "name": "default.test" }, {"_ref": "view/ZG5zLnZpZXckLjI:default.cloud/false", "is_default": false, "name": "default.cloud" }]} | | |
| Get authoritative zones for a DNS view | GET | <wapi_url>/zone_auth?view=default.test | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/zone_auth?view=default.test&_return_as_object=1" | | |
| | {"result": [{"_ref": "zone_auth/ZG5zLnpvbmUkLjEuY29tLmluZm8:info.com/default.test", "fqdn": "info.com", "view": "default.test" }, | | |

| | | |
|---|---|---|
| | {"_ref": "zone_auth/ZG5zLnpvbmUkLjEub3JnLnRlc3Q:test.org/default.test",<br>"fqdn": "test.org",<br>"view": "default.test"<br>}]} | |
| Get all records for a zone in a DNS view | **GET** <wapi_url>/record:host?zone=info.com&view=default.test | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:host?zone=info.com&view=default.test&_return_as_object=1" | |
| | {"result":<br> [{"_ref": "record:host/ZG5zLmhvc3QkLjEuY29tLmluZm8uc2VydmVy:server.info.com/default.test",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuMS5jb20uaW5mby5zZXJ2ZXIuMTAuMTAuMC4xMDAu:10.10.0.100/server.info.com/default.test",<br>    "configure_for_dhcp": false,<br>    "host": "server.info.com",<br>    "ipv4addr": "10.10.0.100"<br>    }],<br>  "name": "server.info.com",<br>  "view": "default.test"<br> },<br> {"_ref": "record:host/ZG5zLmhvc3QkLjEuY29tLmluZm8ubWFpbGVy:mailer.info.com/default.test",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuMS5jb20uaW5mby5tYWlsZXIuMTAuMS4xLjEwMC4:10.1.1.100/mailer.info.com/default.test",<br>    "configure_for_dhcp": false,<br>    "host": "mailer.info.com",<br>    "ipv4addr": "10.1.1.100",<br>    "mac": "aa:bb:cc:11:22:33"<br>    }],<br>  "name": "mailer.info.com",<br>  "view": "default.test"<br> }]} | |
| Get all network views | **GET** <wapi_url>/networkview | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/networkview?_return_as_object=1" | |
| | {"result":<br> [{"_ref": "networkview/ZG5zLm5ldHdvcmtfdmlldyQw:default/true",<br>  "is_default": true,<br>  "name": "default"<br> },<br> {"_ref": "networkview/ZG5zLm5ldHdvcmtfdmlldyQx:test/false",<br>  "is_default": false,<br>  "name": "test"<br> },<br> {"_ref": "networkview/ZG5zLm5ldHdvcmtfdmlldyQy:cloud/false",<br>  "is_default": false,<br>  "name": "cloud"<br> }]} | |
| Create a network view | **POST** <wapi_url>/networkview | {"name": "demo"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/networkview?_return_fields%2B=name&_return_as_object=1" -d<br>'{"name": "demo"}' | |

| | | | |
|---|---|---|---|
| | {"result":<br>  {"_ref": "networkview/ZG5zLm5ldHdvcmtfdmlldyQx:demo/false",<br>   "is_default": false,<br>   "name": "demo"<br>}} | | |
| Create an authoritative zone within a network view | POST | <wapi_url>/zone_auth | {"fqdn": "infoblox.com",<br>"view": "default.test"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/zone_auth?_return_fields%2B=fqdn,network_view&_return_as_obj<br>ect=1" -d '{"fqdn": "infoblox.com","view": "default.test"}' | | |
| | {"result":<br>  {"_ref": "zone_auth/ZG5zLnpvbmUkLjEuY29tLmluZm9ibG94:infoblox.com/default.test",<br>   "fqdn": "infoblox.com",<br>   "network_view": "test"<br>   "view": "default.test"<br>}} | | |
| Create a host record within a network view | POST | <wapi_url>/record:host | {"name":"host.infoblox.com",<br>"ipv4addrs":<br>[{"ipv4addr":"10.10.10.20"}],<br>"view": "default.test"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/record:host?_return_fields%2B=name,network_view&_return_as_o<br>bject=1" -d '{"name":"host.infoblox.com","ipv4addrs": [{"ipv4addr":"10.10.10.20"}],"view":<br>"default.test"}' | | |
| | {"result":<br>  {"_ref":<br>"record:host/ZG5zLmhvc3QkLjEuY29tLmluZm9ibG94Lmhvc3Q:host.infoblox.com/default.test",<br>   "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuMS5jb20uaW5mb2Jsb3guaG9zdC4xMC4x<br>MC4xMC4yMC4:10.10.10.20/host.infoblox.com/default.test",<br>   "configure_for_dhcp": false,<br>   "host": "host.infoblox.com",<br>   "ipv4addr": "10.10.10.20"<br>   }],<br>   "name": "host.infoblox.com",<br>   "network_view": "test",<br>   "view": "default.test"<br>}} | | |
| Add a network within a network view | POST | <wapi_url>/network | {"network":<br>"192.168.1.0/24",<br>"network_view": "test"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/network?_return_fields%2B=network&_return_as_object=1 " -d<br>'{"network": "192.168.1.0/24","network_view": "test"}' | | |
| | {"result":<br>  {"_ref": "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xLjAvMjQvMQ:192.168.1.0/24/test",<br>   "network": "192.168.1.0/24",<br>   "network_view": "test"<br>}} | | |

## VLAN Management

This is only supported with WAPI version 2.10 onwards

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Get VLAN View | GET | &lt;wapi_url&gt;/vlanview | |
| | colspan | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/vlanview?_return_as_object=1" | |
| | | {"result":<br> [{"_ref": "vlanview/ZG5zLnZsYW5fdmlldyRkZWZhdWx0LjEuNDA5NA:default/1/4094",<br>  "end_vlan_id": 4094,<br>  "name": "default",<br>  "start_vlan_id": 1<br>}]} | |
| Add a VLAN view | POST | &lt;wapi_url&gt;/vlanview | {"start_vlan_id": 10,<br>"end_vlan_id": 20,<br>"name": "test"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/vlanview?_return_fields%2B=start_vlan_id,end_vlan_id,name&_return_as_object=1" -d '{"start_vlan_id": 10,"end_vlan_id": 20,"name": "test"}' | |
| | | {"result":<br> {"_ref": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20",<br>  "end_vlan_id": 20,<br>  "name": "test",<br>  "start_vlan_id": 10<br>}} | |
| Add a VLAN range | POST | &lt;wapi_url&gt;/vlanrange | {"start_vlan_id": 15,<br>"end_vlan_id": 20,<br>"name": "testrange",<br>"vlan_view":<br>"vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20"} |
| | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/vlanrange?_return_fields%2B=start_vlan_id,end_vlan_id,name&_return_as_object=1" -d '{"start_vlan_id": 15,"end_vlan_id": 20, "name": "testrange","vlan_view":<br>"vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20"}' | |
| | | {"result":<br> {"_ref":<br>"vlanrange/ZG5zLnZsYW5fcmFuZ2UkdGVzdC4xMC4yMC50ZXN0cmFuZ2UuMTUuMjA:test/testrange<br>/15/20",<br>  "end_vlan_id": 20,<br>  "name": "testrange",<br>  "start_vlan_id": 15,<br>  "vlan_view": {"_ref": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20"}<br>}} | |
| Add a VLAN | POST | &lt;wapi_url&gt;/vlan | {"id": 11,<br>"name": "testvlan",<br>"parent":<br>"vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20",<br>"reserved":true, |

| | | | "contact":"879220", "department":"ng"} |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/vlan?_return_fields%2B=id,name&_return_as_object=1" -d '{"id": 11,"name": "testvlan","parent": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20","reserved":true,"contact":"879220","department":"ng"}' | | |
| | {"result": { "_ref": "vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbmMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTE:test/testvlan/11", "id": 11, "name": "testvlan", "vlan_view": {"_ref": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20"} }} | | |
| Next available VLAN | POST | <wapi_url>/vlan | {"id":"func:nextavailablevlanid:vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20", "name": "next-vlan", "parent": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20", "reserved":true, "contact":"879220", "department":"ng"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/vlan?_return_fields%2B=id,name&_return_as_object=1" -d '{"id":"func:nextavailablevlanid:vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20","name": "next-vlan","parent": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20","reserved":true,"contact":"879220","department":"ng"}' | | |
| | {"_ref": "vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbmMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTA:test/next-vlan/10", "id": 10, "name": "next-vlan", "parent": {"_ref": "vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjIw:test/10/20"}} | | |
| Create a network with a VLAN | POST | <wapi_url>/network | {"network_view":"default", "network":"61.0.0.0/24", "vlans": [{"vlan": "vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbmMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTA:test/next-vlan/10" }]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network?_return_fields%2B=vlans&_return_as_object=1" -d '{"network_view":"default","network":"61.0.0.0/24","vlans": [{"vlan":"vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbmMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTA:test/next-vlan/10" }]}' | | |
| | {"result": {"_ref": "network/ZG5zLm5ldHdvcmskNjEuMC4wLjAvMjQvMA:61.0.0.0/24/default", "network": "61.0.0.0/24", "network_view": "default", "vlans": | | |

| | | | [{"id": 10,<br>  "name": "next-vlan",<br>  "vlan":<br>"vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbnMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTA:test/next-vlan/10"<br>}]}} |
|---|---|---|---|
| Create network with next available VLAN | POST | <wapi_url>/network | {"network_view":"default",<br> "network":"62.0.0.0/24",<br> "vlans":<br> [{"vlan":<br>"func:nextavailablevlan:vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjl w:test/10/20" }]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/network?_return_fields%2B=vlans&_return_as_object=1" -d '{"network_view":"default","network":"62.0.0.0/24","vlans": [{"vlan":"func:nextavailablevlan:vlanview/ZG5zLnZsYW5fdmlldyR0ZXN0LjEwLjlw:test/10/20" }]}' | | |
| | {"result":<br> {"_ref": "network/ZG5zLm5ldHdvcmskNjEuMC4wLjAvMjQvMA:62.0.0.0/24/default",<br>  "network": "62.0.0.0/24",<br>  "network_view": "default",<br>  "vlans":<br>  [{"id": 11,<br>    "name": "testvlan",<br>    "vlan":<br>"vlan/ZG5zLnZsYW4kLmNvbS5pbmZvYmxveC5kbnMudmxhbl92aWV3JHRlc3QuMTAuMjAuMTE:test/testvlan/11"<br>}]}} | | |

## DHCP related scenarios

**DHCP ranges**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Get DHCP ranges | GET | <wapi_url>/range | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/range?_return_as_object=1" | | |
| | {"result":<br> [{"_ref":<br>"range/ZG5zLmRoY3BfcmFuZ2UkMTkyLjE2OC4xLjEwLzE5Mi4xNjguMS4xNS8vLzAv:192.168.1.10/192.168.1.15/default",<br>  "end_addr": "192.168.1.15",<br>  "network": "192.168.1.0/24",<br>  "network_view": "default",<br>  "start_addr": "192.168.1.10"<br>}]} | | |
| Add a DHCP range | POST | <wapi_url>/range | {"start_addr": "10.10.10.20",<br>"end_addr": "10.10.10.100",<br>"server_association_type":<br>"MEMBER",<br>"member":{"_struct": |

| | | | "dhcpmember",<br>"ipv4addr" : "172.26.1.3"}} |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/range?_return_fields%2B=start_addr,end_addr,member&_return_as_object=1" -d '{"start_addr": "10.10.10.20","end_addr": "10.10.10.100","server_association_type": "MEMBER","member":{"_struct": "dhcpmember","ipv4addr" : "172.26.1.3"}}' | | |
| | {"result":<br>  {"_ref":<br>"range/ZG5zLmRoY3BfcmFuZ2UkMTAuMTAuMTAuMjAvMTAuMTAuMTAuMTAwLy8vMC8:10.10.10.20/10.10.10.100/default",<br>    "end_addr": "10.10.10.100",<br>    "member":<br>    {"_struct": "dhcpmember",<br>      "ipv4addr": "172.26.1.3",<br>      "ipv6addr": null,<br>      "name": "member1.localdomain"<br>      },<br>    "network": "10.10.10.0/24",<br>    "network_view": "default",<br>    "start_addr": "10.10.10.20"<br>}} | | |
| Add a DHCP range reserved range | POST | <wapi_url>/range | {"start_addr": "172.26.1.20",<br>"end_addr": "172.26.1.100"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/range?_return_fields%2B=start_addr,end_addr,member&_return_as_object=1" -d '{"start_addr": "172.26.1.20","end_addr": "172.26.1.100"}' | | |
| | {"result":<br>  {"_ref":<br>"range/ZG5zLmRoY3BfcmFuZ2UkMTcyLjI2LjEuMjAvMTcyLjI2LjEuMTAwLy8vMC8:172.26.1.20/172.26.1.100/default",<br>    "end_addr": "172.26.1.100",<br>    "network": "172.26.1.0/24",<br>    "network_view": "default",<br>    "start_addr": "172.26.1.20"<br>}} | | |

In the third scenario in the above example, if you do not assign a member, the range is created as "reserved".

## Search for a DHCP range by Extensible Attributes

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Search ranges by EA (ranges in Bangalore) | GET | <wapi_url>/range?_return_fields%2B=extattrs&*Country:=France |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/range?_return_fields%2B=extattrs&*Location:=Bangalore&_return_as_object=1" | |
| | {"result":<br>  [{"_ref":<br>"range/ZG5zLmRoY3BfcmFuZ2UkMTAuMTAuMTAuMTUwLzEwLjEwLjEwLjIwMC8vLzEv:10.10.10.150/10.10.10.200/test",<br>    "end_addr": "10.10.10.200",<br>    "extattrs": {"Location": {"value": "Bangalore"}},<br>    "network": "10.10.10.0/24", | |

| | | "network_view": "test",<br>"start_addr": "10.10.10.150" |
| | | }]} |

## DHCP Leases

| Operation | REST<br>Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Get DHCP leases | GET | <wapi_url>/lease |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/lease?_return_as_object=1" | |
| | {"result":<br> [{"_ref": "lease/ZG5zLmxlYXNlJDAvMTAuMTAuMC4yMDAvMC8:10.10.10.200/test",<br>  "address": "10.10.10.200",<br>  "network_view": "test"<br> },<br> {"_ref": "lease/ZG5zLmxlYXNlJDAvMTAuMTAuMC4xOTUvMC8:192.168.1.100/default",<br>  "address": "192.168.1.100",<br>  "network_view": "default"<br> },<br> ……<br> {"_ref": "lease/ZG5zLmxlYXNlJDAvMTAuMTAuMC4xOTEvMC8:10.10.10.191/default",<br>  "address": "10.10.10.191",<br>  "network_view": "default"<br> }]} | |
| Get DHCP lease by<br>IP Address | GET | <wapi_url>/lease?address=172.26.1.250&_return_fields=binding_state,hardware,client_hostname,fingerprint&_max_results=1 |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/lease?address=172.26.1.250&_return_fields=binding_state,hardware,<br>client_hostname,fingerprint&_max_results=1&_return_as_object=1" | |
| | {"result":<br> [{"_ref": "lease/ZG5zLmxlYXNlJDQvMTcyLjE2LjIuMC4xMDEvMC8:172.26.1.250/default1",<br>  "binding_state": "ACTIVE",<br>  "fingerprint": "Cisco/Linksys SPA series IP Phone",<br>  "hardware": "16:55:a4:1b:98:c9"<br> }]} | |
| Get a DHCP lease<br>by hostname | GET | <wapi_url>/lease?client_hostname~=demo&_max_results=1&_return_fields=binding_state,hardware,client_hostname,fingerprint |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/lease?client_hostname~=demo&_max_results=1&_return_fields=binding_state,hardware,client_hostname,fingerprint&_return_as_object=1" | |
| | {"result":<br> [{"_ref": "lease/ZG5zLmxlYXNlJC8xOTIuMTY4LjQuMy8wLzE3:192.168.4.3/Company%201",<br>  "binding_state": "STATIC",<br>  "client_hostname": "test",<br>  "hardware": "12:34:56:78:91:23"<br> }]} | |
| Get DHCP leases<br>by network | GET | <wapi_url>/lease?network=172.26.1.0/24&_return_fields=binding_state,hardware,client_hostname,fingerprint,network |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/lease?network=172.26.1.0/24&_return_fields=binding_state,hardware,client_hostname,fingerprint,network&_return_as_object=1" | |

