



Managed DNS API Specification

Version 2.8.8

July 28, 2008

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Revisions and Updates

July 28, 2008

- Rebranded guide, changing 'Tu cows' to 'OpenSRS'.

November 20, 2007

- Made a small correction to the XML request example for Query Inventory Item – by Creator User ID.

November 14, 2005

- Clarified return values for Create DNS Order Response command.

March 8, 2005

- Replaced XML examples for Update Inventory Item command; previous examples were incorrect.

December 9, 2004

- Added "txt" key, which is used to include text records in the Create Template, Update Template, Create Order, Update Order, and Update Inventory Item commands.

October 5, 2004

- Added "expiry_date" parameter, which supports the specification, update, and removal of expiration dates for individual services.
- Added "renewal_msg_flag" parameter, which supports the activation or deactivation of a renewal reminder that is set to notify end users that their service is about to expire.
- Added "Suspend DNS Inventory Item" command.
- Added "Activate DNS Inventory Item" command, which is used to reactivate services that were suspended.
- Added section "Changing DNS Inventory Item Expiration Settings", which describes how to request a renewal-reminder for services assigned an expiry date, and how to change expiration settings.

August 23, 2004

- Added "Delete DNS Inventory Item" command.

June 25, 2004

- Replaced all PERL examples due to incorrect syntax. Replaced several XML examples.

May 18, 2004

- Character limit for RWI 2 username and respective password has changed. Usernames must be 1 – 256 characters; passwords must be 3 – 256.
- RWI 2 user passwords cannot contain special characters. Creation of a new user will fail if you attempt to submit "!", "@", or "#" in the password.

Introduction

Required reading

Please read the generic TPP Specification before attempting to execute any of the commands described in this document. The generic TPP Specification can be found on the [OpenSRS Documentation](#) page.

TPP compatibility

The DNS API commands are compatible with TPP version 1.3.0. Earlier versions of the TPP will not be supported with the DNS Management product.

Document version

In order to be consistently numbered with existing OpenSRS products, this document has been assigned a starting version number of `2.8.0`.

Definition of terms used in this document

Relative domain name

A relative domain name uses standard domain name syntax (e.g. opensrs.com), but cannot end with a dot `.` , nor can it include any special characters other than a hyphen `-`.

Absolute domain name

An absolute domain name uses standard domain name syntax and always ends with a dot `.` (example.com.).

Fully qualified domain name (FQDN)

A standard domain plus a host name, e.g. www.example.com or dns1.example.com

Zone

The zone is the set of DNS records used to control how your domain works and to determine your domain's and host IP addresses.

Record

Records are the elements that define the zone. Each record is then defined by four attributes: a record has an **id**, a **type**, a **name**, and **content**. Mail Exchange records have a fifth attribute: a **priority**. See the "[Record Attributes](#)" section for further details.

Pool

The pool is the list of available nameservers. For the initial release of the DNS Management tool, there will be only one entry in the pool list: `default`.

Validation Rules

The DNS management system requires and checks for the following items. Each item is validated separately.

1. product

1.1. contacts (based on the primary contacts used in the OpenSRS system)

1.1.1. first name

1.1.2. last name

1.1.3. address 1

1.1.4. city

1.1.5. state

1.1.6. country

1.1.7. postal code

1.1.8. phone

1.1.9. email – checks syntax and checks if valid email address

1.2. pool

1.2.1. list – contains one entry: 'default'

1.3. records

1.3.1. A

- The A record contains an IP address.
- Type = A
- Name = alpha-numerical string | * | @
- Content = IP Address

1.3.2. CNAME

- The CNAME record specifies the canonical name of a record (alias).
- Type = CNAME
- Name = alpha-numerical string
- Content = FQDN or relative domain name

1.3.3. NS

- Nameserver Record; specifies nameservers for a sub-domain.
- Type = NS
- Name = alpha-numerical string
- Content = FQDN or relative domain name

1.3.4. MX

- The MX record specifies the mail exchanger host for a domain.
- Type = MX
- Name = alpha-numerical string | * | @
- Priority ≥ 0 and Priority ≤ 65535
- Content = FQDN or relative domain name

1.3.5. SOA

- Start of Authority record
- String TYPE_SOA = 'SOA'
- Name = FQDN
- Primary NS = FQDN

- Hostmaster = FQDN and after replacing 1st . with @ should be 'valid' email address
- TTL/Expire ... etc

2. order

2.1. **Pool name** – currently, only one pool name is available: 'default'

Other constraints

- Each CNAME record must have a unique name.
- CNAME and A records cannot have the same name.

Common Contact Data

The DNS Management tool uses contact data for customer relation management. Three contacts are required. The table below indicates what contact data is required for each contact type.

See "The Contact Object" in the *OpenSRS TPP API Specification* document for the request parameters, response parameters, and examples of contact-related commands.

The following contacts are required:

- Admin
- Billing
- Tech

The following contact fields are required for each contact type:

	Admin	Billing	Tech
first_name	Required	Required	Required
last_name	Required	Required	Required
org_name			
address 1	Required	Required	Required
address 2			
address 3			
city	Required	Required	Required
state	Required	Required	Required
postal_code	Required	Required	Required
country	Required	Required	Required
phone	Required	Required	Required
fax			
e-mail	Required	Required	Required

DNS Objects

The DNS Management system uses these objects:

- Zone
- Record
- Pool
- Nameserver
- Template

Keep in mind that not all calls require each of the attributes of each object.

Zone attributes

Name	Parameter Name:	name
	Type:	String
	Description:	Fully qualified domain name or sub-domain
	Obligation:	Required
	Allowed Value(s):	FQDN

Records	Parameter Name:	records
	Type:	List
	Description:	List of record objects
	Obligation:	Required
	Allowed Value(s):	A NS MX CNAME TXT

The zone object hierarchy

```
zone
  record
    id
    type
    name
    content
    priority
```

Automatically created “read-only” records

In some cases, records are created automatically in the zone, and are set to “read-only” which means that you cannot modify them. This only occurs when you specify a prefix for use with a zone service – in which case a read-only record with that prefix is created in the zone. You are not allowed to change this record. This record exists for as long as the zone service with that associated prefix exists. If you delete the zone service for that prefix, the record that was automatically created is removed.

Record attributes

id	Parameter Name:	id
	Type:	Int
	Description:	The id number assigned to the record. On creation, the record ID is returned as part of the response. Must be specified for update/delete commands.
	Obligation:	Required for modifying and deleting the record.
	Allowed Value(s):	Int greater than 0 (zero)

type	Parameter Name:	type
	Type:	String
	Description:	This defines the type of record: A, CNAME, NS, or MX <ul style="list-style-type: none"> ▪ 'A' = hostname. The hostname provides the IP address of the domain. ▪ 'CNAME' = alias. An alias can be used when you want DNS management to delegate a sub-domain to another nameserver. ▪ 'NS' = name server ▪ 'MX' = Mail Exchanger ▪ 'TXT' = text. A text record can be used to store general information about a particular hostname or device, and is submitted in an array with the "name" and "content" keys.
	Obligation:	Required
	Allowed Value(s):	<ul style="list-style-type: none"> ▪ A, NS, MX, CNAME, TXT

read_only	Parameter Name:	read_only
	Type:	Int
	Description:	Indicated whether the record can be deleted. Normally, read-only records are created as a result of some ancillary service.
	Obligation:	Required
	Allowed Value(s):	<p>0 1</p> <p>Where 0 = false, 1 = true</p>

name	Parameter Name:	name
	Type:	String
	Description:	Name of the record
	Obligation:	Required
	Allowed Value(s):	<p>One of: '@' or '*' or a relative domain name. '@' is used for records affecting the entire domain; '*' is used to designate a wildcard record.</p> <p>In the case where the type is an "A" or "CNAME" record, you cannot specify a name that is already being used as a prefix for a zone service if that zone service is of the following types: 'redirector', 'url-cloak', 'template'. Note that creating an MX record would still be allowed because it would not conflict with the zone service prefix.</p> <p>For example, if you have previously defined a 'redirector' zone service using the prefix "www", then you cannot add an "A" or "CNAME" record using the name "www".</p>

content	Parameter Name:	content
	Type:	String
	Description:	Validated based on record type. For example, A records can only contain an IP address.
	Obligation:	Required
	Allowed Value(s):	IP address, Relative Domain name, etc.

priority	Parameter Name:	priority
	Type:	Int
	Description:	If there are multiple Mail Exchangers, the mail server sending to your domain tries to pick the Mail Exchanger with the lowest priority level, and work its way up.
	Obligation:	Required for MX records only
	Allowed Value(s):	Integer higher than 0 (zero)

Pool attributes (nameserver pool)

name	Parameter Name:	name
	Type:	String
	Description:	Name of the nameserver pool. Only one pool, named 'default', is supported at this time.
	Obligation:	Required
	Allowed Value(s):	'default'

nameservers	Parameter Name:	nameservers
	Type:	List
	Description:	List of available nameservers.
	Obligation:	Required
	Allowed Value(s):	List of nameserver entities

Nameserver attributes

name	Parameter Name:	name
	Type:	String
	Description:	Fully Qualified nameserver Domain Name which includes '.' at end.
	Obligation:	Required
	Allowed Value(s):	Valid nameserver name

ip	Parameter Name:	ip
	Type:	String
	Description:	The nameserver's IP address
	Obligation:	Required
	Allowed Value(s):	IP address

Template attributes

name	Parameter Name:	name
	Type:	String
	Description:	The template name. Only one template, named 'default', is supported at this time.
	Obligation:	Required
	Allowed Value(s):	'default'

records	Parameter Name:	Records
	Type:	List
	Description:	List of records
	Obligation:	Required
	Allowed Value(s):	A NS MX CNAME TXT

Standard Request and Response Headers

For more details, see the generic *OpenSRS TPP API Specification*.

The following elements are required for each request, and returned with each response.

```
protocol' => 'TPP
version' => '1.3.0
```

Note: The versions supported for DNS are TPP 1.3.0 and above; if you are using a version greater than 1.3.0, submit that version.

Standard request elements

The 'requestor' and 'username' must be sent with each request.

requestor	Parameter Name:	requestor
	Type:	String
	Description:	The reseller's username
	Obligation:	Required
	Allowed Value(s):	string
username	Parameter Name:	username
	Type:	String
	Description:	The reseller's username
	Obligation:	Required
	Location:	Within the 'requestor' associative array
	Allowed Value(s):	string

Standard response elements

Each time you execute a command in the DNS Management system, a session ID is generated. The session ID can be used to prevent different users from overwriting each other's changes.

session_id	Parameter Name:	session_id
	Type:	String
	Description:	An ID assigned to the DNS management session.
	Obligation:	Required
	Value(s):	Valid, assigned session id
is_success	Parameter Name:	is_success
	Type:	Int
	Description:	Indicates if the operation was successful or unsuccessful: 1 = successful, 0 = unsuccessful
	Obligation:	Required
	Value(s):	0 1

response_code	Parameter Name:	response_code
	Type:	Int
	Description:	A read-only number code that indicates either success or the type of error that occurred.
	Obligation:	Required, always returned
	Value(s):	Valid code number

response_text	Parameter Name:	response_text
	Type:	String
	Description:	A read-only message that either indicates success or provides an error description
	Obligation:	Required, always returned
	Value(s):	Valid error message

The Check Zone Command

The **check zone** command determines if the requested zone name is available within the specified pool, in the OpenSRS system. This command does not request or obtain that zone name, but returns a response indicating the availability of the zone name.

