SonicWall® SonicOS API 6.5.1

Reference

SONICWALL®

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About SonicOS API

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- Supported Request Methods on page 6
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SonicOS API Function

SonicOS API provides an alternative to the SonicOS Command Line Interface (CLI) for configuring selected functions.

SonicOS API is disabled by default in SonicOS. Any attempts to access SonicOS API while it is disabled results in an `HTTP 403 Forbidden` error. To use the SonicOS API, you must enable it, either through the SonicOS Management Interface or from the CLI.

Topics:

- Enabling through the Management Interface on page 5
- Enabling through the CLI on page 6

Enabling through the Management Interface

To enable SonicOS API through the management interface:

1. Navigate to **MANAGE | Network** > **Appliance | Base Settings**.
2. Scroll to the **SonicOS API** section.
3. Select **Enable SonicOS API**.
4. Click **Accept**.

Enabling through the CLI

Starting at the `config#` prompt:

```
config(<serial number>)# administration
(config-administration)# sonicos-api
(config-administration)# commit
```

Supported Request Methods

SonicOS API utilizes four of the methods defined in the HTTP protocol (RFC 7231 and RFC 5789) to create, read, update and delete (CRUD) resources. Supported HTTP request methods describes the supported HTTP methods.

Supported HTTP request methods

HTTP method	Description
GET	Retrieves the specified resource or collection of resources. GET is a read-only operation that does not alter appliance state or configuration. A GET operation should not contain a request-body.
POST	Submits data to be processed by the specified resource or collection of resources. In most cases, the POST verb is used by SonicOS APIs to create and add a resource to a collection of resources (for example, add a new MAC address-object to collection of objects).
PUT	Updates the specified resource. The data included in the PUT request-body replaces the previous configuration.
DELETE	Deletes the specified resource or collection of resources.

Supported HTTP header request and response formats

Type	Example
Text/plain	`GET /api/sonicos/address-objects/mac` `Accept: text/plain`

Application/JSON	`POST /api/sonicos/address-objects/mac`
	`Content-type: application/json`
	`Accept: application/json`
	`{`
	`"address_object": {`
	`"mac": {`
	`"name": "001122334455"`
	`,"address": "001122334455"`
	`,"multi_homed": true`
	`,"zone": "LAN"`
	`}`
	`}`
	`}`

Supported HTTP Headers

Content-type	Specifies the format (MIME type) of the request body (input).
Accept	Specifies the format of the response body (output).

Supported HTTP MIME Types

SonicOS supports these HTTP MIME types:

- Text/plain
- Application/JSON

These HTTP headers define the request and response format:

- **Content-type** – Specifies the format (MIME type) of the request body (input)
- **Accept** – Specifies the format of the response body (output)

NOTE: The headers can be used to obtain mixed input/output. See examples below for reference.

Examples

Topics:

- Application/JSON on page 7
- Text/Plain on page 8

Application/JSON

When specified, the request and/or response body is expected to be in SonicOS API JSON format.

Request

```
POST /api/sonicos/address-objects/mac
Content-type: application/json
Accept: application/json

{
     "address_object": {
         "mac": {
              "name": "001122334455"
             ,"address": "001122334455"
             ,"multi_homed": true
             ,"zone": "LAN"
         }
     }
}
```

Response

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{
     "status": {
        "success": true
        ,"cli": {
             "depth": 1
            ,"mode": "config_mode"
            ,"configuring": true
```

```
            ,"pending_config": true
            ,"restart_required": "NONE"
        }
        ,"info": [
             { "level": "info", "code": "E_OK", "message": "Success." }
        ]
    }
}
```

Text/Plain

When specified, the request and/or response body is expected to be in SonicOS CLI plain-text command format.

Topics:

- Request 1 on page 8
- Request 2 on page 8

Request 1

```
GET /api/sonicos/address-objects/mac
Accept: text/plain
```

Response

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: text/plain; charset=UTF-8

address-object mac example address 001122334455
    zone LAN
    multi-homed
    exit
```

Request 2

```
POST /api/sonicos/direct/cli
Content-type: text/plain
Accept: application/json

address-object mac example address 001122334455
   zone LAN
   multi-homed
   exit
```

Response

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{
     "status": {
        "success": true
        ,"cli": {
             "depth": 1
            ,"mode": "config_mode"
            ,"configuring": true
```

```
            ,"pending_config": true
            ,"restart_required": "NONE"
        }
        ,"info": [
             { "level": "info", "code": "E_OK", "message": "Success." }
        ]
    }
}
```

Status and Error Representation

All plain text output from the last backend CLI command executed is captured and returned back to the client. If the command executed was not a `show` command and the requested operation succeeded, then the response body is empty. This is consistent with the CLI when executing a command via SSH or the serial console in that status is only rendered to the console upon error.

A JSON status object is guaranteed to be returned in the response body when performing a POST, PUT, or DELETE operation or upon error(s) encountered when processing a request.

Topics:

- HTTP Status Codes on page 9
- Application/JSON on page 10

HTTP Status Codes

SonicOS API uses standard HTTP status codes to report success or failure when servicing a request.

HTTP Status Codes

Code	Status Text	Description
200	OK	The request succeeded.
400	Bad Request	An invalid request was submitted. Verify that the request URI is correct and that the request body is as expected.
401	Not Authorized	The user is unauthenticated or lacks the required privileges for the operation requested.
403	Forbidden	The request was understood by the server but denied. The response body notes the reason why the request was denied.
404	Not Found	The resource specified was not found.
405	Method Not Allowed	The HTTP verb specified is not allowed or supported by the resource specified.
406	Not Acceptable	The MIME type specified in the HTTP `Content-type` and/or `Accept` header is not supported.
413	Request body too large	Maximum size of the request body was exceeded.
414	Request URL too long	The request URL exceeded the maximum size allowed or contains extra/unknown parameters (directories).
500	Internal Server Error	The request failed due to an internal server error. The response body should note the reason why the request failed.
503	No resources	Maximum number of sessions was exceeded.

Application/JSON

A JSON status object is guaranteed to be returned in the response body when performing a POST, PUT, or DELETE operation or upon error(s) encountered when processing a request.

Topics:

- Schema Structure on page 10
- Schema Attributes on page 10

Schema Structure

```
{
   "status": {
      "success": {boolean}
      ,"cli": {
         "depth": {number}
         ,"mode": "{string}"
         ,"command": "{string}"
         ,"configuring": {boolean}
         ,"pending_config": {boolean}
         ,"restart_required": "{string}"
      }
      ,"info": [
         { "level": "{string}", "code": "{string}", "message": "{string}" }
         ...
      ]
   }
}
```

Schema Attributes

Schema attributes

Attribute	Type	Description
`status`	object	Status object.
`status.success`	boolean (true|false)	Boolean success flag. Refer to the `status.info` array for more detailed information as to what caused the error if the success flag is false.
`status.cli`	object	CLI status. **NOTE:** This attribute is included only when an API sent one or more commands to the CLI backend.
`status.cli.depth`	number (uint8)	Current mode depth of the CLI: • 0 = top-level mode • >= 1 config mode
`status.cli.mode`	string	Name of the current mode.
`status.cli.command`	string	Command last executed. **NOTE:** This attribute is only included upon command error(s).
`status.cli.configuring`	boolean (true|false)	Boolean configuring flag. Should always be true upon one or more consecutive POST, PUT or DELETE API calls that modify the configuration.

Schema attributes

Attribute	Type	Description
`status.cli.pending_config`	boolean (true|false)	Boolean pending-config flag. Should always be true upon one or more consecutive POST, PUT or DELETE API calls that modify the configuration. This flag should be cleared once any/all pending changes are committed (saved).
`status.cli.restart_required`	string	Appliance restart status. To take effect, some configuration changes require an appliance restart. These values indicate the type of restart needed: • NONE • APPLIANCE • CHASSIS • CHASSIS_SHUTDOWN • ALL_BLADES
`status.info`	array	Informational message(s).
`status.info.level`	string	Status level: info, warning, error.
`status.info.code`	string	Status code. If success, E_OK is returned, else E_{*XXX*} where *XXX* = error code.
`status.info.message`	string	Status message.

Client Authentication

SonicOS API currently offers two mechanisms for client authentication:

- HTTP Basic Authentication (RFC 2617)
- Challenge-Handshake Authentication (CHAP)

Regardless of the authentication mechanism used, only:

- A single administrator can manage (modify configuration) at any given time. This remains true regardless of where an admin logged in (web management UI, CLI, GMS, or SonicOS API).
- Users with full admin privileges are allowed to access SonicOS API.
- A single SonicOS API session is currently allowed.

Topics:

- Endpoint on page 11
- HTTP Basic Authentication on page 12
- Challenge-Handshake Authentication (CHAP) on page 12

Endpoint

Both authentication mechanisms share the same endpoint for client login and logout.

Endpoint	HTTP Method & Body			
	GET	POST	PUT	DELETE
URI: `/api/sonicos/auth`	Empty	Empty	—	Empty

HTTP Basic Authentication

HTTP Basic Authentication is the simplest method for client authentication as it does not require cookies, session identifiers, etc. HTTP Basic Authentication uses the standard Authentication HTTP header to pass user credentials between the client and server. Because HTTP Basic Authentication provides no means for protecting the confidentiality of a user's credentials, SonicOS API requires user credentials to be transmitted over HTTPS.

For SonicOS API HTTP Basic Authentication, use the Linux command-line `curl` command with the `-u` option:

- Login:

  ```
  curl -k -i -u admin:password -X POST https://a.b.c.d/api/sonicos/auth
  ```

- Logout:

  ```
  curl -k -i -X DELETE https://a.b.c.d/api/sonicos/auth
  ```

Challenge-Handshake Authentication (CHAP)

In addition to HTTP Basic Authentication, SonicOS API supports the same CHAP-style authentication mechanism used by both the SonicOS Management Interface and GMS for client authentication.

Clients must first perform a CHAP challenge initiate request by invoking a call to `GET` *`/api/sonicos/auth`*:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{
    "id": "{string}",
    "challenge": "{string}"
}
```

id:	Type:	string (hexadecimal number)
	Description:	CHAP ID
	Example:	`0b`
challenge:	Type:	string (hexadecimal #)
	Description:	Hexadecimal-formatted, randomly generated number
	Example:	`EA7F57F37595B6891C222EF284C05D84`

Clients must then generate a one-way hash (CHAP digest) using the user's credentials and the parameters returned via the initiate request. For a working reference on how to calculate the digest, see `auth.js` in the SonicOS Web management interface code.

When the CHAP digest is generated, it is packaged up via a JSON-formatted request to `POST` *`/api/sonicos/auth`*:

```
{
    "override": {boolean},
    "id": "{string}",
    "user": "{string}",
    "digest": "{string}"
}
```

override:	Type:	boolean
	Description:	Boolean flag that if true will allow the API session to override an admin currently logged in.
	Default:	false
	Example:	`true`
id:	Type:	string (hexadecimal number)
	Description:	CHAP ID.
	Example:	`0b`
user:	Type:	string
	Description:	Username.
	Example:	`admin`
digest:	Type:	string
	Description:	CHAP digest.
	Example:	`D96E46E27497B6891C222EF284C05D84`

Examples

Topics:

- Example - Commit Pending Configuration on page 13
- Example - Address Object API Calls on page 15

Example - Commit Pending Configuration

All SonicOS APIs that modify configuration (POST, PUT, DELETE) do not take effect immediately. Rather, configuration is staged and is not pushed to run-time config and saved to flash/permanent storage until API clients explicitly execute a POST request to `/api/sonicos/config/pending`. This is the same behavior as in the SonicOS CLI and equivalent to invoking the `commit` command from the top-level config mode.

Pending configuration can be canceled (deleted) at any time by executing a DELETE request to `/api/sonicos/config/pending`. Any/all pending configuration is canceled upon client session termination, whether due to idle-timeout or explicit logout. In this case, all unsaved changes are lost. It is the client's responsibility to either commit pending configuration after each POST/PUT/DELETE API call or maintain pending changes on the client side to be restored in a later session.

Endpoint

Endpoint	HTTP method and body			
	GET	**POST**	**PUT**	**DELETE**
URI: `/api/sonicos/config/pending` **Schema:** N/A	Empty	Empty	—	Empty

Topics:

- Schema on page 14
- Examples on page 14

Schema

Schema Structure

A schema is not really applicable here as POST, PUT, and DELETE HTTP body is expected to be empty. However, GET returns any/all pending (unsaved) configuration.

Schema Attributes

Not applicable.

Examples

Topics:

- # GET Pending Changes (unchanged) on page 14
- # GET Pending Changes on page 14
- # POST Pending Changes on page 15

GET Pending Changes (unchanged)

Request:

```
GET /api/sonicos/config/pending
Accept: application/json
```

Response:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8
{
}
```

GET Pending Changes

Request:

```
GET /api/sonicos/config/pending
Accept: application/json
```

Response:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8
{
   "address_objects": [
      {
         "pending": "ADD"
         ,"ipv4": {
            "name": "B"
            ,"host": {
```

```
            "ip": "2.2.2.2"
          }
          ,"zone": "WAN"
        }
      }
    ]
  }
```

POST Pending Changes

Request:

```
POST /api/sonicos/config/pending
Accept: application/json
```

Response:

```
  HTTP/1.0 200 OK
  Server: SonicWALL
  Content-type: application/json; charset=UTF-8
  {
    "status": {
      "success": true
      ,"cli": {
        "depth": 1
        ,"mode": "config_mode"
        ,"configuring": true
        ,"pending_config": false
        ,"restart_required": "NONE"
      }
      ,"info": [
        { "level": "info", "code": "E_OK", "message": "Success." }
      ]
    }
  }
```

Example - Address Object API Calls

Topics:

- # Create a new IPv4 Address Object named Web Server on page 15
- # Modify the Web Server Address Object host IP on page 16
- # Delete the Web Server Address Object on page 16

Create a new IPv4 Address Object named Web Server

```
POST /api/sonicos/address-objects/ipv4
Content-type: application/json
```

```
{
  "address_object": {
    "ipv4": {
      "name": "Web Server",
      "zone": "DMZ",
```

```
        "host": {
           "ip": "192.168.168.168"
        }
     }
  }
}
```

Modify the Web Server Address Object host IP

```
PUT /api/sonicos/address-objects/ipv4/name/Web%20Server
Content-type: application/json
```

```
{
   "address_object": {
      "ipv4": {
         "host": {
            "ip": "192.168.168.1"
         }
      }
   }
}
```

Delete the Web Server Address Object

```
DELETE /api/sonicos/address-objects/ipv4/name/Web%20Server
```

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API: Config - Pending

- About Modifying Configuration API on page 17
- Endpoint on page 17
- Schema Structure on page 17
  - Schema Attributes on page 18
- Examples on page 18
  - GET Pending Changes (Unchanged) on page 18
  - GET Pending Changes on page 18
  - POST Pending Changes on page 19

About Modifying Configuration API

All SonicOS API that modify configuration (POST, PUT, DELETE) do not take effect immediately. Rather, configuration is staged and is not pushed to run-time config or saved to `flash/permanent` storage until API clients explicitly execute a POST request to `/api/sonicos/config/pending`. This is the same behavior as SonicOS CLI and equivalent to invoking the `commit` command from the top-level config mode.

Pending configuration can be canceled (deleted) at any time by executing a DELETE request to `/api/sonicos/config/pending`. It should be noted that any/all pending configuration is canceled (deleted) upon client session termination, whether due to idle-timeout or explicit logout. In this case, all unsaved changes are lost so it is the client's responsibility to either commit pending configuration after each POST/PUT/DELETE API call or maintain pending changes on the client side to be restored in a later session.

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: `/api/sonicos/config/pending` **Schema:** N/A	Empty	Empty	—	Empty

Schema Structure

A schema is not really applicable here as POST, PUT and DELETE HTTP body is expected to be empty. However, GET returns any/all pending (unsaved) configuration so see all schemas in the following chapters.

Schema Attributes

Not applicable.

Examples

Topics:

- GET Pending Changes (Unchanged) on page 18
- GET Pending Changes on page 18
- POST Pending Changes on page 19

GET Pending Changes (Unchanged)

Request:

```
GET /api/sonicos/config/pending
Accept: application/json
```

Response:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{

}
```

GET Pending Changes

Request:

```
GET /api/sonicos/config/pending
Accept: application/json
```

Response:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{
     "address_objects": [
         {
             "pending": "ADD"
            ,"ipv4": {
                 "name": "B"
                ,"host": {
                     "ip": "2.2.2.2"
                 }
                ,"zone": "WAN"
             }
         }
```

```
    ]
}
```

POST Pending Changes

Request:

```
POST /api/sonicos/config/pending
Accept: application/json
```

Response:

```
HTTP/1.0 200 OK
Server: SonicWALL
Content-type: application/json; charset=UTF-8

{
     "status": {
        "success": true

        ,"cli": {
             "depth": 1
            ,"mode": "config_mode"
            ,"configuring": true
            ,"pending_config": false
            ,"restart_required": "NONE"
        }

        ,"info": [
             { "level": "info", "code": "E_OK", "message": "Success." }
        ]
    }
}
```

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API: Restart

- About Restarting API on page 20
- Endpoint on page 20
- Schema Structure on page 20
    - Schema Attributes on page 20
- Example on page 21

About Restarting API

Restarts SonicOS (and chassis) immediately or after an interval of time.

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE

URI: `/api/sonicos/restart`
`[ / chassis ]`
`[`
`/at/{YYYYMMDDHHMMSS}`
`| /in/{UINT32} { /minutes | /hours | /days }`
`| /now`
`]`
	—	Empty	—	—

Schema: N/A				

Schema Structure

Not applicable.

Schema Attributes

Not applicable.