{"result":
 [{"_ref": "lease/ZG5zLmxlYXNlIJDQvMTcyLjE2LjIwMC4xMDEvMC8:172.26.1.250/default1",
   "binding_state": "ACTIVE",
   "fingerprint": "Cisco/Linksys SPA series IP Phone",
   "hardware": "16:55:a4:1b:98:c9",
   "network": "172.26.1.0/24"
 },
 {"_ref": "lease/ZG5zLmxlYXNlIJC8xOTIuMTY4LjQuMy8wLzE3:172.26.1.3/Company%201",
   "binding_state": "STATIC",
   "client_hostname": "test",
   "hardware": "12:34:56:78:91:23",
   "network": "172.26.1.0/24"
}]}

## Grid management related scenarios

For these operations, you would need the _ref of the grid.

| Operation | REST Method | API Call |
|---|---|---|
| | | Sample cURL Command |
| | | Sample Output |
| Grid reference | GET | <wapi_url>/grid |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/grid" | |
| | {"result":<br> [{"_ref": "grid/b25lLmNsdXN0ZXIkMA:Infoblox"}]} | |

**Grid Settings**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Configure SNMP | PUT | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_return_fields%2B=snmp_setting | {"snmp_setting":<br> {"queries_community_string": "public",<br> "queries_enable": true,<br> "trap_receivers":<br> [{"address": "1.1.1.1"}],<br> "traps_community_string": "public",<br> "traps_enable": true<br>}} |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_return_fields%2B=snmp_setting&_return_as_object=1" -d '{"snmp_setting": {"queries_community_string": "public","queries_enable": true, "trap_receivers": [{"address": "1.1.1.1"}],"traps_community_string": "public","traps_enable": true}}' | |
| | {"result":<br> {"_ref": "grid/b25lLmNsdXN0ZXIkMA:Infoblox",<br> "snmp_setting":<br> {"engine_id": ["80:00:1E:63:05:00:50:56:81:4d:38:0a:c4:cd:0c"],<br> "queries_community_string": "public",<br> "queries_enable": true,<br> "snmpv3_queries_enable": false,<br> "snmpv3_traps_enable": false, | |

| | | | |
|---|---|---|---|
| | | `"syscontact": [],`<br>`"sysdescr": [],`<br>`"syslocation": [],`<br>`"sysname": [],`<br>`"trap_receivers": [{"address": "1.1.1.1"}],`<br>`"traps_community_string": "public",`<br>`"traps_enable": true`<br>`}}}` | |
| Configure NTP | PUT | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Info blox?_return_fields%2B=ntp_setting | {"ntp_setting":<br> {"enable_ntp": true,<br>  "ntp_servers":<br>   [{"address":"10.224.0.10"}]<br>}} |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_return_fields%2B=ntp _setting&_return_as_object=1" -d '{"ntp_setting": {"enable_ntp": true,"ntp_servers": [{"address":"10.224.0.10"}]}}' | | |
| | {"result":<br>  {"_ref": "grid/b25lLmNsdXN0ZXIkMA:Infoblox",<br>   "ntp_setting":<br>     {"enable_ntp": true,<br>      "ntp_acl":<br>         {"ac_list": [],<br>          "acl_type": "NONE",<br>          "service": "TIME"},<br>      "ntp_keys": [],<br>      "ntp_kod": false,<br>      "ntp_servers":<br>        [{"address": "10.224.0.10",<br>          "burst": true,<br>          "enable_authentication": false,<br>          "iburst": true,<br>          "preferred": false}]}<br>}} | | |
| Configure DNS Resolver Setting | PUT | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Info blox?_return_fields%2B=dns_resolver_settin g | {"dns_resolver_setting" :<br>{"resolvers":["192.168.8.52"]}<br>} |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_return_fields%2B=dn s_resolver_setting&_return_as_object=1" -d '{"dns_resolver_setting" : {"resolvers":["192.168.8.52"]}}' | | |
| | {"result":<br>  {"_ref": "grid/b25lLmNsdXN0ZXIkMA:Infoblox",<br>   "dns_resolver_setting":<br>    {"resolvers": ["192.168.8.52"],<br>     "search_domains": []<br>    }<br>}} | | |

## Grid DNS properties

The *grid:dns* object supports DNS service management and configuration such as time-to-live (TTL) settings, zone transfers, queries, root name servers, dynamic updates, sort lists, Transaction Signatures (TSIG) for DNS and others, all at the grid level.

The service configurations of a grid are inherited by all members, zones, and networks unless you specifically override them for selected members, zones, and networks. For this reason, it is recommended that you configure services at the grid level before configuring member, zone and network services.

The Grid Member DNS (*member:dns)* object can be used to configure DNS properties for a Grid member, including enabling or disabling DNS services and other DNS service related parameters. Remember to set the corresponding *use* flag to true. The value of the field will only take effect when its use flag is true. Otherwise, Grid service configurations are inherited by all members.

In the following examples, *max_cached_lifetime* indicates the maximum time (in seconds) a DNS response can be stored in the hardware acceleration cache.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Get grid DNS properties | GET | \<wapi_url>/grid:dns?_return_fields%2B=max_cached_lifetime | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/grid:dns?_return_fields%2B=max_cached_lifetime&_return_as_object=1" | | |
| | {"result": <br> [{"_ref": "grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox", <br>   "max_cached_lifetime": 86400 <br> }]} | | |
| Modify grid DNS properties (max_cached_lifetime) at the Grid level | PUT | \<wapi_url>/grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox?_return_fields%2B=max_cached_lifetime | {"max_cached_lifetime":60000} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox?_return_fields%2B=max_cached_lifetime&_return_as_object=1" -d '{"max_cached_lifetime":60000}' | | |
| | {"result": <br>  {"_ref": "grid:dns/ZG5zLmNsdXN0ZXJfZG5zX3Byb3BlcnRpZXMkMA:Infoblox", <br>   "max_cached_lifetime": 60000 <br>  }} | | |
| Get member DNS properties | GET | \<wapi_url>/member:dns?_return_fields%2B=max_cached_lifetime | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/member:dns?_return_fields%2B=max_cached_lifetime&_return_as_object=1" | | |
| | {"result": <br> [{"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQw:infoblox.localdomain", <br>  "host_name": "infoblox.localdomain", <br>  "ipv4addr": "172.26.1.2", <br>  "max_cached_lifetime": 86400 <br> }, <br>  {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:member1.localdomain", <br>   "host_name": "member1.localdomain", <br>   "ipv4addr": "172.26.1.3", <br>   "max_cached_lifetime": 86400 <br> }]} | | |

| | PUT | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=max_cached_lifetime | {"use_max_cached_lifetime": true, "max_cached_lifetime":80000} |
|---|---|---|---|
| Modify DNS properties (max_cached_lifetime) at the member level | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=max_cached_lifetime&_return_as_object=1" -d '{"use_max_cached_lifetime": true,"max_cached_lifetime":80000}' | |
| | {"result": [{"_ref": "member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain", "host_name": "member1.localdomain", "ipv4addr": "172.26.1.3", "max_cached_lifetime": 80000 }]} | | |

**Modify DNS properties (max_cached_lifetime) at the member level**

| REST Method | API Call | Sample Body |
|---|---|---|
| PUT | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=max_cached_lifetime | {"use_max_cached_lifetime": true, "max_cached_lifetime":80000} |

Sample cURL Command:
```
curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain?_return_fields%2B=max_cached_lifetime&_return_as_object=1" -d '{"use_max_cached_lifetime": true,"max_cached_lifetime":80000}'
```

Sample Output:
```
{"result":
 [{"_ref": "member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQx:member1.localdomain",
   "host_name": "member1.localdomain",
   "ipv4addr": "172.26.1.3",
   "max_cached_lifetime": 80000
}]}
```

**Update DNS properties with additional IP list**

| REST Method | API Call | Sample Body |
|---|---|---|
| PUT | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQw:infoblox.localdomain?_return_fields%2B=additional_ip_list | {"additional_ip_list": ["32.32.32.32"]} |

Sample cURL Command:
```
curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQw:infoblox.localdomain?_return_fields%2B=additional_ip_list&_return_as_object=1" -d '{"additional_ip_list": ["32.32.32.32"]}'
```

Sample Output:
```
{"result":
 [{"_ref": "member:dns/ZG5zLm1lbWJlcl9kbNfcHJvcGVydGllcyQw:infoblox.localdomain",
   "host_name": "infoblox.localdomain",
   "ipv4addr": "172.26.1.3",
   "additional_ip_list": ["32.32.32.32"]
}]}
```

## Members

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Get members | GET | <wapi_url>/member | |
| | colspan: curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/member?_return_as_object=1" | | |
| | colspan: {"result": [{"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain", "config_addr_type": "IPV4", "host_name": "infoblox.localdomain", "platform": "VNIOS", "service_type_configuration": "ALL_V4" }, {"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQx:member1.localdomain", "config_addr_type": "IPV4", "host_name": "member1.localdomain", "platform": "VNIOS", "service_type_configuration": "ALL_V4" }]} | | |
| Get details of a member based on its name | GET | <wapi_url>/member?host_name=infoblox.localdomain | |
| | colspan: curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/member?host_name=infoblox.localdomain&_return_as_object=1" | | |

| | | | |
|---|---|---|---|
| | | {"result":<br> [{"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain",<br>  "config_addr_type": "IPV4",<br>  "host_name": "infoblox.localdomain",<br>  "platform": "VNIOS",<br>  "service_type_configuration": "ALL_V4"<br> }]} | |
| | GET | <wapi_url>/member?ipv4_address=172.26.1.2 | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/member?ipv4_address=172.26.1.2&_return_fields%2B=vip_setting&_return_as_object=1" | | |
| Get details of a member based on its IPv4 address | {"result":<br> [{"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain",<br>  "config_addr_type": "IPV4",<br>  "host_name": "infoblox.localdomain",<br>  "platform": "VNIOS",<br>  "service_type_configuration": "ALL_V4",<br>  "vip_setting":<br>   {"address": "172.26.1.2",<br>    "dscp": 0,<br>    "gateway": "172.26.1.1",<br>    "primary": true,<br>    "subnet_mask": "255.255.255.0",<br>    "use_dscp": false<br> }}]} | | |
| | GET | <wapi_url>/member?_return_fields%2B=node_info | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/member?_return_fields%2B=node_info&_return_as_object=1" | | |
| Get node information for all members | {"result":<br> [{"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain",<br>  "config_addr_type": "IPV4",<br>  "host_name": "infoblox.localdomain",<br>  "node_info":<br>   [{"ha_status": "NOT_CONFIGURED",<br>    "hwid": "42017879A14D4EE9E59F6ABEC0E8F729",<br>    "hwmodel": "",<br>    "hwplatform": "VMWARE",<br>    "hwtype": "IB-V815",<br>    "lan2_physical_setting": {"auto_port_setting_enabled": true},<br>    "lan_ha_port_setting":<br>     {"ha_port_setting":<br>      {"auto_port_setting_enabled": true,<br>       "speed": "10"},<br>      "lan_port_setting": {"auto_port_setting_enabled": true}<br>     },<br>    "mgmt_physical_setting": {"auto_port_setting_enabled": true},<br>    "paid_nios": false,<br>    "physical_oid": "0",<br>    "service_status":<br>     [{"description": "Running",<br>       "service": "NODE_STATUS",<br>       "status": "WORKING" | | |

| | | |
|---|---|---|
| | ```json
},
{"description": "2% - Primary drive usage is OK.",
 "service": "DISK_USAGE",
 "status": "WORKING"
},
{"description": "172.26.1.2",
 "service": "ENET_LAN",
 "status": "WORKING"
},
{"description": "7% - Database capacity usage is OK.",
 "service": "DB_OBJECT",
 "status": "WORKING"
},
{"service": "NTP_SYNC",
 "status": "INACTIVE"
},
…..
{"service": "VPN_CERT",
 "status": "WORKING"
}],
 "v6_mgmt_network_setting":
  {"auto_router_config_enabled": false,
   "enabled": false
}}],
......}
``` | |

| | GET | <wapi_url>/member?_return_fields%2B=service_status |
|---|---|---|

| | | |
|---|---|---|
| | curl -k -u admin:infoblox -X GET
"https://grid-master/wapi/v2.12/member?_return_fields%2B=service_status&_return_as_object=1" | |

| Get Service Status for all members | ```json
{"result":
 [{"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain",
   "config_addr_type": "IPV4",
   "host_name": "infoblox.localdomain",
   "platform": "VNIOS",
   "service_status":
    [{"description": "DHCP Service is working",
     "service": "DHCP",
     "status": "WORKING"
    },
    {"description": "DNS Service is working",
     "service": "DNS",
     "status": "WORKING"
    },
    {"description": "NTP Service is working",
     "service": "NTP",
     "status": "WORKING"
    },
    {"description": "Hard Disk: 0% - TFTP Service is inactive",
     "service": "TFTP",
     "status": "INACTIVE"
    },
    {"description": "Hard Disk: 0% - HTTP File Dist Service is inactive",
     "service": "HTTP_FILE_DIST",
     "status": "INACTIVE"
    },
``` |

|  |  |  |  |
|---|---|---|---|
|  |  | {"description": "Hard Disk: 0% - FTP Service is inactive",<br> "service": "FTP",<br> "status": "INACTIVE"<br>},<br>{"description": "CPU: 100%, Memory: 0%, Hard Disk: 0%",<br> "service": "BLOXTOOLS",<br> "status": "INACTIVE"<br>},<br>{"description": "Captive Portal Service is inactive",<br> "service": "CAPTIVE_PORTAL",<br> "status": "INACTIVE"<br>},<br> {"service": "HSM",<br> "status": "UNKNOWN"<br>}],<br> "service_type_configuration": "ALL_V4"<br>},<br> …<br>]} |  |
| Modify the name of a member | PUT | <wapi_url>/member/b25lLnZpcnR1YWxfbm9 kZSQw:infoblox.localdomain | {"host_name":"nios.test.com"} |
|  | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomai n?_return_fields%2B=host_name&_return_as_object=1" -d '{"host_name":"nios.test.com"}' |  |  |
|  | {"result":<br> {"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:nios.test.com",<br> "config_addr_type": "IPV4",<br> "host_name": "nios.test.com",<br> "platform": "VNIOS",<br> "service_type_configuration": "ALL_V4"<br>}} |  |  |
| Add static routes to a member | PUT | <wapi_url>/member/b25lLnZpcnR1YWxfbm9 kZSQw:infoblox.localdomain | {"static_routes": [{"address":"10.10.10.0", "gateway":"172.26.1.1", "subnet_mask": "255.255.255.0"}]} |
|  | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomai n?_return_fields%2B=static_routes&_return_as_object=1" -d '{ "static_routes":[{"address": "10.10.10.0","gateway": "172.26.1.1","subnet_mask": "255.255.255.0"}]}' |  |  |
|  | {"result":<br> {"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain",<br> "config_addr_type": "IPV4",<br> "host_name": "infoblox.localdomain",<br> "platform": "VNIOS",<br> "service_type_configuration": "ALL_V4",<br> "static_routes":<br> [{"address": "10.10.10.0",<br> "gateway": "172.26.1.1",<br> "subnet_mask": "255.255.255.0"<br>}]}} |  |  |
| Delete static routes from a member | PUT | <wapi_url>/member/b25lLnZpcnR1YWxfbm9 kZSQw:infoblox.localdomain | {"static_routes": []} |