Request parameters for check zone

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: check zone availability
	Obligation:	Required
	Location:	Within the 'check zone' request
	Allowed Value(s):	CHECK
object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the zone
	Obligation:	Required
	Location:	Within the 'check zone' request
	Allowed Value(s):	DNS.ZONE
attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of 'Check Zone'
	Obligation:	Required
	Location:	Within the 'check zone' request
	Allowed Value(s):	Values are variable; see attributes below.
service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns
product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the attributes of product_data.
zone	Parameter Name:	zone
	Type:	associative array
	Description:	The zone
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' (string)

name	Parameter Name:	name
	Type:	string
	Description:	The name of the zone
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	FQDN name of the requested zone

pool_data	Parameter Name:	pool_data
	Type:	Associative array
	Description:	The nameserver pool
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' (string)

name	Parameter Name:	name
	Type:	String
	Description:	The name of the nameserver pool. Currently, only one nameserver pool is available: 'default'.
	Obligation:	Required
	Location:	Within the 'pool' associative array
	Allowed Value(s):	'default'

PERL request example for check zone

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'CHECK',
  'object' => 'DNS.ZONE',
  'requestor' => {
    'username' => 'sampleuser'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'pool' => {
        'name' => 'default'
      },
      'zone' => {
        'name' => 'tucows1064332292809.com'
      }
    }
  },
};
```

XML request example for check zone

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
```

```

    <version>0.9</version>
</header>
<body>
  <data_block>
    <dt_assoc>
      <item key='version'>1.4.0</item>
      <item key='protocol'>TPP</item>
      <item key='action'>CHECK</item>
      <item key='object'>DNS.ZONE</item>
      <item key='requestor'>
        <dt_assoc>
          <item key='username'>sampleuser</item>
        </dt_assoc>
      </item>
      <item key='attributes'>
        <dt_assoc>
          <item key='service'>dns</item>
          <item key='product_data'>
            <dt_assoc>
              <item key='zone'>
                <dt_assoc>
                  <item key='name'>tucows1064332292809.com</item>
                </dt_assoc>
              </item>
              <item key='pool'>
                <dt_assoc>
                  <item key='name'>default</item>
                </dt_assoc>
              </item>
            </dt_assoc>
          </item>
        </dt_assoc>
      </item>
    </data_block>
  </body>
</OPS_envelope>

```

Response parameters for check zone

Important: Do not rely on `is_success` for zone availability; `is_success` indicates whether the check performed successfully, not whether the zone is available. Refer to `is_available` to determine the availability of the zone.

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: check zone availability
	Obligation:	Required
	Location:	Within the 'check zone' response
	Value(s):	CHECK

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the zone
	Obligation:	Required
	Location:	Within the 'check zone' response
	Value(s):	DNS.ZONE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of "check_zone"
	Obligation:	Required
	Location:	Within the 'check zone' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

object_type	Parameter Name:	object_type
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	DNS.ZONE

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see 'product_data' attributes, below.

is_available	Parameter Name:	is_available
	Type:	Int
	Description:	Indicates if particular zone is available in a given pool. 1 = zone is available, 0 = zone is not available
	Obligation:	Required
	Location:	Within the `product_data` associative array
	Value(s):	0 1

zone	Parameter Name:	zone
	Type:	Associative array
	Description:	The DNS zone.
	Obligation:	Required
	Location:	Within the `product_data` associative array
	Value(s):	`name` attribute

name	Parameter Name:	name
	Type:	String
	Description:	The name of the zone
	Obligation:	Required
	Location:	Within the `zone` associative array
	Value(s):	`name` (string)

pool	Parameter Name:	pool
	Type:	Associative array
	Description:	Details of the pool specified in the request.
	Obligation:	Conditional – returned only if `is_available` = 0
	Location:	Within the `product_data` associative array
	Value(s):	Values are variable; see the attributes below

name	Parameter Name:	name
	Type:	String
	Description:	Name of the pool. Currently, only 'default' pool is available.
	Obligation:	Required
	Location:	Within the `pool` associative array
	Value(s):	`default`

nameservers	Parameter Name:	nameservers
	Type:	List
	Description:	The list of available nameservers
	Obligation:	Required
	Location:	Within the `pool` associative array
	Value(s):	Values are variable; see the attributes below.

name	Parameter Name:	name
	Type:	String
	Description:	Name of an available nameserver
	Obligation:	Required
	Location:	Within the `nameservers` associative array
	Value(s):	Valid nameserver name

ip	Parameter Name:	ip
	Type:	Int
	Description:	The IP address of an available nameserver
	Obligation:	Required
	Location:	Within the 'nameservers' associative array
	Value(s):	Valid nameserver IP address

PERL response example for check zone

```
{
  'protocol' => 'TPP',
  'action' => 'CHECK:REPLY',
  'object' => 'DNS.ZONE',
  'session_id' => 'OSRS-7131242',
  'is_success' => '1'
  'response_text' => 'Request completed successfully',
  'version' => '1.4.0',
  'response_code' => '200',
  'attributes' => {
    'product_data' => {
      'is_available' => '1',
      'pool' => {
        'name' => 'default',
        'nameservers' => [
          {
            'ip' => '127.0.0.1',
            'name' => 'ns1.def-pool.com.'
          },
          {
            'ip' => '127.0.0.2',
            'name' => 'ns2.def-pool.com.'
          }
        ]
      }
    },
    'zone' => {
      'name' => 'tucows1064332292809.com'
    }
  },
  'object_type' => 'dns.zone',
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'service' => 'dns'
},
};
```

XML response example for check zone

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
```

```

<body>
  <data_block>
    <dt_assoc>
      <item key='protocol'>TPP</item>
      <item key='action'>CHECK:REPLY</item>
      <item key='object'>DNS.ZONE</item>
      <item key='is_success'>1</item>
      <item key='session_id'>OSRS-7131242</item>
      <item key='version'>1.4.0</item>
      <item key='response_code'>200</item>
      <item key='response_text'>Request completed successfully</item>
      <item key='attributes'>
        <dt_assoc>
          <item key='service'>dns</item>
          <item key='object_type'>dns.zone</item>
          <item key='response_code'>200</item>
          <item key='response_text'>Request completed successfully</item>
          <item key='product_data'>
            <dt_assoc>
              <item key='is_available'>1</item>
              <item key='zone'>
                <dt_assoc>
                  <item key='name'>tucows1064332292809.com</item>
                </dt_assoc>
              </item>
              <item key='pool'>
                <dt_assoc>
                  <item key='nameservers'>
                    <item key='name'>default</item>
                    <dt_array>
                      <item key='0'>
                        <dt_assoc>
                          <item key='ip'>127.0.0.1</item>
                          <item key='name'>ns1.def-pool.com.</item>
                        </dt_assoc>
                      </item>
                      <item key='1'>
                        <dt_assoc>
                          <item key='ip'>127.0.0.2</item>
                          <item key='name'>ns2.def-pool.com.</item>
                        </dt_assoc>
                      </item>
                    </dt_array>
                  </item>
                </dt_assoc>
              </item>
            </dt_assoc>
          </item>
        </dt_assoc>
      </item>
    </dt_assoc>
  </data_block>
</body>
</OPS_envelope>

```

The Retrieve Zone Command

The **retrieve zone** command is a query operation. It does not create the zone, but instead attempts to retrieve existing DNS settings from the current authoritative nameserver for the domain. The following prefixes are used to retrieve zone settings: **www, mail, ftp, pop, pop3, smtp, www2, imap, email, help, test, http, ns1, ns2, ns3, spam.**

The output of this query may be used to provision the zone later.

Discrepancies and limitations with the existing settings may affect the results of this query; as such, this query does not provide a 100% success rate.

Request parameters for retrieve zone

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: retrieve zone
	Obligation:	Required
	Location:	Within the 'retrieve zone' request
	Allowed Value(s):	RETRIEVE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the zone to be retrieved
	Obligation:	Required
	Location:	Within the 'retrieve zone' request
	Allowed Value(s):	DNS.ZONE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the retrieve zone request
	Obligation:	Required
	Location:	Within the 'retrieve zone' request
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

zone	Parameter Name:	zone
	Type:	Associative array
	Description:	The zone name
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' attribute

name	Parameter Name:	name
	Type:	String
	Description:	The zone name
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	string

prefixes	Parameter Name:	prefixes
	Type:	List of strings
	Description:	<p>Prefixes are the standard names within the zone that we attempt to query. At this time, there is no limit to the number of prefixes allowed; however, the number of prefixes affects the execution time of this request.</p> <p>If you do not explicitly provide prefixes to query, then the following are queried by default:</p> <ul style="list-style-type: none"> ▪ www ▪ ftp ▪ pop ▪ pop3 ▪ smtp ▪ imap
	Obligation:	Optional
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	String

PERL request example for retrieve zone

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'RETRIEVE',
  'object' => 'DNS.ZONE',
  'requestor' => {
    'username' => 'sampleuser'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'zone' => {
        'name' => 'tucows1064332292809.com'
      },
      'prefixes' => []
    },
  },
}
};
```

XML request example for retrieve zone

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='protocol'>TPP</item>
        <item key='version'>1.4.0</item>
        <item key='action'>RETRIEVE</item>
        <item key='object'>DNS.ZONE</item>
        <item key='requestor'>
          <dt_assoc>
            <item key='username'>sampleuser</item>
          </dt_assoc>
        </item>
        <item key='attributes'>
          <dt_assoc>
            <item key='service'>dns</item>
            <item key='product_data'>
              <dt_assoc>
                <item key='zone'>
                  <dt_assoc>
                    <item key='name'>tucows1064332292809.com</item>
                  </dt_assoc>
                </item>
                <item key='prefixes'>
                  <dt_array/>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

Response parameter for retrieve zone

action	Parameter Name:	Action
	Type:	String
	Description:	The action performed: retrieve zone
	Obligation:	Required
	Location:	Within the 'retrieve zone' response
	Value(s):	RETRIEVE

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon: the retrieved zone
	Obligation:	Required
	Location:	Within the 'retrieve zone' response
	Value(s):	DNS.ZONE

attributes	Parameter Name:	attributes
	Type:	associative array
	Description:	Attributes of the retrieve zone response
	Obligation:	Required
	Location:	Within the 'retrieve zone' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	Service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

object_type	Parameter Name:	object_type
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	DNS.ZONE

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the attributes of product_data.

zone	Parameter Name:	zone
	Type:	List
	Description:	
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the attributes below

records	Parameter Name:	records
	Type:	List
	Description:	Contains details for each of the records in the zone; see " Record Attributes ".
	Obligation:	Required
	Location:	Within the 'zone' list
	Value(s):	Values include the various record types.