Example

```
POST /api/sonicos/restart
POST /api/sonicos/restart/now
POST /api/sonicos/restart/chassis/now
POST /api/sonicos/restart/in/3/days
```

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API: Address Objects – IPv4

- Endpoint on page 22
- Schema Structure on page 22
  - Object: Address Object on page 22
  - Collection: Address Object on page 23
  - Schema Attributes on page 23

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-objects/ipv4* **Schema:** *collection#address-object-ipv4-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-objects/ipv4/name/{NAME}* **Schema:** *object#address-object-ipv4-config*	Empty	—	Required	Ignored
URI: */api/sonicos/address-objects/ipv4/uuid/{UUID}* **Schema:** *object#address-object-ipv4-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Address Object on page 22
- Collection: Address Object on page 23
- Schema Attributes on page 23

Object: Address Object

```
{
    "address_object": {
        "ipv4": {
            "name": "{string}",
            "uuid": "{string}",

            "host": {
                "ip": "{string}"
            },
```

```
          | "range": {
                "begin": "{string}",
                "end": "{string}"
            },
          | "network": {
                "subnet": "{string}",
                "mask": "{string}"
            }

            "zone": "{string}"
        }
    }
}
```

Collection: Address Object

```
{
    "address_objects": [
        object#address-object-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_object: on page 23
- address_objects: on page 24
- address_object.ipv4: on page 24
- address_object.ipv4.name: on page 24
- address_object.ipv4.uuid: on page 24
- address_object.ipv4.host: on page 24
- address_object.ipv4.host.ip: on page 24
- address_object.ipv4.range: on page 24
- address_object.ipv4.range.begin: on page 24
- address_object.ipv4.range.end: on page 24
- address_object.ipv4.network: on page 25
- address_object.ipv4.network.subnet: on page 25
- address_object.ipv4.network.mask: on page 25
- address_object.ipv4.zone: on page 25

address_object:

```
Type: object
Flags: -none-
Description: Add/edit address object.
```

address_objects:

```
Type: array
Flags: -none-
Description: Address object collection.
```

address_object.ipv4:

```
Type: object
Flags: key
Description: IPV4 address object.
```

address_object.ipv4.name:

```
Type: string
Flags: key
Description: Host/network/range address object name.
```

address_object.ipv4.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_object.ipv4.host:

```
Type: object
Flags: -none-
Description: Address object host.
```

address_object.ipv4.host.ip:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D.
```

address_object.ipv4.range:

```
Type: object
Flags: -none-
Description: Address object range.
```

address_object.ipv4.range.begin:

```
Type: string (ip)
Flags: -none-
Description: IPv4 starting range in the form: D.D.D.D.
```

address_object.ipv4.range.end:

```
Type: string (ip)
Flags: -none-
Description: IIPv4 ending range in the form: D.D.D.D.
```

address_object.ipv4.network:

```
Type: object
Flags: -none-
Description: Address object network.
```

address_object.ipv4.network.subnet:

```
Type: string (ip)
Flags: -none-
Description: IPv4 network in the form: D.D.D.D.
```

address_object.ipv4.network.mask:

```
Type: string (subnet)
Flags: -none-
Description: IPv4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D
```

address_object.ipv4.zone:

```
Type: string
Flags: -none-
Description: Zone object name.
```

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API: Address Objects – IPv6

- Endpoint on page 26
- Schema Structure on page 26
  - Object: Address Object on page 26
  - Collection: Address Objects on page 27
  - Schema Attributes on page 27

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-objects/ipv6* **Schema:** *collection#address-object-ipv6-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-objects/ipv6/name/{NAME}* **Schema:** *object#address-object-ipv6-config*	Empty	—	Required	Ignored
URI: */api/sonicos/address-objects/ipv6/uuid/{UUID}* **Schema:** *object#address-object-ipv6-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Address Object on page 26
- Collection: Address Objects on page 27
- Schema Attributes on page 27

Object: Address Object

```
{
    "address_object": {
        "ipv6": {
            "name": "{string}",
            "uuid": "{string}",

            "host": {
                "ip": "{string}"
            },
```

```
          | "range": {
                "begin": "{string}",
                "end": "{string}"
            },
          | "network": {
                "subnet": "{string}",
                "mask": "{string}"
            }

            "zone": "{string}"
        }
    }
}
```

Collection: Address Objects

```
{
    "address_objects": [
        object#address-object-ipv6-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_object: on page 27
- address_objects: on page 28
- address_object.ipv6: on page 28
- address_object.ipv6.name: on page 28
- address_object.ipv6.uuid: on page 28
- address_object.ipv6.host: on page 28
- address_object.ipv6.host.ip: on page 28
- address_object.ipv6.range: on page 28
- address_object.ipv6.range.begin: on page 28
- address_object.ipv6.range.end: on page 28
- address_object.ipv6.network: on page 29
- address_object.ipv6.network.subnet: on page 29
- address_object.ipv6.network.mask: on page 29
- address_object.ipv6.zone: on page 29

address_object:

```
Type: object
Flags: -none-
Description: Add/edit address object.
```

address_objects:

```
Type: array
Flags: -none-
Description: Address object collection.
```

address_object.ipv6:

```
Type: object
Flags: key
Description: IPV6 address object.
```

address_object.ipv6.name:

```
Type: string
Flags: key
Description: Host/network/range address object name.
```

address_object.ipv6.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_object.ipv6.host:

```
Type: object
Flags: -none-
Description: Address object host.
```

address_object.ipv6.host.ip:

```
Type: string (ip)
Flags: -none-
Description: IPv6 host address in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

address_object.ipv6.range:

```
Type: object
Flags: -none-
Description: Address object range.
```

address_object.ipv6.range.begin:

```
Type: string (ip)
Flags: -none-
Description: IPv6 starting range in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

address_object.ipv6.range.end:

```
Type: string (ip)
Flags: -none-
Description: IIPv6 ending range in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

address_object.ipv6.network:

```
Type: object
Flags: -none-
Description: Address object network.
```

address_object.ipv6.network.subnet:

```
Type: string (ip)
Flags: -none-
Description: IPv6 network in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

address_object.ipv6.network.mask:

```
Type: string (v6 prefix)
Flags: -none-
Description: Network prefix.
```

address_object.ipv6.zone:

```
Type: string
Flags: -none-
Description: Zone object name.
```

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API: Address Objects – MAC

- Endpoint on page 30
- Schema Structure on page 30
  - Object: Address Object on page 30
  - Collection: Address Object on page 31
  - Schema Attributes on page 31

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-objects/*mac **Schema:** *collection#address-object-mac-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-objects/mac/name/{NAME}* **Schema:** *object#address-object-mac-config*	Empty	—	Required	Ignored
URI: */api/sonicos/address-objects/mac/uuid/{UUID}* **Schema:** *object#address-object-mac-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Address Object on page 30
- Collection: Address Object on page 31
- Schema Attributes on page 31

Object: Address Object

```
{
    "address_object": {
        "mac": {
            "name": "{string}",
            "uuid": "{string}",
            "address": "{string}",
            "zone": "{string}",
            "multi_homed": {boolean}
        }
```

```
    }
}
```

Collection: Address Object

```
{
    "address_objects": [
        object#address-object-mac-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_object: on page 31
- address_objects: on page 31
- address_object.mac: on page 31
- address_object.mac.name: on page 31
- address_object.mac.uuid: on page 32
- address_object.mac.address on page 32
- address_object.mac.zone: on page 32
- address_object.mac.multi_homed: on page 32

address_object:

```
Type: object
Flags: -none-
Description: address object.
```

address_objects:

```
Type: array
Flags: -none-
Description: Address object collection.
```

address_object.mac:

```
Type: object
Flags: key
Description: MAC address object.
```

address_object.mac.name:

```
Type: string
Flags: key
Description: MAC address object name.
```

address_object.mac.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_object.mac.address

```
Type: string (mac)
Flags: -none-
Description: Address object MAC address in the form: HH:HH:HH:HH:HH:HH or HHHHHHHHHHHH or
HH-HH-HH-HH-HH-HH.
```

address_object.mac.zone:

```
Type: string
Flags: -none-
Description: Zone object name.
```

address_object.mac.multi_homed:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable multi-homed host.
```

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API: Address Objects – FQDN

- Endpoint on page 33
- Schema Structure on page 33
  - Object: Address Object on page 33
  - Collection: Address Object on page 34
  - Schema Attributes on page 34

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-objects/*fqdn **Schema:** *collection#address-object-fqdn-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-objects/fqdn/name/{NAME}* **Schema:** *object#address-object-fqdn-config*	Empty	—	Required	Ignored
URI: */api/sonicos/address-objects/fqdn/uuid/{UUID}* **Schema:** *object#address-object-fqdn-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Address Object on page 33
- Collection: Address Object on page 34
- Schema Attributes on page 34

Object: Address Object

```
{
       "address_object": {
        "fqdn": {
            "name": "{string}",
            "uuid": "{string}",
            "domain": "{string}",
            "zone": "{string}",
            "dns_ttl": {number}
        }
```

```
    }
}
```

Collection: Address Object

```
{
    "address_objects": [
        object#address-object-fqdn-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_object: on page 34
- address_objects: on page 34
- address_object.fqdn: on page 34
- address_object.fqdn.name: on page 34
- address_object.fqdn.uuid: on page 35
- address_object.fqdn.domain on page 35
- address_object.fqdn.zone: on page 35
- address_object.fqdn.dns_ttl on page 35

address_object:

```
Type: object
Flags: -none-
Description: address object.
```

address_objects:

```
Type: array
Flags: -none-
Description: Address object collection.
```

address_object.fqdn:

```
Type: object
Flags: key
Description: fqdn address object.
```

address_object.fqdn.name:

```
Type: string
Flags: key
Description: FQDN address object name.
```

address_object.fqdn.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_object.fqdn.domain

```
Type: string (fqdn)
Flags: -none-
Description: FQDN in the form: example.com or *.example.com.
```

address_object.fqdn.zone:

```
Type: string
Flags: -none-
Description: Zone object name.
```

address_object.fqdn.dns_ttl

```
Type: number (uint16))
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

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API: Address Groups — IPv4

- Endpoint on page 36
- Schema Structure on page 36
  - Object: Address Group on page 36
  - Collection: Address Group on page 37
  - Schema Attributes on page 37

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-groups/*ipv4 **Schema:** *collection#address-group-ipv4-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-groups/ipv4/name/{NAME}* **Schema:** *object#address-group-ipv4-config*	Empty	—	Required	If deleting member(s)
URI: */api/sonicos/address-groups/ipv4/uuid/{UUID}* **Schema:** *object#address-group-ipv4-config*	Empty	—	Required	If deleting member(s)

Schema Structure

Topics:

- Object: Address Group on page 36
- Collection: Address Group on page 37
- Schema Attributes on page 37

Object: Address Group

```
{
    "address_group": {
        "ipv4": {
            "name": "{string}",
            "uuid": "{string}",

            "address_group": {
                "ipv4": [
                    {
                        "name": "{string}"
```

```
                },

                ...
            ]
        },

        "address_object": {
            "ipv4": [
                {
                    "name": "{string}"
                },

                ...
            ],

            "mac": [
                {
                    "name": "{string}"
                },

                ...
            ],

            "fqdn": [
                {
                    "name": "{string}"
                },

                ...
            ]
        }
    }
}
```

Collection: Address Group

```
{
    "address_objects": [
        object#address-group-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_group: on page 38
- address_groups: on page 38
- address_group.ipv4: on page 38
- address_group.ipv4.name: on page 38
- address_group.ipv4.uuid: on page 38
- address_group.ipv4.address_group: on page 38
- address_group.ipv4.address_group.ipv4: on page 38
- address_group.ipv4.address_object.ipv4.name: on page 39

- address_group.ipv4.address_object.mac: on page 39
- address_group.ipv4.address_object.mac.name: on page 39
- address_group.ipv4.address_object.fqdn: on page 39
- address_group.ipv4.address_object.fqdn.name: on page 39

address_group:

```
Type: object
Flags: -none-
Description: Address group.
```

address_groups:

```
Type: array
Flags: -none-
Description: Address group collection.
```

address_group.ipv4:

```
Type: object
Flags: key
Description: ipv4 address group.
```

address_group.ipv4.name:

```
Type: string
Flags: key
Description: IPv4 address group name.
```

address_group.ipv4.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_group.ipv4.address_group:

```
Type: object
Flags: -none-
Description: Assign address group to group.
```

address_group.ipv4.address_group.ipv4:

```
Type: array
Flags: -none-
Description: IPV4 address group.
```

address_group.ipv4.address_group.ipv4.name:

```
Type: string
Flags: -none-
Description: Group address object name.
```

address_group.ipv4.address_object:

```
Type: object
Flags: -none-
Description: Assign an FQDN address object to group.
```

address_group.ipv4.address_object.ipv4:

```
Type: array
Flags: -none-
Description: IPV4 address object.
```

address_group.ipv4.address_object.ipv4.name:

```
Type: string
Flags: -none-
Description: Host/network/range address object name.
```

address_group.ipv4.address_object.mac:

```
Type: array
Flags: -none-
Description: MAC address object.
```

address_group.ipv4.address_object.mac.name:

```
Type: string
Flags: -none-
Description: MAC address object name.
```

address_group.ipv4.address_object.fqdn:

```
Type: array
Flags: -none-
Description: FQDN address object.
```

address_group.ipv4.address_object.fqdn.name:

```
Type: string
Flags: -none-
Description: FQDN address object name.
```

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API: Address Groups — IPv6

- Endpoint on page 40
- Schema Structure on page 40
  - Object: Address Group on page 40
  - Collection: Address Group on page 41
  - Schema Attributes on page 42

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/address-groups/*ipv6 **Schema:** *collection#address-group-ipv6-config*	Empty	Required	Required	Required
URI: */api/sonicos/address-groups/ipv6/name/{NAME}* **Schema:** *object#address-group-ipv6-config*	Empty	—	Required	If deleting member(s)
URI: */api/sonicos/address-groups/ipv6/uuid/{UUID}* **Schema:** *object#address-group-ipv6-config*	Empty	—	Required	If deleting member(s)

Schema Structure

Topics:

- Object: Address Group on page 40
- Collection: Address Group on page 41
- Schema Attributes on page 42

Object: Address Group

```
{
"ipv6": {
            "name": "{string}",
            "uuid": "{string}",

            "address_group": {
                "ipv4": [
                    {
                        "name": "{string}"
                    },
```

```
                ...
            ],

            "ipv6": [
                {
                    "name": "{string}"
                },

                ...
            ]
        },

        "address_object": {
            "ipv4": [
                {
                    "name": "{string}"
                },

                ...
            ],

            "ipv6": [
                {
                    "name": "{string}"
                },

                ...
            ],

            "mac": [
                {
                    "name": "{string}"
                },

                ...
            ],

            "fqdn": [
                {
                    "name": "{string}"
                },

                ...
            ]
        }
    }
}
```

Collection: Address Group

```
{
    "address_objects": [
        object#address-group-ipv6-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- address_group: on page 42
- address_groups: on page 42
- address_group.ipv6: on page 42
- address_group.ipv6.name: on page 42
- address_group.ipv6.uuid: on page 42
- address_group.ipv6.address_group: on page 43
- address_group.ipv6.address_group.ipv4: on page 43
- address_group.ipv6.address_group.ipv4.name: on page 43
- address_group.ipv6.address_object.ipv6: on page 43
- address_group.ipv6.address_object.ipv6.name: on page 44
- address_group.ipv6.address_object.mac: on page 44
- address_group.ipv6.address_object.mac.name: on page 44
- address_group.ipv6.address_object.fqdn: on page 44
- address_group.ipv6.address_object.fqdn.name: on page 44

address_group:

```
Type: object
Flags: -none-
Description: Address group.
```

address_groups:

```
Type: array
Flags: -none-
Description: Address group collection.
```

address_group.ipv6:

```
Type: object
Flags: key
Description: IPV6 address group.
```

address_group.ipv6.name:

```
Type: string
Flags: key
Description: Group address object name.
```

address_group.ipv6.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

address_group.ipv6.address_group:

```
Type: object
Flags: -none-
Description: Assign address group to group.
```

address_group.ipv6.address_group.ipv4:

```
Type: array
Flags: -none-
Description: IPV4 address group.
```

address_group.ipv6.address_group.ipv4.name:

```
Type: string
Flags: -none-
Description: Group address object name.
```

address_group.ipv6.address_group.ipv6:

```
Type: array
Flags: -none-
Description: IPV6 address group.
```

address_group.ipv6.address_group.ipv6.name:

```
Type: string
Flags: -none-
Description: Group address object name.
```

address_group.ipv6.address_object:

```
Type: object
Flags: -none-
Description: Assign an IPV6 address object to group.
```

address_group.ipv6.address_object.ipv4:

```
Type: array
Flags: -none-
Description: IPV4 address object.
```

address_group.ipv6.address_object.ipv4.name:

```
Type: string
Flags: -none-
Description: Host/network/range address object name.
```

address_group.ipv6.address_object.ipv6:

```
Type: array
Flags: -none-
Description: IPV6 address object.
```

address_group.ipv6.address_object.ipv6.name:

```
Type: string
Flags: -none-
Description: Address object name.
```

address_group.ipv6.address_object.mac:

```
Type: array
Flags: -none-
Description: MAC address object.
```

address_group.ipv6.address_object.mac.name:

```
Type: string
Flags: -none-
Description: MAC address object name.
```

address_group.ipv6.address_object.fqdn:

```
Type: array
Flags: -none-
Description: FQDN address object.
```

address_group.ipv6.address_object.fqdn.name:

```
Type: string
Flags: -none-
Description: FQDN address object name.
```

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API: Schedule Objects

- Endpoint on page 45
- Schema Structure on page 45
  - Object: Schedule on page 45
  - Collection: Schedule on page 46
  - Schema Attributes on page 46

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/schedules* **Schema:** *collection#schedule-config*	Empty	Required	Required	Required
URI: */api/sonicos/schedules/name/{NAME}* **Schema:** *object#schedule-config*	Empty	—	Required	Ignored
URI: */api/sonicos/schedules/uuid/{UUID}* **Schema:** *object#schedule-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Schedule on page 45
- Collection: Schedule on page 46
- Schema Attributes on page 46

Object: Schedule

```
{
"schedule": {
        "name": "{string}",
        "uuid": "{string}",

        "occurs": {
            "once": {
                "event": {
                    "start": "{string}",
                    "end": "{string}"
```

```
            }
          },
        | "recurring": {
            "recurring": [
                {
                    "start": "{string}",
                    "end": "{string}",
                    "sun": {boolean},
                    "mon": {boolean},
                    "tue": {boolean},
                    "wed": {boolean},
                    "thu": {boolean},
                    "fri": {boolean},
                    "sat": {boolean}
                },

                ...
            ]
          },
        | "mixed": {
            "event": {
                "start": "{string}",
                "end": "{string}"
            },

            "recurring": [
                {
                    "start": "{string}",
                    "end": "{string}",
                    "sun": {boolean},
                    "mon": {boolean},
                    "tue": {boolean},
                    "wed": {boolean},
                    "thu": {boolean},
                    "fri": {boolean},
                    "sat": {boolean}
                },

                ...
            ]
          }
      }
  }
}
```

Collection: Schedule

```
{
    "schedules": [
        object#schedule-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- schedule: on page 47
- schedules: on page 47
- schedule.name: on page 47