| | | | |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_return_fields%2B=static_routes&_return_as_object=1" -d '{ "static_routes":[]}' | | |
| | {"result": {"_ref": "member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain", "config_addr_type": "IPV4", "host_name": "infoblox.localdomain", "platform": "VNIOS", "service_type_configuration": "ALL_V4", "static_routes": [] }} | | |
| Enable DNS Service on a member | PUT | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQw:member1.localdomain | {"enable_dns":true} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQw:member1.localdomain?_return_as_object=1" -d '{"enable_dns":true}' | | |
| | {"result": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQw:member1.localdomain"} | | |
| Enable DHCP Service on a member | PUT | <wapi_url>/member:dhcpproperties/ZG5zLm1lbWJlcl9kaGNwX3Byb3BlcnRpZXMkMQ:member1.localdomain | {"enable_dhcp":true} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT "https://grid-master/wapi/v2.12/member:dhcpproperties/ZG5zLm1lbWJlcl9kaGNwX3Byb3BlcnRpZXMkMQ:member1.localdomain?_return_as_object=1" -d '{"enable_dhcp":true}' | | |
| | {"result": "member:dhcpproperties/ZG5zLm1lbWJlcl9kaGNwX3Byb3BlcnRpZXMkMQ:member1.localdomain"} | | |
| Add a member to the grid | POST | <wapi_url>/member | {"config_addr_type": "IPV4", "platform": "VNIOS", "host_name":"autojoin01.localdomain", "vip_setting": {"subnet_mask": "255.255.255.0", "address": "192.128.2.7", "gateway":"192.128.2.1"}} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member?_return_as_object=1" -d '{"config_addr_type": "IPV4","platform": "VNIOS","host_name":"autojoin01.localdomain","vip_setting": {"subnet_mask": "255.255.255.0","address": "192.128.2.7","gateway":"192.128.2.1"}}' | | |
| | {"result": "member/b25lLnZpcnR1YWxfbm9kZSQx:autojoin01.localdomain"} | | |
| Add a HA member to the grid | POST | <wapi_url>/member | {"config_addr_type": "IPV4", "platform": "VNIOS", "host_name":"member-ha.localdomain", "enable_ha":true, "router_id":150, "vip_setting": {"subnet_mask": "255.255.255.0", "address": "192.128.2.100", "gateway":"192.128.2.1"}, "node_info": |

| | | | |
|---|---|---|---|
| | | | [{"lan_ha_port_setting": {"ha_ip_address":"192.128.2.70", "mgmt_lan":"192.128.2.80"}}, {"lan_ha_port_setting": {"ha_ip_address":"192.128.2.71", "mgmt_lan":"192.128.2.81"}}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member?_return_as_object=1" -d '{"config_addr_type": "IPV4","platform": "VNIOS","host_name":"member-ha.localdomain","enable_ha":true,"router_id":150,"vip_setting": {"subnet_mask": "255.255.255.0","address": "192.128.2.100","gateway":"192.128.2.1"},"node_info":[{"lan_ha_port_setting":{"ha_ip_address":"192.128.2.70","mgmt_lan":"192.128.2.80"}},{"lan_ha_port_setting":{"ha_ip_address":"192.128.2.71","mgmt_lan":"192.128.2.81"}}]}' | | |
| | {"result": "member/b25LnW9vjR1ZUxfbm9aUIsx:member-ha.localdomain"} | | |
| Add a member with anycast configuration | POST | <wapi_url>/member | {"config_addr_type": "IPV4", "platform": "VNIOS", "host_name":"member-anycast.localdomain", "vip_setting": {"subnet_mask": "255.255.255.0", "address": "192.128.2.100", "gateway":"192.128.2.1"}, "additional_ip_list": [{"anycast":true, "enable_bgp":true, "enable_ospf":true, "interface":"LOOPBACK", "ipv4_network_setting": {"subnet_mask": "255.255.255.255", "address": "192.128.2.10", "gateway":"192.128.2.1"}}], "bgp_as": [{"as":100, "link_detect":true, "neighbors": [{"authentication_mode":"NONE", "interface":"LAN_HA", "neighbor_ip":"192.168.2.102", "remote_as":102, "enable_bfd":true}]}], "ospf_list": [{"area_id":"100", "authentication_type":"NONE", "auto_calc_cost_enabled":true, "interface":"LAN_HA", "is_ipv4":true}]} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member?_return_as_object=1" -d '{"config_addr_type": "IPV4","platform": "VNIOS","host_name":"member-anycast.localdomain","vip_setting": {"subnet_mask": "255.255.255.0","address": "192.128.2.100","gateway":"192.128.2.1"},"additional_ip_list":[{"anycast":true,"enable_bgp":true,"enable_ospf":true,"interface":"LOOPBACK","ipv4_network_setting":{"subnet_mask": | | |

| | | | |
|---|---|---|---|
| | "255.255.255.255","address": "192.128.2.10","gateway":"192.128.2.1"}}],"bgp_as":[{"as":100,"link_detect":true,"neighbors" :[{"authentication_mode":"NONE","interface":"LAN_HA","neighbor_ip":"192.168.2.102","rem ote_as":102,"enable_bfd":true}]}],"ospf_list":[{"area_id":"100","authentication_type":"NONE", "auto_calc_cost_enabled":true,"interface":"LAN_HA","is_ipv4":true}]}' | | |
| | {"result": "member/b25lLnZpcnR1YWxfbm9kZSQz:member-anycast.localdomain"} | | |
| Initiate member join | POST | <member_wapi_url>/grid?_function=join | {"grid_name":"Infoblox", "master":"*<grid master ip address>*", "shared_secret":"test"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://member-master/wapi/v2.12/grid?_function=join&_return_as_object=1" -d '{"grid_name":"Infoblox", "master":"grid-master", "shared_secret":"test"}' | | |

**Clear DNS Cache**

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Get member DNS reference | GET | <wapi_url>/member:dns |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/member:dns?_return_as_object=1" | |
| | {"result": [{"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQw:infoblox.localdomain", "host_name": "infoblox.localdomain", "ipv4addr": "10.196.205.12"}, {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:infoblox_member1.localdomain", "host_name": "infoblox_member1.localdomain", "ipv4addr": "10.196.205.13"}, {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQ2:infoblox-cpmember.localdomain" , "host_name": "infoblox-cpmember.localdomain", "ipv4addr": "10.196.205.14"}, {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQ4:testingwapi.localdomain", "host_name": "testingwapi.localdomain", "ipv4addr": "192.128.2.7"}, {"_ref": "member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQxMA:nios.test.com", "host_name": "nios.test.com", "ipv4addr": "10.196.205.100" }]} | | |
| Clear DNS cache of a member | POST | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:infoblox_ member1.localdomain?_function=clear_dns_cache |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:inf oblox_member1.localdomain?_function=clear_dns_cache" | |
| | {} | |
| Clear DNS cache of a member for a specific DNS view | POST | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:infoblox_ member1.localdomain?_function=clear_dns_cache&view=Internal%20DNS |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:inf oblox_member1.localdomain?_function=clear_dns_cache&view=Internal%20DNS" | |

| | | | |
|---|---|---|---|
| | | {} | |
| Clear DNS cache of a member for a specific FQDN and all the records within it | POST | <wapi_url>/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:infoblox_member1.localdomain?_function=clear_dns_cache&domain=test.com&clear_full_tree=true | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member:dns/ZG5zLm1lbWJlcl9kbnNfcHJvcGVydGllcyQx:infoblox_member1.localdomain?_function=clear_dns_cache&domain=test.com&clear_full_tree=true" | | |
| | {} | | |

**Services**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| Get grid service status | POST | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=requestrestartservicestatus | {"service_option": "ALL"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=requestrestartservicestatus" -d '{"service_option": "ALL"}' | | |
| Restart the services | POST | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=restartservices | {"member_order" : "SIMULTANEOUSLY", "service_option": "ALL"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=restartservices" -d '{"member_order" : "SIMULTANEOUSLY","service_option": "ALL"}' | | |
| Restart the services when no restart action is required | POST | <wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=restartservices | {"member_order" : "SIMULTANEOUSLY", "restart_option":"FORCE_RESTART", "service_option": "ALL"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=restartservices" -d '{"member_order" : "SIMULTANEOUSLY","restart_option":"FORCE_RESTART","service_option": "ALL"}' | | |
| Get the pending changes | GET | <wapi_url>/grid:servicerestart:request:changedobject | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/grid:servicerestart:request:changedobject" | | |

In the above examples, in the *service_option* you can replace *ALL* with *DNS* or *DHCP*

**Discovery**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Get the pre-built discovery tasks on the grid | GET | <wapi_url>/discoverytask | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/discoverytask?_return_as_object=1" | | |
| | {"result": [{"_ref": "discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlbnQ:current", "discovery_task_oid": "current", "member_name": "infoblox.localdomain"}, | | |

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| | | | |
|---|---|---|---|
| | | | {"_ref": "discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJHNjaGVkdWxlZA:scheduled",<br>  "discovery_task_oid": "scheduled",<br>  "member_name": "infoblox.localdomain"<br>}]] |
| Modify the scheduled discovery task | PUT | \<wapi_url>/discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJHNjaGVkdWxlZA:scheduled | '{"mode":"ICMP",<br>"network_view":"default",<br>"networks":<br>["network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMS4wLzI0LzA:192.168.11.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTcyLjAuMC4wLzI0LzA:172.0.0.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTAuMTAuMTAwLjAvMjQvMA:10.10.100.0/24/default"],<br>"ping_retries": 5,<br>"ping_timeout": 1500,<br>"scheduled_run":<br> {"frequency": "DAILY",<br>  "hour_of_day": 6,<br>   "minutes_past_hour": 0,<br>    "repeat": "RECUR"<br>}}' |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJHNjaGVkdWxlZA:scheduled" -d '{"mode":"ICMP","network_view":"default","networks":<br>["network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMS4wLzI0LzA:192.168.11.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTcyLjAuMC4wLzI0LzA:172.0.0.0/24/default","network/ZG5zLm5ldHdvcmskMTAuMTAuMTAwLjAvMjQvMA:10.10.100.0/24/default"],"ping_retries":<br>5,"ping_timeout": 1500,"scheduled_run": {"frequency": "DAILY","hour_of_day":<br>6,"minutes_past_hour": 0,"repeat": "RECUR"}}' | | |
| | discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJHNjaGVkdWxlZA:scheduled | | |
| Modify the current discovery task | PUT | \<wapi_url>/discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlbnQ:current | '{"mode":"ICMP",<br>"network_view":"default",<br>"networks":<br>["network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMS4wLzI0LzA:192.168.11.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTcyLjAuMC4wLzI0LzA:172.0.0.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTAuMTAuMTAwLjAvMjQvMA:10.10.100.0/24/default"],<br>"ping_retries": 5,<br>"ping_timeout": 1500}' |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X PUT<br>"https://grid-master/wapi/v2.12/discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlbnQ:current" -d '{"mode":"ICMP","network_view":"default","networks":<br>["network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xMS4wLzI0LzA:192.168.11.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTcyLjAuMC4wLzI0LzA:172.0.0.0/24/default","network/ZG5zLm5ldHdvcmskMTAuMTAuMTAwLjAvMjQvMA:10.10.100.0/24/default"],"ping_retries":<br>5,"ping_timeout": 1500}' | | |
| | discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlbnQ:current | | |

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| Start the current discovery task | POST | <wapi_url>/discoverytask/ZG5zLmRpc2 NvdmVyeV90YXNrJGN1cnJlbnQ:current ?_function=network_discover_control | {"action":"START"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlb nQ:current?_function=network_discovery_control" -d '{"action":"START"}' | | |
| Fetch the discovery task to get the state | GET | <wapi_url>/discoverytask?_return_fields %2B=status,state | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/discoverytask?_return_as_object=1&_return_fields%2B=s tatus,state" | | |
| | {"result": [{"_ref": "discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJGN1cnJlbnQ:current", "discovery_task_oid": "current", "member_name": "infoblox.localdomain", "state": "COMPLETE", "status": "Current status: Ended\nDiscovery was started by administrator 'admin'\n\n Discovered: 8\n Pending processing: 0\n Managed: 0\n Unmanaged: 8\n Conflicts: 0\n\n Existing objects updated with discovery data: 0"}, {"_ref": "discoverytask/ZG5zLmRpc2NvdmVyeV90YXNrJHNjaGVkdWxlZA:scheduled", "discovery_task_oid": "scheduled", "member_name": "infoblox.localdomain", "state": "COMPLETE", "status": "Current status: Ended\n\n Discovered: 0\n Pending processing: 0\n Managed: 0\n Unmanaged: 0\n Conflicts: 0\n\n Existing objects updated with discovery data: 0" }]} | | |

## vDiscovery

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Get vDiscovery tasks | GET | <wapi_url>/vdiscoverytask | |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/vdiscoverytask?_return_as_object=1" | | |
| | {"result": [{"_ref": "vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRBenVyZSB2RGlzY292ZXJ5:Azure%20 vDiscovery", "name": "Azure vDiscovery", "state": "WARNING" }, {"_ref": "vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRBV1MgdkRpc2NvdmVyeQ:AWS%20vD iscovery", "name": "AWS vDiscovery", "state": "WARNING" }, {"_ref": "vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRWTXdhcmUgdkRpc2NvdmVyeQ:VMwa re%20vDiscovery", "name": "VMware vDiscovery", "state": "WARNING" | | |

| | | | |
|---|---|---|---|
| | | | },<br>{"_ref":<br>"vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRPcGVuc3RhY2sgdkRpc2NvdmVyeQ:Openstack%20vDiscovery",<br>  "name": "Openstack vDiscovery",<br>  "state": "WARNING"<br>}]} |
| Create a vDiscovery Task to discover the AWS environment | POST | <wapi_url>/vdiscoverytask | '{"name": "ec2.eu-west-1",<br>"driver_type": "AWS",<br>"fqdn_or_ip":<br>"ec2.eu-west-1.amazonaws.com",<br>"username": "test",<br>"password": "test",<br>"member": "infoblox.localdomain",<br>"port": 443,<br>"protocol": "HTTPS",<br>"auto_consolidate_cloud_ea": true,<br>"auto_consolidate_managed_tenant": true,<br>"auto_consolidate_managed_vm": true,<br>"merge_data": true,<br>"private_network_view": "default",<br>"private_network_view_mapping_policy": "DIRECT",<br>"public_network_view": "default",<br>"public_network_view_mapping_policy": "DIRECT",<br>"update_metadata": true,<br>"scheduled_run":<br>{"_struct":"setting:schedule",<br>"frequency": "HOURLY",<br>"repeat": "RECUR",<br>"minutes_past_hour": 1,<br>"disable": true}}' |
| | colspan | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/vdiscoverytask?_return_fields=name,driver_type&_return_as_object=1" -d '{"name": "ec2.eu-west-1", "driver_type": "AWS",  "fqdn_or_ip": "ec2.eu-west-1.amazonaws.com", "username": "test", "password": "test", "member": "infoblox.localdomain", "port": 443, "protocol": "HTTPS", "auto_consolidate_cloud_ea": true, "auto_consolidate_managed_tenant": true, "auto_consolidate_managed_vm": true, "merge_data": true, "private_network_view": "default", "private_network_view_mapping_policy": "DIRECT", "public_network_view": "default", "public_network_view_mapping_policy": "DIRECT", "update_metadata": true, "scheduled_run": {"_struct":"setting:schedule","frequency": "HOURLY", "repeat": "RECUR", "minutes_past_hour": 1, "disable": true}}' | |
| | colspan | {"result":<br>  {"_ref":<br>"vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRlYzIuZXUtd2VzdC0x:ec2.eu-west-1",<br>  "driver_type": "AWS",<br>  "name": "ec2.eu-west-1"<br>}} | |
| Start a vDiscovery task | POST | <wapi_url>/vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRlYzIuZXUtd2VzdC0 | {"action":"START"} |

| | | x:ec2.eu-west-1<u>?\_function=vdiscover\_control</u> |
|---|---|---|
| | \* | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/vdiscoverytask/ZG5zLmNkaXNjb3ZlcnlfdGFzayRlYzIuZXUtd2VzdC0x:ec2.eu-west-1?\_function=vdiscovery\_control" -d '{"action":"START"}' |