PERL response example for retrieve zone

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'RETRIEVE:REPLY',
  'object' => 'DNS.ZONE',
  'session_id' => 'OSRS-7131254',
  'is_success' => '1'
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'attributes' => {
    'object_type' => 'dns.zone',
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns'
    'product_data' => {
      'zone' => {
        'records' => [
          {
            'response_text' => '',
            'read_only' => '0',
            'name' => '@',
            'content' => '216.40.33.61',
            'type' => 'A',
            'id' => '0',
            'response_code' => '200'
          },
          {
            'response_text' => '',
            'read_only' => '0',
            'name' => 'mx0',
            'content' => '216.40.36.30',
            'type' => 'A',
            'id' => '0',
            'response_code' => '200'
          },
          {
            'priority' => '10',
            'response_text' => '',
            'read_only' => '0',
            'content' => 'mail.opensrs.com.',
            'name' => '@',
            'type' => 'MX',
            'id' => '0',
            'response_code' => '200'
          },
          {

```

```

        'response_text' => '',
        'read_only' => '0',
        'name' => 'www',
        'content' => '216.40.33.61',
        'type' => 'A',
        'id' => '0',
        'response_code' => '200'
    }
},
'version' => '0',
'name' => ''
}
},
};

```

XML response example for retrieve zone

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='protocol'>TPP</item>
        <item key='version'>1.4.0</item>
        <item key='action'>RETRIEVE:REPLY</item>
        <item key='object'>DNS.ZONE</item>
        <item key='is_success'>1</item>
        <item key='session_id'>OSRS-7131254</item>
        <item key='response_code'>200</item>
        <item key='response_text'>Request completed successfully</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='service'>dns</item>
            <item key='response_code'>200</item>
            <item key='object_type'>dns.zone</item>
            <item key='response_text'>Request completed successfully</item>
            <item key='product_data'>
              <dt_assoc>
                <item key='zone'>
                  <dt_assoc>
                    <item key='version'>0</item>
                    <item key='name' />
                    <item key='records'>
                      <dt_array>
                        <item key='0'>
                          <dt_assoc>
                            <item key='read_only'>0</item>
                            <item key='content'>216.40.33.61</item>
                            <item key='response_text' />
                            <item key='id'>0</item>
                            <item key='response_code'>200</item>

```

```

        <item key='type'>A</item>
        <item key='name'>@</item>
    </dt_assoc>
</item>
<item key='1'>
    <dt_assoc>
        <item key='read_only'>0</item>
        <item key='content'>216.40.36.30</item>
        <item key='response_text' />
        <item key='id'>0</item>
        <item key='response_code'>200</item>
        <item key='type'>A</item>
        <item key='name'>mx0</item>
    </dt_assoc>
</item>
<item key='2'>
    <dt_assoc>
        <item key='name'>@</item>
        <item key='read_only'>0</item>
        <item key='response_text' />
        <item key='content'>mail.opensrs.com.</item>
        <item key='id'>0</item>
        <item key='response_code'>200</item>
        <item key='type'>MX</item>
        <item key='priority'>10</item>
    </dt_assoc>
</item>
<item key='3'>
    <dt_assoc>
        <item key='read_only'>0</item>
        <item key='content'>216.40.33.61</item>
        <item key='response_text' />
        <item key='id'>0</item>
        <item key='response_code'>200</item>
        <item key='type'>A</item>
        <item key='name'>www</item>
    </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

The Create Template Command

The **create template** command creates a named template, which contains your basic zone settings and which can be used as a starting point for zones you'll create later. You can also create an empty template and add settings later.

If you create a template with an invalid record, you get a list of the invalid records, indicating each failure.

At this time, only one template per reseller, named 'default', is supported.

Request parameters for create template

action	Parameter Name:	Action
	Type:	String
	Description:	The action to be performed: create
	Obligation:	Required
	Location:	Within the 'create template' request
	Allowed Value(s):	CREATE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the template to be created
	Obligation:	Required
	Location:	Within the 'create template' request
	Allowed Value(s):	TEMPLATE

attributes	Parameter Name:	attributes
	Type:	String
	Description:	Attributes of the create template request
	Obligation:	Required
	Location:	Within the 'create template' request
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be created
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'template' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the template; currently only one template is available: 'default'
	Obligation:	Required
	Location:	Within the 'template' associative array
	Allowed Value(s):	'default'

records	Parameter Name:	records
	Type:	List
	Description:	List of records
	Obligation:	Optional
	Location:	Within the 'template' associative array
	Allowed Value(s):	The various record types; see " Record Attributes ".

PERL request example for create template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'create',
  'object' => 'dns.template',
  'requestor' => {
    'username' => 'purple'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'name' => 'template-1088104310737'
        'records' => [
          {
            'priority' => '5',
            'content' => 'mail.ex300.com.',
            'name' => 'mail',
            'type' => 'MX'
          },
          {
            'content' => 'ex300',
            'name' => ' ex300',
            'type' => 'CNAME'
          },
        ],
      },
    },
  },
}
```



```

        'content' => '10.0.10.36',
        'name' => ' ex300',
        'type' => 'A'
    },
    {
        'content' => 'miscellaneous comments',
        'name' => ' ex305',
        'type' => 'TXT'
    }
],
}
},
};

```

XML request example for create template

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">create</item>
        <item key="object">dns.template</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">purple</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="records">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="name">mail</item>
                            <item key="priority">5</item>
                            <item key="type">MX</item>
                            <item key="content">mail.ex300.com.</item>
                          </dt_assoc>
                        </item>
                        <item key="1">
                          <dt_assoc>
                            <item key="name">ex300</item>
                            <item key="type">CNAME</item>
                            <item key="content">ex300</item>
                          </dt_assoc>
                        </item>
                      </dt_array>
                    </item>
                  </dt_assoc>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```

```

    </dt_assoc>
  </item>
  <item key="2">
    <dt_assoc>
      <item key="name">ex300</item>
      <item key="type">A</item>
      <item key="content">10.0.10.36</item>
    </dt_assoc>
  </item>
  <item key="3">
    <dt_assoc>
      <item key="name">ex305</item>
      <item key="type">TXT</item>
      <item key="content">miscellaneous comments</item>
    </dt_assoc>
  </item>
</dt_array>
</item>
<item key="name">template-1088104310737</item>
</dt_assoc>
</item>
  </dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for create template

action	Parameter Name:	action
	Type:	String
	Description:	The action performed: create template
	Obligation:	Required
	Location:	Within the 'create template' response
	Value(s):	CREATE:REPLY

object	Parameter Name:	Object
	Type:	String
	Description:	The object acted upon: the created template
	Obligation:	Required
	Location:	Within the 'create template' response
	Value(s):	DNS.TEMPLATE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the create template response
	Obligation:	Required
	Location:	Within the 'create template' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	string
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be created
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'template' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the template, currently, only one template is available: 'default'
	Obligation:	Required
	Location:	Within the 'template' associative array
	Value(s):	'default'

records	Parameter Name:	records
	Type:	List
	Description:	List of records. In case of failure, the response with each records will contain a response_text and response_code, identifying the reason for failure.
	Obligation:	Required
	Location:	Within the 'template' associative array
	Value(s):	Values include the various record types; see " Record Attributes ".

PERL response example for create template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'CREATE:REPLY',
  'object' => 'DNS.TEMPLATE',
  'session_id' => 'OSRS-5593861',
  'is_success' => '1'
  'response_text' => 'Request completed successfully',
}
```

```

'response_code' => '200',
'attributes' => {
  'object_type' => 'dns.template',
  'response_text' => 'Command successful.',
  'response_code' => '200',
  'service' => 'dns'
  'product_data' => {
    'template' => {
      'name' => 'template-1088104310737',
      'response_code' => '200'
      'response_text' => 'Command successful',
      'records' => [
        {
          'priority' => '5',
          'response_text' => 'Command successful.',
          'read_only' => '0',
          'content' => 'mail.ex300.com.',
          'name' => 'mail',
          'type' => 'MX',
          'id' => '781',
          'response_code' => '200'
        },
        {
          'priority' => '0',
          'response_text' => 'Command successful.',
          'read_only' => '0',
          'content' => 'ex300',
          'name' => 'ex300',
          'type' => 'CNAME',
          'id' => '782',
          'response_code' => '200'
        },
        {
          'priority' => '0',
          'response_text' => 'Command successful.',
          'read_only' => '0',
          'content' => '10.0.10.36',
          'name' => 'ex300',
          'type' => 'A',
          'id' => '783',
          'response_code' => '200'
        },
        {
          'priority' => '0',
          'response_text' => 'Command successful.',
          'read_only' => '0',
          'content' => 'miscellaneous comments',
          'name' => 'ex305',
          'type' => 'TXT',
          'id' => '784',
          'response_code' => '200'
        }
      ],
    },
  },
},
};

```

XML response example for create template

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">CREATE:REPLY</item>
        <item key="object">DNS.TEMPLATE</item>
        <item key="session_id">OSRS-5593861</item>
        <item key="is_success">1</item>
        <item key="response_code">200</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="response_code">200</item>
            <item key="object_type">dns.template</item>
            <item key="response_text">Request completed successfully</item>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="response_text">Command successful</item>
                    <item key="response_code">200</item>
                    <item key="name">template-1088104310737</item>
                    <item key="records">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="name">mail</item>
                            <item key="read_only">0</item>
                            <item key="response_text">Command successful.</item>
                            <item key="content">mail.ex300.com.</item>
                            <item key="id">781</item>
                            <item key="response_code">200</item>
                            <item key="type">MX</item>
                            <item key="priority">5</item>
                          </dt_assoc>
                        </item>
                        <item key="1">
                          <dt_assoc>
                            <item key="name">ex300</item>
                            <item key="read_only">0</item>
                            <item key="response_text">Command successful.</item>
                            <item key="content">ex300</item>
                            <item key="id">782</item>
                            <item key="response_code">200</item>
                            <item key="type">CNAME</item>
                            <item key="priority">0</item>
                          </dt_assoc>
                        </item>
                      </dt_array>
                    </item>
                  </dt_assoc>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

```
</item>
<item key="2">
  <dt_assoc>
    <item key="name">ex300</item>
    <item key="read_only">0</item>
    <item key="response_text">Command successful.</item>
    <item key="content">10.0.10.36</item>
    <item key="id">783</item>
    <item key="response_code">200</item>
    <item key="type">A</item>
    <item key="priority">0</item>
  </dt_assoc>
</item>
<item key="3">
  <dt_assoc>
    <item key="name">ex305</item>
    <item key="read_only">0</item>
    <item key="response_text">
      Command successful.</item>
    <item key="content">miscellaneous comments</item>
    <item key="id">784</item>
    <item key="response_code">200</item>
    <item key="type">TXT</item>
    <item key="priority">0</item>
  </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>
```

The Update Template Command

The **update template** command allows you to change template content. Specifically, this command allows you to update, delete, and create records within the template. The template name and ID cannot be changed.

If you try to update a template using an invalid record, the system returns the entire list of records, and identifies the records that have failed using a specific error code describing the failure.