- schedule.uuid: on page 48
- schedule.occurs: on page 48
- schedule.occurs.once: on page 48
- schedule.occurs.once.event: on page 48
- schedule.occurs.once.event.start: on page 48
- schedule.occurs.recurring.recurring.end: on page 49
- schedule.occurs.recurring.recurring.mon: on page 49
- schedule.occurs.recurring.recurring.tue: on page 49
- schedule.occurs.recurring.recurring.wed: on page 49
- schedule.occurs.recurring.recurring.thu: on page 49
- schedule.occurs.recurring.recurring.fri: on page 49
- schedule.occurs.recurring.recurring.sat: on page 49
- schedule.occurs.mixed: on page 49
- schedule.occurs.mixed.event: on page 50
- schedule.occurs.mixed.event.start: on page 50
- schedule.occurs.mixed.event.end: on page 50
- schedule.occurs.mixed.recurring: on page 50
- schedule.occurs.mixed.recurring.start: on page 50
- schedule.occurs.mixed.recurring.end: on page 50
- schedule.occurs.mixed.recurring.sun: on page 50
- schedule.occurs.mixed.recurring.mon: on page 50
- schedule.occurs.mixed.recurring.tue: on page 50
- schedule.occurs.mixed.recurring.wed: on page 51
- schedule.occurs.mixed.recurring.thu: on page 51
- schedule.occurs.mixed.recurring.fri: on page 51
- schedule.occurs.mixed.recurring.sat: on page 51

schedule:

```
Type: object
Flags: -none-
Description: Schedule object.
```

schedules:

```
Type: array
Flags: -none-
Description: Schedule object collection.
```

schedule.name:

```
Type: string
Flags: key
Description:
```

schedule.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

schedule.occurs:

```
Type: object
Flags: -none-
Description: Set schedule type.
```

schedule.occurs.once:

```
Type: object
Flags: -none-
Description: Set for single occurrence.
```

schedule.occurs.once.event:

```
Type: object
Flags: -none-
Description: Enter the start and end date and time of a one time event.
```

schedule.occurs.once.event.start:

```
Type: string (time yyyymmddhhmm)
Flags: -none-
Description: Timestamp in the form: YYYY:MM:DD:HH:MM
```

schedule.occurs.once.event.end:

```
Type: string (time yyyymmddhhmm)
Flags: -none-
Description: Timestamp in the form: YYYY:MM:DD:HH:MM
```

schedule.occurs.recurring:

```
Type: object
Flags: -none-
Description: Set for recurring schedule.
```

schedule.occurs.recurring.recurring:

```
Type: array
Flags: -none-
Description: Add to the list of applicable days and start and stop time of the schedule.
```

schedule.occurs.recurring.recurring.start:

```
Type: string (time hhmm)
Flags: -none-
Description: Time in the form: DD:DD
```

schedule.occurs.recurring.recurring.end:

```
Type: string (time hhmm)
Flags: -none-
Description: Time in the form: DD:DD
```

schedule.occurs.recurring.recurring.sun:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.mon:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.tue:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.wed:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.thu:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.fri:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.recurring.recurring.sat:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed:

```
Type: object
Flags: -none-
Description: Set for both recurring schedule and single occurrence.
```

schedule.occurs.mixed.event:

```
Type: object
Flags: -none-
Description: Enter the start and end date and time of a one time event.
```

schedule.occurs.mixed.event.start:

```
Type: string (time yyyymmddhhmm)
Flags: -none-
Description: Timestamp in the form: YYYY:MM:DD:HH:MM
```

schedule.occurs.mixed.event.end:

```
Type: string (time yyyymmddhhmm)
Flags: -none-
Description: Timestamp in the form: YYYY:MM:DD:HH:MM
```

schedule.occurs.mixed.recurring:

```
Type: array
Flags: -none-
Description: Add to the list of applicable days and start and stop time of the schedule.
```

schedule.occurs.mixed.recurring.start:

```
Type: string (time hhmm)
Flags: -none-
Description: Time in the form: DD:DD
```

schedule.occurs.mixed.recurring.end:

```
Type: string (time hhmm)
Flags: -none-
Description: Time in the form: DD:DD
```

schedule.occurs.mixed.recurring.sun:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.mon:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.tue:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.wed:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.thu:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.fri:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

schedule.occurs.mixed.recurring.sat:

```
Type: boolean (true|false)
Flags: -none-
Description: Day of the week.
```

11

API: Service Objects

- Endpoint on page 52
- Schema Structure on page 52
  - Object: Service Object on page 52
  - Collection: Service Object on page 53
  - Schema Attributes on page 53

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/service-objects* **Schema:** *collection#service-object-config*	Empty	Required	Required	Required
URI: */api/sonicos/service-objects/name/{NAME}* **Schema:** *object#service-object-config*	Empty	—	Required	Ignored
URI: */api/sonicos/service-objects/uuid/{UUID}* **Schema:** *object#service-object-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Service Object on page 52
- Collection: Service Object on page 53
- Schema Attributes on page 53

Object: Service Object

```
{
    "service_object": {
        "name": "{string}",
        "uuid": "{string}",

        "custom": {number},
      | "icmp": "{string}",
      | "igmp": "{string}",
      | "tcp": {
```

```
            "begin": {number},
            "end": {number}
        },
      | "udp": {
            "begin": {number},
            "end": {number}
        },
      | "gre": {true},
      | "esp": {true},
      | "6over4": {true},
      | "ah": {true},
      | "icmpv6": "{string}",
      | "eigrp": {true},
      | "ospf": "{string}",
      | "pim": "{string}",
      | "l2tp": {true},
      | "ipcomp": {true}
    }
}

collection#service-object-config
{
    "service_objects": [
        object#service-object-config,
        ...
    ]
}
```

Collection: Service Object

```
{
    "service-objects": [
        object#service-object-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- service_object: on page 54
- service_objects: on page 54
- service_object.name: on page 54
- service_object.uuid: on page 54
- service_object.custom: on page 54
- service_object.icmp: on page 54
- service_object.igmp: on page 55
- service_object.tcp: on page 55
- service_object.tcp.begin: on page 55
- service_object.tcp.end: on page 55
- service_object.udp: on page 55
- service_object.udp.begin: on page 55

- service_object.udp.end: on page 55
- service_object.gre: on page 55
- service_object.esp: on page 55
- service_object.6over4: on page 56
- service_object.ah: on page 56
- service_object.icmpv6: on page 56
- service_object.eigrp: on page 56
- service_object.ospf: on page 56
- service_object.pim: on page 56
- service_object.l2tp: on page 56
- service_object.ipcomp: on page 56

service_object:

```
Type: object
Flags: -none-
Description: Service object.
```

service_objects:

```
Type: array
Flags: -none-
Description: Service object collection.
```

service_object.name:

```
Type: string
Flags: key
Description: Service object name.
```

service_object.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

service_object.custom:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

service_object.icmp:

```
Type: string
Flags: -none-
Description: Service object ICMP.
```

service_object.igmp:

```
Type: string
Flags: -none-
Description: Service object IGMP.
```

service_object.tcp:

```
Type: object
Flags: -none-
Description: Service object TCP.
```

service_object.tcp.begin:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

service_object.tcp.end:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

service_object.udp:

```
Type: object
Flags: -none-
Description: Service object UDP.
```

service_object.udp.begin:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

service_object.udp.end:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

service_object.gre:

```
Type: boolean (true)
Flags: -none-
Description: Service object GRE.
```

service_object.esp:

```
Type: boolean (true)
Flags: -none-
Description: Service object ESP.
```

service_object.6over4:

```
Type: boolean (true)
Flags: -none-
Description: Service object 6over4.
```

service_object.ah:

```
Type: boolean (true)
Flags: -none-
Description: Service object AH.
```

service_object.icmpv6:

```
Type: string
Flags: -none-
Description: Service object ICMPV6
```

service_object.eigrp:

```
Type: boolean (true)
Flags: -none-
Description: Service object EIGRP.
```

service_object.ospf:

```
Type: string
Flags: -none-
Description: Service object OSPF.
```

service_object.pim:

```
Type: string
Flags: -none-
Description: Service object PIM.
```

service_object.l2tp:

```
Type: boolean (true)
Flags: -none-
Description: Service object l2tp.
```

service_object.ipcomp:

```
Type: boolean (true)
Flags: -none-
Description: Service object ipcomp.
```

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API: Service Groups

- Endpoint on page 57
- Schema Structure on page 57
  - Object: Service Group on page 57
  - Collection: Service Group on page 58
  - Schema Attributes on page 58

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/service-groups* **Schema:** *collection#service-group-config*	Empty	Required	Required	Required
URI: */api/sonicos/service-groups/name/{NAME}* **Schema:** *object#service-group-config*	Empty	—	Required	If deleting member(s)
URI: */api/sonicos/service-groups/uuid/{UUID}* **Schema:** *object#service-group-config*	Empty	—	Required	If deleting member(s)

Schema Structure

Topics:

- Object: Service Group on page 57
- Collection: Service Group on page 58
- Schema Attributes on page 58

Object: Service Group

```
{
    "service_group": {
        "name": "{string}",
        "uuid": "{string}",

        "service_object": [
            {
                "name": "{string}"
            },
```

```
            ...
        ],

        "service_group": [
            {
                "name": "{string}"
            },

            ...
        ]
    }
}
```

Collection: Service Group

```
{
    "service-groups": [
        object#service-group-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- service_group: on page 58
- service_groups: on page 58
- service_group.name: on page 58
- service_group.uuid: on page 59
- service_group.service_object: on page 59
- service_group.service_object.name: on page 59
- service_group.service_group: on page 59
- service_group.service_group.name: on page 59

service_group:

```
Type: object
Flags: -none-
Description: Service group.
```

service_groups:

```
Type: array
Flags: -none-
Description: Service group collection.
```

service_group.name:

```
Type: string
Flags: key
Description: Service object group name.
```

service_group.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

service_group.service_object:

```
Type: array
Flags: -none-
Description: Assign service object to group.
```

service_group.service_object.name:

```
Type: string
Flags: -none-
Description: Service object name.
```

service_group.service_group:

```
Type: array
Flags: -none-
Description: Assign service group to group.
```

service_group.service_group.name:

```
Type: string
Flags: -none-
Description: Service object group name.
```

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API: Zones

- Endpoint on page 60
- Schema Structure on page 60
  - Object: Zone on page 60
  - Collection: Zone on page 62
  - Schema Attributes on page 62

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/zones* **Schema:** *collection#zone-config*	Empty	Required	Required	Required
URI: */api/sonicos/zones/name/{NAME}* **Schema:** *object#zone-config*	Empty	—	Required	Ignored
URI: */api/sonicos/zones/uuid/{UUID}* **Schema:** *object#zone-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Zone on page 60
- Collection: Zone on page 62
- Schema Attributes on page 62

Object: Zone

```
{
    "zone": {
        "name": "{string}",
        "uuid": "{string}",

        "security_type": "{string}",
        "interface_trust": {boolean},

        "auto_generate_access_rules": {
            "allow_from_to_equal": {boolean},
```

```
    "allow_from_higher": {boolean},
    "allow_to_lower": {boolean},
    "deny_from_lower": {boolean}
},

"websense_content_filtering": {boolean},

"client": {
    "anti_virus": {boolean},
    "content_filtering": {boolean}
},

"gateway_anti_virus": {boolean},
"intrusion_prevention": {boolean},
"app_control": {boolean},
"anti_spyware": {boolean},
"create_group_vpn": {boolean},
"ssl_control": {boolean},
"sslvpn_access": {boolean},

"wireless": {
    "sslvpn_enforcement": {
        "server": {
            "name": "{string}",
          | "host": "{string}"
        },

        "service": {
            "name": "{string}",

          | "protocol": {
                "name": "{string}",
                "begin": {number},
                "end": {number}
            }
        }
    },

    "wifi_sec_enforcement": {
        "exception_service": {
            "name": "{string}",

          | "protocol": {
                "name": "{string}",
                "begin": {number},
                "end": {number}
            }
        }
    },

    "wifi_sec_for_site_to_site_vpn": {boolean},
    "trust_wpa_traffic_as_wifi_sec": {boolean},
    "only_sonicpoint_traffic": {boolean}
},

"guest_services": {
    "inter_guest": {boolean},

    "bypass": {
        "client": {
            "anti_virus": {boolean},
            "content_filtering": {boolean}
        }
    },

    "external_auth": {
        "client_redirect": "{string}",
```

```
                "web_server": {
                    "protocol": "{string}",
                    "name": "{string}",
                    "port": {number},
                    "timeout": {number}
                },

                "message_auth": {
                    "method": "{string}",
                    "shared_secret": "{string}",
                    "confirm_secret": "{string}"
                },

                "social_network": {
                    "facebook": {boolean},
                    "google": {boolean},
                    "twitter": {boolean}
                },

                "auth_pages": {
                    "login": "{string}",
                    "expiration": "{string}",
                    "timeout": "{string}",
                    "max_sessions": "{string}",
                    "traffic_exceeded": "{string}"
                },

                "web_content": {
                    "redirect": {
                        "use_default": {true},
                      | "custom": "{string}"
                    },

                    "server_down": {
                        "use_default": {true},
                      | "custom": "{string}"
                    }
}
```

Collection: Zone

```
{
    "zones": [
        object#zone-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- zone: on page 66
- zones: on page 66
- zone.name: on page 67
- zone.uuid: on page 67
- zone.security_type: on page 67

- zone.interface_trust: on page 67
- zone.auto_generate_access_rules: on page 67
- zone.auto_generate_access_rules.allow_from_to_equal: on page 67
- zone.auto_generate_access_rules.allow_from_higher: on page 67
- zone.auto_generate_access_rules.allow_to_lower: on page 67
- zone.auto_generate_access_rules.deny_from_lower: on page 67
- zone.websense_content_filtering: on page 68
- zone.client: on page 68
- zone.client.anti_virus: on page 68
- zone.client.content_filtering: on page 68
- zone.gateway_anti_virus: on page 68
- zone.intrusion_prevention: on page 68
- zone.app_control: on page 68
- zone.anti_spyware: on page 68
- zone.create_group_vpn: on page 68
- zone.ssl_control: on page 69
- zone.sslvpn_access: on page 69
- zone.wireless: on page 69
- zone.wireless.sslvpn_enforcement: on page 69
- zone.wireless.sslvpn_enforcement.server: on page 69
- zone.wireless.sslvpn_enforcement.server.name: on page 69
- zone.wireless.sslvpn_enforcement.server.host: on page 69
- zone.wireless.sslvpn_enforcement.service: on page 69
- zone.wireless.sslvpn_enforcement.service.name: on page 69
- zone.wireless.sslvpn_enforcement.service.protocol: on page 70
- zone.wireless.sslvpn_enforcement.service.protocol.name: on page 70
- zone.wireless.sslvpn_enforcement.service.protocol.begin: on page 70
- zone.wireless.sslvpn_enforcement.service.protocol.end: on page 70
- zone.wireless.wifi_sec_enforcement: on page 70
- zone.wireless.wifi_sec_enforcement.exception_service: on page 70
- zone.wireless.wifi_sec_enforcement.exception_service.name: on page 70
- zone.wireless.wifi_sec_enforcement.exception_service.protocol: on page 70
- zone.wireless.wifi_sec_enforcement.exception_service.protocol.name: on page 70
- zone.wireless.wifi_sec_enforcement.exception_service.protocol.begin: on page 71
- zone.wireless.wifi_sec_enforcement.exception_service.protocol.end: on page 71
- zone.wireless.wifi_sec_for_site_to_site_vpn: on page 71
- zone.wireless.trust_wpa_traffic_as_wifi_sec: on page 71

- zone.wireless.only_sonicpoint_traffic: on page 71
- zone.guest_services: on page 71
- zone.guest_services.inter_guest: on page 71
- zone.guest_services.bypass: on page 71
- zone.guest_services.bypass.client: on page 71
- zone.guest_services.bypass.client.anti_virus: on page 72
- zone.guest_services.bypass.client.content_filtering: on page 72
- zone.guest_services.external_auth: on page 72
- zone.guest_services.external_auth.client_redirect: on page 72
- zone.guest_services.external_auth.web_server: on page 72
- zone.guest_services.external_auth.web_server.protocol: on page 72
- zone.guest_services.external_auth.web_server.name: on page 72
- zone.guest_services.external_auth.web_server.port: on page 72
- zone.guest_services.external_auth.web_server.timeout: on page 72
- zone.guest_services.external_auth.message_auth: on page 73
- zone.guest_services.external_auth.message_auth.method: on page 73
- zone.guest_services.external_auth.message_auth.shared_secret: on page 73
- zone.guest_services.external_auth.message_auth.confirm_secret: on page 73
- zone.guest_services.external_auth.social_network: on page 73
- zone.guest_services.external_auth.social_network.facebook: on page 73
- zone.guest_services.external_auth.social_network.google: on page 73
- zone.guest_services.external_auth.social_network.twitter: on page 73
- zone.guest_services.external_auth.auth_pages: on page 73
- zone.guest_services.external_auth.auth_pages.login: on page 74
- zone.guest_services.external_auth.auth_pages.expiration: on page 74
- zone.guest_services.external_auth.auth_pages.timeout: on page 74
- zone.guest_services.external_auth.auth_pages.max_sessions: on page 74
- zone.guest_services.external_auth.auth_pages.traffic_exceeded: on page 74
- zone.guest_services.external_auth.web_content: on page 74
- zone.guest_services.external_auth.web_content.redirect: on page 74
- zone.guest_services.external_auth.web_content.redirect.use_default: on page 74
- zone.guest_services.external_auth.web_content.redirect.custom: on page 74
- zone.guest_services.external_auth.web_content.server_down: on page 75
- zone.guest_services.external_auth.web_content.server_down.use_default: on page 75
- zone.guest_services.external_auth.web_content.server_down.custom: on page 75
- zone.guest_services.external_auth.logout_expired: on page 75
- zone.guest_services.external_auth.logout_expired.every: on page 75

- zone.guest_services.external_auth.logout_expired.cgi: on page 75
- zone.guest_services.external_auth.status_check: on page 75
- zone.guest_services.external_auth.status_check.every: on page 75
- zone.guest_services.external_auth.status_check.cgi: on page 75
- zone.guest_services.external_auth.session_sync: on page 76
- zone.guest_services.external_auth.session_sync.every: on page 76
- zone.guest_services.external_auth.session_sync.cgi: on page 76
- zone.guest_services.policy_page_non_authentication: on page 76
- zone.guest_services.policy_page_non_authentication.guest_usage_policy: on page 76
- zone.guest_services.custom_auth_page: on page 76
- zone.guest_services.custom_auth_page.header: on page 76
- zone.guest_services.custom_auth_page.header.text: on page 76
- zone.guest_services.custom_auth_page.header.url: on page 76
- zone.guest_services.custom_auth_page.footer: on page 77
- zone.guest_services.custom_auth_page.footer.text: on page 77
- zone.guest_services.custom_auth_page.footer.url: on page 77
- zone.guest_services.post_auth: on page 77
- zone.guest_services.bypass_guest_auth: on page 77
- zone.guest_services.bypass_guest_auth.all: on page 77
- zone.guest_services.bypass_guest_auth.name: on page 77
- zone.guest_services.bypass_guest_auth.group: on page 77
- zone.guest_services.bypass_guest_auth.mac: on page 77
- zone.guest_services.smtp_redirect: on page 78
- zone.guest_services.smtp_redirect.name: on page 78
- zone.guest_services.smtp_redirect.host: on page 78
- zone.guest_services.deny_networks: on page 78
- zone.guest_services.deny_networks.name: on page 78
- zone.guest_services.deny_networks.group: on page 78
- zone.guest_services.deny_networks.mac: on page 78
- zone.guest_services.deny_networks.fqdn: on page 78
- zone.guest_services.deny_networks.host: on page 78
- zone.guest_services.deny_networks.range: on page 79
- zone.guest_services.deny_networks.range.begin: on page 79
- zone.guest_services.deny_networks.range.end: on page 79
- zone.guest_services.deny_networks.network: on page 79
- zone.guest_services.deny_networks.network.subnet: on page 79
- zone.guest_services.deny_networks.network.mask: on page 79

- zone.guest_services.deny_networks.ipv6: on page 79
- zone.guest_services.deny_networks.ipv6.host: on page 79
- zone.guest_services.deny_networks.ipv6.range: on page 79
- zone.guest_services.deny_networks.ipv6.range.begin: on page 80
- zone.guest_services.deny_networks.ipv6.range.end: on page 80
- zone.guest_services.deny_networks.ipv6.network: on page 80
- zone.guest_services.deny_networks.ipv6.network.subnet: on page 80
- zone.guest_services.deny_networks.ipv6.network.mask: on page 80
- zone.guest_services.pass_networks: on page 80
- zone.guest_services.pass_networks.name: on page 80
- zone.guest_services.pass_networks.group: on page 80
- zone.guest_services.pass_networks.mac: on page 80
- zone.guest_services.pass_networks.fqdn: on page 81
- zone.guest_services.pass_networks.host: on page 81
- zone.guest_services.pass_networks.range: on page 81
- zone.guest_services.pass_networks.range.begin: on page 81
- zone.guest_services.pass_networks.range.end: on page 81
- zone.guest_services.pass_networks.network: on page 81
- zone.guest_services.pass_networks.network.subnet: on page 81
- zone.guest_services.pass_networks.network.mask: on page 81
- zone.guest_services.pass_networks.ipv6: on page 81
- zone.guest_services.pass_networks.ipv6.host: on page 82
- zone.guest_services.pass_networks.ipv6.range: on page 82
- zone.guest_services.pass_networks.ipv6.range.begin: on page 82
- zone.guest_services.pass_networks.ipv6.range.end: on page 82
- zone.guest_services.pass_networks.ipv6.network: on page 82
- zone.guest_services.pass_networks.ipv6.network.subnet: on page 82
- zone.guest_services.pass_networks.ipv6.network.mask: on page 82
- zone.guest_services.max_guests: on page 82
- zone.guest_services.dynamic_address_translation: on page 82

zone:

```
Type: object
Flags: -none-
Description: Zone object.
```

zones:

```
Type: array
Flags: -none-
Description: Zone object collection.
```

zone.name:

```
Type: string
Flags: key
Description: Zone object name.
```

zone.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

zone.security_type:

```
Type: string
Flags: -none-
Description: Set zone security type.
```

zone.interface_trust:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable allow interface trust.
```

zone.auto_generate_access_rules:

```
Type: object
Flags: -none-
Description: Enable auto generate access rules.
```

zone.auto_generate_access_rules.allow_from_to_equal:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow traffic between zones with the same trust level.
```

zone.auto_generate_access_rules.allow_from_higher:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow traffic from zones with higher trust level.
```

zone.auto_generate_access_rules.allow_to_lower:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow traffic to zones with lower trust level.
```

zone.auto_generate_access_rules.deny_from_lower:

```
Type: boolean (true|false)
Flags: -none-
Description: Deny traffic from zones with lower trust level.
```

zone.websense_content_filtering:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable enforce websense enterprise content filtering service.
```

zone.client:

```
Type: object
Flags: -none-
Description: Client settings
```

zone.client.anti_virus:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable client anti-virus enforcement service.
```

zone.client.content_filtering:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable client content filtering services enforcement service.
```

zone.gateway_anti_virus:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable gateway anti-virus service.
```

zone.intrusion_prevention:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable intrusion prevention service.
```

zone.app_control:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable app control service.
```

zone.anti_spyware:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable anti-spyware service.
```

zone.create_group_vpn:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable automatic creation of group VPN for this zone.
```

zone.ssl_control:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable SSL-Control on this zone.
```

zone.sslvpn_access:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable SSL-VPN access this zone.
```

zone.wireless:

```
Type: object
Flags: -none-
Description: Enter wireless zone configuration mode.
```

zone.wireless.sslvpn_enforcement:

```
Type: object
Flags: -none-
Description: Enable SSLVPN enforcement. Set to null or {} if disabled/unconfigured.
```

zone.wireless.sslvpn_enforcement.server:

```
Type: object
Flags: -none-
Description: Set the SSLVPN server as a named address object.
```

zone.wireless.sslvpn_enforcement.server.name:

```
Type: string
Flags: -none-
Description: Host address object name.
```

zone.wireless.sslvpn_enforcement.server.host:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.wireless.sslvpn_enforcement.service:

```
Type: object
Flags: -none-
Description: Set the SSLVPN service as a named service object.
```

zone.wireless.sslvpn_enforcement.service.name:

```
Type: string
Flags: -none-
Description: Service object name.
```

zone.wireless.sslvpn_enforcement.service.protocol:

```
Type: object
Flags: -none-
Description: Set the SSLVPN service as a protocol.
```

zone.wireless.sslvpn_enforcement.service.protocol.name:

```
Type: string
Flags: -none-
Description: Service protocol.
```

zone.wireless.sslvpn_enforcement.service.protocol.begin:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

zone.wireless.sslvpn_enforcement.service.protocol.end:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

zone.wireless.wifi_sec_enforcement:

```
Type: object
Flags: -none-
Description: Enable WiFiSec enforcement.
```

zone.wireless.wifi_sec_enforcement.exception_service:

```
Type: object
Flags: -none-
Description: Specify services that are allowed to bypass wifisec enforcement.
```

zone.wireless.wifi_sec_enforcement.exception_service.name:

```
Type: string
Flags: -none-
Description: Service object name.
```

zone.wireless.wifi_sec_enforcement.exception_service.protocol:

```
Type: object
Flags: -none-
Description: Set the WiFiSec exception service as a protocol.
```

zone.wireless.wifi_sec_enforcement.exception_service.protocol.name:

```
Type: string
Flags: -none-
Description: Service protocol.
```

zone.wireless.wifi_sec_enforcement.exception_service.protocol.begin:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

zone.wireless.wifi_sec_enforcement.exception_service.protocol.end:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

zone.wireless.wifi_sec_for_site_to_site_vpn:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable WiFiSec for site-to-site VPN tunnel traversal.
```

zone.wireless.trust_wpa_traffic_as_wifi_sec:

```
Type: boolean (true|false)
Flags: -none-
Description: Trust WPA / WPA2 traffic as WiFiSec.
```

zone.wireless.only_sonicpoint_traffic:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable only allow traffic generated by a SonicPoint/SonicPointN.
```

zone.guest_services:

```
Type: object
Flags: -none-
Description: Enable zone guest services and enter configuration mode. Set to null or {} if
disabled/unconfigured.
```

zone.guest_services.inter_guest:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable inter-guest communication.
```

zone.guest_services.bypass:

```
Type: object
Flags: -none-
Description: Enable bypass check for guest clients.
```

zone.guest_services.bypass.client:

```
Type: object
Flags: -none-
Description: Enable bypass check for guest clients.
```

zone.guest_services.bypass.client.anti_virus:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable bypass anti-virus check for guests.
```

zone.guest_services.bypass.client.content_filtering:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable bypass client content filtering check for guests.
```

zone.guest_services.external_auth:

```
Type: object
Flags: -none-
Description: Enable external guest authentication and enter its configuration mode. Set to
null or {} if disabled/unconfigured.
```

zone.guest_services.external_auth.client_redirect:

```
Type: string
Flags: -none-
Description: Set local web server settings for client redirect.
```

zone.guest_services.external_auth.web_server:

```
Type: object
Flags: -none-
Description: Configure the external web server settings.
```

zone.guest_services.external_auth.web_server.protocol:

```
Type: string
Flags: -none-
Description: Configure the external web server protocol.
```

zone.guest_services.external_auth.web_server.name:

```
Type: string
Flags: -none-
Description: FQDN/host address object name.
```

zone.guest_services.external_auth.web_server.port:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

zone.guest_services.external_auth.web_server.timeout:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

zone.guest_services.external_auth.message_auth:

```
Type: object
Flags: -none-
Description: Enable external message authentication.
```

zone.guest_services.external_auth.message_auth.method:

```
Type: string
Flags: -none-
Description: Set external message authentication method.
```

zone.guest_services.external_auth.message_auth.shared_secret:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.message_auth.confirm_secret:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.social_network:

```
Type: object
Flags: -none-
Description: Enable social network login.
```

zone.guest_services.external_auth.social_network.facebook:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Facebook social network login.
```

zone.guest_services.external_auth.social_network.google:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Google social network login.
```

zone.guest_services.external_auth.social_network.twitter:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Twitter social network login.
```

zone.guest_services.external_auth.auth_pages:

```
Type: object
Flags: -none-
Description: Configure the external authentication pages.
```

zone.guest_services.external_auth.auth_pages.login:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.auth_pages.expiration:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.auth_pages.timeout:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.auth_pages.max_sessions:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.auth_pages.traffic_exceeded:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.web_content:

```
Type: object
Flags: -none-
Description: Configure the Web content messages.
```

zone.guest_services.external_auth.web_content.redirect:

```
Type: object
Flags: -none-
Description: Configure the Web content redirect message.
```

zone.guest_services.external_auth.web_content.redirect.use_default:

```
Type: boolean (true)
Flags: -none-
Description: Use the default Web content redirect message.
```

zone.guest_services.external_auth.web_content.redirect.custom:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.web_content.server_down:

```
Type: object
Flags: -none-
Description: Configure the Web content server down message.
```

zone.guest_services.external_auth.web_content.server_down.use_default:

```
Type: boolean (true)
Flags: -none-
Description: Use the default Web content server down message.
```

zone.guest_services.external_auth.web_content.server_down.custom:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.logout_expired:

```
Type: object
Flags: -none-
Description: Enable auto-session logout.
```

zone.guest_services.external_auth.logout_expired.every:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

zone.guest_services.external_auth.logout_expired.cgi:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.status_check:

```
Type: object
Flags: -none-
Description: Enable server status check.
```

zone.guest_services.external_auth.status_check.every:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

zone.guest_services.external_auth.status_check.cgi:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.external_auth.session_sync:

```
Type: object
Flags: -none-
Description: Enable session synchronization.
```

zone.guest_services.external_auth.session_sync.every:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

zone.guest_services.external_auth.session_sync.cgi:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.policy_page_non_authentication:

```
Type: object
Flags: -none-
Description: Enable policy page without authentication and enter its configuration mode. Set
to null or {} if disabled/unconfigured.
```

zone.guest_services.policy_page_non_authentication.guest_usage_policy:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.custom_auth_page:

```
Type: object
Flags: -none-
Description: Enable custom authentication page and enter its configuration mode. Set to null
or {} if    disabled/unconfigured.
```

zone.guest_services.custom_auth_page.header:

```
Type: object
Flags: -none-
Description: Configure custom page header.
```

zone.guest_services.custom_auth_page.header.text:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.custom_auth_page.header.url:

```
Type: string (web url)
Flags: -none-
Description: URL in the form: http://host/file
```

zone.guest_services.custom_auth_page.footer:

```
Type: object
Flags: -none-
Description: Configure custom login page footer.
```

zone.guest_services.custom_auth_page.footer.text:

```
Type: string
Flags: -none-
Description:
```

zone.guest_services.custom_auth_page.footer.url:

```
Type: string (web url)
Flags: -none-
Description: URL in the form: http://host/file
```

zone.guest_services.post_auth:

```
Type: string (web url)
Flags: -none-
Description: URL in the form: http://host/file
```

zone.guest_services.bypass_guest_auth:

```
Type: object
Flags: -none-
Description: Enable bypass guest authentication. Set to null or {} if disabled/unconfigured.
```

zone.guest_services.bypass_guest_auth.all:

```
Type: boolean (true)
Flags: -none-
Description: All MAC addresses.
```

zone.guest_services.bypass_guest_auth.name:

```
Type: string
Flags: -none-
Description: MAC address object name.
```

zone.guest_services.bypass_guest_auth.group:

```
Type: string
Flags: -none-
Description: MAC group address object name.
```

zone.guest_services.bypass_guest_auth.mac:

```
Type: string (mac)
Flags: -none-
Description: Address object MAC address in the form: HH:HH:HH:HH:HH:HH or HHHHHHHHHHHH or
HH-HH-HH-HH-HH-HH.
```

zone.guest_services.smtp_redirect:

```
   Type: object
   Flags: -none-
   Description: Redirect SMTP traffic to specified server. Set to null or {} if
disabled/unconfigured.
```

zone.guest_services.smtp_redirect.name:

```
   Type: string
   Flags: -none-
   Description: Host address object name.
```

zone.guest_services.smtp_redirect.host:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks:

```
   Type: object
   Flags: -none-
   Description: Enable blocking of traffic to the named network.
```

zone.guest_services.deny_networks.name:

```
   Type: string
   Flags: -none-
   Description: Address object name.
```

zone.guest_services.deny_networks.group:

```
   Type: string
   Flags: -none-
   Description: Group address object name.
```

zone.guest_services.deny_networks.mac:

```
   Type: string (mac)
   Flags: -none-
   Description: Address object MAC address in the form: HH:HH:HH:HH:HH:HH or HHHHHHHHHHHH or
HH-HH-HH-HH-HH-HH.
```

zone.guest_services.deny_networks.fqdn:

```
   Type: string (fqdn)
   Flags: -none-
   Description: FQDN in the form: example.com or *.example.com.
```

zone.guest_services.deny_networks.host:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.range:

```
Type: object
Flags: -none-
Description: Set the denied networks to range of addresses.
```

zone.guest_services.deny_networks.range.begin:

```
Type: string (ip)
Flags: -none-
Description: IPv4 starting range in the form: D.D.D.D. IPv6 starting range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.range.end:

```
Type: string (ip)
Flags: -none-
Description: IPv4 ending range in the form: D.D.D.D. IPv6 ending range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.network:

```
Type: object
Flags: -none-
Description: Set the denied networks to network address.
```

zone.guest_services.deny_networks.network.subnet:

```
Type: string (ip)
Flags: -none-
Description: IPv4 network in the form: D.D.D.D. IPv6 network in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.network.mask:

```
Type: string (subnet)
Flags: -none-
Description: IPv4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D. IPv6 netmask in the
form: /D.
```

zone.guest_services.deny_networks.ipv6:

```
Type: object
Flags: -none-
Description: IPv6 address object.
```

zone.guest_services.deny_networks.ipv6.host:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.ipv6.range:

```
Type: object
Flags: -none-
Description: Set the denied networks to range of addresses.
```

zone.guest_services.deny_networks.ipv6.range.begin:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 starting range in the form: D.D.D.D. IPv6 starting range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.ipv6.range.end:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 ending range in the form: D.D.D.D. IPv6 ending range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.ipv6.network:

```
   Type: object
   Flags: -none-
   Description: Set the denied networks to network address.
```

zone.guest_services.deny_networks.ipv6.network.subnet:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 network in the form: D.D.D.D. IPv6 network in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.deny_networks.ipv6.network.mask:

```
   Type: string (subnet)
   Flags: -none-
   Description: IPv4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D. IPv6 netmask in the
form: /D.
```

zone.guest_services.pass_networks:

```
   Type: object
   Flags: -none-
   Description: Enable allowing of traffic to the named network.
```

zone.guest_services.pass_networks.name:

```
   Type: string
   Flags: -none-
   Description: Address object name.
```

zone.guest_services.pass_networks.group:

```
   Type: string
   Flags: -none-
   Description: Group address object name.
```

zone.guest_services.pass_networks.mac:

```
   Type: string (mac)
   Flags: -none-
   Description: Address object MAC address in the form: HH:HH:HH:HH:HH:HH or HHHHHHHHHHHH or
HH-HH-HH-HH-HH-HH.
```

zone.guest_services.pass_networks.fqdn:

```
Type: string (fqdn)
Flags: -none-
Description: FQDN in the form: example.com or *.example.com.
```

zone.guest_services.pass_networks.host:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.range:

```
Type: object
Flags: -none-
Description: Set the pass networks to range of addresses.
```

zone.guest_services.pass_networks.range.begin:

```
Type: string (ip)
Flags: -none-
Description: IPv4 starting range in the form: D.D.D.D. IPv6 starting range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.range.end:

```
Type: string (ip)
Flags: -none-
Description: IPv4 ending range in the form: D.D.D.D. IPv6 ending range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.network:

```
Type: object
Flags: -none-
Description: Set the pass networks to network address.
```

zone.guest_services.pass_networks.network.subnet:

```
Type: string (ip)
Flags: -none-
Description: IPv4 network in the form: D.D.D.D. IPv6 network in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.network.mask:

```
Type: string (subnet)
Flags: -none-
Description: IPv4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D. IPv6 netmask in the
form: /D.
```

zone.guest_services.pass_networks.ipv6:

```
Type: object
Flags: -none-
Description: IPv6 address object.
```

zone.guest_services.pass_networks.ipv6.host:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 host address in the form: D.D.D.D. IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.ipv6.range:

```
   Type: object
   Flags: -none-
   Description: Set the pass networks to range of addresses.
```

zone.guest_services.pass_networks.ipv6.range.begin:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 starting range in the form: D.D.D.D. IPv6 starting range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.ipv6.range.end:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 ending range in the form: D.D.D.D. IPv6 ending range in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.ipv6.network:

```
   Type: object
   Flags: -none-
   Description: Set the pass networks to network address.
```

zone.guest_services.pass_networks.ipv6.network.subnet:

```
   Type: string (ip)
   Flags: -none-
   Description: IPv4 network in the form: D.D.D.D. IPv6 network in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

zone.guest_services.pass_networks.ipv6.network.mask:

```
   Type: string (subnet)
   Flags: -none-
   Description: IPv4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D. IPv6 netmask in the
form: /D.
```

zone.guest_services.max_guests:

```
   Type: number (uint16)
   Flags: -none-
   Description: Integer in the form: D OR 0xHHHH
```

zone.guest_services.dynamic_address_translation:

```
   Type: boolean (true|false)
   Flags: -none-
   Description: Enable dynamic address translation.
```

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API: DNS

- Endpoint on page 83
- Schema Structure on page 83
  - Object: DNS on page 83
  - Schema Attributes on page 84

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/dns* **Schema:** *collection#dns-config*	Empty	—	Required	—

Schema Structure

Topics:

- Object: DNS on page 83
- Schema Attributes on page 84

Object: DNS

```
{
    "dns": {
        "server": {
            "inherit": {true},
          | "static": {
                "primary": "{string}",
                "secondary": "{string}",
                "tertiary": "{string}"
            }

            "ipv6": {
                "preferred": {boolean},

                "inherit": {true},
              | "static": {
                    "primary": "{string}",
                    "secondary": "{string}",
                    "tertiary": "{string}"
                }
```

```
            }
        },

        "rebinding": {
            "action": "{string}",

            "allowed_domains": {
                "name": "{string}",
              | "group": "{string}"
            }
        },

        "fqdn_binding": {boolean}
    }
}
```

Schema Attributes

Topics:

- dns: on page 84
- dns.server: on page 85
- dns.server.inherit: on page 85
- dns.server.static: on page 85
- dns.server.static.primary: on page 85
- dns.server.static.secondary: on page 85
- dns.server.static.tertiary: on page 85
- dns.server.ipv6: on page 85
- dns.server.ipv6.preferred: on page 85
- dns.server.ipv6.inherit: on page 85
- dns.server.ipv6.static: on page 86
- dns.server.ipv6.static.primary: on page 86
- dns.server.ipv6.static.secondary: on page 86
- dns.server.ipv6.static.tertiary: on page 86
- dns.rebinding: on page 86
- dns.rebinding.action: on page 86
- dns.rebinding.allowed_domains: on page 86
- dns.rebinding.allowed_domains.name: on page 87
- dns.rebinding.allowed_domains.group: on page 87
- dns.fqdn_binding: on page 87

dns:

```
Type: object
Flags: -none-
Description: DNS configuration.
```

dns.server:

```
Type: object
Flags: -none-
Description: DNS server configuration.
```

dns.server.inherit:

```
Type: boolean (true)
Flags: -none-
Description: Inherit DNS servers.
```

dns.server.static:

```
Type: object
Flags: -none-
Description: Set static DNS server
```

dns.server.static.primary:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D
```

dns.server.static.secondary:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D
```

dns.server.static.tertiary:

```
Type: string (ip)
Flags: -none-
Description: IPv4 host address in the form: D.D.D.D
```

dns.server.ipv6:

```
Type: object
Flags: -none-
Description: Set IPv6 DNS server
```

dns.server.ipv6.preferred:

```
Type: boolean
Flags: -none-
Description: Prefer IPv6 DNS servers.
```

dns.server.ipv6.inherit:

```
Type: boolean (true)
Flags: -none-
Description: Inherit DNS servers.
```

dns.server.ipv6.static:

```
Type: object
Flags: -none-
Description: Set static DNS server
```

dns.server.ipv6.static.primary:

```
Type: string (ip)
Flags: -none-
Description: IIPv6 host address in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

dns.server.ipv6.static.secondary:

```
Type: string (ip)
Flags: -none-
Description: IPv6 host address in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

dns.server.ipv6.static.tertiary:

```
Type: string (ip)
Flags: -none-
Description: IPv6 host address in the form: HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH
```

dns.rebinding:

```
Type: object
Flags: -none-
Description: Enable and configure DNS rebinding attack prevention. Set to null or {} if
disabled/unconfigured.
```

Disabling rebinding example:

```
{
    "dns": {
        "rebinding": {
        }
    }
}
```

dns.rebinding.action:

```
Type: string
Flags: -none-
Description: Set action when experiencing attack. Must be one of the following values:
log-attack-only | return-query-refused | drop-dns-reply
```

dns.rebinding.allowed_domains:

```
Type: object
Flags: -none-
Description: Specify the domains for which checking is not done. Set to null or {} if
disabled/unconfigured.
```

Disabling allowed_domains example:

```
{
    "dns": {
        "rebinding": {
```

```
            "allowed_domains": {
            }
        }
    }
}
```

dns.rebinding.allowed_domains.name:

```
Type: string
Flags: -none-
Description: FQDN address object name.
```

dns.rebinding.allowed_domains.group:

```
Type: string
Flags: -none-
Description: Custom FQDN group address object name.
```

dns.fqdn_binding:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable FQDN object only cache DNS reply from sanctioned server.
```

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API: Interfaces – IPv4

- Endpoint on page 88
- Schema Structure on page 88
  - Object: Interface – IPv4 on page 88
  - Collection: Interface – IPv4 on page 90
  - Schema Attributes on page 90

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/interfaces/ipv4* **Schema:** *collection#interface-ipv4-config*	Empty	—	Required	—
URI: */api/sonicos/interfaces/ipv4* **Schema:** *collection#interface-ipv4-config*	Empty	—	Required	—

Schema Structure

Topics:

- Object: Interface – IPv4 on page 88
- Collection: Interface – IPv4 on page 90
- Schema Attributes on page 90

Object: Interface – IPv4

```
{
    "interface": {
        "ipv4": {
            "name": "{string}",
            "comment": "{string}",

            "ip_assignment": {
                "zone": "{string}",

                "mode": {
                    "static": {
                        "ip": "{string}",
                        "netmask": "{string}",
```

```
            "gateway": "{string}",

            "dns": {
                "primary": "{string}",
                "secondary": "{string}",
                "tertiary": "{string}"
            },

            "backup_ip": "{string}"
        },

      | "dhcp": {
            "hostname": "{string}",
            "renew_on_startup": {boolean},
            "renew_on_link_up": {boolean},
            "initiate_renewals_with_discover": {boolean},
            "force_discover_interval": {number}
        }
    }
},

"mtu": {number},

"mac": {
    "default": {true},
  | "override": "{string}"
},

"link_speed": {
    "auto_negotiate": {true},
  | "half": "{string}",
  | "full": "{string}"
},

"management": {
    "http": {boolean},
    "https": {boolean},
    "ping": {boolean},
    "snmp": {boolean},
    "ssh": {boolean}
},

"user_login": {
    "http": {boolean},
    "https": {boolean}
},

"https_redirect": {boolean},
"send_icmp_fragmentation": {boolean},
"fragment_packets": {boolean},
"ignore_df_bit": {boolean},
"flow_reporting": {boolean},
"multicast": {boolean},
"cos_8021p": {boolean},
"exclude_route": {boolean},
"asymmetric_route": {boolean},
"shutdown_port": {boolean},
"default_8021p_cos": "{string}",
"policy": "{string}",

"sonicpoint": {
    "limit": {number},

    "reserve_address": {
        "dynamic": {true},
      | "manual": "{string}"
    }
```

```
            }
        }
    }
}
```

Collection: Interface – IPv4

```
{
    "interfaces": [
        object#interface-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- interface: on page 91
- interfaces: on page 92
- interface.ipv4: on page 92
- interface.ipv4.name: on page 92
- interface.ipv4.comment: on page 92
- interface.ipv4.ip_assignment: on page 92
- interface.ipv4.ip_assignment.zone: on page 92
- interface.ipv4.ip_assignment.mode: on page 92
- interface.ipv4.ip_assignment.mode.static: on page 92
- interface.ipv4.ip_assignment.mode.static.ip: on page 92
- interface.ipv4.ip_assignment.mode.static.netmask: on page 93
- interface.ipv4.ip_assignment.mode.static.gateway: on page 93
- interface.ipv4.ip_assignment.mode.static.dns: on page 93
- interface.ipv4.ip_assignment.mode.static.dns.primary: on page 93
- interface.ipv4.ip_assignment.mode.static.dns.secondary: on page 93
- interface.ipv4.ip_assignment.mode.static.dns.tertiary: on page 93
- interface.ipv4.ip_assignment.mode.static.backup_ip: on page 93
- interface.ipv4.ip_assignment.mode.dhcp: on page 93
- interface.ipv4.ip_assignment.mode.dhcp.hostname: on page 93
- interface.ipv4.ip_assignment.mode.dhcp.renew_on_startup: on page 94
- interface.ipv4.ip_assignment.mode.dhcp.renew_on_link_up: on page 94
- interface.ipv4.ip_assignment.mode.dhcp.initiate_renewals_with_discover: on page 94
- interface.ipv4.ip_assignment.mode.dhcp.force_discover_interval: on page 94
- interface.ipv4.mtu: on page 94
- interface.ipv4.mac: on page 94

- interface.ipv4.mac.default: on page 94
- interface.ipv4.mac.override: on page 94
- interface.ipv4.link_speed: on page 94
- interface.ipv4.link_speed.auto_negotiate: on page 95
- interface.ipv4.link_speed.half: on page 95
- interface.ipv4.link_speed.full: on page 95
- interface.ipv4.management: on page 95
- interface.ipv4.management.http: on page 95
- interface.ipv4.management.https: on page 95
- interface.ipv4.management.ping: on page 95
- interface.ipv4.management.snmp: on page 95
- interface.ipv4.management.ssh: on page 95
- interface.ipv4.user_login: on page 96
- interface.ipv4.user_login.http: on page 96
- interface.ipv4.user_login.https: on page 96
- interface.ipv4.https_redirect: on page 96
- interface.ipv4.send_icmp_fragmentation: on page 96
- interface.ipv4.fragment_packets: on page 96
- interface.ipv4.ignore_df_bit: on page 96
- interface.ipv4.flow_reporting: on page 96
- interface.ipv4.multicast: on page 96
- interface.ipv4.cos_8021p: on page 97
- interface.ipv4.exclude_route: on page 97
- interface.ipv4.asymmetric_route: on page 97
- interface.ipv4.shutdown_port: on page 97
- interface.ipv4.default_8021p_cos: on page 97
- interface.ipv4.policy: on page 97
- interface.ipv4.sonicpoint: on page 97
- interface.ipv4.sonicpoint.limit: on page 97
- interface.ipv4.sonicpoint.reserve_address: on page 97
- interface.ipv4.sonicpoint.reserve_address.dynamic: on page 98
- interface.ipv4.sonicpoint.reserve_address.manual: on page 98

interface:

```
Type: object
Flags: -none-
Description: Interface.
```

interfaces:

```
Type: array
Flags: -none-
Description: Interface collection.
```

interface.ipv4:

```
Type: object
Flags: -none-
Description: IP version IPV4.
```

interface.ipv4.name:

```
Type: string
Flags: key
Description: Interface name.
```

interface.ipv4.comment:

```
Type: string
Flags: -none-
Description:
```

interface.ipv4.ip_assignment:

```
Type: object
Flags: -none-
Description: Set interface zone and IP assignment. Set to null or {} if
disabled/unconfigured.
```

interface.ipv4.ip_assignment.zone:

```
Type: string
Flags: -none-
Description: Zone object name.
```

interface.ipv4.ip_assignment.mode:

```
Type: object
Flags: -none-
Description: Interface IP assignment mode.
```

interface.ipv4.ip_assignment.mode.static:

```
Type: object
Flags: -none-
Description: Static IP address assignment.
```

interface.ipv4.ip_assignment.mode.static.ip:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.static.netmask:

```
Type: string (v4 subnet)
Flags: -none-
Description: IPV4 netmask in decimal dotted or CIDR form: D.D.D.D OR /D
```

interface.ipv4.ip_assignment.mode.static.gateway:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.static.dns:

```
Type: object
Flags: -none-
Description: Set the DNS server IP address.
```

interface.ipv4.ip_assignment.mode.static.dns.primary:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.static.dns.secondary:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.static.dns.tertiary:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.static.backup_ip:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

interface.ipv4.ip_assignment.mode.dhcp:

```
Type: object
Flags: -none-
Description: IP address obtained by DHCP.
```

interface.ipv4.ip_assignment.mode.dhcp.hostname:

```
Type: string
Flags: -none-
Description:
```

interface.ipv4.ip_assignment.mode.dhcp.renew_on_startup:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable request renew of previous IP on startup.
```

interface.ipv4.ip_assignment.mode.dhcp.renew_on_link_up:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable renew DHCP lease on any link up occurrence.
```

interface.ipv4.ip_assignment.mode.dhcp.initiate_renewals_with_discover:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable initiate renewals with a discover when using DHCP.
```

interface.ipv4.ip_assignment.mode.dhcp.force_discover_interval:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

interface.ipv4.mtu:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

interface.ipv4.mac:

```
Type: object
Flags: -none-
Description: Set MAC address used for this interface.
```

interface.ipv4.mac.default:

```
Type: boolean (true)
Flags: -none-
Description: Factory configured MAC.
```

interface.ipv4.mac.override:

```
Type: string (mac)
Flags: -none-
Description: MAC address in the form: HH:HH:HH:HH:HH:HH OR HHHHHHHHHHHH
```

interface.ipv4.link_speed:

```
Type: object
Flags: -none-
Description: Set interface link speed.
```

interface.ipv4.link_speed.auto_negotiate:

```
Type: boolean (true)
Flags: -none-
Description: Set interface link speed to auto-negotiate.
```

interface.ipv4.link_speed.half:

```
Type: string
Flags: -none-
Description: Half duplex.
```

interface.ipv4.link_speed.full:

```
Type: string
Flags: -none-
Description: Full duplex.
```

interface.ipv4.management:

```
Type: object
Flags: -none-
Description: Enable management for the specified protocols.
```

interface.ipv4.management.http:

```
Type: boolean (true|false)
Flags: -none-
Description: HTTP.
```

interface.ipv4.management.https:

```
Type: boolean (true|false)
Flags: -none-
Description: HTTPS.
```

interface.ipv4.management.ping:

```
Type: boolean (true|false)
Flags: -none-
Description: Ping.
```

interface.ipv4.management.snmp:

```
Type: boolean (true|false)
Flags: -none-
Description: SNMP.
```

interface.ipv4.management.ssh:

```
Type: boolean (true|false)
Flags: -none-
Description: SSH.
```

interface.ipv4.user_login:

```
Type: object
Flags: -none-
Description: Enable user login for the specified protocols.
```

interface.ipv4.user_login.http:

```
Type: boolean (true|false)
Flags: -none-
Description: HTTP.
```

interface.ipv4.user_login.https:

```
Type: boolean (true|false)
Flags: -none-
Description: HTTPS.
```

interface.ipv4.https_redirect:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable redirection from HTTP to HTTPS.
```

interface.ipv4.send_icmp_fragmentation:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable ICMP fragmentation needed message generation.
```

interface.ipv4.fragment_packets:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable fragment non-VPN outbound packets larger than this interface's MTU.
```

interface.ipv4.ignore_df_bit:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable ignore don't fragment (DF) bit.
```

interface.ipv4.flow_reporting:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable flow reporting on the interface.
```

interface.ipv4.multicast:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable multicast support.
```

interface.ipv4.cos_8021p:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable 802.1p support.
```

interface.ipv4.exclude_route:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable exclude from route advertisement (NSM, OSPF, BGP, RIP).
```

interface.ipv4.asymmetric_route:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable asymmetric route.
```

interface.ipv4.shutdown_port:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable shutdown port.
```

interface.ipv4.default_8021p_cos:

```
Type: string
Flags: -none-
Description: Enable default 802.1p CoS.
```

interface.ipv4.policy:

```
Type: string
Flags: -none-
Description: Tunnel interface VPN policy name.
```

interface.ipv4.sonicpoint:

```
Type: object
Flags: -none-
Description: Set SonicPoint parameter.
```

interface.ipv4.sonicpoint.limit:

```
Type: number (uint32)
Flags: -none-
Description: SonicPoint limit per interface.
```

interface.ipv4.sonicpoint.reserve_address:

```
Type: object
Flags: -none-
Description: Set dynamically or manually reserve SonicPoint address.
```

interface.ipv4.sonicpoint.reserve_address.dynamic:

```
Type: boolean (true)
Flags: -none-
Description: Dynamically reserve SonicPoint address.
```

interface.ipv4.sonicpoint.reserve_address.manual:

```
Type: string (v4 ip)
Flags: -none-
Description: IPV4 Address in the form: a.b.c.d
```

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API: NAT Policies – IPv4

- Endpoint on page 99
- Schema Structure on page 99
  - Object: NAT Policies – IPv4 on page 99
  - Collection: NAT Policies – IPv4 on page 101
  - Schema Attributes on page 101

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/nat-policies/ipv4* **Schema:** *collection#nat-policies-ipv4-config*	Empty	Required	Required	Required
URI: */api/sonicos/nat-policies/ipv4* **Schema:** *collection#nat-policies-ipv4-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: NAT Policies – IPv4 on page 99
- Collection: NAT Policies – IPv4 on page 101
- Schema Attributes on page 101

Object: NAT Policies – IPv4

```
{
    "nat_policy": {
        "ipv4": {
            "inbound": "{string}",
            "outbound": "{string}",

            "source": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_source": {
```

```
            "original": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "destination": {
            "any": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "translated_destination": {
            "original": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "service": {
            "any": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "translated_service": {
            "original": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "uuid": "{string}",
        "name": "{string}",
        "enable": {boolean},
        "comment": "{string}",

        "priority": {
            "auto": {true},
          | "manual": {number}
        },

        "reflexive": {boolean},

        "virtual_group": {
            "any": {true},
          | "id": {number}
        },

        "nat_method": "{string}",
        "source_port_remap": {boolean},

        "high_availability": {
            "probing": {
                "probe_every": {number},

                "probe_type": {
                    "icmp_ping": {true},
                  | "tcp": {number}
                },

                "reply_timeout": {number},
                "deactivate_after": {number},
                "reactivate_after": {number},
                "rst_as_miss": {boolean},
                "port_probing": {boolean}
            }
        }
    }
```

```
    }
}
```

Collection: NAT Policies – IPv4

```
{
    "nat_policies": [
        object#nat-policy-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- nat_policy: on page 102
- nat_policies: on page 102
- nat_policy.ipv4: on page 103
- nat_policy.ipv4.inbound: on page 103
- nat_policy.ipv4.outbound: on page 103
- nat_policy.ipv4.source: on page 103
- nat_policy.ipv4.source.any: on page 103
- nat_policy.ipv4.source.name: on page 103
- nat_policy.ipv4.source.group: on page 103
- nat_policy.ipv4.translated_source: on page 103
- nat_policy.ipv4.translated_source.original: on page 103
- nat_policy.ipv4.translated_source.name: on page 104
- nat_policy.ipv4.translated_source.group: on page 104
- nat_policy.ipv4.destination: on page 104
- nat_policy.ipv4.destination.any: on page 104
- nat_policy.ipv4.destination.name: on page 104
- nat_policy.ipv4.destination.group: on page 104
- nat_policy.ipv4.translated_destination: on page 104
- nat_policy.ipv4.translated_destination.original: on page 104
- nat_policy.ipv4.translated_destination.name: on page 104
- nat_policy.ipv4.translated_destination.group: on page 105
- nat_policy.ipv4.service: on page 105
- nat_policy.ipv4.service.any: on page 105
- nat_policy.ipv4.service.name: on page 105
- nat_policy.ipv4.service.group: on page 105
- nat_policy.ipv4.translated_service: on page 105