**Permissions**

| Operation | REST Method | API Call |
|---|---|---|
| | | **Sample cURL Command** |
| | | **Sample Output** |
| Get permissions | GET | <wapi\_url>/permission |
| | \* | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/permission?\_return\_as\_object=1" |
| | \* | {"result": [{"\_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy56b25lJC4uLi4uY29tLmluZm9ibG94Lm9uZS5yb2xlJEROUyBBBZG1pbi4:DNS%20Admin/WRITE", "permission": "WRITE", "resource\_type": "VIEW", "role": "DNS Admin" }, {"\_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy56b25lJC5zcmdfcm9vdC4uLmNvbS5pbmZvYmxveC5vbmUucm9sZSRETlMgQWRtaW4u:DNS%20Admin/WRITE", "permission": "WRITE", "resource\_type": "SHARED\_RECORD\_GROUP", "role": "DNS Admin" }, …. {"\_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy5uZXR3b3JrX3ZpZXdfcGFyZW50JC8uLi5jb20uaW5mb2Jsb3guR3JpZCCBBZG1pbi5rbnMububXNfYWRfc2l0ZXNfZG9tYWlu:Grid%20Admin/WRITE", "permission": "WRITE", "resource\_type": "MS\_ADSITES\_DOMAIN", "role": "Grid Admin" }]} |
| Get permissions for a role (DHCP Admin) | GET | <wapi\_url>/permission?role=DHCP%20Admin |
| | \* | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/permission?role=DHCP%20Admin&\_return\_as\_object=1" |
| | \* | {"result": [{"\_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy5uZXR3b3JrX3ZpZXdfcGFyZW50JC8uLi5jb20uaW5mb2Jsb3guRHUCBBZG1pbi4:DHCP%20Admin/WRITE", "permission": "WRITE", "resource\_type": "NETWORK\_VIEW", "role": "DHCP Admin" }, {"\_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy5kaGNwX21hY19maWx0ma |

| | | |
|---|---|---|
| | Wx0ZXJfcGFyZW50JDAuLi5jb20uaW5mb2Jsb3gub25lLnJvbGUkREhDBBZG1pbi4:<br>DHCP%20Admin/WRITE",<br>  "permission": "WRITE",<br>  "resource_type": "DHCP_MAC_FILTER",<br>  "role": "DHCP Admin"<br> },<br> …..<br> {"_ref":<br>"permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRycy5jbHVzdGVyX2RoY3<br>BfcHJvcGVydGllcyQwLi4uY29tLmluZm9ibG94Lm9uZS5yb2xlJERIQ1AgQWRtaW4u:DH<br>CP%20Admin/WRITE",<br>  "permission": "WRITE",<br>  "resource_type": "GRID_DHCP_PROPERTIES",<br>  "role": "DHCP Admin"<br>}]} | |
| Get permissions for a group | GET <wapi_url>/permission?group=cloud-api-only | |
| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/permission?group=cloud-api-only" | |
| | {"result":<br> [{"_ref":<br>"permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRycy5jbHVzdGVyX2RoY3<br>BfcHJvcGVydGllcyQwLi4uY29tLmluZm9ibG94Lm9uZS5hZG1pbl9ncm91cCQuY2xvdW<br>QtYXBpLW9ubHku:cloud-api-only/WRITE",<br>   "group": "cloud-api-only",<br>   "permission": "WRITE",<br>   "resource_type": "GRID_DHCP_PROPERTIES"<br> },<br>  {"_ref":<br>"permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRycy50ZW5hbnRfcGFyZW<br>50JGFsbC4uLmNvbS5pbmZvYmxveC5vbmUuYWRtaW5fZ3JvdXAkLmNsb3VkLWFwa<br>S1vbmx5Lg:cloud-api-only/WRITE",<br>   "group": "cloud-api-only",<br>   "permission": "WRITE",<br>   "resource_type": "TENANT"<br> },<br>  {"_ref":<br>"permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRycy5uZXR3b3JrX3ZpZXd<br>fcGFyZW50JC8uLi5jb20uaW5mb2Jsb3gub25lLmFkbWluX2dyb3VwJC5jbG91ZC1hcGkt<br>b25seS4:cloud-api-only/WRITE",<br>   "group": "cloud-api-only",<br>   "permission": "WRITE",<br>   "resource_type": "NETWORK_VIEW"<br> },<br>  {"_ref":<br>"permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRycy5jbHVzdGVyX2Ruc19<br>wcm9wZXJ0aWVzJDAuLi5jb20uaW5mb2Jsb3gub25lLmFkbWluX2dyb3VwJC5jbG91ZC<br>1hcGktb25seS4:cloud-api-only/WRITE",<br>   "group": "cloud-api-only",<br>   "permission": "WRITE",<br>   "resource_type": "GRID_DNS_PROPERTIES"<br>}]} | |

## Export a CSV file

When you initiate a CSV Export, you will get a URL that can be used to download the file directly, and a token for the download session.  After downloading the CSV file, remember to remove the stored file using the token.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate a CSV export | POST | `<wapi_url>/fileop?_function=csv_export` | {"_object": "record:host"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=csv_export" -d '{"_object": "record:host"}' | | |
| | {"token": "eJylUMFuwjAMvftH4ELbFNrCbkwd2qQQJJJi0o9UmKbPUJlkSEPz9nEnbabcdYjl+z89+ltK6O3p9\nBg7SmhD9RUbrwQmYSzKD7Ud7y6zR6cW70wHaLnZ41AO4EiRif6ExkkEERTKCW8JcuRWcZvrmyN8x\n0qRn4CrYiaqomqouVpus4VCtIZxmFz8yWjP/I0YXHvJcNGVW1pnIyjyVUBGvFnGgUSPZ3OtPJLVo\nnD+/718O2XYYiiEPmz5c3ZgFchk+HKik0SJ8XZmrX/amJok0iK/XAuCublgc13Z53Hyf1nuhA/yqiN\ntIrMOVVLHvH4sk/p8pcwWZUOJNLN2u3bFo9Pu/SvIMSjE3W6p2gYHEiPKmC0KO3k0v/dtYZ9Mt\np3\nDsm4S8Sr9oGsSdiGsT77AjVimUo=\n", "url": "https://grid-master.2/http_direct_file_io/req_id-DOWNLOAD-1001/Hostrecords.csv" } | | |
| Download the CSV file | GET | `<url_from_the_previous_output>` Example: `https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-1001/Hostrecords.csv` | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-1001/Hostrecords.csv" -o "Hostrecords.csv" | | |
| | #Hostrecords.csv file is saved in the present working directory# | | |
| Remove the stored file using the token | POST | `<wapi_url>/fileop?_function=downloadcomplete` | {"token": "eJyIUM..o="} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJylUMFuwjAMvftH4ELbFNrCbkwd2qQQJJJi0o9UmKbPUJlkSEPz9nEnbabcdYjl+z89+ltK6O3p9\nBg7SmhD9RUbrwQmYSzKD7Ud7y6zR6cW70wHaLnZ41AO4EiRif6ExkkEERTKCW8JcuRWcZvrmyN8x\n0qRn4CrYiaqomqouVpus4VCtIZxmFz8yWjP/I0YXHvJcNGVW1pnIyjyVUBGvFnGgUSPZ3OtP\nJLVo\nD+/718O2XYYiiEPmz5c3ZgFchk+HKik0SJ8XZmrX/amJok0iK/XAuCublgc13Z53Hyf1nuhA/yqiN\ntIrMOVVLHvH4sk/p8pcwWZUOJNLN2u3bFo9Pu/SvIMSjE3W6p2gYHEiPKmC0KO3kOv/dtYZ9Mt\np3\nDsm4S8Sr9oGsSdiGsT77AjVimUo=\n"}' | | |

Please note that while downloading the CSV file (in the second step above), the *Content-Type* in the header will be *application/force-download.*

## Export results of a WAPI call

You can cache the results by exporting the results of a WAPI call and save the data to disk.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Export results of a WAPI call | POST | `<wapi_url>/fileop?_function=read` | {"_encoding":"JSON", "_filename":"allhosts.info.com.json","_object":"record:host", "_return_fields":"name,extattrs", "zone":"info.com"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=read" -d '{"_encoding":"JSON","_filename":"allhosts.info.com.json","_object":"record:host","_return_fields":"name,extattrs","zone":"info.com"}' | | |

The file will be in a folder called 'wapi_output' in the HTTP file distribution.

## Get Lease History files

When you initiate a lease history export, you will get a URL that can be used to download the file directly, and a token for the download session.  After downloading the lease history file, remember to remove the stored file using the token.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate a CSV export | POST | <wapi_url>/fileop?_function=getleasehistoryfiles | {"member": "m1.infoblox.com", "start_time": "1514764800", "end_time" :"1533686400"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=getleasehistoryfiles" -d '{"member": "m1.infoblox.com", "start_time": "1514764800", "end_time" :"1533686400"}' | | |
| | {"token": "eJylUMFuwjAMvftH4ELbFNrCbkwd2qQJJJi0o9UmKbPUJlkSEPz9nEnbabcdYjl+z89+ltK6O3p9\nB g7SmhD9RUbrwQmYSzKD7Ud7y6zR6cW70wHaLnZ41AO4EiRif6ExkkEERTKCW8JcuRWcZvrmy N8x\n0qRn4CrYiaqomqouVpus4VCtlZxmFz8yWjP/I0YXHvJcNGVW1pnIyjyVUBGvFnGgUSPZ3OtP JLVo\nD+/718O2XYiiEPmz5c3ZgFchk+HKik0SJ8XZmrX/amJok0iK/XAuCublgc13Z53Hyf1nuhA/yqiN \ntlrMOVVLHvH4sk/p8pcwWZUOJNLN2u3bFo9Pu/SvIMSjE3W6p2gYHEiPKmC0KO3kOv/dtYZ9Mt p3\nDsm4S8Sr9oGsSdiGsT77AjVimUo=\n", "url": "https://192.168.1.2/http_direct_file_io/req_id-DOWNLOAD-0202150809630902/dhcpLeaseHistory.csv.gz" } | | |
| Download the CSV file | GET | <url_from_the_previous_output> Example: https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-0202150809630902/dhcpLeaseHistory.csv.gz | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-0202150809630902/dhcpLeaseHistory.csv.gz" -o "dhcpLeaseHistory.csv.gz" | | |
| | #dhcpLeaseHistory.csv.gz file is saved in the present working directory# | | |
| Remove the stored file using the token | POST | <wapi_url>/fileop?_function=downloadcomplete | {"token": "eJylUM..o="} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJylUMFuwjAMvftH4ELbFNrCbkwd2qQJJJi0o9UmKbPUJlkSEPz9nEnbabcdYjl+z89+ltK6O3p9\nB g7SmhD9RUbrwQmYSzKD7Ud7y6zR6cW70wHaLnZ41AO4EiRif6ExkkEERTKCW8JcuRWcZvrmy N8x\n0qRn4CrYiaqomqouVpus4VCtlZxmFz8yWjP/I0YXHvJcNGVW1pnIyjyVUBGvFnGgUSPZ3OtP JLVo\nD+/718O2XYiiEPmz5c3ZgFchk+HKik0SJ8XZmrX/amJok0iK/XAuCublgc13Z53Hyf1nuhA/yqiN \ntlrMOVVLHvH4sk/p8pcwWZUOJNLN2u3bFo9Pu/SvIMSjE3W6p2gYHEiPKmC0KO3kOv/dtYZ9Mt p3\nDsm4S8Sr9oGsSdiGsT77AjVimUo=\n"}' | | |

Please note that while downloading the lease history file (in the second step above), the *Content-Type* in the header will be *application/force-download.*

## Import a file (Certificate)

---

When you initiate a file import, you will get a URL to which you can upload the file to. Once you have uploaded the file, signal to the appliance to perform an action on the uploaded file. In this example, we will upload a certificate.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate file upload | POST | <wapi_url>/fileop?_function=uploadinit | |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=uploadinit" | | |
| | {"token": "eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PMgQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvKqyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqqXHoE2UVT0EWtRRlbho+nupIsw8f9eFeJHE7WRVpE5pWkV\nxe8f96lc/hlmq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQHpUHoNFaSfu3HVrDftksO8YyfAc8FM7\nT9YkrI1Yn38Bt1KUqw==\n", "url": "https://172.26.1.2/http_direct_file_io/req_id-UPLOAD-1001/import_file" } | | |
| Upload contents of a CA certificate | POST | <url_from_the_previous_output> Example: https://x.x.x.x/http_direct_file_io/req_id-UPLOAD-1001/import_file | file=@ca.cert.pem |
| | curl -k -u admin:infoblox -H 'content-type:multipart-formdata' "https://grid-master/http_direct_file_io/req_id-UPLOAD-1001/import_file" -F file=@ca.cert.pem | | |
| Upload the CA Certificate | POST | <wapi_url>/fileop?_function=uploadcertificate | {"certificate_usage":"EAP_CA", "member": "infoblox.localdomain", "token":"eJydk..=="} |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=uploadcertificate" -d '{"certificate_usage":"EAP_CA","member": "infoblox.localdomain","token":"eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PMgQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvKqyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqqXHoE2UVT0EWtRRlbho+nupIsw8f9eFeJHE7WRVpE5pWkV\nxe8f96lc/hlmq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQHpUHoNFaSfu3HVrDftksO8YyfAc8FM7\nT9YkrI1Yn38Bt1KUqw==\n"}' | | |

Please note that while uploading the file (in the second step above), the Content-Type in the header will be *multipart/form-data*

---

## Import a CSV file

When you need to update or create multiple records, you can store the data as fields in a CSV file and import it at once. This will be faster in comparison with updating or creating each object with a separate API call. This example assumes that the values and fields in your CSV file are comma-separated. For more information on the CSV file, you can refer to the CSV Import Reference section under Tech Docs in the Support Site.

| Operation | REST Method | API Call | Sample Body |
|-----------|-------------|----------|-------------|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate file upload | POST | &lt;wapi_url&gt;/fileop?_function=uploadinit | |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=uploadinit" | | |
| | {"token": "eJydUE1PwzAMvfuPbJe1Tbe2G7ehMQkJDbTB2WqTdFhqk5CkaPv3OENw4cYhkeP34TxLad0VvT4D\nX9KaEP0ko/XgBMwlmd52g71k1uh04tXpALs2tnjUPbgSJGI30RDJIIIiGcEtYa7cCk4zfXHkrxhp\n1DNwFexFVVRNVddVk4l6tdyUGwin2eQHhmsWvMfowl2ei6bMyjoTWZmnFiriv0XsadBINvf6A0kt\n3l6enre7hSiKMqfRWf/NYK8m2ZLias2uf+kM3CYrDsK1KJiVB07dnnUeR/e/qUL8eKl20ioy59Qt\n2fz+8ZDK5S9htOomSWvabV+3ezHzYp3cFIR6dqNMKRcNgT3pQAaNFaUfX+ptqDYcUsGsdknFTxE/t\n1mTsA1jXfYFNGOU6g==\n", "url": "https://172.26.1.2/http_direct_file_io/req_id-UPLOAD-1002/import_file" } | | | |
| Upload contents of the CSV file | POST | &lt;url_from_the_previous_output&gt; Example: https://x.x.x.x/http_direct_file_io/req_id-UPLOAD-1002/import_file | file=@HostRecords.csv |
| | curl -k -u admin:infoblox -H 'content-type:multipart/form-data' "https://grid-master/http_direct_file_io/req_id-UPLOAD-1002/import_file" -F file=@HostRecords.csv | | |
| Upload the CSV file | POST | &lt;wapi_url&gt;/fileop?_function=csv_import | {"action":"START", "on_error":"CONTINUE", "update_method":"MERGE", "token":"eJydU..=="} |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=csv_import" -d '{"action":"START","on_error":"CONTINUE","update_method":"MERGE","token":"eJydUE1PwzAMvfuPbJe1Tbe2G7ehMQkJDbTB2WqTdFhqk5CkaPv3OENw4cYhkeP34TxLad0VvT4D\nX9KaEP0ko/XgBMwlmd52g71k1uh04tXpALs2tnjUPbgSJGI30RDJIIIiGcEtYa7cCk4zfXHkrxhp\n1DNwFexFVVRNVddVk4l6tdyUGwin2eQHhmsWvMfowl2ei6bMyjoTWZmnFiriv0XsadBINvf6A0kt\n3l6enre7hSiKMqfRWf/NYK8m2ZLias2uf+kM3CYrDsK1KJiVB07dnnUeR/e/qUL8eKl20ioy59Qt\n2fz+8ZDK5S9htOomSWvabV+3ezHzYp3cFIR6dqNMKRcNgT3pQAaNFaUfX+ptqDYcUsGsdknFTxE/t\n1mTsA1jXfYFNGOU6g==\n"}' | | |
| | {"csv_import_task": {"_ref": "csvimporttask/b25lLmNzdl9pbXBvcnRfdGFzayQ1:5", "admin_name": "admin", "file_name": "import_file", "file_size": 215, "import_id": 5, "lines_failed": 0, "lines_processed": 0, "lines_warning": 0, "on_error": "CONTINUE", "operation": "UPDATE", "separator": "COMMA", | | |

| | | |
|---|---|---|
| | "start_time": 1537512228,<br>"status": "PENDING",<br>"update_method": "MERGE"<br>}} | |

| | GET | <wapi_url>/csvimporttask/b25lLmNzdl9pbXBvcnRfdGFzayQ1:5 |
|---|---|---|

| | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/csvimporttask/b25lLmNzdl9pbXBvcnRfdGFzayQ1:5" |
|---|---|

| Verify the status of the CSV import task | {"_ref": "csvimporttask/b25lLmNzdl9pbXBvcnRfdGFzayQ1:5",<br>"admin_name": "admin",<br>"end_time": 1537512233,<br>"file_name": "import_file",<br>"file_size": 215,<br>"import_id": 5,<br>"lines_failed": 0,<br>"lines_processed": 3,<br>"lines_warning": 0,<br>"on_error": "CONTINUE",<br>"operation": "UPDATE",<br>"separator": "COMMA",<br>"start_time": 1537512233,<br>"status": "COMPLETED",<br>"update_method": "MERGE"<br>} |
|---|---|

Please note that while uploading the file (in the second step above), the Content-Type in the header will be *multipart/form-data*.