Request parameters for update template

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: update template
	Obligation:	Required
	Location:	Within the 'update template' request
	Allowed Value(s):	UPDATE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the template to be updated
	Obligation:	Required
	Location:	Within the 'update template' request
	Allowed Value(s):	TEMPLATE

attributes	Parameter Name:	attributes
	Type:	String
	Description:	Attributes of the update template request
	Obligation:	Required
	Location:	Within the 'update template' request
	Allowed Value(s):	Values are variable; see attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes below.

template	Parameter Name:	Template
	Type:	Associative array
	Description:	The template to be update
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'template' attributes.

name	Parameter Name:	Name
	Type:	String
	Description:	Name of the template. Currently, only one template is supported: 'default'
	Obligation:	Required
	Location:	Within the 'template' associative array
	Allowed Value(s):	'default'

update_records	Parameter Name:	update_records
	Type:	List
	Description:	List of records to be updated. Each record should contain an id . Updateable fields include content and priority ; you can't change record name or type ; to do this, you'll need to delete a record and create a new one.
	Obligation:	Required, but may be left blank if no changes
	Location:	Within the 'template' associative array
	Allowed Value(s):	Records; see " Record Attributes ".

delete_records	Parameter Name:	delete_records
	Type:	List
	Description:	List of records to be deleted. Each record should contain an id .
	Obligation:	Required, but may be left blank if no deletions
	Location:	Within the 'template' associative array
	Allowed Value(s):	Records; see " Record Attributes ".

create_records	Parameter Name:	create_records
	Type:	List
	Description:	List of records to be created. Each record should contain name/content/type. MX records also require priority.
	Obligation:	Required, but may be left blank if no new records
	Location:	Within the 'template' associative array
	Allowed Value(s):	Values include the various record types; see " Record Attributes ".

PERL request example for update template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'update',
  'object' => 'dns.template',
  'requestor' => {
    'username' => 'purple'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'name' => 'template-1088104774339'
        'delete_records' => [
          {
            'id' => '789'
          }
        ],
        'update_records' => [
          {
            'priority' => '5',
            'content' => 'mail2.example300.com.',
            'name' => 'mail2',
            'id' => '788',
            'type' => 'MX'
          },
          {
            'content' => '10.0.10.36',
            'name' => 'example300',
            'id' => '790',
            'type' => 'A'
          }
        ],
        'create_records' => [
          {
            'content' => 'ns1.example300.com.',
            'name' => 'example300',
            'type' => 'NS'
          },
          {
            'priority' => '5',
            'content' => 'mail1.example300.com.',
            'name' => 'mail1',
            'type' => 'MX'
          },
          {
            'content' => 'example300',
            'name' => 'ex3001',
            'type' => 'CNAME'
          },
          {
            'type' => 'TXT',
            'name' => 'example.com',

```

```

        'content' => 'miscellaneous comments'
    }
    {
        'content' => '65.50.166.99',
        'name' => 'address',
        'type' => 'A'
    }
    ],
}
},
};

```

XML request example for update template

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">update</item>
        <item key="object">dns.template</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">purple</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="create_records">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="name">ex300</item>
                            <item key="type">NS</item>
                            <item key="content">ns1.ex300.com.</item>
                          </dt_assoc>
                        </item>
                        <item key="1">
                          <dt_assoc>
                            <item key="name">mail1</item>
                            <item key="priority">5</item>
                            <item key="type">MX</item>
                            <item key="content">mail1.ex300.com.</item>
                          </dt_assoc>
                        </item>
                        <item key="2">

```

```

        <dt_assoc>
          <item key="name">ex3001</item>
          <item key="type">CNAME</item>
          <item key="content">ex300</item>
        </dt_assoc>
      </item>
      <item key="3">
        <dt_assoc>
          <item key="name">example.com</item>
          <item key="type">TXT</item>
          <item key="content">miscellaneous comments</item>
        </dt_assoc>
      </item>
      <item key="4">
        <dt_assoc>
          <item key="name">address</item>
          <item key="type">A</item>
          <item key="content">65.50.166.99</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
  <item key="name">template-1088104774339</item>
  <item key="update_records">
    <dt_array>
      <item key="0">
        <dt_assoc>
          <item key="name">mail2</item>
          <item key="priority">5</item>
          <item key="type">MX</item>
          <item key="content">mail2.ex300.com.</item>
          <item key="id">788</item>
        </dt_assoc>
      </item>
      <item key="1">
        <dt_assoc>
          <item key="name">ex300</item>
          <item key="type">A</item>
          <item key="content">10.0.10.36</item>
          <item key="id">790</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
  <item key="delete_records">
    <dt_array>
      <item key="0">
        <dt_assoc>
          <item key="id">789</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
</dt_assoc>
</item>
</dt_assoc>
</item>

```

```

        <item key="service">dns</item>
      </dt_assoc>
    </item>
  </dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for update template

action	Parameter Name:	Action
	Type:	String
	Description:	The action performed: update template
	Obligation:	Required
	Location:	Within the 'update template' response
	Value(s):	UPDATE

object	Parameter Name:	Object
	Type:	String
	Description:	The object acted upon: the template
	Obligation:	Required
	Location:	Within the 'update template' response
	Value(s):	DNS.TEMPLATE

attributes	Parameter Name:	Attributes
	Type:	Associative array
	Description:	Attributes of the update template response
	Obligation:	Required
	Location:	Within the 'update template' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be updated
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'template' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	Name of the template. Currently, only one template is supported: 'default'.
	Obligation:	Required
	Location:	Within the 'template' associative array
	Value(s):	'default'

create_records	Parameter Name:	create_records
	Type:	List
	Description:	List of records populated with id on success or error code and error text on error. Records contain a record id.
	Obligation:	Required, but may be left blank if no new records
	Location:	Within the 'template' associative array
	Value(s):	Values include the various record types; see " Record Attributes ".

update_records	Parameter Name:	update_records
	Type:	List
	Description:	List of records populated with error code and error text on error.
	Obligation:	Required, but may be left blank if no changes
	Location:	Within the 'template' associative array
	Value(s):	Values include the various record types; see " Record Attributes ".

delete_records	Parameter Name:	delete_records
	Type:	List
	Description:	List of records populated with error code and error text on error.
	Obligation:	Required, but may be left blank if no deletions
	Location:	Within the 'template' associative array
	Value(s):	Record ID numbers to be deleted

PERL response example for update template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'UPDATE:REPLY',
  'object' => 'DNS.TEMPLATE',
  'session_id' => 'OSRS-5593873',
  'is_success' => '1'
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'attributes' => {
    'object_type' => 'dns.template',
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'name' => 'template-1088104774339',
        'response_code' => '200'
        'delete_records' => [
          {
            'priority' => '0',
            'response_text' => '',
            'read_only' => '0',
            'id' => '789',
            'response_code' => '200'
          }
        ],
        'update_records' => [
          {
            'priority' => '5',
            'response_text' => 'Command successful.',
            'read_only' => '0',
            'content' => 'mail2.ex300.com.',
            'name' => 'mail',
            'type' => 'MX',
            'id' => '788',
            'response_code' => '200'
          },
          {
            'priority' => '0',
            'response_text' => 'Command successful.',
            'read_only' => '0',
            'content' => '10.0.10.36',
            'name' => 'ex300',
            'type' => 'A',
            'id' => '790',
            'response_code' => '200'
          }
        ],
        'response_text' => 'Command successful',
        'create_records' => [
          {
            'priority' => '0',
```

```

        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'ns1.ex300.com.',
        'name' => 'ex300',
        'type' => 'NS',
        'id' => '791',
        'response_code' => '200'
    },
    {
        'priority' => '5',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'mail1.ex300.com.',
        'name' => 'mail1',
        'type' => 'MX',
        'id' => '792',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'ex300',
        'name' => 'ex3001',
        'type' => 'CNAME',
        'id' => '793',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'miscellaneous comments',
        'name' => 'example.com',
        'type' => 'TXT',
        'id' => '794',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => '65.50.166.99',
        'name' => 'address',
        'type' => 'TXT',
        'id' => '795',
        'response_code' => '200'
    }
],
},
},
};

```

XML response example for update template

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">UPDATE:REPLY</item>
        <item key="object">DNS.TEMPLATE</item>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-5593873</item>
        <item key="response_code">200</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="response_text">Request completed successfully</item>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="delete_records">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="read_only">0</item>
                            <item key="response_text"/>
                            <item key="id">789</item>
                            <item key="response_code">200</item>
                            <item key="priority">0</item>
                          </dt_assoc>
                        </item>
                      </dt_array>
                    </item>
                    <item key="response_text">Command successful</item>
                    <item key="update_records">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="name">mail</item>
                            <item key="read_only">0</item>
                            <item key="response_text">Command successful.</item>
                            <item key="content">mail2.ex300.com.</item>
                            <item key="id">788</item>
                            <item key="response_code">200</item>
                            <item key="type">MX</item>
                            <item key="priority">5</item>
                          </dt_assoc>
                        </item>
                        <item key="1">

```



```

    <dt_assoc>
      <item key="name">ex300</item>
      <item key="read_only">0</item>
      <item key="response_text">Command successful.</item>
      <item key="content">10.0.10.36</item>
      <item key="id">790</item>
      <item key="response_code">200</item>
      <item key="type">A</item>
      <item key="priority">0</item>
    </dt_assoc>
  </item>
</dt_array>
</item>
<item key="response_code">200</item>
<item key="create_records">
  <dt_array>
    <item key="0">
      <dt_assoc>
        <item key="name">ex300</item>
        <item key="read_only">0</item>
        <item key="response_text">Command successful.</item>
        <item key="content">ns1.ex300.com.</item>
        <item key="id">791</item>
        <item key="response_code">200</item>
        <item key="type">NS</item>
        <item key="priority">0</item>
      </dt_assoc>
    </item>
    <item key="1">
      <dt_assoc>
        <item key="name">mail1</item>
        <item key="read_only">0</item>
        <item key="response_text">Command successful.</item>
        <item key="content">mail1.ex300.com.</item>
        <item key="id">792</item>
        <item key="response_code">200</item>
        <item key="type">MX</item>
        <item key="priority">5</item>
      </dt_assoc>
    </item>
    <item key="2">
      <dt_assoc>
        <item key="name">ex3001</item>
        <item key="read_only">0</item>
        <item key="response_text">Command successful.</item>
        <item key="content">ex300</item>
        <item key="id">793</item>
        <item key="response_code">200</item>
        <item key="type">CNAME</item>
        <item key="priority">0</item>
      </dt_assoc>
    </item>
    <item key="3">
      <dt_assoc>
        <item key="name">example.com</item>
        <item key="read_only">0</item>
        <item key="response_text">Command successful.</item>

```

```
        <item key="content">miscellaneous comments</item>
        <item key="id">794</item>
        <item key="response_code">200</item>
        <item key="type">TXT</item>
        <item key="priority">0</item>
    </dt_assoc>
</item>
<item key="4">
    <dt_assoc>
        <item key="name">address</item>
        <item key="read_only">0</item>
        <item key="response_text">Command successful.</item>
        <item key="content">65.50.166.99</item>
        <item key="id">795</item>
        <item key="response_code">200</item>
        <item key="type">A</item>
        <item key="priority">0</item>
    </dt_assoc>
</item>
</dt_array>
</item>
    <item key="name">template-1088104774339</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
    <item key="response_code">200</item>
    <item key="object_type">dns.template</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>
```

The Delete Template Command

The `delete template` command deletes a named, user-created template.

Request parameters for delete template

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: delete template
	Obligation:	Required
	Location:	Within the 'delete template' request
	Allowed Value(s):	DELETE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the template to be deleted
	Obligation:	Required
	Location:	Within the 'delete template' request
	Allowed Value(s):	TEMPLATE

attributes	Parameter Name:	attributes
	Type:	String
	Description:	Attributes of the delete template request
	Obligation:	Required
	Location:	Within the 'delete template' request
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be deleted
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' attribute

name	Parameter Name:	name
	Type:	String
	Description:	Name of the template. Currently, only one template is supported: 'default'
	Obligation:	Required
	Location:	Within the 'template' associative array
	Allowed Value(s):	'default'

PERL request example for delete template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'delete',
  'object' => 'dns.template',
  'requestor' => {
    'username' => 'jaser'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'name' => 'template-1088172531001'
      }
    }
  },
}
};
```