- nat_policy.ipv4.translated_service.original: on page 105
- nat_policy.ipv4.translated_service.name: on page 105
- nat_policy.ipv4.translated_service.group: on page 105
- nat_policy.ipv4.uuid: on page 106
- nat_policy.ipv4.name: on page 106
- nat_policy.ipv4.enable: on page 106
- nat_policy.ipv4.comment: on page 106
- nat_policy.ipv4.priority: on page 106
- nat_policy.ipv4.priority.auto: on page 106
- nat_policy.ipv4.priority.manual: on page 106
- nat_policy.ipv4.reflexive: on page 106
- nat_policy.ipv4.virtual_group: on page 106
- nat_policy.ipv4.virtual_group.any: on page 107
- nat_policy.ipv4.virtual_group.id: on page 107
- nat_policy.ipv4.nat_method: on page 107
- nat_policy.ipv4.source_port_remap: on page 107
- nat_policy.ipv4.high_availability: on page 107
- nat_policy.ipv4.high_availability.probing: on page 107
- nat_policy.ipv4.high_availability.probing.probe_every: on page 107
- nat_policy.ipv4.high_availability.probing.probe_type: on page 107
- nat_policy.ipv4.high_availability.probing.probe_type.icmp_ping: on page 107
- nat_policy.ipv4.high_availability.probing.probe_type.tcp: on page 108
- nat_policy.ipv4.high_availability.probing.reply_timeout: on page 108
- nat_policy.ipv4.high_availability.probing.deactivate_after: on page 108
- nat_policy.ipv4.high_availability.probing.reactivate_after: on page 108
- nat_policy.ipv4.high_availability.probing.port_probing: on page 108
- nat_policy.ipv4.high_availability.probing.rst_as_miss: on page 108

nat_policy:

```
Type: object
Flags: -none-
Description: NAT policy.
```

nat_policies:

```
Type: array
Flags: -none-
Description: NAT policy collection.
```

nat_policy.ipv4:

```
Type: object
Flags: -none-
Description: IPv4 NAT policy.
```

nat_policy.ipv4.inbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.ipv4.outbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.ipv4.source:

```
Type: object
Flags: key
Description: Specify the original source for the NAT policy.
```

nat_policy.ipv4.source.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.ipv4.source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv4.source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv4.translated_source:

```
Type: object
Flags: key
Description: Specify the translated source for the NAT policy.
```

nat_policy.ipv4.translated_source.original:

```
Type: boolean (true)
Flags: key
Description: Original source IP.
```

nat_policy.ipv4.translated_source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv4.translated_source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv4.destination:

```
Type: object
Flags: key
Description: Specify the original destination for the NAT policy.
```

nat_policy.ipv4.destination.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.ipv4.destination.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv4.destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv4.translated_destination:

```
Type: object
Flags: key
Description: Specify the translated destination for the NAT policy.
```

nat_policy.ipv4.translated_destination.original:

```
Type: boolean (true)
Flags: key
Description: Original destination IP.
```

nat_policy.ipv4.translated_destination.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv4.translated_destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv4.service:

```
Type: object
Flags: key
Description: Specify the original service for the NAT policy.
```

nat_policy.ipv4.service.any:

```
Type: boolean (true)
Flags: key
Description: Any service.
```

nat_policy.ipv4.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

nat_policy.ipv4.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

nat_policy.ipv4.translated_service:

```
Type: object
Flags: key
Description: Specify the translated service for the NAT policy.
```

nat_policy.ipv4.translated_service.original:

```
Type: boolean (true)
Flags: key
Description: Original service.
```

nat_policy.ipv4.translated_service.name:

```
Type: string
Flags: key
Description: Service object name.
```

nat_policy.ipv4.translated_service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

nat_policy.ipv4.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

nat_policy.ipv4.name:

```
Type: string
Flags: required
Description: Name.
```

nat_policy.ipv4.enable:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable NAT policy.
```

nat_policy.ipv4.comment:

```
Type: string
Flags: -none-
Description:
```

nat_policy.ipv4.priority:

```
Type: object
Flags: -none-
Description: Set NAT policy priority
```

nat_policy.ipv4.priority.auto:

```
Type: boolean (true)
Flags: -none-
Description: Set auto priority(priority = 0) for NAT policy.
```

nat_policy.ipv4.priority.manual:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

nat_policy.ipv4.reflexive:

```
Type: boolean (true|false)
Flags: -none-
Description: Configure a reflexive rule.
```

nat_policy.ipv4.virtual_group:

```
Type: object
Flags: -none-
Description: Specify virtual group for the NAT policy.
```

nat_policy.ipv4.virtual_group.any:

```
Type: boolean (true)
Flags: -none-
Description: Any virtual group.
```

nat_policy.ipv4.virtual_group.id:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

nat_policy.ipv4.nat_method:

```
Type: string
Flags: -none-
Description: Set the NAT destination translation method.
```

nat_policy.ipv4.source_port_remap:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable source port remap.
```

nat_policy.ipv4.high_availability:

```
Type: object
Flags: -none-
Description: NAT high availability and load balancing configuration mode.
```

nat_policy.ipv4.high_availability.probing:

```
Type: object
Flags: -none-
Description: Enable HA probing and enter configuration mode.
```

nat_policy.ipv4.high_availability.probing.probe_every:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

nat_policy.ipv4.high_availability.probing.probe_type:

```
Type: object
Flags: -none-
Description: Set probe IP type.
```

nat_policy.ipv4.high_availability.probing.probe_type.icmp_ping:

```
Type: boolean (true)
Flags: -none-
Description: ICMP ping probe.
```

nat_policy.ipv4.high_availability.probing.probe_type.tcp:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

nat_policy.ipv4.high_availability.probing.reply_timeout:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

nat_policy.ipv4.high_availability.probing.deactivate_after:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

nat_policy.ipv4.high_availability.probing.reactivate_after:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

nat_policy.ipv4.high_availability.probing.rst_as_miss:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable count RST response as miss.
```

nat_policy.ipv4.high_availability.probing.port_probing:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable port probing.
```

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API: NAT Policies – IPv6

- Endpoint on page 109
- Schema Structure on page 109
  - Object: NAT Policies – IPv6 on page 109
  - Schema Attributes on page 110

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/nat-policies/ipv6* **Schema:** *collection#nat-policies-ipv6-config*	Empty	Required	Required	Required
URI: */api/sonicos/nat-policies/ipv6* **Schema:** *collection#nat-policies-ipv6-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: NAT Policies – IPv6 on page 109
- Schema Attributes on page 110

Object: NAT Policies – IPv6

```
{
    "nat_policy": {
        "ipv6": {
            "inbound": "{string}",
            "outbound": "{string}",

            "source": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_source": {
                "original": {true},
              | "name": "{string}",
              | "group": "{string}"
```

```
            },

            "destination": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_destination": {
                "original": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "service": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_service": {
                "original": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "uuid": "{string}",
            "name": "{string}",
            "enable": {boolean},
            "comment": "{string}",

            "priority": {
                "auto": {true},
              | "manual": {number}
            },

            "reflexive": {boolean},

            "virtual_group": {
                "any": {true},
              | "id": {number}
            }
        }
    }
}
```

Schema Attributes

Topics:

- nat_policy: on page 111
- nat_policies: on page 112
- nat_policy.ipv6: on page 112
- nat_policy.ipv6.inbound: on page 112
- nat_policy.ipv6.outbound: on page 112
- nat_policy.ipv6.source: on page 112
- nat_policy.ipv6.source.any: on page 112
- nat_policy.ipv6.source.name: on page 112

- nat_policy.ipv6.source.group: on page 112
- nat_policy.ipv6.translated_source: on page 112
- nat_policy.ipv6.translated_source.original: on page 113
- nat_policy.ipv6.translated_source.name: on page 113
- nat_policy.ipv6.translated_source.group: on page 113
- nat_policy.ipv6.destination: on page 113
- nat_policy.ipv6.destination.any: on page 113
- nat_policy.ipv6.destination.name: on page 113
- nat_policy.ipv6.destination.group: on page 113
- nat_policy.ipv6.translated_destination: on page 113
- nat_policy.ipv6.translated_destination.original: on page 113
- nat_policy.ipv6.translated_destination.name: on page 114
- nat_policy.ipv6.translated_destination.group: on page 114
- nat_policy.ipv6.service.any: on page 114
- nat_policy.ipv6.service.name: on page 114
- nat_policy.ipv6.service.group: on page 114
- nat_policy.ipv6.translated_service: on page 114
- nat_policy.ipv6.translated_service.original: on page 114
- nat_policy.ipv6.translated_service.name: on page 114
- nat_policy.ipv6.translated_service.group: on page 114
- nat_policy.ipv6.uuid: on page 115
- nat_policy.ipv6.name: on page 115
- nat_policy.ipv6.enable: on page 115
- nat_policy.ipv6.comment: on page 115
- nat_policy.ipv6.comment: on page 115
- nat_policy.ipv6.priority: on page 115
- nat_policy.ipv6.priority.auto: on page 115
- nat_policy.ipv6.priority.manual: on page 115
- nat_policy.ipv6.reflexive: on page 115
- nat_policy.ipv6.reflexive: on page 115
- nat_policy.ipv6.virtual_group: on page 115
- nat_policy.ipv6.virtual_group.any: on page 116
- nat_policy.ipv6.virtual_group.id: on page 116

nat_policy:

```
Type: object
Flags: -none-
Description: NAT policy.
```

nat_policies:

```
Type: object
Flags: -none-
Description: NAT policy collection.
```

nat_policy.ipv6:

```
Type: object
Flags: key
Description: IPv6 NAT policy.
```

nat_policy.ipv6.inbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.ipv6.outbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.ipv6.source:

```
Type: object
Flags: key
Description: Specify the original source for the NAT policy.
```

nat_policy.ipv6.source.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.ipv6.source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv6.source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv6.translated_source:

```
Type: object
Flags: key
Description: Specify the translated source for the NAT policy.
```

nat_policy.ipv6.translated_source.original:

```
Type: boolean (true)
Flags: key
Description: Original source IP.
```

nat_policy.ipv6.translated_source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv6.translated_source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv6.destination:

```
Type: object
Flags: key
Description: Specify the original destination for the NAT policy.
```

nat_policy.ipv6.destination.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.ipv6.destination.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv6.destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv6.translated_destination:

```
Type: object
Flags: key
Description: Specify the translated destination for the NAT policy.
```

nat_policy.ipv6.translated_destination.original:

```
Type: boolean (true)
Flags: key
Description: Original destination IP.
```

nat_policy.ipv6.translated_destination.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.ipv6.translated_destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.ipv6.service:

```
Type: object
Flags: key
Description: Specify the original service for the NAT policy.
```

nat_policy.ipv6.service.any:

```
Type: boolean (true)
Flags: key
Description: Any service.
```

nat_policy.ipv6.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

nat_policy.ipv6.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

nat_policy.ipv6.translated_service:

```
Type: object
Flags: key
Description: Specify the translated service for the NAT policy.
```

nat_policy.ipv6.translated_service.original:

```
Type: boolean (true)
Flags: key
Description: Original service.
```

nat_policy.ipv6.translated_service.name:

```
Type: string
Flags: key
Description: Service object name.
```

nat_policy.ipv6.translated_service.group:

```
Type: string
Flags: key
```

```
Description: Service object group name.
```

nat_policy.ipv6.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

nat_policy.ipv6.name:

```
Type: string
Flags: required
Description: Name.
```

nat_policy.ipv6.enable:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable NAT policy.
```

nat_policy.ipv6.comment:

```
Type: string
Flags: -none-
Description: Policy comment.
```

nat_policy.ipv6.priority:

```
Type: object
Flags: -none-
Description: Set NAT policy priority.
```

nat_policy.ipv6.priority.auto:

```
Type: boolean (true)
Flags: -none-
Description: Set auto priority(priority = 0) for NAT policy.
```

nat_policy.ipv6.priority.manual:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

nat_policy.ipv6.reflexive:

```
Type: boolean (true|false)
Flags: -none-
Description: Configure a reflexive rule.
```

nat_policy.ipv6.virtual_group:

```
Type: object
Flags: -none-
Description: Specify virtual group for the NAT policy.
```

nat_policy.ipv6.virtual_group.any:

```
Type: boolean (true)
Flags: -none-
Description: Any virtual group.
```

nat_policy.ipv6.virtual_group.id:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

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API: NAT Policies – NAT64

- Endpoint on page 117
- Schema Structure on page 117
  - Object: NAT Policies – NAT64 on page 117
  - Collection: NAT Policies – NAT64 on page 118
  - Schema Attributes on page 118

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/nat-policies/nat64* **Schema:** *collection#nat-policy-nat64-config*	Empty	Required	Required	Required
URI: */api/sonicos/nat-policies/nat64* **Schema:** *collection#nat-policy-nat64-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: NAT Policies – NAT64 on page 117
- Collection: NAT Policies – NAT64 on page 118
- Schema Attributes on page 118

Object: NAT Policies – NAT64

```
{
    "nat_policy": {
        "nat64": {
            "inbound": "{string}",
            "outbound": "{string}",

            "source": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_source": {
```

```
                "original": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "pref64": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "translated_destination": {
                "embedded_ipv4_address": {true}
            },

            "service": {
                "icmp_udp_tcp": {true}
            },

            "translated_service": {
                "original": {true}
            },

            "uuid": "{string}",
            "name": "{string}",
            "enable": {boolean},
            "comment": "{string}"
        }
    }
}
```

Collection: NAT Policies – NAT64

```
{
    "nat_policies": [
        object#nat-policy-nat64-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- nat_policy: on page 119
- nat_policies: on page 119
- nat_policy.nat64: on page 119
- nat_policy.nat64.inbound: on page 119
- nat_policy.nat64.outbound: on page 119
- nat_policy.nat64.source: on page 120
- nat_policy.nat64.source.any: on page 120
- nat_policy.nat64.source.name: on page 120
- nat_policy.nat64.source.group: on page 120
- nat_policy.nat64.translated_source: on page 120

- nat_policy.nat64.translated_source.original: on page 120
- nat_policy.nat64.translated_source.name: on page 120
- nat_policy.nat64.translated_source.group: on page 120
- nat_policy.nat64.pref64: on page 120
- nat_policy.nat64.pref64.any: on page 121
- nat_policy.nat64.pref64.name: on page 121
- nat_policy.nat64.pref64.group: on page 121
- nat_policy.nat64.translated_destination: on page 121
- nat_policy.nat64.translated_destination.embedded_ipv4_address: on page 121
- nat_policy.nat64.service: on page 121
- nat_policy.nat64.service.icmp_udp_tcp: on page 121
- nat_policy.nat64.service.icmp_udp_tcp: on page 121
- nat_policy.nat64.translated_service: on page 121
- nat_policy.nat64.translated_service.original: on page 121
- nat_policy.nat64.uuid: on page 122
- nat_policy.nat64.name: on page 122
- nat_policy.nat64.enable: on page 122
- nat_policy.nat64.comment: on page 122

nat_policy:

```
Type: object
Flags: -none-
Description: NAT policy.
```

nat_policies:

```
Type: object
Flags: -none-
Description: NAT policy collection.
```

nat_policy.nat64:

```
Type: object
Flags: key
Description: NAT64 NAT policy.
```

nat_policy.nat64.inbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.nat64.outbound:

```
Type: string
Flags: key
Description: Interface name.
```

nat_policy.nat64.source:

```
Type: object
Flags: key
Description: Specify the original source for the NAT64 policy.
```

nat_policy.nat64.source.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.nat64.source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.nat64.source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.nat64.translated_source:

```
Type: object
Flags: key
Description: Specify the translated source for the NAT64 policy.
```

nat_policy.nat64.translated_source.original:

```
Type: boolean (true)
Flags: key
Description: Original source IP.
```

nat_policy.nat64.translated_source.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.nat64.translated_source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.nat64.pref64:

```
Type: object
Flags: key
Description: Specify the prefix for the NAT64 policy.
```

nat_policy.nat64.pref64.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

nat_policy.nat64.pref64.name:

```
Type: string
Flags: key
Description: Address object name.
```

nat_policy.nat64.pref64.group:

```
Type: string
Flags: key
Description: Group address object name.
```

nat_policy.nat64.translated_destination:

```
Type: object
Flags: key
Description: Specify the translated destination for the NAT policy.
```

nat_policy.nat64.translated_destination.embedded_ipv4_address:

```
Type: boolean (true)
Flags: key
Description: Embedded ipv4 address.
```

nat_policy.nat64.service:

```
Type: object
Flags: key
Description: Specify the original service for the NAT policy.
```

nat_policy.nat64.service.icmp_udp_tcp:

```
Type: boolean (true)
Flags: key
Description: ICMP UDP TCP service.
```

nat_policy.nat64.translated_service:

```
Type: object
Flags: key
Description: Specify the translated service for the NAT policy.
```

nat_policy.nat64.translated_service.original:

```
Type: boolean (true)
Flags: key
Description: Original service.
```

nat_policy.nat64.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

nat_policy.nat64.name:

```
Type: string
Flags: required
Description: Name.
```

nat_policy.nat64.enable:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable NAT policy.
```

nat_policy.nat64.comment:

```
Type: string
Flags: -none-
Description:
```

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API: Access Rules – IPv4

- Endpoint on page 123
- Schema Structure on page 123
  - Object: Access Rules – IPv4 on page 123
  - Collection: Access Rules – IPv4 on page 125
  - Schema Attributes on page 125

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/access-rules/ipv4* **Schema:** *collection#access-rule-ipv4-config*	Empty	Required	Required	Required
URI: */api/sonicos/access-rules/ipv4/uuid/{UUID}* **Schema:** *collection#access-rule-ipv4-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Access Rules – IPv4 on page 123
- Collection: Access Rules – IPv4 on page 125
- Schema Attributes on page 125

Object: Access Rules – IPv4

```
{
    "access_rule": {
        "ipv4": {
            "from": "{string}",
            "to": "{string}",
            "action": "{string}",

            "source": {
                "address": {
                    "any": {true},
                  | "name": "{string}",
                  | "group": "{string}"
                },
```

```
    "port": {
        "any": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"service": {
    "any": {true},
  | "name": "{string}",
  | "group": "{string}"
},

"destination": {
    "address": {
        "any": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"schedule": {
    "always_on": {true},
  | "name": "{string}"
},

"users": {
    "included": {
        "all": {true},
      | "guests": {true},
      | "administrator": {true},
      | "name": "{string}",
      | "group": "{string}"
    },

    "excluded": {
        "none": {true},
      | "guests": {true},
      | "administrator": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"uuid": "{string}",
"name": "{string}",
"comment": "{string}",
"enable": {boolean},
"reflexive": {boolean},
"max_connections": {number},
"logging": {boolean},
"management": {boolean},
"packet_monitoring": {boolean},

"priority": {
    "auto": {true},
  | "manual": {number}
},

"tcp": {
    "timeout": {number}
},

"udp": {
    "timeout": {number}
},
```

```
            "fragments": {boolean},
            "botnet_filter": {boolean},

            "connection_limit": {
                "destination": {
                    "threshold": {number}
                },

                "source": {
                    "threshold": {number}
                }
            },

            "flow_reporting": {boolean},
            "geo_ip_filter": {boolean},
            "single_sign_on": {boolean},
            "cos_override": {boolean},

            "quality_of_service": {
                "class_of_service": {
                    "explicit": "{string}",
                  | "map": {true},
                  | "preserve": {true}
                },

                "dscp": {
                    "explicit": {number},
                  | "map": {true},
                  | "preserve": {true}
                }
            }
        }
    }
}
```

Collection: Access Rules – IPv4

```
{
    "access_rules": [
        object#access_rule-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- access_rule: on page 127
- access_rules: on page 128
- access_rule.ipv4: on page 128
- access_rule.ipv4.from: on page 128
- access_rule.ipv4.to: on page 128
- access_rule.ipv4.action: on page 128
- access_rule.ipv4.source: on page 128
- access_rule.ipv4.source.address: on page 128