## Generate a certificate signing request (CSR)

When you initiate a CSR, you will get a URL that can be used to download the file directly, and a token for the download session. After downloading the CSR file, remember to remove the stored file using the token.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate a CSV export | POST | <wapi_url>/fileop?_function=generatecsr | {"certificate_usage" : "ADMIN",<br>"algorithm":"SHA-512",<br>"email" : "admin@api-testing.com",<br>"cn" : "API-Testing",<br>"country" : "US",<br>"state" : "California",<br>"locality" : "Santa Clara",<br>"org" : "Infoblox",<br>"org_unit" : "TME",<br>"member": "infoblox.localdomain"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST<br>"https://grid-master/wapi/v2.12/fileop?_function=generatecsr" -d '{"_object": "record:host"}' | | |
| | {"token": "eJyljrEKwjAURX+IZLZJXzSN7VapgiAtiOAYSvOsAWNrjKCI/24z6Orgei733PskeB+MeyhvLJI8\ngnQ 2nfNUCEEIZGIGMInIzZ3GiBy9H645Y5BQyFLKE0GBs0CVNg5brw7mhMr0zOFFGR2X9b7a1EUZ\n JzzhIHkGQkIqhWQtOk8HtGS068Y3Cs9tr825CzuLdfXlttfhFimLXaG2y9UnCIxdfe+aDpm3w/83\njA7 OXxXyegM9j1mw\n", | | |

| | | "url": "https://10.196.205.12/http_direct_file_io/req_id-DOWNLOAD-0202172915716757/cert.pem"} | |
|---|---|---|---|
| Download the CSV file | GET | <url_from_the_previous_output><br>Example:<br>https://x.x.x.x/http_direct_file_io/rreq_id-DOWNLOAD-0202172915716757/cert.pem | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-0202172915716757/cert.pem" -o "cert.pem" | | |
| | #cert.pem file is saved in the present working directory# | | |
| Remove the stored file using the token | POST | <wapi_url>/fileop?_function=downloadcomplete | {"token": "eJyl..w\n"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJyljrEKwjAURX+IZLZJXzSN7VapgiAtiOAYSvOsAWNrjKCI/24z6Orgei733PskeB+MeyhvLJI8\ngnQ2nfNUCEEIZGIGMInIzZ3GiBy9H645Y5BQyFLKE0GBs0CVNg5brw7mhMr0zOFFGR2X9b7a1EUZ\nJzzhIHkGQkIqhWQtOk8HtGS068Y3Cs9tr825CzuLdfXIttfhFimLXaG2y9UnCIxdfe+aDpm3w/83\njA7OXxXyegM9j1mw\n"}' | | |

Please note that while downloading the CSV file (in the second step above), the *Content-Type* in the header will be *application/force-download.*

## Grid database backup and restore

When you initiate a backup, you will get a URL that can be used to download the file directly, and a token for the download session.  After downloading the backup file, remember to remove the stored file using the token.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate a backup | POST | <wapi_url>/fileop?_function=getgriddata | {"type": "BACKUP"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=getgriddata" -d '{"type": "BACKUP"}' | | |
| | {"token": "eJydUE1PwzAMvfuPjMvaplvWjdtQmYSENmlD4mi1STos2iQkGdr+PQ4SnDhxSOT4fcR+Sjl/w2DO\nwJdyNqZwUckF8ALuFNnB9aO7Fs6afNLNmwhtlzo8mgF8DQqxv9CYyCKCJpXAL+BO+yWcZubqK\ndww\n0WRm4CXshKxkI+W6XhWyqZayhniaXcLl6Ir5byn5eF+WoqkLpoiiLnMLNfFoCQqcaDZIrg/lA0v\nP2\n8Lp/PmzbuagqUWqeqe+iKfrune2a7EyaqzUb/6VgaJNJWci1qJhXRt68O5syTf7fXwvxY4vGKqfJ\nnnnO3Zv+Hp30uF7+EyekcjchptduXLR4fd/ktIaajF6ucpGgYHMiMOmJyqNzku/CtWsM+b9l3Hsn6\nnS8JPEyI5m7ENY33xBbbQAIIA=\n",<br> "url": "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-1001/database.bak"<br>} | | |
| Download the backup | GET | <url_from_the_previous_output><br>Example:<br>https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-1001/database.bak | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-1001/database.bak" -o "database.bak" | | |
| | #database.bak file is saved in the present working directory# | | |
| Remove the stored file using the token | POST | <wapi_url>/fileop?_function=downloadcomplete | {"token": "eJydU..A="} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJydUE1PwzAMvfuPjMvaplvWjdtQmYSENmlD4mi1STos2iQkGdr+PQ4SnDhxSOT4fcR+Sjl/w2DO\nwJdyNqZwUckF8ALuFNnB9aO7Fs6afNLNmwhtlzo8mgF8DQqxv9CYyCKCJpXAL+BO+yWcZubqK | | |

dww\n0WRm4CXshKxkI+W6XhWyqZayhniaXcLI6Ir5byn5eF+WoqkLpoiiLnMLNfFoCQcaDZIrg/lA0v
P2\n8Lp/PmzbuagqUWqeqe+iKfrune2a7EyaqzUb/6VgaJNJWci1qJhXRt68O5syTf7fXwvxY4vGKqfJ\
nnnO3Zv+Hp30uF7+EyekcjchptduXLR4fd/ktIaajF6ucpGgYHMiMOmJyqNzku/CtWsM+b9l3Hsn6\nS
8JPEyI5m7ENY33xBbQAllA=\n"}'

Please note that while downloading the backup (in the second step above), the *Content-Type* in the header will
be *application/force-download.*

When you initiate a backup, you will get a URL to which you can upload the backup file directly, and a token for
restoring the database.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Initiate a file upload | POST | <wapi_url>/fileop?_function=uploadinit | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=uploadinit" | | |
| | {"token": "eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PMgQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvKqyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqqXHoE2UVT0EWtRRlbho+nupIsw8f9eeFeJHE7WRVpE5pWkV\nnxe8f96lc/hImq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQHpUHoNFaSfu3HVrDftksO8YyfAc8FM7\nT9YkrI1Yn38Bt1KUqw==\n", "url": "https://grid-master/http_direct_file_io/req_id-UPLOAD-1001/import_file" } | | |
| Upload the backup file | POST | <url_from_the_previous_output> Example: https://x.x.x.x/http_direct_file_io/req_id-UPLOAD-1001/import_file | filedata=@database.bak |
| | curl -k -u admin:infoblox "https://grid-master/http_direct_file_io/req_id-UPLOAD-1001/import_file" -F name=database.bak -F filedata=@database.bak | | |
| Restore the database | POST | <wapi_url>/fileop?_function=restoredatabase | {"mode":"NORMAL", "token": "eJydU..w="} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=restoredatabase" -d '{"mode":"NORMAL","token":"eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PM gQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+ pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvK qyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqqXHoE2UVT0EWtRRl bho+nupIsw8f9eeFeJHE7WRVpE5pWkV\nnxe8f96lc/hImq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQH pUHoNFaSfu3HVrDftksO8YyfAc8FM7\nT9YkrI1Yn38Bt1KUqw==\n"}' | | |

## Grid upgrade

For a grid-wide upgrade, you can use the *upgrade* function. This function provides control over the Grid
upgrade. The upgrade process normally is as follows:

1. Upload the upgrade file using the set_upgrade_file function call in object fileop.
2. Call this function with 'action' set to 'UPLOAD', this will prepare the uploaded file for deployment.
3. Call this function with 'action' set to 'DISTRIBUTION_START', which will start the Grid distribution
   process.
4. Call this function with 'action' set to 'UPGRADE', which will restart the appliances with the new NIOS
   version.

| Operation | | REST Method | API Call | Sample Body |
|---|---|---|---|---|
| | | | **Sample cURL Command** | |
| | | | **Sample Output** | |
| Upload the upgrade file | Initiate a file upload | POST | `<wapi_url>/fileop?_function=uploadinit` | |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=uploadinit" | |
| | | | {"token": "eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PMgQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvKqyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqXHoE2UVT0EWtRRlbho+nupIsw8f9eFeJHE7WRVpE5pWkV\nnxe8f96lc/hlmq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQHpUHoNFaSfu3HVrDftksO8YyfAc8FM7\nnT9YkrI1Yn38Bt1KUqw==\n", "url": "https://grid-master/http_direct_file_io/req_id-UPLOAD-1001/import_file" } | |
| | Upload the upgrade file | POST | `<url_from_the_previous_output>` Example: https://x.x.x.x/http_direct_file_io/req_id-UPLOAD-1001/import_file | file=@upgrade-file.bin |
| | | | curl -k -u admin:infoblox "https://grid-master/http_direct_file_io/req_id-UPLOAD-1001/import_file" -F name=upgrade-file.bin -F filedata=@upgrade-file.bin | |
| | Set it as the upgrade file | POST | `<wapi_url>/fileop?_function=set_upgrade_file` | {"token": "eJydU..w="} |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=set_upgrade_file" -d '{"token":"eJydUMFOwzAMvftHymVt09Fu5TY0JiGhgTY4W22SDkttYpIUbX9PMgQXbhwS2X7PL3lPSssXdPoE\n8ZLW+OBmGawDFnAjyQy2H+05t0anEy6sPWy70OFBD8AVSMR+pjGQQQRFMgAv4UbxLRwzfWZyFww0\n6Qy4hp2oy3pVN1XT5GXZtmIF/pjNboxoE/nvIbC/KwqxqvKqyUVeFWmEiuLXAg40aiRbOP2BpBZv\nL0/Pm+1ClKUoaGLrvhlR6ypLKlbrqPqXHoE2UVT0EWtRRlbho+nupIsw8f9eFeJHE7WRVpE5pWkV\nnxe8f96lc/hlmq64rKaXt5nWDh4dd6mvw4cCiSQnGdI7ZQHpUHoNFaSfu3HVrDftksO8YyfAc8FM7\nnT9YkrI1Yn38Bt1KUqw==\n"}' | |
| Call the *upgrade* function to "UPLOAD" the file | | POST | `<wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade` | {"action": "UPLOAD"} |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade" -d '{"action": "UPLOAD"}' | |
| Call the *upgrade* function to start the distribution process | | POST | `<wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade` | {"action": "DISTRIBUTION_START"} |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade" -d '{"action": "DISTRIBUTION_START"}' | |
| Call the *upgrade* function to start the upgrade | | POST | `<wapi_url>/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade` | {"action": "UPGRADE"} |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/grid/b25lLmNsdXN0ZXIkMA:Infoblox?_function=upgrade" -d '{"action": "UPGRADE"}' | |
| Check the upgrade status | | GET | `<wapi_url>/upgradestatus?type=GRID` | |
| | | | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/upgradestatus?type=GRID" | |
| | | | [{"_ref": "upgradestatus/Li51cGdyYWRlc3RhdHVzJHVwZ3JhZGVfc3RhdHVz:Infoblox", "element_status": "WORKING", | |

    "grid_state": "DEFAULT",
    "group_state": "GROUP_NONE",
    "ha_status": "NOT_CONFIGURED",
    "message": "",
    "steps_completed": 0,
    "steps_total": 0,
    "type": "GRID",
    "upgrade_state": "NONE",
    "upgrade_test_status": "NONE"
}]

## Traffic Capture

You must first initiate the traffic capture. To download the traffic capture file, the capture must be stopped. Either stop it manually or wait for the timer to expire.  After downloading the capture file, remember to remove the stored file using the token.

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Check the current capture status | POST | \<wapi_url>/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_status | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_status" | | |
| | {"file_exists": false,<br>"file_size": 0,<br>"status": "STOPPED"} | | |
| Initiate the capture | POST | \<wapi_url>/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_control&action=START&interface=ALL | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_control&action=START&interface=ALL" | | |
| | {} | | |
| Check the capture status | POST | \<wapi_url>/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_status | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_status" | | |
| | {"file_exists": true,<br>"file_size": 12288,<br>"status": "RUNNING"} | | |
| Stop the capture | POST | \<wapi_url>/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_control&action=STOP&interface=ALL | |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/member/b25lLnZpcnR1YWxfbm9kZSQw:infoblox.localdomain?_function=capture_traffic_control&action=STOP&interface=ALL" | | |
| | {} | | |
| Generate the capture file | POST | \<wapi_url>/fileop?_function=getmemberdata&member=infoblox.localdomain&type=TRAFFIC_CAPTURE_FILE | |

| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=getmemberdata&member=infoblox.localdomain&type=TRAFFIC_CAPTURE_FILE" | |
|---|---|---|
| | {"token": "eJy9kcFuwyAMhu+8SHsJCTRJw26dskqTqlZqJ+1oJUAypCQwQqZ2Tz9Tab3utgOW8f9bfNhSWncD\nr3uCQdppDn6RwXriGFlLM3W2HeyV2knHE25Oz6RuQgNn3RHHiQRoFzMEMwEQZWQgbkPWyuXkstJX\nZ/wNghn1iriC7FmxzZkQvKoo5xUrBZkvq8UPqJbo/wjBzU9pyjLKREl5VtCcp7EKyiBdgM4MGoxN\nvnf4Eo5L69H48nHZ1whgTPNvkecV5IcoifYAPVjaDspABz5hAY4KRZ8kmT/IKgnRqGd3B9jQ0nvbf\nSLKNUEZhViHTXy+h7f4LhTPBnGXYk844wKbXaRjdv+Mz9osDepJWmamPVY5cz6/HmG4ehtGquBkW\nl1Xv3nZwftnHe0HmcHasjltkWxQ7owc1Q7Ag7egaf++qyDFOqm0cmMktAb60n42doiZQa+kPIMm5\nYA==\n", "url": "https://10.196.205.42/http_direct_file_io/req_id-DOWNLOAD-1119203448225965/infoblox.localdo_0_2019-11-19-20-34-48_tcpdumpLog.tar.gz"} | |
| **Download the traffic capture file** | GET | <url_from_the_previous_output> Example: https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-1119203448225965/infoblox.localdo_0_2019-11-19-20-34-48_tcpdumpLog.tar.gz | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-1119203448225965/infoblox.localdo_0_2019-11-19-20-34-48_tcpdumpLog.tar.gz" -o "trafficCapture.tar.gz" | | |
| | # trafficCapture.tar.gz file is saved in the present working directory# | | |
| **Remove the stored file using the token** | POST | <wapi_url>/fileop?_function=downloadcomplete | {"token": "eJy9kc..A=="} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJy9kcFuwyAMhu+8SHsJCTRJw26dskqTqlZqJ+1oJUAypCQwQqZ2Tz9Tab3utgOW8f9bfNhSWncD\nr3uCQdppDn6RwXriGFlLM3W2HeyV2knHE25Oz6RuQgNn3RHHiQRoFzMEMwEQZWQgbkPWyuXkstJX\nZ/wNghn1iriC7FmxzZkQvKoo5xUrBZkvq8UPqJbo/wjBzU9pyjLKREl5VtCcp7EKyiBdgM4MGoxN\nvnf4Eo5L69H48nHZ1whgTPNvkecV5IcoifYAPVjaDspABz5hAY4KRZ8kmT/IKgnRqGd3B9jQ0nvbf\nSLKNUEZhViHTXy+h7f4LhTPBnGXYk844wKbXaRjdv+Mz9osDepJWmamPVY5cz6/HmG4ehtGquBkW\nl1Xv3nZwftnHe0HmcHasjltkWxQ7owc1Q7Ag7egaf++qyDFOqm0cmMktAb60n42doiZQa+kPIMm5\nnYA==\n"}' | | |