XML request example for delete template

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">delete</item>
        <item key="object">dns.template</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">jaser</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="name">template-1088172531001</item>
                  </dt_assoc>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

```

        </dt_assoc>
      </item>
    </dt_assoc>
  </item>
  <item key="service">dns</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for delete template

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: update template
	Obligation:	Required
	Location:	Within the 'delete template' response
	Value(s):	DELETE:REPLY

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the template to be updated
	Obligation:	Required
	Location:	Within the 'delete template' response
	Value(s):	DNS.TEMPLATE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the Delete Template response
	Obligation:	Required
	Location:	Within the 'delete template' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

object_type	Parameter Name:	object_type
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns.template

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the `attributes` associative array.
	Value(s):	Values are variable; see the `product_data` attributes.
template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be deleted
	Obligation:	Required
	Location:	Within the `product_data` associative array
	Value(s):	Values are variable; see the `template` attributes.
name	Parameter Name:	name
	Type:	String
	Description:	Name of the deleted template. Currently, only one template is supported: `default`
	Obligation:	Required
	Location:	Within the `template` associative array
	Value(s):	`default`

PERL response example for delete template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'DELETE:REPLY',
  'object' => 'DNS.TEMPLATE',
  'session_id' => 'OSRS-7194146',
  'response_text' => 'Request completed successfully',
  'is_success' => '1'
  'response_code' => '200',
  'attributes' => {
    'object_type' => 'dns.template',
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'response_text' => 'Command successful',
        'records' => [],
        'name' => 'template-1088172531001',
        'response_code' => '200'
      }
    }
  },
},
};
```

XML response example for delete template

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">DELETE:REPLY</item>
        <item key="object">DNS.TEMPLATE</item>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-7194146</item>
        <item key="response_code">200</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="response_code">200</item>
            <item key="object_type">dns.template</item>
            <item key="response_text">Request completed successfully</item>
            <item key="product_data">
              <dt_assoc>
                <item key="template">
                  <dt_assoc>
                    <item key="response_text">Command successful</item>
                    <item key="response_code">200</item>
                    <item key="name">template-1088172531001</item>
                    <item key="records">
                      <dt_array/>
                    </item>
                  </dt_assoc>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

The Query Template Command

Use the **query template** command to retrieve all values in your template and to view template settings.

Request parameters for query template

action	Parameter Name:	action
	Type:	String
	Description:	The action performed: query template
	Obligation:	Required
	Location:	Within the 'query template' request
	Allowed Value(s):	QUERY

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the template to be queried
	Obligation:	Required
	Location:	Within the 'query template' request
	Allowed Value(s):	TEMPLATE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the Query Template request
	Obligation:	Required
	Location:	Within the 'query template' request
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be queried
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' attribute

name	Parameter Name:	name
	Type:	String
	Description:	Name of the template to query
	Obligation:	Required
	Location:	The 'template' associative array
	Allowed Value(s):	'default'

PERL request example for query template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'query',
  'object' => 'dns.template',
  'requestor' => {
    'username' => 'jfraser'
  },
  'attributes' => {
    'service' => 'dns'
    'product_data' => {
      'template' => {
        'name' => 'template-1088178591231'
      }
    }
  },
}
};
```

XML request example for query template

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">query</item>
        <item key="object">dns.template</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">jfraser</item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

```

    </dt_assoc>
  </item>
  <item key="attributes">
    <dt_assoc>
      <item key="product_data">
        <dt_assoc>
          <item key="template">
            <dt_assoc>
              <item key="name">template-1088178591231</item>
            </dt_assoc>
          </item>
        </dt_assoc>
      </item>
      <item key="service">dns</item>
    </dt_assoc>
  </item>
</dt_assoc>
</data_block>
</body>

```

Response parameters for query template

action	Parameter Name:	action
	Type:	String
	Description:	The action performed: query template
	Obligation:	Required
	Location:	Within the 'query template' response
	Value(s):	QUERY

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon: the queried template
	Obligation:	Required
	Location:	Within the 'query template' response
	Value(s):	TEMPLATE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the Query Template response
	Obligation:	Required
	Location:	Within the 'query template' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template to be queried
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'template' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	Name of the template that was queried
	Obligation:	Required
	Location:	Within the 'template' associative array
	Value(s):	default

records	Parameter Name:	records
	Type:	List
	Description:	List of records
	Obligation:	Optional
	Location:	Within the 'template' associative array
	Value(s):	Values include the various record types; see " Record Attributes ".

PERL response example for query template

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'QUERY:REPLY',
  'object' => 'DNS.TEMPLATE',
  'session_id' => 'OSRS-7194212',
  'response_code' => '200',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'attributes' => {
    'object_type' => 'dns.template',
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns'
  }
  'product_data' => {
    'template' => {
      'response_text' => 'Command successful',
      'records' => [
        {
          'priority' => '0',
          'response_text' => ''
        }
      ]
    }
  }
}
```

```

        'read_only' => '0',
        'content' => 'some-domain',
        'name' => 'user',
        'type' => 'CNAME',
        'id' => '669',
        'response_code' => '200'
    },
    {
        'priority' => '5',
        'response_text' => '',
        'read_only' => '0',
        'content' => 'mail.some-domain.com.',
        'name' => 'mail',
        'type' => 'MX',
        'id' => '668',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => '',
        'read_only' => '0',
        'content' => '10.0.10.36',
        'name' => 'some-domain',
        'type' => 'A',
        'id' => '670',
        'response_code' => '200'
    }
],
'name' => 'template-1088178591231',
'response_code' => '200'
}
},
}
};

```

XML response example for query template

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">QUERY:REPLY</item>
        <item key="object">DNS.TEMPLATE</item>
        <item key="session_id">OSRS-7194212</item>
        <item key="is_success">1</item>
        <item key="response_code">200</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>

```

```

<item key="response_text">Request completed successfully</item>
<item key="product_data">
  <dt_assoc>
    <item key="template">
      <dt_assoc>
        <item key="response_text">Command successful</item>
        <item key="response_code">200</item>
        <item key="name">template-1088178591231</item>
        <item key="records">
          <dt_array>
            <item key="0">
              <dt_assoc>
                <item key="name">user</item>
                <item key="read_only">0</item>
                <item key="response_text"/>
                <item key="content">some-domain</item>
                <item key="id">669</item>
                <item key="response_code">200</item>
                <item key="type">CNAME</item>
                <item key="priority">0</item>
              </dt_assoc>
            </item>
            <item key="1">
              <dt_assoc>
                <item key="name">mail</item>
                <item key="read_only">0</item>
                <item key="response_text"/>
                <item key="content">mail.some-domain.com.</item>
                <item key="id">668</item>
                <item key="response_code">200</item>
                <item key="type">MX</item>
                <item key="priority">5</item>
              </dt_assoc>
            </item>
            <item key="2">
              <dt_assoc>
                <item key="name">some-domain</item>
                <item key="read_only">0</item>
                <item key="response_text"/>
                <item key="content">10.0.10.36</item>
                <item key="id">670</item>
                <item key="response_code">200</item>
                <item key="type">A</item>
                <item key="priority">0</item>
              </dt_assoc>
            </item>
          </dt_array>
        </item>
      </dt_assoc>
    </item>
    <item key="response_code">200</item>
    <item key="object_type">dns.template</item>
  </dt_assoc>
</item>
</dt_assoc>

```

```
</data_block>  
</body>  
</OPS_envelope>
```

The Create Order Command

When you create an order, you can process it at the time you create it, or save the order to pending, then process it later.

When the order is created, the product is created too, but it is not active.

See “The Create/Update Order Operation” in the generic *OpenSRS TPP API Specification* document for the initial API call.

Request parameters for create order

action	Parameter Name:	Action
	Type:	String
	Description:	The action to be performed: create order
	Obligation:	Required
	Location:	Within the 'create order' request
Allowed Value(s):	CREATE	

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the order to be created
	Obligation:	Required
	Location:	Within the 'create order' request
Allowed Value(s):	ORDER	

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the Create Order command
	Obligation:	Required
	Location:	Within the 'create order' request
Allowed Value(s):	Values are variable; see the attributes below.	

handling	Parameter Name:	handling
	Type:	String
	Description:	Allows you to save the order to pending, or to process the order immediately. When you process the order immediately, you are also charged immediately.
	Obligation:	Required
	Location:	Within the 'attributes' associative array
Allowed Value(s):	'save' or 'process'	

client_reference	Parameter Name:	client_reference
	Type:	String
	Description:	A user-defined value to identify the order
	Obligation:	Optional
	Location:	Within the 'attributes' associative array
Allowed Value(s):	String	

user_id	Parameter Name:	user_id
	Type:	string
	Description:	User ID of the owner of the zone
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Valid use id

contacts	Parameter Name:	contacts
	Type:	Associative array
	Description:	Use the 'id' attribute to populate this request with the contact data for that contact. If you do not have the contact id, you'll need to supply the full contact set. See " Common Contact Data ".
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Contact ID or contact set

id	Parameter Name:	id
	Type:	Int
	Description:	If you have contacts defined in the system, enter the contact ID here to specify the contact. If you do not have the contact ID, you'll need to supply the full contact set.
	Obligation:	Required
	Location:	Within the 'contacts' associative array
	Allowed Value(s):	Valid contact ID

create_items	Parameter Name:	create_items
	Type:	Associative array
	Description:	
	Obligation:	Required, but may be left empty if no new items
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	dns

object_type	Parameter Name:	object_type
	Type:	String
	Description:	The type of DNS service being purchased. Currently, only 'managed' is available.
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	'managed'

orderitem_type	Parameter Name:	orderitem_type
	Type:	String
	Description:	The type of order item
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	'new'

expiry_date	Parameter Name:	expiry_date
	Type:	String
	Description:	When used with "create_items", this parameter allows you to set an expiry date for a new order item. To set or change an expiry date The date must be a future date, in the following format: <ul style="list-style-type: none"> ▪ day must be 2 characters, i.e. 01-31 ▪ month must be first three characters of month name, i.e. Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec ▪ year must be in four character format, i.e. 2005 ▪ example: 27-Aug-2008 To remove an expiry date: Submit '-1'
	Obligation:	Optional - If not specified, the order item will not expire, and will be billed to your account each month, indefinitely or until the item is cancelled, suspended, or an expiry date is set.
	Location:	Within the 'create_items' associative array. Also permitted in the 'update_items' and 'inventory_items' arrays.
	Allowed Value(s):	Future date in valid format, e.g. '27-Aug-2008'

contact_set	Parameter Name:	contact_set
	Type:	Associative array
	Description:	This is an associative array where the key is the contact type, and the value indicates which contact to use from the contacts array described earlier.
	Obligation:	Required: admin, tech, and billing
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	admin, tech, and billing

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	Values are variable; see the attributes below

zone	Parameter Name:	zone
	Type:	Object
	Description:	The zone
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the zone
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid zone name

records	Parameter Name:	records
	Type:	List of records
	Description:	The records attribute can be empty, but is still a mandatory attribute of zone, and must be included in the command. If populated, the records are added to the newly created zone.
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Values include the various record types; see " Record Attributes ".

pool	Parameter Name:	pool
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'pool' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the nameserver pool
	Obligation:	Required
	Location:	Within the 'pool' associative array
	Allowed Value(s):	'default'

flags	Parameter Name:	flags
	Type:	Associative array
	Description:	<p>These flags allow you specify certain operations that are allowed on the zone.</p> <p>The status of these flags are returned in the order query result. These flags are <i>not enforced</i> by the system when using the API, and the ability to set/retrieve them are provided as a convenience to you when building your own business logic and front-end. It is up to you to enforce these settings when using the API.</p> <p>For example, if you have set "allow zone management" to 0 (i.e. don't allow), you can still send an API command that manages the zone – the system does not prevent this.</p> <p>However, these flags <i>are</i> honoured by the DNS Management Web Interface.</p>
	Obligation:	Optional
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'flags' attributes.

allow_zone_management	Parameter Name:	allow_zone_management
	Type:	String
	Description:	Indicates if zone management is allowed on this zone
	Obligation:	Optional If this flag is not specified, then the value in the Reseller defaults will be used.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow zone management (false) 1 = allow zone management (true)

allow_url_forwarding	Parameter Name:	allow_url_forwarding
	Type:	String
	Description:	Indicates if URL forwarding is allowed on this zone
	Obligation:	Optional If this flag is not specified, then the value in the Reseller defaults will be used.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow URL forwarding (false) 1 = allow URL forwarding (true)

allow_templates	Parameter Name:	allow_templates
	Type:	String
	Description:	Indicates if templates are allowed on this zone
	Obligation:	Optional If this flag is not specified, then the value in the Reseller defaults will be used.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow templates (false) 1 = allow template (true)

PERL request example for create order

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'create',
  'object' => 'order',
  'requestor' => {
    'username' => 'jfraser'
  },
  'attributes' => {
    'password' => 'horizon',
    'client_reference' => 'user_1088178626710',
    'service' => 'dns',
    'username' => 'horizon',
```

```

'handling' => 'process'
'contacts' => [
  {
    'id' => '22791'
  }
],
'create_items' => [
  {
    'product_data' => {
      'period' => '1',
      'pool' => {
        'name' => 'default'
      },
      'zone' => {
        'records' => [
          {
            'priority' => '5',
            'content' => 'mail.somedmn.com.',
            'name' => 'www',
            'type' => 'MX'
          },
          {
            'content' => 'www',
            'name' => 'mail',
            'type' => 'CNAME'
          },
          {
            'content' => '10.0.10.36',
            'name' => 'www',
            'type' => 'A'
          },
          {
            'content' => 'miscellaneous',
            'name' => 'example',
            'type' => 'TXT'
          }
        ],
        'name' => 'user-1088178626710.com'
      }
    },
    'object_type' => 'managed',
    'contact_set' => {
      'admin' => '0',
      'tech' => '0',
      'billing' => '0'
    },
    'service' => 'dns',
    'order_item_type' => 'new',
    'expiry_date' => '27-Aug-2008'
  }
],
};