- access_rule.ipv4.source.address.any: on page 128
- access_rule.ipv4.source.address.name: on page 128
- access_rule.ipv4.source.address.group: on page 129
- access_rule.ipv4.source.port: on page 129
- access_rule.ipv4.source.port.any: on page 129
- access_rule.ipv4.source.port.name: on page 129
- access_rule.ipv4.source.port.group: on page 129
- access_rule.ipv4.service: on page 129
- access_rule.ipv4.service.any: on page 129
- access_rule.ipv4.service.name: on page 129
- access_rule.ipv4.service.group: on page 129
- access_rule.ipv4.destination: on page 130
- access_rule.ipv4.destination.address: on page 130
- access_rule.ipv4.destination.address.any: on page 130
- access_rule.ipv4.destination.address.name: on page 130
- access_rule.ipv4.destination.address.group: on page 130
- access_rule.ipv4.schedule: on page 130
- access_rule.ipv4.schedule.always_on: on page 130
- access_rule.ipv4.schedule.name: on page 130
- access_rule.ipv4.users: on page 130
- access_rule.ipv4.users.included: on page 131
- access_rule.ipv4.users.included.all: on page 131
- access_rule.ipv4.users.included.guests: on page 131
- access_rule.ipv4.users.included.administrator: on page 131
- access_rule.ipv4.users.included.name: on page 131
- access_rule.ipv4.users.included.group: on page 131
- access_rule.ipv4.users.excluded: on page 131
- access_rule.ipv4.users.excluded.none: on page 131
- access_rule.ipv4.users.excluded.guests: on page 131
- access_rule.ipv4.users.excluded.administrator: on page 132
- access_rule.ipv4.users.excluded.name: on page 132
- access_rule.ipv4.users.excluded.group: on page 132
- access_rule.ipv4.uuid: on page 132
- access_rule.ipv4.name: on page 132
- access_rule.ipv4.name: on page 132
- access_rule.ipv4.comment: on page 132
- access_rule.ipv4.enable: on page 132

- access_rule.ipv4.reflexive: on page 132
- access_rule.ipv4.max_connections: on page 132
- access_rule.ipv4.logging: on page 133
- access_rule.ipv4.management: on page 133
- access_rule.ipv4.packet_monitoring: on page 133
- access_rule.ipv4.priority: on page 133
- access_rule.ipv4.priority.auto: on page 133
- access_rule.ipv4.priority.manual: on page 133
- access_rule.ipv4.tcp: on page 133
- access_rule.ipv4.tcp.timeout: on page 133
- access_rule.ipv4.udp: on page 133
- access_rule.ipv4.udp.timeout: on page 134
- access_rule.ipv4.fragments: on page 134
- access_rule.ipv4.botnet_filter: on page 134
- access_rule.ipv4.connection_limit: on page 134
- access_rule.ipv4.connection_limit.destination: on page 134
- access_rule.ipv4.connection_limit.destination.threshold: on page 134
- access_rule.ipv4.connection_limit.source: on page 134
- access_rule.ipv4.connection_limit.source.threshold: on page 134
- access_rule.ipv4.flow_reporting: on page 134
- access_rule.ipv4.geo_ip_filter: on page 135
- access_rule.ipv4.single_sign_on: on page 135
- access_rule.ipv4.single_sign_on: on page 135
- access_rule.ipv4.cos_override: on page 135
- access_rule.ipv4.quality_of_service: on page 135
- access_rule.ipv4.quality_of_service.class_of_service: on page 135
- access_rule.ipv4.quality_of_service.class_of_service.explicit: on page 135
- access_rule.ipv4.quality_of_service.class_of_service.map: on page 135
- access_rule.ipv4.quality_of_service.class_of_service.preserve: on page 135
- access_rule.ipv4.quality_of_service.dscp: on page 135
- access_rule.ipv4.quality_of_service.dscp.explicit: on page 136
- access_rule.ipv4.quality_of_service.dscp.map: on page 136
- access_rule.ipv4.quality_of_service.dscp.preserve: on page 136

access_rule:

```
Type: object
Flags: -none-
Description: Access rule.
```

access_rules:

```
Type: array
Flags: -none-
Description: Access rule collection.
```

access_rule.ipv4:

```
Type: object
Flags: -none-
Description: IPv4 access rule.
```

access_rule.ipv4.from:

```
Type: string
Flags: key
Description: Zone object name.
```

access_rule.ipv4.to:

```
Type: string
Flags: key
Description: Zone object name.
```

access_rule.ipv4.action:

```
Type: string
Flags: key
Description: Set the action for this access rule.
```

access_rule.ipv4.source:

```
Type: object
Flags: key
Description: Source.
```

access_rule.ipv4.source.address:

```
Type: object
Flags: key
Description: Source address.
```

access_rule.ipv4.source.address.any:

```
Type: boolean (true)
Flags: key
Description: Any address.
```

access_rule.ipv4.source.address.name:

```
Type: string
Flags: key
Description: Address object name.
```

access_rule.ipv4.source.address.group:

```
Type: string
Flags: key
Description: Group address object name.
```

access_rule.ipv4.source.port:

```
Type: object
Flags: key
Description: Specify a source port for this Access Policy.
```

access_rule.ipv4.source.port.any:

```
Type: boolean (true)
Flags: key
Description: Any source service.
```

access_rule.ipv4.source.port.name:

```
Type: string
Flags: key
Description: Service object name.
```

access_rule.ipv4.source.port.group:

```
Type: string
Flags: key
Description: Service object group name.
```

access_rule.ipv4.service:

```
Type: object
Flags: key
Description: Specify a destination service for this Access Policy.
```

access_rule.ipv4.service.any:

```
Type: boolean (true)
Flags: key
Description: Any destination service.
```

access_rule.ipv4.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

access_rule.ipv4.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

access_rule.ipv4.destination:

```
Type: object
Flags: key
Description: Destination.
```

access_rule.ipv4.destination.address:

```
Type: object
Flags: key
Description: Destination a destination address for this Access Policy.
```

access_rule.ipv4.destination.address.any:

```
Type: boolean (true)
Flags: key
Description: Any address.
```

access_rule.ipv4.destination.address.name:

```
Type: string
Flags: key
Description: Address object name.
```

access_rule.ipv4.destination.address.group:

```
Type: string
Flags: key
Description: Group address object name.
```

access_rule.ipv4.schedule:

```
Type: object
Flags: key
Description: Specify a schedule for this access policy.
```

access_rule.ipv4.schedule.always_on:

```
Type: boolean (true)
Flags: key
Description: Always on.
```

access_rule.ipv4.schedule.name:

```
Type: string
Flags: key
Description: Schedule object name.
```

access_rule.ipv4.users:

```
Type: object
Flags: key
Description: Specify users that are excluded from this access policy.
```

access_rule.ipv4.users.included:

```
Type: object
Flags: key
Description: Specify included users.
```

access_rule.ipv4.users.included.all:

```
Type: boolean (true)
Flags: key
Description: All users.
```

access_rule.ipv4.users.included.guests:

```
Type: boolean (true)
Flags: key
Description: Guest users.
```

access_rule.ipv4.users.included.administrator:

```
Type: boolean (true)
Flags: key
Description: Administrator.
```

access_rule.ipv4.users.included.name:

```
Type: string
Flags: key
Description: Local user object name.
```

access_rule.ipv4.users.included.group:

```
Type: string
Flags: key
Description: Local user group object name.
```

access_rule.ipv4.users.excluded:

```
Type: object
Flags: key
Description: Specify excluded users.
```

access_rule.ipv4.users.excluded.none:

```
Type: boolean (true)
Flags: key
Description: No users.
```

access_rule.ipv4.users.excluded.guests:

```
Type: boolean (true)
Flags: key
Description: Guest users.
```

access_rule.ipv4.users.excluded.administrator:

```
Type: boolean (true)
Flags: key
Description: Administrator.
```

access_rule.ipv4.users.excluded.name:

```
Type: string
Flags: key
Description: Local user object name.
```

access_rule.ipv4.users.excluded.group:

```
Type: string
Flags: key
Description: Local user group object name.
```

access_rule.ipv4.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

access_rule.ipv4.name:

```
Type: string
Flags: required
Description: Name.
```

access_rule.ipv4.comment:

```
Type: string
Flags: -none-
Description:
```

access_rule.ipv4.enable:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable this access rule.
```

access_rule.ipv4.reflexive:

```
Type: boolean (true|false)
Flags: -none-
Description: Configure a reflexive rule.
```

access_rule.ipv4.max_connections:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

access_rule.ipv4.logging:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable logging when this access rule is used.
```

access_rule.ipv4.management:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow management traffic.
```

access_rule.ipv4.packet_monitoring:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable packet monitoring.
```

access_rule.ipv4.priority:

```
Type: object
Flags: -none-
Description: Set access rule priority
```

access_rule.ipv4.priority.auto:

```
Type: boolean (true)
Flags: -none-
Description: Set auto priority(priority = 0) for access rule.
```

access_rule.ipv4.priority.manual:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv4.tcp:

```
Type: object
Flags: -none-
Description: TCP.
```

access_rule.ipv4.tcp.timeout:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv4.udp:

```
Type: object
Flags: -none-
Description: UDP.
```

access_rule.ipv4.udp.timeout:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv4.fragments:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow fragmented packets on this access rule.
```

access_rule.ipv4.botnet_filter:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Botnet filter.
```

access_rule.ipv4.connection_limit:

```
Type: object
Flags: -none-
Description: Configure connection limit.
```

access_rule.ipv4.connection_limit.destination:

```
Type: object
Flags: -none-
Description: Enable connection limit for each destination IP address. Set to null or {} if
disabled/unconfigured.
```

access_rule.ipv4.connection_limit.destination.threshold:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

access_rule.ipv4.connection_limit.source:

```
Type: object
Flags: -none-
Description: Enable connection limit for each source IP address. Set to null or {} if
disabled/unconfigured.
```

access_rule.ipv4.connection_limit.source.threshold:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

access_rule.ipv4.flow_reporting:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable flow reporting.
```

access_rule.ipv4.geo_ip_filter:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Geo-IP filter.
```

access_rule.ipv4.single_sign_on:

```
Type: boolean (true|false)
Flags: -none-
Description: Invoke single sign on to authenticate users.
```

access_rule.ipv4.cos_override:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow 802.1p marking to override DSCP values.
```

access_rule.ipv4.quality_of_service:

```
Type: object
Flags: -none-
Description: Configure quality of service for rule.
```

access_rule.ipv4.quality_of_service.class_of_service:

```
Type: object
Flags: -none-
Description: Set 802.1p marking action. Set to null or {} if disabled/unconfigured.
```

access_rule.ipv4.quality_of_service.class_of_service.explicit:

```
Type: string
Flags: -none-
Description: Set explicit marking.
```

access_rule.ipv4.quality_of_service.class_of_service.map:

```
Type: boolean (true)
Flags: -none-
Description: Map marking.
```

access_rule.ipv4.quality_of_service.class_of_service.preserve:

```
Type: boolean (true)
Flags: -none-
Description: Preserve marking.
```

access_rule.ipv4.quality_of_service.dscp:

```
Type: object
Flags: -none-
Description: Set DSCP marking action.
```

access_rule.ipv4.quality_of_service.dscp.explicit:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

access_rule.ipv4.quality_of_service.dscp.map:

```
Type: boolean (true)
Flags: -none-
Description: Map marking.
```

access_rule.ipv4.quality_of_service.dscp.preserve:

```
Type: boolean (true)
Flags: -none-
Description: Preserve marking.
```

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API: Access Rules – IPv6

- Endpoint on page 137
- Schema Structure on page 137
  - Object: Access Rules – IPv6 on page 137
  - Collection: Access Rules – IPv6 on page 139
  - Schema Attributes on page 139

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/access-rules/ipv6* **Schema:** *collection#access-rule-ipv6-config*	Empty	Required	Required	Required
URI: */api/sonicos/access-rules/ipv6/uuid/{UUID}* **Schema:** *collection#access-rule-ipv6-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Access Rules – IPv6 on page 137
- Collection: Access Rules – IPv6 on page 139
- Schema Attributes on page 139

Object: Access Rules – IPv6

```
{
    "access_rule": {
        "ipv6": {
            "from": "{string}",
            "to": "{string}",
            "action": "{string}",

            "source": {
                "address": {
                    "any": {true},
                  | "name": "{string}",
                  | "group": "{string}"
                },
```

```
    "port": {
        "any": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"service": {
    "any": {true},
  | "name": "{string}",
  | "group": "{string}"
},

"destination": {
    "address": {
        "any": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"schedule": {
    "always_on": {true},
  | "name": "{string}"
},

"users": {
    "included": {
        "all": {true},
      | "guests": {true},
      | "administrator": {true},
      | "name": "{string}",
      | "group": "{string}"
    },

    "excluded": {
        "none": {true},
      | "guests": {true},
      | "administrator": {true},
      | "name": "{string}",
      | "group": "{string}"
    }
},

"uuid": "{string}",
"name": "{string}",
"comment": "{string}",
"enable": {boolean},
"reflexive": {boolean},
"max_connections": {number},
"logging": {boolean},
"management": {boolean},
"packet_monitoring": {boolean},

"priority": {
    "auto": {true},
  | "manual": {number}
},

"tcp": {
    "timeout": {number}
},

"udp": {
    "timeout": {number}
},
```

```
            "fragments": {boolean},
            "botnet_filter": {boolean},

            "connection_limit": {
                "destination": {
                    "threshold": {number}
                },

                "source": {
                    "threshold": {number}
                }
            },

            "flow_reporting": {boolean},
            "geo_ip_filter": {boolean},
            "single_sign_on": {boolean},
            "cos_override": {boolean},

            "quality_of_service": {
                "class_of_service": {
                    "explicit": "{string}",
                  | "map": {true},
                  | "preserve": {true}
                },

                "dscp": {
                    "explicit": {number},
                  | "map": {true},
                  | "preserve": {true}
                }
            }
        }
    }
}
```

Collection: Access Rules – IPv6

```
{
    "access_rules": [
        object#access_rule-ipv6-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- access_rule: on page 141
- access_rules: on page 142
- access_rule.ipv6: on page 142
- access_rule.ipv6.from: on page 142
- access_rule.ipv6.to: on page 142
- access_rule.ipv6.action: on page 142
- access_rule.ipv6.source: on page 142
- access_rule.ipv6.source.address: on page 142

- access_rule.ipv6.source.address.any: on page 142
- access_rule.ipv6.source.address.name: on page 142
- access_rule.ipv6.source.address.group: on page 143
- access_rule.ipv6.source.port: on page 143
- access_rule.ipv6.source.port.any: on page 143
- access_rule.ipv6.source.port.name: on page 143
- access_rule.ipv6.source.port.group: on page 143
- access_rule.ipv6.service: on page 143
- access_rule.ipv6.service.any: on page 143
- access_rule.ipv6.service.name: on page 143
- access_rule.ipv6.destination: on page 143
- access_rule.ipv6.destination.address: on page 144
- access_rule.ipv6.destination.address.any: on page 144
- access_rule.ipv6.destination.address.name: on page 144
- access_rule.ipv6.destination.address.group: on page 144
- access_rule.ipv6.schedule: on page 144
- access_rule.ipv6.schedule.always_on: on page 144
- access_rule.ipv6.schedule.name: on page 144
- access_rule.ipv6.users: on page 144
- access_rule.ipv6.users.included: on page 144
- access_rule.ipv4.users.included.all: on page 145
- access_rule.ipv6.users.included.guests: on page 145
- access_rule.ipv6.users.included.administrator: on page 145
- access_rule.ipv6.users.included.name: on page 145
- access_rule.ipv6.users.included.group: on page 145
- access_rule.ipv6.users.excluded: on page 145
- access_rule.ipv6.users.excluded.none: on page 145
- access_rule.ipv6.users.excluded.guests: on page 145
- access_rule.ipv6.users.excluded.administrator: on page 145
- access_rule.ipv6.users.excluded.name: on page 146
- access_rule.ipv6.users.excluded.group: on page 146
- access_rule.ipv6.uuid: on page 146
- access_rule.ipv6.name: on page 146
- access_rule.ipv6.comment: on page 146
- access_rule.ipv6.enable: on page 146
- access_rule.ipv6.reflexive: on page 146
- access_rule.ipv6.reflexive: on page 146

- access_rule.ipv6.max_connections: on page 146
- access_rule.ipv6.logging: on page 146
- access_rule.ipv6.management: on page 147
- access_rule.ipv6.packet_monitoring: on page 147
- access_rule.ipv6.priority: on page 147
- access_rule.ipv6.priority.auto: on page 147
- access_rule.ipv6.priority.manual: on page 147
- access_rule.ipv6.tcp: on page 147
- access_rule.ipv6.tcp.timeout: on page 147
- access_rule.ipv6.udp: on page 147
- access_rule.ipv6.udp.timeout: on page 147
- access_rule.ipv6.fragments: on page 148
- access_rule.ipv6.botnet_filter: on page 148
- access_rule.ipv6.connection_limit: on page 148
- access_rule.ipv6.connection_limit.destination: on page 148
- access_rule.ipv6.connection_limit.destination.threshold: on page 148
- access_rule.ipv6.connection_limit.source: on page 148
- access_rule.ipv6.connection_limit.source.threshold: on page 148
- access_rule.ipv6.flow_reporting: on page 148
- access_rule.ipv6.geo_ip_filter: on page 148
- access_rule.ipv6.single_sign_on: on page 149
- access_rule.ipv6.cos_override: on page 149
- access_rule.ipv6.quality_of_service: on page 149
- access_rule.ipv6.quality_of_service.class_of_service: on page 149
- access_rule.ipv6.quality_of_service.class_of_service.explicit: on page 149
- access_rule.ipv6.quality_of_service.class_of_service.map: on page 149
- access_rule.ipv6.quality_of_service.class_of_service.preserve: on page 149
- access_rule.ipv6.quality_of_service.dscp: on page 149
- access_rule.ipv6.quality_of_service.dscp.explicit: on page 149
- access_rule.ipv6.quality_of_service.dscp.map: on page 150
- access_rule.ipv6.quality_of_service.dscp.preserve: on page 150

access_rule:

```
Type: object
Flags: -none-
Description: Access rule.
```

access_rules:

```
Type: array
Flags: -none-
Description: Access rule collection.
```

access_rule.ipv6:

```
Type: object
Flags: -none-
Description: IPv6 access rule.
```

access_rule.ipv6.from:

```
Type: string
Flags: key
Description: Zone object name.
```

access_rule.ipv6.to:

```
Type: string
Flags: key
Description: Zone object name.
```

access_rule.ipv6.action:

```
Type: string
Flags: key
Description: Set the action for this access rule.
```

access_rule.ipv6.source:

```
Type: object
Flags: key
Description: Source.
```

access_rule.ipv6.source.address:

```
Type: object
Flags: key
Description: Source address.
```

access_rule.ipv6.source.address.any:

```
Type: boolean (true)
Flags: key
Description: Any address.
```

access_rule.ipv6.source.address.name:

```
Type: string
Flags: key
Description: Address object name.
```

access_rule.ipv6.source.address.group:

```
Type: string
Flags: key
Description: Group address object name.
```

access_rule.ipv6.source.port:

```
Type: object
Flags: key
Description: Specify a source port for this Access Policy.
```

access_rule.ipv6.source.port.any:

```
Type: boolean (true)
Flags: key
Description: Any source service.
```

access_rule.ipv6.source.port.name:

```
Type: string
Flags: key
Description: Service object name.
```

access_rule.ipv6.source.port.group:

```
Type: string
Flags: key
Description: Service object group name.
```

access_rule.ipv6.service:

```
Type: object
Flags: key
Description: Specify a destination service for this Access Policy.
```

access_rule.ipv6.service.any:

```
Type: boolean (true)
Flags: key
Description: Any destination service.
```

access_rule.ipv6.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

access_rule.ipv6.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

access_rule.ipv6.destination:

```
Type: object
Flags: key
Description: Destination.
```

access_rule.ipv6.destination.address:

```
Type: object
Flags: key
Description: Destination a destination address for this Access Policy.
```

access_rule.ipv6.destination.address.any:

```
Type: boolean (true)
Flags: key
Description: Any address.
```

access_rule.ipv6.destination.address.name:

```
Type: string
Flags: key
Description: Address object name.
```

access_rule.ipv6.destination.address.group:

```
Type: string
Flags: key
Description: Group address object name.
```

access_rule.ipv6.schedule:

```
Type: object
Flags: key
Description: Specify a schedule for this access policy.
```

access_rule.ipv6.schedule.always_on:

```
Type: boolean (true)
Flags: key
Description: Always on.
```

access_rule.ipv6.schedule.name:

```
Type: string
Flags: key
Description: Schedule object name.
```

access_rule.ipv6.users:

```
Type: object
Flags: key
Description: Specify users that are excluded from this access policy.
```

access_rule.ipv6.users.included:

```
Type: object
Flags: key
Description: Specify included users.
```

access_rule.ipv4.users.included.all:

```
Type: boolean (true)
Flags: key
Description: All users.
```

access_rule.ipv6.users.included.guests:

```
Type: boolean (true)
Flags: key
Description: Guest users.
```

access_rule.ipv6.users.included.administrator:

```
Type: boolean (true)
Flags: key
Description: Administrator.
```

access_rule.ipv6.users.included.name:

```
Type: string
Flags: key
Description: Local user object name.
```

access_rule.ipv6.users.included.group:

```
Type: string
Flags: key
Description: Local user group object name.
```

access_rule.ipv6.users.excluded:

```
Type: object
Flags: key
Description: Specify excluded users.
```

access_rule.ipv6.users.excluded.none:

```
Type: boolean (true)
Flags: key
Description: No users.
```

access_rule.ipv6.users.excluded.guests:

```
Type: boolean (true)
Flags: key
Description: Guest users.
```

access_rule.ipv6.users.excluded.administrator:

```
Type: boolean (true)
Flags: key
Description: Administrator.
```

access_rule.ipv6.users.excluded.name:

```
Type: string
Flags: key
Description: Local user object name.
```

access_rule.ipv6.users.excluded.group:

```
Type: string
Flags: key
Description: Local user group object name.
```

access_rule.ipv6.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

access_rule.ipv6.name:

```
Type: string
Flags: required
Description: Name.
```

access_rule.ipv6.comment:

```
Type: string
Flags: -none-
Description:
```

access_rule.ipv6.enable:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable this access rule.
```

access_rule.ipv6.reflexive:

```
Type: boolean (true|false)
Flags: -none-
Description: Configure a reflexive rule.
```

access_rule.ipv6.max_connections:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

access_rule.ipv6.logging:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable logging when this access rule is used.
```

access_rule.ipv6.management:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow management traffic.
```

access_rule.ipv6.packet_monitoring:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable packet monitoring.
```

access_rule.ipv6.priority:

```
Type: object
Flags: -none-
Description: Set access rule priority
```

access_rule.ipv6.priority.auto:

```
Type: boolean (true)
Flags: -none-
Description: Set auto priority(priority = 0) for access rule.
```

access_rule.ipv6.priority.manual:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv6.tcp:

```
Type: object
Flags: -none-
Description: TCP.
```

access_rule.ipv6.tcp.timeout:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv6.udp:

```
Type: object
Flags: -none-
Description: UDP.
```

access_rule.ipv6.udp.timeout:

```
Type: number (uint32)
Flags: -none-
Description: Integer in the form: D OR 0xHHHHHHHH
```

access_rule.ipv6.fragments:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow fragmented packets on this access rule.
```

access_rule.ipv6.botnet_filter:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Botnet filter.
```

access_rule.ipv6.connection_limit:

```
Type: object
Flags: -none-
Description: Configure connection limit.
```

access_rule.ipv6.connection_limit.destination:

```
Type: object
Flags: -none-
Description: Enable connection limit for each destination IP address. Set to null or {} if
disabled/unconfigured.
```

access_rule.ipv6.connection_limit.destination.threshold:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

access_rule.ipv6.connection_limit.source:

```
Type: object
Flags: -none-
Description: Enable connection limit for each source IP address. Set to null or {} if
disabled/unconfigured.
```

access_rule.ipv6.connection_limit.source.threshold:

```
Type: number (uint16)
Flags: -none-
Description: Integer in the form: D OR 0xHHHH
```

access_rule.ipv6.flow_reporting:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable flow reporting.
```

access_rule.ipv6.geo_ip_filter:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable Geo-IP filter.
```

access_rule.ipv6.single_sign_on:

```
Type: boolean (true|false)
Flags: -none-
Description: Invoke single sign on to authenticate users.
```

access_rule.ipv6.cos_override:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow 802.1p marking to override DSCP values.
```

access_rule.ipv6.quality_of_service:

```
Type: object
Flags: -none-
Description: Configure quality of service for rule.
```

access_rule.ipv6.quality_of_service.class_of_service:

```
Type: object
Flags: -none-
Description: Set 802.1p marking action. Set to null or {} if disabled/unconfigured.
```

access_rule.ipv6.quality_of_service.class_of_service.explicit:

```
Type: string
Flags: -none-
Description: Set explicit marking.
```

access_rule.ipv6.quality_of_service.class_of_service.map:

```
Type: boolean (true)
Flags: -none-
Description: Map marking.
```

access_rule.ipv6.quality_of_service.class_of_service.preserve:

```
Type: boolean (true)
Flags: -none-
Description: Preserve marking.
```

access_rule.ipv6.quality_of_service.dscp:

```
Type: object
Flags: -none-
Description: Set DSCP marking action.
```

access_rule.ipv6.quality_of_service.dscp.explicit:

```
Type: number (uint8)
Flags: -none-
Description: Integer in the form: D OR 0xHH
```

access_rule.ipv6.quality_of_service.dscp.map:

```
Type: boolean (true)
Flags: -none-
Description: Map marking.
```

access_rule.ipv6.quality_of_service.dscp.preserve:

```
Type: boolean (true)
Flags: -none-
Description: Preserve marking.
```

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API: Route Policies – IPv4

- Endpoint on page 151
- Schema Structure on page 151
  - Object: Route Policies – IPv4 on page 151
  - Collection: Route Policies – IPv4 on page 152
  - Schema Attributes on page 152

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/route-policies/ipv4* **Schema:** *collection#route-policy-ipv4-config*	Empty	Required	Required	Required
URI: */api/sonicos/route-policies/ipv4/uuid/{UUID}* **Schema:** *collection#route-policy-ipv4-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Route Policies – IPv4 on page 151
- Collection: Route Policies – IPv4 on page 152
- Schema Attributes on page 152

Object: Route Policies – IPv4

```
{
    "route_policy": {
        "ipv4": {
            "interface": "{string}",
            "metric": {number},

            "source": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "destination": {
```

```
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "service": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "gateway": {
                "default": {true},
              | "name": "{string}",
              | "host": "{string}"
            },

            "uuid": "{string}",
            "name": "{string}",
            "disable_on_interface_down": {boolean},
            "vpn_precedence": {boolean},
            "auto_add_access_rules": {boolean},
            "probe": "{string}",
            "disable_when_probes_succeed": {boolean},
            "default_probe_state_up": {boolean},
            "comment": "{string}",
            "tcp_acceleration": {boolean},
            "wxa_group": "{string}"
        }
    }
}
```

Collection: Route Policies – IPv4

```
{
    "route_policies": [
        object#route-policy-ipv4-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- route_policy: on page 153
- route_policies: on page 153
- route_policy.ipv4: on page 153
- route_policy.ipv4.interface: on page 154
- route_policy.ipv4.metric: on page 154
- route_policy.ipv4.source: on page 154
- route_policy.ipv4.source.any: on page 154
- route_policy.ipv4.source.name: on page 154
- route_policy.ipv4.source.group: on page 154
- route_policy.ipv4.destination: on page 154

- route_policy.ipv4.destination.any: on page 154
- route_policy.ipv4.destination.name: on page 154
- route_policy.ipv4.destination.group: on page 155
- route_policy.ipv4.service: on page 155
- route_policy.ipv4.service.any: on page 155
- route_policy.ipv4.service.name: on page 155
- route_policy.ipv4.service.group: on page 155
- route_policy.ipv4.service: on page 155
- route_policy.ipv4.service.any: on page 155
- route_policy.ipv4.service.name: on page 155
- route_policy.ipv4.service.group: on page 155
- route_policy.ipv4.gateway: on page 155
- route_policy.ipv4.gateway.default: on page 155
- route_policy.ipv4.gateway.name: on page 155
- route_policy.ipv4.gateway.host: on page 155
- route_policy.ipv4.uuid: on page 156
- route_policy.ipv4.name: on page 156
- route_policy.ipv4.disable_on_interface_down: on page 156
- route_policy.ipv4.vpn_precedence: on page 156
- route_policy.ipv4.auto_add_access_rules: on page 156
- route_policy.ipv4.probe: on page 156
- route_policy.ipv4.disable_when_probes_succeed: on page 156
- route_policy.ipv4.default_probe_state_up: on page 156
- route_policy.ipv4.comment: on page 156
- route_policy.ipv4.tcp_acceleration: on page 157
- route_policy.ipv4.wxa_group: on page 157

route_policy:

```
Type: object
Flags: -none-
Description: Route policy.
```

route_policies:

```
Type: array
Flags: -none-
Description: Route policy collection.
```

route_policy.ipv4:

```
Type: object
Flags: -none-
Description: IPv4 route policy.
```

route_policy.ipv4.interface:

```
Type: string
Flags: key
Description: Route interface name.
```

route_policy.ipv4.metric:

```
Type: number (uint8)
Flags: key
Description: Integer in the form: D OR 0xHH
```

route_policy.ipv4.source:

```
Type: object
Flags: key
Description: Set route policy source.
```

route_policy.ipv4.source.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

route_policy.ipv4.source.name:

```
Type: string
Flags: key
Description: Host/network/range address object name.
```

route_policy.ipv4.source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

route_policy.ipv4.destination:

```
Type: object
Flags: key
Description: Set route policy destination.
```

route_policy.ipv4.destination.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

route_policy.ipv4.destination.name:

```
Type: string
Flags: key
Description: FQDN/host/network/range address object name.
```

route_policy.ipv4.destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

route_policy.ipv4.service:

```
Type: object
Flags: key
Description: Set route policy service.
```

route_policy.ipv4.service.any:

```
Type: boolean (true)
Flags: key
Description: Any service.
```

route_policy.ipv4.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

route_policy.ipv4.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

route_policy.ipv4.gateway:

```
Type: object
Flags: key
Description: Set route policy gateway.
```

route_policy.ipv4.gateway.default:

```
Type: boolean (true)
Flags: key
Description: Default gateway 0.0.0.0
```

route_policy.ipv4.gateway.name:

```
Type: string
Flags: key
Description: Host address object name.
```

route_policy.ipv4.gateway.host:

```
Type: string (ip)
Flags: key
Description: IPv4 host address in the form: D.D.D.D
```

route_policy.ipv4.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

route_policy.ipv4.name:

```
Type: string
Flags: required
Description: Name.
```

route_policy.ipv4.disable_on_interface_down:

```
Type: boolean (true|false)
Flags: -none-
Description: Disable route when the interface is disconnected.
```

route_policy.ipv4.vpn_precedence:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow VPN path to take precedence.
```

route_policy.ipv4.auto_add_access_rules:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable auto-add access rules.
```

route_policy.ipv4.probe:

```
Type: string
Flags: -none-
Description: Atom Object name.
```

route_policy.ipv4.disable_when_probes_succeed:

```
Type: boolean (true|false)
Flags: -none-
Description: Disable route when probe succeeds.
```

route_policy.ipv4.default_probe_state_up:

```
Type: boolean (true|false)
Flags: -none-
Description: Set probe default state to up.
```

route_policy.ipv4.comment:

```
Type: string
Flags: -none-
Description:
```

route_policy.ipv4.tcp_acceleration:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable permit TCP acceleration.
```

route_policy.ipv4.wxa_group:

```
Type: string
Flags: -none-
Description: WXA group name.
```

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API: Route Policies – IPv6

- Endpoint on page 158
- Schema Structure on page 158
  - Object: Route Policies – IPv6 on page 158
  - Collection: Route Policies – IPv6 on page 159
  - Schema Attributes on page 159

Endpoint

Endpoint	HTTP method and body			
	GET	POST	PUT	DELETE
URI: */api/sonicos/route-policies/ipv6* **Schema:** *collection#route-policy-ipv6-config*	Empty	Required	Required	Required
URI: */api/sonicos/route-policies/ipv6/uuid/{UUID}* **Schema:** *collection#route-policy-ipv6-config*	Empty	—	Required	Ignored

Schema Structure

Topics:

- Object: Route Policies – IPv6 on page 158
- Collection: Route Policies – IPv6 on page 159
- Schema Attributes on page 159

Object: Route Policies – IPv6

```
{
    "route_policy": {
        "ipv6": {
            "interface": "{string}",
            "metric": {number},

            "source": {
                "any": {true},
              | "name": "{string}",
              | "group": "{string}"
            },

            "destination": {
```

```
            "any": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "service": {
            "any": {true},
          | "name": "{string}",
          | "group": "{string}"
        },

        "gateway": {
            "default": {true},
          | "name": "{string}",
          | "host": "{string}"
        },

        "uuid": "{string}",
        "name": "{string}",
        "disable_on_interface_down": {boolean},
        "vpn_precedence": {boolean},
        "auto_add_access_rules": {boolean},
        "probe": "{string}",
        "disable_when_probes_succeed": {boolean},
        "default_probe_state_up": {boolean},
        "comment": "{string}"
    }
  }
}
```

Collection: Route Policies – IPv6

```
{
    "route_policies": [
        object#route-policy-ipv6-config,
        ...
    ]
}
```

Schema Attributes

Topics:

- route_policy: on page 160
- route_policies: on page 160
- route_policy.ipv6: on page 160
- route_policy.ipv6.interface: on page 160
- route_policy.ipv6.metric: on page 160
- route_policy.ipv6.source: on page 161
- route_policy.ipv6.source.any: on page 161
- route_policy.ipv6.destination.name: on page 161
- route_policy.ipv6.destination.group: on page 161
- route_policy.ipv6.service: on page 161

- route_policy.ipv6.service.any: on page 162
- route_policy.ipv6.service.name: on page 162
- route_policy.ipv6.service.group: on page 162
- route_policy.ipv6.gateway: on page 162
- route_policy.ipv6.gateway.default: on page 162
- route_policy.ipv6.gateway.name: on page 162
- route_policy.ipv6.gateway.host: on page 162
- route_policy.ipv6.uuid: on page 162
- route_policy.ipv6.name: on page 162
- route_policy.ipv6.disable_on_interface_down: on page 163
- route_policy.ipv6.vpn_precedence: on page 163
- route_policy.ipv6.auto_add_access_rules: on page 163
- route_policy.ipv6.probe: on page 163
- route_policy.ipv6.disable_when_probes_succeed: on page 163
- route_policy.ipv6.default_probe_state_up: on page 163

route_policy:

```
Type: object
Flags: -none-
Description: Route policy.
```

route_policies:

```
Type: array
Flags: -none-
Description: Route policy collection.
```

route_policy.ipv6:

```
Type: object
Flags: key
Description: IPv6 route policy.
```

route_policy.ipv6.interface:

```
Type: string
Flags: key
Description: Route interface name.
```

route_policy.ipv6.metric:

```
Type: number (uint8)
Flags: key
Description: Integer in the form: D OR 0xHH
```

route_policy.ipv6.source:

```
Type: object
Flags: key
Description: Set route policy source.
```

route_policy.ipv6.source.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

route_policy.ipv6.source.name:

```
Type: string
Flags: key
Description: Host/network/range address object name.
```

route_policy.ipv6.source.group:

```
Type: string
Flags: key
Description: Group address object name.
```

route_policy.ipv6.destination:

```
Type: object
Flags: key
Description: Set route policy destination.
```

route_policy.ipv6.destination.any:

```
Type: boolean (true)
Flags: key
Description: Any host.
```

route_policy.ipv6.destination.name:

```
Type: string
Flags: key
Description: FQDN/host/network/range address object name.
```

route_policy.ipv6.destination.group:

```
Type: string
Flags: key
Description: Group address object name.
```

route_policy.ipv6.service:

```
Type: object
Flags: key
Description: Set route policy service.
```

route_policy.ipv6.service.any:

```
Type: boolean (true)
Flags: key
Description: Any service.
```

route_policy.ipv6.service.name:

```
Type: string
Flags: key
Description: Service object name.
```

route_policy.ipv6.service.group:

```
Type: string
Flags: key
Description: Service object group name.
```

route_policy.ipv6.gateway:

```
Type: object
Flags: key
Description: Set route policy gateway.
```

route_policy.ipv6.gateway.default:

```
Type: boolean (true)
Flags: key
Description: Default gateway 0.0.0.0/::
```

route_policy.ipv6.gateway.name:

```
Type: string
Flags: key
Description: Host address object name.
```

route_policy.ipv6.gateway.host:

```
Type: string (ip)
Flags: key
Description: IPv4 host address in the form: D.D.D.D IPv6 host address in the form:
HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH:HHHH.
```

route_policy.ipv6.uuid:

```
Type: string
Flags: key
Description: UUID in the form: HHHHHHHH-HHHH-HHHH-HHHH-HHHHHHHHHHHH
```

route_policy.ipv6.name:

```
Type: string
Flags: required
Description: Name.
```

route_policy.ipv6.disable_on_interface_down:

```
Type: boolean (true|false)
Flags: -none-
Description: Disable route when the interface is disconnected.
```

route_policy.ipv6.vpn_precedence:

```
Type: boolean (true|false)
Flags: -none-
Description: Allow VPN path to take precedence.
```

route_policy.ipv6.auto_add_access_rules:

```
Type: boolean (true|false)
Flags: -none-
Description: Enable auto-add access rules.
```

route_policy.ipv6.probe:

```
Type: string
Flags: -none-
Description: Atom Object name.
```

route_policy.ipv6.disable_when_probes_succeed:

```
Type: boolean (true|false)
Flags: -none-
Description: Disable route when probe succeeds.
```

route_policy.ipv6.default_probe_state_up:

```
Type: boolean (true|false)
Flags: -none-
Description: Set probe default state to up.
```

route_policy.ipv6.comment:

```
Type: string
Flags: -none-
Description:
```

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SonicWall Support

Technical support is available to customers who have purchased SonicWall products with a valid maintenance contract and to customers who have trial versions.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. To access the Support Portal, go to https://www.sonicwall.com/support.

The Support Portal enables you to:

- View knowledge base articles and technical documentation
- View video tutorials
- Access MySonicWall
- Learn about SonicWall professional services
- Review SonicWall Support services and warranty information
- Register for training and certification
- Request technical support or customer service

To contact SonicWall Support, visit https://www.sonicwall.com/support/contact-support.

About This Document

Legend

WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.

CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

IMPORTANT, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

SonicOS Reference
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