Please note that while downloading the capture file, the *Content-Type* in the header will be *application/force-download.*

## Support Bundle

When you initiate a support bundle download, you will get a URL that can be used to download the tar.gz file directly, and a token for the download session.  After downloading the support bundle, remember to remove the stored file using the token.

| **Operation** | **REST Method** | **API Call** | **Sample Body** |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| **Initiate the support bundle download** | POST | <wapi_url>/fileop?_function=get_support_bundle | {"member": "infoblox.local"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=get_support_bundle" -d '{"member": "infoblox.local"}' | | |
| | {"token": "eJytUUFuwyAQvPOR5BJsnBjbvSVyI1WqEimp1OPKBuwi2bAFXCV9faFSe+2lB9Cws8MsgxAW7+\nDU\nSOImrPHBLSJYR5CRtdBmsP1kb9QalVa4o/Kk7UIHFzUQLIgA6Bc9BW0AiNQiENyStcQdua7UDbW7\nnQ9CzWhEsyZGVVV00ZVE2IFf5rm4Y8dfV4qZI8yh4CwH9Q5axpqCM15TRKs9SEaSO0wU | | |

| | | Y9KRA28yp\nd9By055fT8/nfbvJWc5zXuRlw3lV57vML4jWhcNi5KRo6BwdP6NJlfy0jKiOdn/dEtuaJJ DxvRGz\nPGoyH8PpRpWFGf91NMZ+rEAZYaU2Y6oW0fPwdEpw+9swW5kSZSnkdv+yh8vjMZ1L4s MFGU8fwKpl\nDlpN0kOwIOyMnftW1eSUUug7BG1wCfChnNfWJK6JXE+/AJH0pUU=\n", "url": "https://10.196.205.42/http_direct_file_io/req_id-DOWNLOAD-0106062059667804/supportBundle.ta r.gz"} |
|---|---|---|
| Download the support bundle | GET | <url_from_the_previous_output> Example: https://x.x.x.x/http_direct_file_io/req_id-DOWNLOAD-01 06062059667804/supportBundle.tar.gz | |
| | curl -k -u admin:infoblox -H 'content-type: application/force-download' "https://grid-master/http_direct_file_io/req_id-DOWNLOAD-0106062059667804/supportBundle.tar.g z" -o "infoblox.local_supportBundle.tar.gz" | | |
| | # infoblox.local_supportBundle.tar.gz file is saved in the present working directory# | | |
| Remove the stored file using the token | POST | <wapi_url>/fileop?_function=downloadcomplete | {"token": "eJytUUF..U=\n"} |
| | curl -k -u admin:infoblox -H 'content-type: application/json' -X POST "https://grid-master/wapi/v2.12/fileop?_function=downloadcomplete" -d '{"token" : "eJytUUFuwyAQvPOR5BJsnBjbvSVyl1WqEimp1OPKBuwi2bAFXCV9faFSe+2lB9Cws8MsgxAW7+ DU\nSOImrPHBLSJYR5CRtdBmsP1kb9QalVa4o/Kk7UIHFzUQLIgA6Bc9BW0AiNQiENyStcQdua7U DbW7\nQ9CzWhEsyZGVVV00ZVE2lFf5rm4Y8dfV4qZl8yh4CwH9Q5axpqCM15TRKs9SEaSO0wU Y9KRA28yp\nd9By055fT8/nfbvJWc5zXuRlw3lV57vML4jWhcNi5KRo6BwdP6NJlfy0jKiOdn/dEtuaJJ DxvRGz\nPGoyH8PpRpWFGf91NMZ+rEAZYaU2Y6oW0fPwdEpw+9swW5kSZSnkdv+yh8vjMZ1L4s MFGU8fwKpl\nDlpN0kOwIOyMnftW1eSUUug7BG1wCfChnNfWJK6JXE+/AJH0pUU=\n"}' | | |

Please note that while downloading the capture file, the *Content-Type* in the header will be *application/force-download.*

## Sample paging request

When a search result yields a large number of results, you can use paging. To start a paging request, the initial search request must have *_paging* and *_return_as_object* set to 1, and *_max_results* set to the desired page size. The returned results object will contain the *next_page_id* field and the result field set to the first page of results. Note that the *next_page_id* field only contains URL-safe characters so it can be used as is and no quotation characters are required for subsequent requests. To get the subsequent results, you can re-send GET requests to the original object and set *_page_id* to the ID string returned in the previous page of results.

The following example shows how to retrieve all host records in the environment, 4 at a time. You can change the queried network object or the number of records according to your requirement.

| Operation | REST Method | API Call |
|---|---|---|
| | | Sample cURL Command |
| | | Sample Output |
| Fetch the first 4 host records | GET | <wapi_url>/record:host?_paging=1&_return_as_object=1&max_results=4 |
| | curl -k -u admin:infoblox -X GET "https://grid-master/wapi/v2.12/record:host?_paging=1&_return_as_object=1&_max_results=4" | |
| | {"next_page_id": "789c55904d4ec3301085f77391744354a7296db9413615a207b0fc1b8c128f653ba2bd3d330681d858f23 7efcd7bf6ce2601b70eb3ab5b8ed207b7d82257b4a58334d0a48372eb569acba466c7f400d35e305579e6 fb083b9b8e4da6ee3237cd334c2313f6c8103d123b8131981ea498810e83b1d4bc998a19d2197686657ac 17b8fd1f55a1507afe49e8842ba8091526f61a9214a09a83f9ca990c41eaef52d09c11504d7f5983f55b614 277e7b96aa7265321261b084353470fca939634599b0841a304af4beb836a7673cb5155655c5e0d482ce 5034416a511fc931bf50343f29db97772cec1d5ad2ff7f652ce0ca9536fd87065e3a1c58ef43fe767355dad0 | |

7f014b0f819a-e4718db1318cfc3099a781c541542ccd82f4738853cf5c1a2b0b371",
"result":
[{"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Q:host.info.com/default",
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaG9zdC4xMC4xMC4xMC4yMC4:10.10.10.20/host.info.com/default",
     "configure_for_dhcp": false,
     "host": "host.info.com",
     "ipv4addr": "10.10.10.20"
    }],
   "name": "host.info.com",
   "view": "default"
 },
 {"_ref":
"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5kZW1vLnNlcnZlcjE:server1.demo.com/default",
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmRlbW8uc2VydmVyMS4xLjEuMS4yNS4:1.1.1.25/server1.demo.com/default",
     "configure_for_dhcp": false,
     "host": "server1.demo.com",
     "ipv4addr": "1.1.1.25"
    }],
   "name": "server1.demo.com",
   "view": "default"
 },
 {"_ref":
"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5kZW1vLm1vbml0b3I:monitor.demo.com/default",
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmRlbW8ubW9uaXRvci4xLjEuMS41MC4:1.1.1.50/monitor.demo.com/default",
     "configure_for_dhcp": false,
     "host": "monitor.demo.com",
     "ipv4addr": "1.1.1.50"
    }],
   "name": "monitor.demo.com",
   "view": "default"
 },
 {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnRlc3Q:test.info.com/default",
  "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8udGVzdC4yLjIuMi4xMTAu4xMTAu:2.2.2.120/test.info.com/default",
     "configure_for_dhcp": false,
     "host": "test.info.com",
     "ipv4addr": "2.2.2.120"
    }],
   "name": "test.info.com",
   "view": "default"
 }]}

| | | |
|---|---|---|
| Query the next set of records | GET | <wapi_url>/record:host?_paging=1&_return_as_object=1&_page_id=789c55904d4ec3301085f77391744354a7296db9413615a207b0fc1b8c128f653ba2bd3d330681d858f237efcd7bf6ce2601b70eb3ab5b8ed207b7d82257b4a58334d0a48372eb569acba466c7f400d35e305579e6fb083b9b8e4da6ee3237cd334c2313f6c8103d123b8131981ea498810e83b1d4bc998a19d219768 |

6657ac17b8fd1f55a1507afe49e8842ba8091526f61a9214a09a83f9ca990c41eaef52d09c1150
4d7f5983f55b614277e7b96aa7265321261b084353470fca939634599b0841a304af4beb836a7
673cb5155655c5e0d482ce5034416a511fc931bf50343f29db97772cec1d5ad2ff7f652ce0ca95
36fd87065e3a1c58ef43fe767355dad07f014b0f819a-e4718db1318cfc3099a781c541542ccd82
f4738853cf5c1a2b0b371

```
curl -k -u admin:infoblox -X GET
"https://grid-master/wapi/v2.12/record:host?_paging=1&_return_as_object=1&_page_id=789c55904d4ec
3301085f77391744354a7296db9413615a207b0fc1b8c128f653ba2bd3d330681d858f237efcd7bf6ce260
1b70eb3ab5b8ed207b7d82257b4a58334d0a48372eb569acba466c7f400d35e305579e6fb083b9b8e4da
6ee3237cd334c2313f6c8103d123b8131981ea498810e83b1d4bc998a19d2197686657ac17b8fd1f55a15
07afe49e8842ba8091526f61a9214a09a83f9ca990c41eaef52d09c11504d7f5983f55b614277e7b96aa72
65321261b084353470fca939634599b0841a304af4beb836a7673cb5155655c5e0d482ce5034416a511fc
931bf50343f29db97772cec1d5ad2ff7f652ce0ca9536fd87065e3a1c58ef43fe767355dad07f014b0f819a-e
4718db1318cfc3099a781c541542ccd82f4738853cf5c1a2b0b371"
```

```
{"next_page_id":
"789c55904b6ec3300c44f7bc88b3322cd9f9f506de0445730041d6c755619b8224a3c9ed4b0a69812ef96
6c82179b051c0bdc1e4ca9e36e5835b6c562bdadc4094a43490efcd4aba8a7a764c7b183bc154a799eb0
10e361eab4d3f54aa9e138c0393ff734938c38df1f4559ed1517da188e40c26fbf689b910b9721f67a9b079
24203a3006e39346cfa0d8bce5927653309128e060d8382df8687173eda4b38377ea1f89924182516adac
352c2a61450b43385780fb7f21145dd5e1c690d8fe95b27cb89a7df1373d1899712e7d7414b5843059717
98b1a08a984309b829f43ebbaa5f61ec59b7ba687e65c73992864e3c769ffe3e226555aad987547f20075a
a083dcfe0072798173-a0384f2ecdda419caa42aba69cb40f4827127cd8d59201fdd873f5e",
"result":
[{"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnMx:s1.info.com/default",
  "ipv4addrs":
  [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uczEuMTAuMTAu
MTAuMjAu:10.10.10.20/s1.info.com/default",
    "configure_for_dhcp": false,
    "host": "s1.info.com",
    "ipv4addr": "10.10.10.20"
  }],
  "name": "s1.info.com",
  "view": "default"
},
  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmgy:h2.info.com/default",
  "ipv4addrs":
  [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uaDIuNS41LjUuO
TAu:5.5.5.90/h2.info.com/default",
    "configure_for_dhcp": false,
    "host": "h2.info.com",
    "ipv4addr": "5.5.5.90"
  }],
  "name": "h2.info.com",
  "view": "default"
},
  {"_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmUy:e2.info.com/default",
  "ipv4addrs":
  [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uZTIuOS45LjkuM
TAwLg:9.9.9.100/e2.info.com/default",
    "configure_for_dhcp": false,
    "host": "e2.info.com",
    "ipv4addr": "9.9.9.100"
  }],
```

| | | |
|---|---|---|
| | | "name": "e2.info.com",<br>"view": "default"<br>},<br>{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmRldnN0YWNr:devstack.info.com/default",<br>"ipv4addrs":<br>[{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8uZGV2c3RhY2su<br>MTcyLjI2LjEuMjAu:172.26.1.20/devstack.info.com/default",<br>"configure_for_dhcp": false,<br>"host": "devstack.info.com",<br>"ipv4addr": "172.26.1.20"<br>}],<br>"name": "devstack.info.com",<br>"view": "default"<br>}]} |
| Query the next<br>set of records | GET | <wapi_url>/record:host?_paging=1&_return_as_object=1&_page_id=789c55904b6ec3300c44<br>f7bc88b3322cd9f9f506de0445730041d6c755619b8224a3c9ed4b0a69812ef966c82179b051c<br>0bdc1e4ca9e36e5835b6c562bdadc4094a43490efcd4aba8a7a764c7b183bc154a799eb010e3<br>61eab4d3f54aa9e138c0393ff734938c38df1f4559ed1517da188e40c26fbf689b910b9721f67a9<br>b07924203a3006e39346cfa0d8bce5927653309128e060d8382df8687173eda4b38377ea1f89<br>924182516adac352c2a61450b43385780fb7f21145dd5e1c690d8fe95b27cb89a7df1373d1899<br>712e7d7414b584305971798b1a08a984309b829f43ebbaa5f61ec59b7ba687e65c73992864e3<br>c769ffe3e226555aad987547f20075aa083dcfe0072798173-a0384f2ecdda419caa42aba69cb4<br>0f4827127cd8d59201fdd873f5e |
| | | curl -k -u admin:infoblox -X GET<br>"https://grid-master/wapi/v2.12/record:host?_paging=1&_return_as_object=1&_page_id=789c55904b6ec<br>3300c44f7bc88b3322cd9f9f506de0445730041d6c755619b8224a3c9ed4b0a69812ef966c82179b051c0b<br>dc1e4ca9e36e5835b6c562bdadc4094a43490efcd4aba8a7a764c7b183bc154a799eb010e361eab4d3f54<br>aa9e138c0393ff734938c38df1f4559ed1517da188e40c26fbf689b910b9721f67a9b07924203a3006e3934<br>6cfa0d8bce5927653309128e060d8382df8687173eda4b38377ea1f89924182516adac352c2a61450b433<br>85780fb7f21145dd5e1c690d8fe95b27cb89a7df1373d1899712e7d7414b584305971798b1a08a984309b<br>829f43ebbaa5f61ec59b7ba687e65c73992864e3c769ffe3e226555aad987547f20075aa083dcfe0072798<br>173-a0384f2ecdda419caa42aba69cb40f4827127cd8d59201fdd873f5e" |
| | | {"result":<br>[{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLnJvdXRlcg:router.info.com/default",<br>"ipv4addrs":<br>[{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLmluZm8ucm91dGVyLjEw<br>MC4xMC4xMC4xLg:100.10.10.1/router.info.com/default",<br>"configure_for_dhcp": false,<br>"host": "router.info.com",<br>"ipv4addr": "100.10.10.1"<br>}],<br>"name": "router.info.com",<br>"view": "default"<br>}]} |

## Multiple Object Body Feature using /request

The *request* object allows the control of WAPI through a single-entry point. You can either have Single Object Body Requests or Multiple Object Body Requests.