```

XML request example for create order

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.4.0</item>
        <item key="action">create</item>
        <item key="object">order</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">jfraser</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="handling">process</item>
            <item key="client_reference">user_1088178626710</item>
            <item key="password">horizon</item>
            <item key="contacts">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="id">22791</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
            <item key="create_items">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="product_data">
                      <dt_assoc>
                        <item key="zone">
                          <dt_assoc>
                            <item key="records">
                              <dt_array>
                                <item key="0">
                                  <dt_assoc>
                                    <item key="name">www</item>
                                    <item key="priority">5</item>
                                    <item key="type">MX</item>
                                    <item key="content">mail.somedmn.com.</item>
                                  </dt_assoc>
                                </item>
                                <item key="1">
                                  <dt_assoc>
                                    <item key="name">mail</item>
                                  </dt_assoc>
                                </item>
                              </dt_array>
                            </item>
                          </dt_assoc>
                        </item>
                      </dt_assoc>
                    </item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

```

        <item key="type">CNAME</item>
        <item key="content">www</item>
    </dt_assoc>
</item>
<item key="2">
    <dt_assoc>
        <item key="name">www</item>
        <item key="type">A</item>
        <item key="content">10.0.10.36</item>
    </dt_assoc>
</item>
<item key="3">
    <dt_assoc>
        <item key="name">example</item>
        <item key="type">TXT</item>
        <item key="content">miscellaneous</item>
    </dt_assoc>
</item>
</dt_array>
</item>
    <item key="name">user-1088178626710.com</item>
</dt_assoc>
</item>
<item key="pool">
    <dt_assoc>
        <item key="name">default</item>
    </dt_assoc>
</item>
    <item key="period">1</item>
</dt_assoc>
</item>
<item key="service">dns</item>
<item key="object_type">managed</item>
<item key="order_item_type">new</item>
<item key="expiry_date">27-Aug-2008</item>
<item key="contact_set">
    <dt_assoc>
        <item key="admin">0</item>
        <item key="tech">0</item>
        <item key="billing">0</item>
    </dt_assoc>
</item>
</dt_assoc>
</item>
</dt_array>
</item>
    <item key="username">horizon</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for create order

action	Parameter Name:	Action
	Type:	String
	Description:	The action performed: create order
	Obligation:	Required
	Location:	Within the 'create order' response
	Value(s):	CREATE:REPLY

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon: the queried order
	Obligation:	Required
	Location:	Within the 'create order' response
	Value(s):	ORDER

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'create order' response
	Value(s):	Values are variable; see the attributes below.

order_id	Parameter Name:	order_id
	Type:	Int
	Description:	Id number assigned to the order
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Int

client_reference	Parameter Name:	client_reference
	Type:	String
	Description:	A user-defined value to identify the order
	Obligation:	Optional
	Location:	Within the 'attributes' associative array
	Value(s):	String

status	Parameter Name:	status
	Type:	string
	Description:	Indicates the status of the order, e.g. 'pending'
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Valid status, e.g. 'completed', 'updated', 'validated'

price	Parameter Name:	price
	Type:	Int
	Description:	The cost of the order, including all order items
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Int

contacts	Parameter Name:	contacts
	Type:	List
	Description:	List of associative arrays
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Contact data, see " Common Contact Data ".

create_items	Parameter Name:	create_items
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the attributes below.

client_reference	Parameter Name:	client_reference
	Type:	String
	Description:	A user-defined value to identify the order
	Obligation:	Optional
	Location:	Within the 'create_items' associative array
	Value(s):	String

item_id	Parameter Name:	item_id
	Type:	Int
	Description:	The ID number assigned to an item in the order
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Int

status	Parameter Name:	status
	Type:	String
	Description:	Indicates the status of the order, e.g. "created"
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Valid status, e.g. 'completed', 'pending', etc.

price	Parameter Name:	price
	Type:	Int
	Description:	The cost of the order including all order items
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Int

major_code	Parameter Name:	major_code
	Type:	Int
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
Value(s):	Int	

major_text	Parameter Name:	major_text
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
Value(s):	String	

product_item	Parameter Name:	product_item
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
Value(s):	Values are variable; see the 'product_item' attributes.	

service	Parameter Name:	service
	Type:	string
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'product_item' associative array
Value(s):	dns	

object_type	Parameter Name:	object_type
	Type:	string
	Description:	
	Obligation:	Required
	Location:	Within the 'product_item' associative array
Value(s):	Managed	

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The inventory ID of the item
	Obligation:	Required
	Location:	Within the 'product_item' associative array
Value(s):	Valid inventory item ID	

PERL response example for create order

```
{
  'protocol' => 'TPP',
  'session_id' => 'OSRS-7194215',
  'object' => 'ORDER',
  'version' => '1.4.0',
  'response_code' => '200',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'action' => 'CREATE:REPLY',
  'attributes' => {
    'contacts' => [
      {
        'duns' => '',
        'client_reference' => '',
        'address3' => '',
        'org_name' => '',
        'state' => '',
        'last_name' => '',
        'email' => '',
        'city' => '',
        'response_text' => 'Request completed successfully',
        'postal_code' => '',
        'fax' => '',
        'contact_id' => '22791',
        'url' => '',
        'country' => '',
        'response_code' => '200',
        'phone' => '',
        'address2' => '',
        'title' => '',
        'address1' => '',
        'first_name' => ''
      }
    ],
    'client_reference' => 'user_1088178626710',
    'create_items' => [
      {
        'client_reference' => '',
        'status' => 'charged',
        'major_code' => '200',
        'term' => '1',
        'item_id' => '18512',
        'product_item' => {
          'product_data' => {
            'zone_data' => {
              'records' => [
                {
                  'priority' => '5',
                  'response_text' => 'Command successful.',
                  'read_only' => '0',
                  'content' => 'mail.somedmn.com.',
                  'name' => 'www',
                  'type' => 'MX',
```

```

        'id' => '6390',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'www',
        'name' => 'mail',
        'type' => 'CNAME',
        'id' => '6391',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => '10.0.10.36',
        'name' => 'www',
        'type' => 'A',
        'id' => '6392',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'miscellaneous',
        'name' => 'example',
        'type' => 'TXT',
        'id' => '6393',
        'response_code' => '200'
    }
],
'version' => '0',
'name' => 'user-1088178626710.com'
},
'pool_data' => {
    'name' => 'default',
    'nameservers' => []
},
'zone_services' => []
},
'object_type' => 'managed',
'response_text' => 'Request completed successfully',
'contact_set' => {
    'admin' => '22791',
    'tech' => '22791',
    'billing' => '22791'
},
'response_code' => '200',
'service' => 'dns',
'inventory_item_id' => '18292'
},
'contact_set' => {
    'admin' => '41401',
    'tech' => '41401',

```

```

        'billing' => '41401'
    },
    'ancillary_price' => '0',
    'price' => '5',
    'major_text' => 'Money charged'
}
],
'status' => 'charged',
'order_id' => '19939',
'price' => '5'
}
};

```

XML response example for create order

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="version">1.4.0</item>
        <item key="action">CREATE:REPLY</item>
        <item key="object">ORDER</item>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-7194215</item>
        <item key="protocol">TPP</item>
        <item key="response_code">200</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="status">charged</item>
            <item key="create_items">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="major_code">200</item>
                    <item key="ancillary_price">0</item>
                    <item key="client_reference"/>
                    <item key="status">charged</item>
                    <item key="contact_set">
                      <dt_assoc>
                        <item key="tech">41401</item>
                        <item key="admin">41401</item>
                        <item key="billing">41401</item>
                      </dt_assoc>
                    </item>
                    <item key="item_id">18512</item>
                    <item key="term">1</item>
                    <item key="price">5</item>
                    <item key="product_item">
                      <dt_assoc>
                        <item key="contact_set">
                          <dt_assoc>