Single object body requests can be used for any supported WAPI operations, including scheduling and approval. Only HTTP methods (GET, PUT, DELETE and POST) are valid methods for the single object body

Multiple object body requests are composed of a list of single requests. While programming this enables to make multiple requests with one API call, thus simplifying an operation, and reducing the number of API calls to be made. In addition to the standard HTTP methods (GET, PUT, POST, and DELETE), single request inside a multiple object body request can be set to these values:

| Method | Description |
|---|---|
| STATE:ASSIGN | Copy fields in the data object to the state object. |
| STATE:DISPLAY | Added the state object to the returned result list. |

**Note**: The Multiple Object Body Feature is only available NIOS 7.1 onwards (WAPI v2.1 onwards)

### Get records of multiple record types

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | | **Sample cURL Command** |
| | | | **Sample Output** |
| Get Host/A/PTR records | POST | <wapi_url>/request | [{"method": "GET",<br>"object": "record:host",<br>"data": {},<br>"args":{"_return_fields":"name,dns_name,aliases,dns_alia ses,ipv4addrs,configure_for_dns"}},<br>{"method": "GET",<br>"object": "record:a",<br>"data": {},"args": {}},<br>{"method": "GET",<br>"object": "record:ptr",<br>"data": {},"args": {}}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method":"GET","object":"record:host","data":{},"args":{"_return_fields":"name,dns_name,aliases,dns _aliases,ipv4addrs,configure_for_dns"}},{"method": "GET","object": "record:a","data": {},"args": {}},{"method": "GET","object": "record:ptr","data": {},"args": {}}]' | | |
| | [[{"_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default",<br>  "configure_for_dns": true,<br>  "dns_name": "host1.test.com",<br>  "ipv4addrs":<br>   [{"_ref":<br>"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuX2RlZmF1bHQuY29tLnRlc3QuaG9zdDEuMTc yLjI2LjEuEuMjEu:172.26.1.21/host1.test.com/default",<br>    "configure_for_dhcp": false,<br>    "host": "host1.test.com", | | |

```
    "ipv4addr": "172.26.1.21"
    },
   ….
  {"_ref": "record:host/ZG5zLmhvc3QkLjEuY29tLmluZm8ubWFpbGVy:mailer.info.com/default.test",
   "configure_for_dns": true,
   "dns_name": "mailer.info.com",
   "ipv4addrs":
   [{"_ref":
"record:host_ipv4addr/ZG5zLmhvc3RfYWRkcmVzcyQuMS5jb20uaW5mby5tYWlsZXIuMTAuMS4xLjE
wMC4:10.1.1.100/mailer.info.com/default.test",
    "configure_for_dhcp": false,
    "host": "mailer.info.com",
    "ipv4addr": "10.1.1.100",
    "mac": "aa:bb:cc:11:22:33"
   }],
   "name": "mailer.info.com"
}],
[{"_ref":
"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sdGVzdC5ob3N0LDE3Mi4yNi4xLjEwM
A:host.test.info.com/default",
  "ipv4addr": "172.26.1.100",
  "name": "host.test.info.com",
  "view": "default"
  },
  {"_ref":
"record:a/ZG5zLmJpbmRfYSQuX2RlZmF1bHQuY29tLmluZm8sc2VydmVyLDEwLjEwLjEwLjI:server.inf
o.com/default",
  "ipv4addr": "10.10.10.2",
  "name": "server.info.com",
  "view": "default"
}],
[{"_ref":
"record:ptr/ZG5zLmJpbmRfcHRyJC5fZGVmYVVsdC5hcnBhLmluLWFkZHIuMTI3LjAuMC4xLmxvY2Fs
aG9zdA:1.0.0.127.in-addr.arpa/default",
  "ptrdname": "localhost",
  "view": "default"
  },
  ….
  {"_ref":
"record:ptr/ZG5zLmJpbmRfcHRyJC4yLmFycGEuaXA2LjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjA
uMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMC4wLjAuMS4ubG9jYWxob3N0:1.0.0.0.0.0.0.0.
0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa/default.cloud",
  "ptrdname": "localhost",
  "view": "default.cloud"
}]]
```

**Delete a host record**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Delete a Host record | POST | <wapi_url>/request | [{"method": "STATE:ASSIGN", "data":{"host_name":"host1.test.com"}}, {"method":"GET", "object": "record:host", "data": {"name":"##STATE:host_name:##"}, |

| | | | "assign_state": {"host_ref": "_ref"},<br>"enable_substitution": true,"discard": true},<br>{ "method": "DELETE",<br> "object": "##STATE:host_ref:##",<br>"enable_substitution": true,"discard": true},<br>{"method": "STATE:DISPLAY"}] |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "STATE:ASSIGN","data":{"host_name":"host1.test.com"}},{"method":"GET","object": "record:host","data": {"name":"##STATE:host_name:##"},"assign_state": {"host_ref": "_ref"},"enable_substitution": true,"discard": true},{ "method": "DELETE", "object": "##STATE:host_ref:##","enable_substitution": true,"discard": true},{"method": "STATE:DISPLAY"}]' |||
| | [{"host_name": "host1.test.com",<br> "host_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default"<br>}] |||

## Get next available IP address

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command |||
| | | Sample Output |||
| Get next available IP address from an IPv4 subnet | POST | <wapi_url>/request | [{"method": "GET",<br>"object": "network",<br>"data": {"network": "192.168.1.0/24"},<br>"assign_state": {"netw_ref": "_ref"},<br>"discard": true},<br>{"method": "POST",<br>"object": "##STATE:netw_ref:##",<br>"args": {"_function": "next_available_ip"},<br>"enable_substitution": true}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "GET","object": "network","data": {"network": "192.168.1.0/24"},"assign_state": {"netw_ref": "_ref"},"discard": true},{"method": "POST","object": "##STATE:netw_ref:##","args": {"_function": "next_available_ip"},"enable_substitution": true}]' |||
| | [{"ips": ["192.168.1.1"]}] |||
| Get next available IP address from an IPv6 subnet | POST | <wapi_url>/request | [{"method": "POST",<br> "object": "record:host",<br> "data": {"configure_for_dns": false,<br>        "ipv6addrs":<br>            [{"configure_for_dhcp": false,<br>                "ipv6addr":<br>                    {"_object_function":"next_available_ip",<br>                    "_result_field":"ips",<br>                    "_object" : "ipv6network",<br>                    "_object_parameters":<br><br>{"network":"2600:6801:1106:f00::f00/120",<br>                    "network_view":"sandbox"}}}],<br>            "name": "CPE_1",<br>            "network_view": "sandbox"},<br> "args": {"_return_fields": "name" }<br>}] |

| | | | |
|---|---|---|---|
| curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "POST","object": "record:host","data": {"configure_for_dns": false,"ipv6addrs":[{"configure_for_dhcp": false, "ipv6addr":{"_object_function":"next_available_ip","_result_field":"ips","_object" : "ipv6network","_object_parameters":{"network":"2600:6801:1106:f00::f00/120", "network_view":"sandbox"}}}],"name": "host.demo.com","network_view": "sandbox"},"args": {"_return_fields": "name" }}]' |
| [{"_ref": "record:host/ZG5zLmhvc3QkLm5vbl9ETlNfaG9zdF9yb290MS4wLjE1NzQxOTEwMTc2NzZuY29tLm RlbW8uaG9zdA:host.demo.com/%20%20", "name": "host.demo.com" }] |

**Pre-provision a Grid member**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | | **Sample cURL Command** |
| | | | **Sample Output** |
| Pre-provision a grid member | POST | <wapi_url>/request | [{"method": "POST", "object": "member", "data": {"host_name": "autojoin01.localdomain", "vip_setting": {"address": "172.16.0.160", "gateway": "172.16.0.1", "subnet_mask": "255.255.255.0"}, "config_addr_type": "IPV4", "platform": "VNIOS"}, "assign_state": {"member_ref": "_ref"}, "enable_substitution": true, "discard": true}, {"method": "PUT", "object": "##STATE:member_ref:##", "enable_substitution": true, "data": {"pre_provisioning":{"hardware_info": [{"hwmodel": "IB-VM-820", "hwtype": "IB-VNIOS"}], "licenses": ["dhcp","dns","enterprise", "vnios","rpz"]}}}, {"method": "STATE:DISPLAY"}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "POST","object": "member","data": {"host_name": "autojoin01.localdomain","vip_setting": {"address": "172.16.0.160","gateway": "172.16.0.1","subnet_mask": "255.255.255.0"},"config_addr_type": "IPV4","platform": "VNIOS"},"assign_state": {"member_ref": "_ref"},"enable_substitution": true, "discard": true}, {"method": "PUT","object": "##STATE:member_ref:##","enable_substitution": true,"data": {"pre_provisioning":{"hardware_info": [{"hwmodel": "IB-VM-820","hwtype": "IB-VNIOS"}],"licenses": ["dhcp","dns","enterprise","vnios","rpz"]}}},{"method": "STATE:DISPLAY"}]' | | |
| | ["member/b25lLnZpcnR1YWxfbm9kZSQy:autojoin01.infoblox", {"member_ref": "member/b25lLnZpcnR1YWxfbm9kZSQy:autojoin01.infoblox"}] | | |
| Pre-provision an IB-FLEX member | POST | <wapi_url>/request | [{"method": "POST", "object": "member", "data": {"host_name": "flex-member1.localdomain", "vip_setting": {"address": "172.16.0.200", "gateway": "172.16.0.1", |

| | | | "subnet_mask": "255.255.255.0"},<br>"config_addr_type": "IPV4",<br>"platform": "VNIOS"},<br> "assign_state": {"member_ref": "_ref"},<br> "enable_substitution": true,<br> "discard": true},<br>{"method": "PUT",<br> "object": "##STATE:member_ref:##",<br> "enable_substitution": true,<br> "data": {"pre_provisioning":{"hardware_info": [{"hwtype": "IB-FLEX"}],<br> "licenses": []}}},<br>{"method": "STATE:DISPLAY"}] |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "POST","object": member","data": {"host_name": "flex-member1.localdomain","vip_setting": {"address": "172.16.0.200","gateway": "172.16.0.1","subnet_mask": "255.255.255.0"},"config_addr_type": "IPV4","platform": "VNIOS"},"assign_state": {"member_ref": "_ref"},"enable_substitution": true, "discard": true},{"method": "PUT","object": "##STATE:member_ref:##","enable_substitution": true,"data": {"pre_provisioning":{"hardware_info": [{"hwtype": "IB-FLEX"}],"licenses": []}}},{"method": "STATE:DISPLAY"}]' ||||
| | ["member/b25lLnZpcnR1YWxfbm9kZSQ5:flex-member1.localdomain",<br> {"member_ref": "member/b25lLnZpcnR1YWxfbm9kZSQ5:flex-member1.localdomain"}] ||||

**Enable DHCP service on a member**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Enable the DHCP service on a member | POST | <wapi_url>/request | [{"method": "STATE:ASSIGN",<br> "data":{"member_name":"member1.localdomain"}},<br>{"method":"GET",<br> "object": "member:dhcpproperties",<br> "data": {"host_name":"##STATE:member_name:##"},<br> "assign_state": {"host_ref": "_ref"},<br> "enable_substitution": true,<br> "discard": true},<br>{"method": "PUT",<br> "object": "##STATE:host_ref:##",<br> "enable_substitution": true,<br> "data": {"enable_dhcp":true}},<br>{"method": "STATE:DISPLAY"}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" - d '[{"method": "STATE:ASSIGN","data":{"member_name":"member1.localdomain"}},{"method":"GET","object": "member:dhcpproperties","data": {"host_name":"##STATE:member_name:##"},"assign_state": {"host_ref": "_ref"},"enable_substitution": true,"discard": true},{ "method": "PUT", "object": "##STATE:host_ref:##","enable_substitution": true,"data": {"enable_dhcp":true}},{"method": "STATE:DISPLAY"}]' ||||
| | ["member:dhcpproperties/ZG5zLm1lbWJlcl9kaGNwX3Byb3BlcnRpZXMkMQ:member1.localdomain",<br> {"host_ref":<br>"member:dhcpproperties/ZG5zLm1lbWJlcl9kaGNwX3Byb3BlcnRpZXMkMQ:member1.localdomain",<br> "member_name": "member1.localdomain"}] ||||

## Get permissions for an object

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Get permissions for an object | POST | <wapi_url>/request | [{"method": "STATE:ASSIGN",<br>"data": {"zone_name": "test.org"}},<br>{"method": "GET",<br>"object": "zone_auth",<br>"data": {"fqdn": "##STATE:zone_name:##"},<br>"assign_state": {"zone_ref": "_ref"},<br>"enable_substitution": true,"discard": true},<br>{"method": "GET",<br> "object": "permission",<br>"enable_substitution": true },<br>{"method": "STATE:DISPLAY"}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST "https://grid-master/wapi/v2.12/request" -d '[{"method": "STATE:ASSIGN","data": {"zone_name": "test.org"}},{"method": "GET","object": "zone_auth","data": {"fqdn": "##STATE:zone_name:##"},"assign_state": {"zone_ref": "_ref"},"enable_substitution": true,"discard": true},{"method": "GET", "object": "permission","enable_substitution": true },{"method": "STATE:DISPLAY"}]' | | |
| | [[{"_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy56b25lJC4uLi4uY29tLmluZm9ibG94Lm9uZS5yb2xlJEROROUyBBZG1pbi4:DNS%20Admin/WRITE",<br>   "permission": "WRITE",<br>   "resource_type": "VIEW",<br>   "role": "DNS Admin"<br>  },<br>  …<br>  {"_ref": "permission/b25lLmhpZXJfcnVsZSQuY29tLmluZm9ibG94LmRucy5jbHVzdGVyX2Ruc19wcm9wZXJ0aWVzJDAuLi5jb20uaW5mb2Jsb3gub25lLmFkbWluX2dyb3VwJC5jbG91ZC1hcGktb25seS4:cloud-api-only/WRITE",<br>   "group": "cloud-api-only",<br>   "permission": "WRITE",<br>   "resource_type": "GRID_DNS_PROPERTIES"<br> }],<br>{"zone_name": "test.org",<br> "zone_ref": "zone_auth/ZG5zLnpvbmUkLjEub3JnLnRlc3Q:test.org/default.test"<br>}] | | |
| | [{"host_name": "host1.test.com",<br> "host_ref": "record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS50ZXN0Lmhvc3Qx:host1.test.com/default"<br>}] | | |

## Add multiple subnets

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | Sample cURL Command | |
| | | Sample Output | |
| Create multiple subnets | POST | <wapi_url>/request | [{"method": "POST",<br> "object": "network",<br> "data": {"network": "10.10.10.0/24"}}, |

| | | | {"method": "POST",<br>"object": "network",<br>"data": {"network": "10.10.20.0/24"}},<br>{"method": "POST",<br>"object": "network",<br>"data": {"network": "10.10.30.0/24"}}] |
|---|---|---|---|
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST<br>"https://grid-master/wapi/v2.12/request" -d '[{"method": "POST","object": "network","data": {"network":<br>"10.10.10.0/24"}},{"method": "POST", "object": "network","data": {"network":<br>"10.10.20.0/24"}},{"method": "POST","object": "network","data": {"network": "10.10.30.0/24"}}]' | | |
| | ["network/ZG5zLm5ldHdvcmskMTAuMTAuMTAuMC8yNC8w:10.10.10.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTAuMTAuMjAuMC8yNC8w:10.10.20.0/24/default",<br>"network/ZG5zLm5ldHdvcmskMTAuMTAuMzAuMC8yNC8w:10.10.30.0/24/default"] | | |