```

```

        <item key="tech">22791</item>
        <item key="admin">22791</item>
        <item key="billing">22791</item>
    </dt_assoc>
</item>
<item key="inventory_item_id">18292</item>
<item key="service">dns</item>
<item key="response_text">Request completed
successfully</item>
<item key="product_data">
    <dt_assoc>
        <item key="zone_services">
            <dt_array/>
        </item>
        <item key="pool_data">
            <dt_assoc>
                <item key="nameservers">
                    <dt_array/>
                </item>
                <item key="name">default</item>
            </dt_assoc>
        </item>
        <item key="zone_data">
            <dt_assoc>
                <item key="version">0</item>
                <item key="name">user-1088178626710.com</item>
                <item key="records">
                    <dt_array>
                        <item key="0">
                            <dt_assoc>
                                <item key="name">www</item>
                                <item key="read_only">0</item>
                                <item key="response_text">Command
successful.</item>
                                <item key="content">mail.x300.com.</item>
                                <item key="id">6390</item>
                                <item key="response_code">200</item>
                                <item key="type">MX</item>
                                <item key="priority">5</item>
                            </dt_assoc>
                        </item>
                        <item key="1">
                            <dt_assoc>
                                <item key="name">mail</item>
                                <item key="read_only">0</item>
                                <item key="response_text">Command
successful.</item>
                                <item key="content">www</item>
                                <item key="id">6391</item>
                                <item key="response_code">200</item>
                                <item key="type">CNAME</item>
                                <item key="priority">0</item>
                            </dt_assoc>
                        </item>
                        <item key="2">
                            <dt_assoc>
                                <item key="name">www</item>

```

```

        <item key="read_only">0</item>
        <item key="response_text">Command
successful.</item>

        <item key="content">10.0.10.36</item>
        <item key="id">6392</item>
        <item key="response_code">200</item>
        <item key="type">A</item>
        <item key="priority">0</item>
    </dt_assoc>
</item>
<item key="3">
    <dt_assoc>
        <item key="name">example</item>
        <item key="read_only">0</item>
        <item key="response_text">Command
successful.</item>

        <item key="content">miscellaneous</item>
        <item key="id">6393</item>
        <item key="response_code">200</item>
        <item key="type">TXT</item>
        <item key="priority">0</item>
    </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
<item key="response_code">200</item>
<item key="object_type">managed</item>
</dt_assoc>
</item>
<item key="major_text">Money charged</item>
</dt_assoc>
</item>
</dt_array>
</item>
<item key="contacts">
    <dt_array>
        <item key="0">
            <dt_assoc>
                <item key="country"/>
                <item key="last_name"/>
                <item key="postal_code"/>
                <item key="client_reference"/>
                <item key="duns"/>
                <item key="phone"/>
                <item key="org_name"/>
                <item key="first_name"/>
                <item key="state"/>
                <item key="title"/>
                <item key="address1"/>
                <item key="address2"/>
                <item key="address3"/>
                <item key="city"/>
                <item key="fax"/>

```

```
        <item key="url"/>
        <item key="contact_id">22791</item>
        <item key="response_text">Request completed
successfully</item>
        <item key="response_code">200</item>
        <item key="email"/>
    </dt_assoc>
</item>
</dt_array>
</item>
<item key="order_id">19939</item>
<item key="price">5</item>
<item key="client_reference">user_1088178626710</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>
```

The Update Order Command

The **update** operation for orders permits the modification of orders and order items that are still pending. Order records can be created, modified, or deleted. For additional details, see "The Order Object" in the *OpenSRS TPP API Specification*.

Note: The **update order** command only saves the changes made to the order. If you want to process the order, you need to submit a **process order** command after you submit the update.

Request parameters for update order

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: update order
	Obligation:	Required
	Location:	Within the 'update order' request
	Allowed Value(s):	UPDATE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the order to be updated
	Obligation:	Required
	Location:	Within the 'update order' request
	Allowed Value(s):	ORDER

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the order
	Obligation:	Required
	Location:	Within the 'update order' request
	Allowed Value(s):	Values are variable; see the attributes below.

user_id	Parameter Name:	user_id
	Type:	Int
	Description:	user ID
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Valid User Id

order_id	Parameter Name:	order_id
	Type:	Int
	Description:	Order Id for the order that you want to change.
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Valid Order ID

contacts	Parameter Name:	contacts
	Type:	
	Description:	Use the 'id' attribute to populate this request with the contact data for that contact. If you do not have the contact id, you need to supply the full contact set. See " Common Contact Data ".
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Contact ID or contact set

id	Parameter Name:	id
	Type:	Int
	Description:	If you have contacts defined in the system, enter the contact id here. If you do not have the contact ID, you need to supply the full contact set.
	Obligation:	Optional
	Location:	Within the 'contacts' associative array.
	Allowed Value(s):	Valid contact ID

cancel_items	Parameter Name:	cancel_items
	Type:	Associative array
	Description:	Add the order item IDs that you want to cancel to this array. This array can be left empty.
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Valid order item id numbers

create_items	Parameter Name:	create_items
	Type:	Associative array
	Description:	This array can be left empty if you do not want to create a new item.
	Obligation:	Required, but may be left empty if no new items
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	dns

object_type	Parameter Name:	object_type
	Type:	String
	Description:	The type of DNS service being purchased. Currently, only 'managed' is available.
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	'managed'

orderitem_type	Parameter Name:	orderitem_type
	Type:	String
	Description:	Order item type
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	'New'

expiry_date	Parameter Name:	expiry_date
	Type:	String
	Description:	Allows you to set, change, or remove an expiry date for an inventory_item (i.e. a processed order item). To set or change an expiry date The date must be a future date, in the following format: <ul style="list-style-type: none"> ▪ day must be 2 characters, i.e. 01-31 ▪ month must be first three characters of month name, i.e. Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec ▪ year must be in four character format, i.e. 2005 ▪ example: 27-Aug-2008 To remove an expiry date: Submit '-1'
	Obligation:	Optional
	Location:	Within the 'update_items' associative array. Also permitted in the 'create_items' and 'inventory_items' arrays.
	Allowed Value(s):	Future date in valid format, e.g. '27-Aug-2008', or '-1' if removing an expiry date.

contact_set	Parameter Name:	contact_set
	Type:	Associative array
	Description:	This is an associative array where the key is the contact type, and the value indicates which contact to use from the contacts array described earlier.
	Obligation:	Required: admin, tech, and billing
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	admin, tech, and billing

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Allowed Value(s):	Values are variable; see the attributes below

zone	Parameter Name:	zone
	Type:	Object
	Description:	The zone
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the zone
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid zone name

records	Parameter Name:	records
	Type:	List of records
	Description:	The records attribute can be empty, but is still a mandatory attribute of zone, and must be included in the command. If populated, the records will be added to the newly created zone.
	Obligation:	Required
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Values include the various record types; see " Record Attributes ".

pool	Parameter Name:	pool
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'pool' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	The name of the nameserver pool
	Obligation:	Required
	Location:	Within the 'pool' associative array
	Allowed Value(s):	'default'

flags	Parameter Name:	flags
	Type:	Associative array
	Description:	<p>These flags allow you specify certain operations that are allowed on the zone.</p> <p>The status of these flags are returned when you do a Query Inventory Item command.</p> <p>These flags are <i>not enforced</i> by the system when using the API, and the ability to set/retrieve them are provided as a convenience to you when building your own business logic and front-end. It is up to you to enforce these settings when using the API.</p> <p>For example, if you set "allow zone management" to 0 (i.e. don't allow), you can still send an API command that manages the zone – the system does not prevent this.</p> <p>However, these flags <i>are</i> honoured by the DNS Management web interface.</p>
	Obligation:	<p>Optional</p> <p>If individual flags are not specified then the Reseller defaults are used.</p>
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'flags' attributes.

allow_zone_management	Parameter Name:	allow_zone_management
	Type:	String
	Description:	Indicates if zone management is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified, then the value in the Reseller defaults is used.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow zone management (false)</p> <p>1 = allow zone management (true)</p>

allow_url_forwarding	Parameter Name:	allow_url_forwarding
	Type:	String
	Description:	Indicates if URL forwarding is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified, then the value in the Reseller defaults is used.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow URL forwarding (false)</p> <p>1 = allow URL forwarding (true)</p>

allow_templates	Parameter Name:	allow_templates
	Type:	String
	Description:	Indicates if templates are allowed on this zone
	Obligation:	Optional If this flag is not specified, then the value in the Reseller defaults is used.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow templates (false) 1 = allow templates (true)

update_items	Parameter Name:	update_items
	Type:	List
	Description:	
	Obligation:	Optional
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid record

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'update order' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

zone	Parameter Name:	zone
	Type:	Object
	Description:	The name of the zone
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone' attributes.

create_records	Parameter Name:	create_records
	Type:	List
	Description:	List of records
	Obligation:	Required, but can be left blank
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid records; see " Records Attributes ".

update_records	Parameter Name:	update_records
	Type:	List
	Description:	List of records
	Obligation:	Required, but can be left blank
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid records; see " Records Attributes ".

delete_records	Parameter Name:	create_records
	Type:	List
	Description:	Add the ID number of the records that you want to delete.
	Obligation:	Required, but can be left blank
	Location:	Within the 'zone' associative array
	Allowed Value(s):	Valid record ID numbers

flags	Parameter Name:	flags
	Type:	Associative array
	Description:	<p>These flags allow you specify certain operations that are allowed on the zone.</p> <p>The status of these flags are returned in the order query result.</p> <p>These flags are <i>not enforced</i> by the system when using the API, and the ability to set/retrieve them is provided as a convenience to you when building your own business logic and front-end. It is up to you to enforce these settings when using the API.</p> <p>For example, if you set "allow zone management" to 0 (i.e. don't allow), you can still send an API command that manages the zone – the system does not prevent this.</p> <p>However, these flags <i>are</i> honoured by the DNS Management web interface.</p>
	Obligation:	<p>Optional</p> <p>Any flags that are not specified in the update remain unchanged.</p>
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'flags' attributes.

allow_zone_management	Parameter Name:	allow_zone_management
	Type:	String
	Description:	Indicates if zone management is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified in the update, it remains unchanged.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow zone management (false)</p> <p>1 = allow zone management (true)</p>

allow_url_forwarding	Parameter Name:	allow_url_forwarding
	Type:	String
	Description:	Indicates if URL forwarding is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified in the update, it remains unchanged.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow URL forwarding (false)</p> <p>1 = allow URL forwarding (true)</p>

allow_templates	Parameter Name:	allow_templates
	Type:	String
	Description:	Indicates if templates are allowed on this zone
	Obligation:	Optional If this flag is not specified in the update, it remains unchanged.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow templates (false) 1 = allow templates (true)

template	Parameter Name:	template
	Type:	Object
	Description:	The template upon which items are updated.
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	'name' attribute

name	Parameter Name:	name
	Type:	String
	Description:	The name of the template
	Obligation:	Required
	Location:	Within the 'template' associative array
	Allowed Value(s):	'default'

contact_set	Parameter Name:	contact_set
	Type:	Int
	Description:	Indicates which contact to use, i.e. Admin, Tech, or Billing. The integer determines which contact to use: 0 = Admin, 1 = Tech, 2 = Billing.
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Allowed Value(s):	0 1 2 or whatever integer you assigned to the contact