**Add multiple host record**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Create multiple host records | POST | <wapi_url>/request | [{"method": "POST",<br>"object": "record:host",<br>"data": {"name":"host-1.info.com",<br>"ipv4addrs": [{"ipv4addr":"10.10.10.21"}]},<br>"assign_state": {"host1_ref": "_ref"},<br>"enable_substitution": true,<br>"discard": true},<br><br>{"method": "POST",<br>"object": "record:host",<br>"data": {"name":"host-2.info.com",<br>"ipv4addrs": [{"ipv4addr":"10.10.10.22"}]},<br>"assign_state": {"host2_ref": "_ref"},<br>"enable_substitution": true,<br>"discard": true},<br>{"method": "STATE: DISPLAY"}] |
| | curl -k -u admin:infoblox -H 'content-type:application/json' -X POST<br>"https://grid-master/wapi/v2.12/request" -d '[{"method": "POST","object": "record:host","data":<br>{"name":"host-1.info.com","ipv4addrs": [{"ipv4addr":"10.10.10.21"}]},"assign_state": {"host1_ref":<br>"_ref"},"enable_substitution": true,"discard": true},{"method": "POST","object": "record:host","data":<br>{"name":"host-2.info.com", "ipv4addrs": [{"ipv4addr":"10.10.10.22"}]},"assign_state": {"host2_ref":<br>"_ref"},"enable_substitution": true,"discard": true},{"method": "STATE:DISPLAY"}]' | | |
| | [{"host1_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3QtMQ:host-1.info.com/default",<br>"host2_ref":<br>"record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3QtMg:host-2.info.com/default"}] | | |

**Add network using next available network**

| Operation | REST Method | API Call | Sample Body |
|---|---|---|---|
| | | **Sample cURL Command** | |
| | | **Sample Output** | |
| Create network using the next available network | POST | <wapi_url>/request | [{ "method": "GET",<br>"object": "networkcontainer",<br>"data": {"*Site:": "test"}, |

| | | |
|---|---|---|
| function within a network container with the EA Site set to "test" | | "assign_state": {"netw_ref": "_ref"},<br>"discard": true},<br>{ "method": "POST",<br>"object": "network",<br>"data":{<br>"network":<br>{"_object_function": "next_available_network",<br>"_result_field":"networks",<br>"_parameters":{ "cidr":24 },<br>"_object_ref": "##STATE:netw_ref:##"<br>}<br>},<br>"enable_substitution": true},<br>{"method": "STATE: DISPLAY"}] |

```
curl -k -u admin:infoblox -H 'content-type:application/json' -X POST
"https://grid-master/wapi/v2.12/request" -d '[{ "method": "GET","object": "networkcontainer", "data":
{"*Site:": "test"}, "assign_state": {"netw_ref": "_ref"},"discard": true},{ "method": "POST","object":
"network","data":{"network":{"_object_function":
"next_available_network","_result_field":"networks","_parameters":{ "cidr":24 },"_object_ref":
"##STATE:netw_ref:##"} },"enable_substitution": true},{"method": "STATE: DISPLAY"}]'
```

```
[
    "network/ZG5zLm5ldHdvcmskMTkyLjE2OC4xLjAvMjQvMA:192.168.1.0/24/default"
]
```

# Sample Codes

This section covers sample API calls in different programming/scripting languages

## Python

These examples use the *requests* module. For more details on the requests module, please refer http://docs.python-requests.org

| Network Object | REST Operation | Sample Python Programme |
|---|---|---|
| HOST record | GET | import requests<br>requests.packages.urllib3.disable_warnings()  # Disable SSL warnings in requests #<br>url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"<br>response = requests.request("GET", url, auth=('admin', 'Infoblox'), verify=False)<br>print(response.text) |
| | GET | #This example demonstrates the use of cookies(ibapauth)#<br> import requests<br>import copy<br>requests.packages.urllib3.disable_warnings()  # Disable SSL warnings in requests #<br>url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"<br>response = requests.request("GET", url, auth=('admin', 'Infoblox'), verify=False)<br>authcookie = copy.copy(response.cookies['ibapauth'] print(authcookie)<br>print(response.text)<br>#You can re-use the authcookie in subsequent API calls#<br>response_using_cookie = requests.request("GET", url, cookies=authcookie, verify=False)<br>print(response_using_cookie.text) |
| | GET | #This example demonstrates how you can work with large results using paging#<br>import requests<br>requests.packages.urllib3.disable_warnings() # Disable SSL warnings in requests #<br>url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1" |

| | | |
|---|---|---|
| | | querystring = {"_max_results":"20","_paging":"1","_return_as_object":"1"}<br>response = requests.request("GET", url, auth=('admin', 'Infoblox'),<br>params=querystring,verify=False)<br>print(response.text)<br>next_page_id = response.json()['next_page_id']<br>while next_page_id:<br>    query = {"_page_id":next_page_id}<br>    newresponse = requests.request("GET", url, auth=('admin', 'infoblox'),<br>params=query,verify=False)<br>     print(newresponse.text)<br>    try:<br>        next_page_id = newresponse.json()['next_page_id']<br>    except Exception:<br>        next_page_id = 0 |
| | POST | import requests<br>requests.packages.urllib3.disable_warnings()  # Disable SSL warnings in requests #<br>url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"<br>payload = "{\"name\":\"host.info.com\",\"ipv4addrs\": [{\"ipv4addr\":\"172.26.1.20\"}]}"<br>headers = {'content-type': "application/json"}<br>response = requests.request("POST", url, auth=('admin', 'Infoblox'), data=payload,<br>headers=headers, verify=False)<br>print(response.text) |
| | POST<br>(using the<br>'session'<br>method that<br>automatically<br>handles the<br>session<br>cookies, etc<br>when you<br>perform<br>multiple<br>POST/GET) | import requests<br>import getpass<br>requests.packages.urllib3.disable_warnings() # Disable SSL warnings in requests #<br>url = "https://grid-master/wapi/v2.12"<br># Get username and password for auth #<br>user = input('Username: ')<br>passwd = getpass.getpass('Password: ')<br>wapi_session = requests.session()<br>wapi_session.auth = ('user', 'passwd')<br>payload = '{"name":"host.info.com","ipv4addrs": [{"ipv4addr":"172.26.1.20"}]}'<br>headers = { 'content-type': "application/json" }<br># WAPI call POST /record:host #<br>response = wapi_session.post(wapi_url+"/record:host?_return_as_object=1",<br>data=payload, headers=headers, auth=(user, passwd), verify=False)<br># Error handling #<br>if response.status_code == 201:<br>  print("Success.")<br>else:<br>  print("Failed.")<br>print(response.text) |
| | PUT | import requests<br>requests.packages.urllib3.disable_warnings()  # Disable SSL warnings in requests #<br>url =<br>"https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1"<br>payload = "{\"name\":\"host1.info.com\"}"<br>headers = {'content-type': "application/json"}<br>response = requests.request("PUT", url, auth=('admin', 'Infoblox'), data=payload,<br>headers=headers, verify=False)<br>print(response.text) |
| | DELETE | import requests<br>requests.packages.urllib3.disable_warnings()  # Disable SSL warnings in requests #<br>url = |

| | | "https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1"<br>headers = {'content-type': "application/json"}<br>response = requests.request("DELETE", url, auth=('admin', 'Infoblox'), headers=headers,<br>verify=False)<br>print(response.text) |

## Powershell

The following examples use the following function to avoid SSL Certificate issue while using HTTPS.

| Function Description | Function Contents |
|---|---|
| Function to ignore Self-Signed Certificates | ```
function Ignore-SelfSignedCerts
{
   try
   {
      Write-Host "Adding TrustAllCertsPolicy type." -ForegroundColor White
      Add-Type -TypeDefinition  @"
      using System.Net;
      using System.Security.Cryptography.X509Certificates;
      public class TrustAllCertsPolicy : ICertificatePolicy
      {
         public bool CheckValidationResult(
         ServicePoint srvPoint, X509Certificate certificate,
         WebRequest request, int certificateProblem)
         {
            return true;
         }
      }
"@
      Write-Host "TrustAllCertsPolicy type added." -ForegroundColor White
   }
   catch
   {
      Write-Host $_ -ForegroundColor "Yellow"
   }
   [System.Net.ServicePointManager]::CertificatePolicy = New-Object TrustAllCertsPolicy
}
``` |

| Network Object | REST Operation | Sample Powershell Code |
|---|---|---|
| HOST record | GET | ```
Ignore-SelfSignedCerts
$url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"
$pwd = ConvertTo-SecureString "Infoblox" -AsPlainText -Force
$creds = New-Object Management.Automation.PSCredential ('admin', $pwd)
Invoke-RestMethod -Uri $url -Method GET -Credential $creds
``` |
| | GET | ```
#This example demonstrates the use of cookies(ibapauth)#
Ignore-SelfSignedCerts
$url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"
$pwd = ConvertTo-SecureString "Infoblox" -AsPlainText -Force
$creds = New-Object Management.Automation.PSCredential ('admin', $pwd)
Invoke-RestMethod -Uri $url -Method GET -Credential $creds -SessionVariable authcookie
#You can re-use the authcookie in subsequent API calls#
Invoke-RestMethod -Uri $url -Method GET -WebSession $authcookie
``` |

| | POST | Ignore-SelfSignedCerts<br>$url = "https://grid-master/wapi/v2.12/record:host?_return_as_object=1"<br>$pwd = ConvertTo-SecureString "Infoblox" -AsPlainText -Force<br>$creds = New-Object Management.Automation.PSCredential ('admin', $pwd)<br>$host_details = @{<br>  name="host.info.com"<br>  ipv4addrs=@(@{ipv4addr="172.26.1.20"})}<br>$body = $host_details | ConvertTo-Json<br>Invoke-RestMethod -Uri $url -Method POST -Credential $creds -ContentType 'application/json' -Body $body |
|---|---|---|
| | PUT | Ignore-SelfSignedCerts<br>$url =<br>"https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1"<br>$pwd = ConvertTo-SecureString "Infoblox" -AsPlainText -Force<br>$creds = New-Object Management.Automation.PSCredential ('admin', $pwd)<br>$host_details = @{<br>  name="host1.info.com"}<br>$body = $host_details | ConvertTo-Json<br>Invoke-RestMethod -Uri $url -Method PUT -Credential $creds -ContentType 'application/json' -Body $body |
| | DELETE | Ignore-SelfSignedCerts<br>$url =<br>"https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1"<br>$pwd = ConvertTo-SecureString "Infoblox" -AsPlainText -Force<br>$creds = New-Object Management.Automation.PSCredential ('admin', $pwd)<br>Invoke-RestMethod -Uri $url -Method DELETE -Credential $creds |

## Java

**Using Java Unirest**

| Network Object | REST Operation | Sample Java Unirest Code |
|---|---|---|
| HOST record | GET | HttpResponse<JsonNode> response =<br>Unirest.get("https://grid-master/wapi/v2.12/record:host?_return_as_object=1")<br>.header("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.header("accept", "application/json")<br>.asJson(); |
| | POST | HttpResponse<JsonNode> response =<br>Unirest.post("https://grid-master/wapi/v2.12/record:host?_return_as_object=1")<br>.header("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.header("accept", "application/json")<br>.header("content-type", "application/json")<br>.body("{\"name\":\"host.info.com\",\"ipv4addrs\": [{\"ipv4addr\":\"172.26.1.20\"}]}")<br>.asJson(); |
| | PUT | HttpResponse<JsonNode> response =<br>Unirest.put("https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1")<br>.header("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.header("accept", "application/json")<br>.header("content-type", "application/json")<br>.body("{\"name\":\"host1.info.com\"}")<br>.asJson(); |

| | DELETE | HttpResponse<JsonNode> response = Unirest.delete("https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1")<br>.header("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.header("accept", "application/json")<br>.header("content-type", "application/json")<br>.body("{\"name\":\"host1.info.com\"}")<br>.asJson(); |

**Using Java OkHttpClient**

| Network Object | REST Operation | Sample Java OkHttpClient Code |
|---|---|---|
| HOST record | GET | OkHttpClient client = new OkHttpClient();<br>Request request = new Request.Builder()<br>.url("https://grid-master/wapi/v2.12/record:host?_return_as_object=1")<br>.get()<br>.addHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.build();<br>Response response = client.newCall(request).execute(); |
| | POST | OkHttpClient client = new OkHttpClient();<br>MediaType mediaType = MediaType.parse("application/json");<br>RequestBody body = RequestBody.create(mediaType, "{\"name\":\"host.info.com\",\"ipv4addrs\":[{\"ipv4addr\":\"172.26.1.20\"}]}");<br>Request request = new Request.Builder()<br>.url("https://grid-master/wapi/v2.12/record:host?_return_as_object=1")<br>.post(body)<br>.addHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.addHeader("content-type", "application/json")<br>.build();<br>Response response = client.newCall(request).execute(); |
| | PUT | OkHttpClient client = new OkHttpClient();<br>MediaType mediaType = MediaType.parse("application/json");<br>RequestBody body = RequestBody.create(mediaType, "{\"name\":\"host1.info.com\"}");<br>Request request = new Request.Builder()<br>.url("https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1")<br>.put(body)<br>.addHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.addHeader("content-type", "application/json")<br>.build();<br>Response response = client.newCall(request).execute(); |
| | DELETE | OkHttpClient client = new OkHttpClient();<br>Request request = new Request.Builder()<br>.url("https://grid-master/wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1")<br>.delete(null)<br>.addHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=")<br>.addHeader("content-type", "application/json")<br>.build();<br>Response response = client.newCall(request).execute(); |

## C# (CSharp)

These examples use the *RestSharp* library.

| Network Object | REST Operation | Sample C# Scripts |
|---|---|---|
| HOST record | GET | ServicePointManager.ServerCertificateValidationCallback +=(sender, certificate, chain, sslPolicyErrors) =>true; //Disable SSL Warnings//<br>var client = new RestClient("grid-master");<br>var request = new RestRequest("wapi/v2.12/record:host?_return_as_object=1",Method.GET);<br>request.AddHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=");<br>IRestResponse response = client.Execute(request);<br>var results = response.Data; |
| | POST | ServicePointManager.ServerCertificateValidationCallback +=(sender, certificate, chain, sslPolicyErrors) =>true; //Disable SSL Warnings//<br>var client = new RestClient("grid-master");<br>var request = new RestRequest("wapi/v2.12/record:host?_return_as_object=1",Method.POST);<br>request.AddHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=");<br>request.AddHeader("content-type", "application/json");<br>request.AddParameter("application/json", "{\"name\":\"host.info.com\",\"ipv4addrs\": [{\"ipv4addr\":\"172.26.1.20\"}]}", ParameterType.RequestBody);<br>IRestResponse response = client.Execute(request);<br>var results = response.Data; |
| | PUT | ServicePointManager.ServerCertificateValidationCallback +=(sender, certificate, chain, sslPolicyErrors) =>true; //Disable SSL Warnings//<br>var client = new RestClient("grid-master");<br>var request = new RestRequest("wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1",Method.PUT);<br>request.AddHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=");<br>request.AddHeader("content-type", "application/json");<br>request.AddParameter("application/json", "{\"name\":\"host1.info.com\"}", ParameterType.RequestBody);<br>IRestResponse response = client.Execute(request);<br>var results = response.Data; |
| | DELETE | ServicePointManager.ServerCertificateValidationCallback +=(sender, certificate, chain, sslPolicyErrors) =>true; //Disable SSL Warnings//<br>var client = new RestClient("grid-master");<br>var request = new RestRequest("wapi/v2.12/record:host/ZG5zLmhvc3QkLl9kZWZhdWx0LmNvbS5pbmZvLmhvc3Qx:host.info.com/default?_return_as_object=1",Method.DELETE);<br>request.AddHeader("authorization", "Basic YWRtaW46aW5mb2Jsb3g=");<br>request.AddHeader("content-type", "application/json");<br>IRestResponse response = client.Execute(request);<br>var results = response.Data; |

## References

Infoblox Community: Definitive List of REST Examples

Youtube Channel: WAPI Bytes

Infoblox Community: Why use Infoblox WAPIs

Infoblox Community: Getting Started with WAPIs using POSTMAN

Infoblox Community: Getting Started with WAPIs using Insomnia

[Infoblox Community: Get more value out of Infoblox APIs](#)

[Infoblox Community: Consolidate your WAPIs using the Request Object](#)

**Infoblox**

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