PERL request example for update order

```
{
  'protocol' => 'TPP',
  'object' => 'order',
  'version' => '1.4.0',
  'action' => 'update',
  'requestor' => {
    'username' => 'paagy'
  },
  'attributes' => {
    'contacts' => [
      {
        'id' => '30547'
      }
    ]
  }
}
```

```

],
'create_items' => [
  {
    'product_data' => {
      'period' => '1',
      'pool' => {
        'name' => 'default'
      },
      'zone' => {
        'records' => [
          {
            'priority' => '5',
            'content' => 'm2.t5.com.',
            'name' => 'ex300',
            'type' => 'MX'
          },
          {
            'content' => 'www1-t5.com.',
            'name' => 'mail1',
            'type' => 'CNAME'
          },
          {
            'content' => '10.1.10.36',
            'name' => 'www1',
            'type' => 'A'
          },
          {
            'content' => 'miscellaneous',
            'name' => 'www5',
            'type' => 'TXT'
          }
        ],
        'name' => 'ex300-101abc.com'
      }
    },
    'object_type' => 'managed',
    'contact_set' => {
      'admin' => '0',
      'tech' => '0',
      'billing' => '0'
    },
    'service' => 'dns',
    'order_item_type' => 'new'
  }
],
'order_id' => '14167',
'update_items' => [
  {
    'product_data' => {
      'template' => {
        'name' => 'default'
      },
      'zone' => {
        'delete_records' => [
          {
            'id' => '9041'
          }
        ],
      },
    },
  },
]

```



```

    {
      'id' => '9042'
    }
  ],
  'update_records' => [
    {
      'content' => 'mail.tuws.com.',
      'id' => '9040'
    }
  ],
  'create_records' => [
    {
      'priority' => '5',
      'content' => 'mail3.t5.com.',
      'name' => 'ex300-mx',
      'type' => 'MX'
    },
    {
      'content' => 'www2.com.',
      'name' => 'mail2',
      'type' => 'CNAME'
    },
    {
      'content' => '10.2.10.36',
      'name' => 'www2',
      'type' => 'A'
    }
  ]
}
},
'contact_set' => {
  'admin' => '0',
  'tech' => '0',
  'billing' => '0'
},
'item_id' => '17680',
'expiry_date' => '27-Aug-2008'
}
],
'cancel_items' => [],

```

```

        'user_id' => '12537'
    }
};

```

Request Example, XML (Update Order)

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='version'>1.4.0</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='user_id'>12537</item>
            <item key='cancel_items'>
              <dt_array/>
            </item>
            <item key='create_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='service'>dns</item>
                    <item key='product_data'>
                      <dt_assoc>
                        <item key='zone'>
                          <dt_assoc>
                            <item key='records'>
                              <dt_array>
                                <item key='0'>
                                  <dt_assoc>
                                    <item key='name'>ex300</item>
                                    <item key='priority'>5</item>
                                    <item key='type'>MX</item>
                                    <item key='content'>m2.t5.com.</item>
                                  </dt_assoc>
                                </item>
                              </dt_array>
                            </item>
                          <item key='1'>
                            <dt_assoc>
                              <item key='name'>mail1</item>
                              <item key='type'>CNAME</item>
                              <item key='content'>www1-t5.com.</item>
                            </dt_assoc>
                          </item>
                        <item key='2'>
                          <dt_assoc>
                            <item key='name'>www1</item>
                            <item key='type'>A</item>
                            <item key='content'>10.1.10.36</item>
                          </dt_assoc>
                        </item>
                      </dt_assoc>
                    </item>
                  <item key='e'>
                    <dt_assoc>

```

```

        <item key='name'>www5</item>
        <item key='type'>TXT</item>
        <item key='content'>miscellaneous</item>
    </dt_assoc>
</item>
</dt_array>
</item>
<item key='name'>ex300-101abc.com</item>
</dt_assoc>
</item>
<item key='pool'>
    <dt_assoc>
        <item key='name'>default</item>
    </dt_assoc>
</item>
<item key='period'>1</item>
</dt_assoc>
</item>
<item key='object_type'>managed</item>
<item key='order_item_type'>new</item>
<item key='contact_set'>
    <dt_assoc>
        <item key='admin'>0</item>
        <item key='tech'>0</item>
        <item key='billing'>0</item>
    </dt_assoc>
</item>
</dt_assoc>
</item>
</dt_array>
</item>
<item key='contacts'>
    <dt_array>
        <item key='0'>
            <dt_assoc>
                <item key='id'>30547</item>
            </dt_assoc>
        </item>
    </dt_array>
</item>
<item key='update_items'>
    <dt_array>
        <item key='0'>
            <dt_assoc>
                <item key='expiry_date'>27-Aug-2008</item>
                <item key='product_data'>
                    <dt_assoc>
                        <item key='zone'>
                            <dt_assoc>
                                <item key='create_records'>
                                    <dt_array>
                                        <item key='0'>
                                            <dt_assoc>
                                                <item key='name'>ex300-mx</item>
                                                <item key='priority'>5</item>
                                                <item key='type'>MX</item>
                                                <item key='content'>mail3.t5.com.</item>
                                            </dt_assoc>
                                        </item>
                                    </dt_array>
                                </item>
                            </dt_assoc>
                        </item>
                    </dt_assoc>
                </item>
            </dt_assoc>
        </item>
    </dt_array>
</item>

```

```

        </dt_assoc>
    </item>
    <item key='1'>
        <dt_assoc>
            <item key='name'>mail2</item>
            <item key='type'>CNAME</item>
            <item key='content'>www2.com.</item>
        </dt_assoc>
    </item>
    <item key='2'>
        <dt_assoc>
            <item key='name'>www2</item>
            <item key='type'>A</item>
            <item key='content'>10.2.10.36</item>
        </dt_assoc>
    </item>
</dt_array>
</item>
<item key='update_records'>
    <dt_array>
        <item key='0'>
            <dt_assoc>
                <item key='content'>mail.tuws.com.</item>
                <item key='id'>9040</item>
            </dt_assoc>
        </item>
    </dt_array>
</item>
<item key='delete_records'>
    <dt_array>
        <item key='0'>
            <dt_assoc>
                <item key='id'>9041</item>
            </dt_assoc>
        </item>
        <item key='1'>
            <dt_assoc>
                <item key='id'>9042</item>
            </dt_assoc>
        </item>
    </dt_array>
</item>
</dt_assoc>
</item>
<item key='template'>
    <dt_assoc>
        <item key='name'>default</item>
    </dt_assoc>
</item>
</dt_assoc>
</item>
<item key='item_id'>17680</item>
<item key='contact_set'>
    <dt_assoc>
        <item key='admin'>0</item>
        <item key='tech'>0</item>
        <item key='billing'>0</item>
    </dt_assoc>

```

```

        </dt_assoc>
      </item>
    </dt_assoc>
  </item>
</dt_array>
</item>
<item key='order_id'>14167</item>
</dt_assoc>
</item>
<item key='object'>order</item>
<item key='requestor'>
  <dt_assoc>
    <item key='username'>paagy</item>
  </dt_assoc>
</item>
<item key='action'>update</item>
<item key='protocol'>TPP</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for update order

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: update order
	Obligation:	Required
	Location:	Within the 'update order' response
	Value(s):	RETRIEVE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the order to be updated
	Obligation:	Required
	Location:	Within the 'update order' response
	Value(s):	DNS.ZONE

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the order
	Obligation:	Required
	Location:	Within the 'update order' response
	Value(s):	Values are variable; see the attributes below.

contacts	Parameter Name:	contacts
	Type:	List
	Description:	Use the 'id' attribute to populate this request with the contact data for that contact. If you do not have the contact id, you need to supply the full contact set. See " Common Contact Data ".
	Obligation:	Optional
	Location:	Within the 'attributes' associative array
	Value(s):	Contact ID or contact set

cancel_items	Parameter Name:	cancel_items
	Type:	List
	Description:	List of associative arrays of the items you want to cancel
	Obligation:	optional
	Location:	Within the 'attributes' associative array
	Value(s):	Valid item ID numbers

create_items	Parameter Name:	create_items
	Type:	List
	Description:	List of associative arrays
	Obligation:	optional
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the attributes below

client_reference	Parameter Name:	client_reference
	Type:	String
	Description:	A user-defined value to identify the order
	Obligation:	Optional
	Location:	Within the 'create_items' associative array
	Value(s):	String

item_id	Parameter Name:	item_id
	Type:	Int
	Description:	The ID number assigned to an item in the order
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Int

major_code	Parameter Name:	major_code
	Type:	Int
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	

major_text	Parameter Name:	major_text
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	

status	Parameter Name:	status
	Type:	String
	Description:	Indicates the status of the order, e.g. "updated"
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Valid status, e.g. 'completed', 'pending', 'validated'

price	Parameter Name:	price
	Type:	Int
	Description:	The cost of the order, including all order items
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Int

product_item	Parameter Name:	product_item
	Type:	Associative array
	Description:	The information required to create a DNS item
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	Values are variable; see attributes below.

service	Parameter Name:	service
	Type:	string
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'product_item' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	DNS information required to purchase
	Obligation:	Required
	Location:	Within the 'product_item' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

zone_data	Parameter Name:	zone_data
	Type:	Associative array
	Description:	Zone data
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'zone_data' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	Name of the zone, currently only 'default' is available.
	Obligation:	Required
	Location:	Within 'zone_data' associative array
	Value(s):	Valid zone name

version	Parameter Name:	version
	Type:	Int
	Description:	
	Obligation:	Optional
	Location:	Within 'zone_data' associative array
	Value(s):	Int

records	Parameter Name:	records
	Type:	List
	Description:	List of records.
	Obligation:	Required
	Location:	Within 'zone_data' associative array
	Value(s):	Valid records; see Record Attributes .

pool_data	Parameter Name:	pool_data
	Type:	Associative array
	Description:	Information regarding the pool
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the attributes below

name	Parameter Name:	name
	Type:	String
	Description:	Name of the pool, currently only 'default' is available
	Obligation:	Required
	Location:	Within 'pool_data' associative array
	Value(s):	'default'

nameservers	Parameter Name:	nameservers
	Type:	String
	Description:	Nameservers available in the pool
	Obligation:	Optional
	Location:	Within 'pool_data' associative array
	Value(s):	List of nameservers

update_items	Parameter Name:	update_items
	Type:	List
	Description:	List of associative arrays
	Obligation:	Optional
	Location:	Within the 'zone' associative array
	Value(s):	Valid record

client_reference	Parameter Name:	client_reference
	Type:	String
	Description:	A user-defined value to identify the order
	Obligation:	Optional
	Location:	Within the 'update_items' associative array
	Value(s):	String

item_id	Parameter Name:	item_id
	Type:	Int
	Description:	The ID number assigned to an item in the order
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Value(s):	Int

major_code	Parameter Name:	major_code
	Type:	Int
	Description:	
	Obligation:	Required
	Location:	Within the 'create_items' associative array
	Value(s):	

major_text	Parameter Name:	major_text
	Type:	String
	Description:	
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Value(s):	

status	Parameter Name:	status
	Type:	String
	Description:	Indicates the status of the order, e.g. "updated"
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Value(s):	Valid status, e.g. 'completed', 'pending', 'validated'

price	Parameter Name:	price
	Type:	Int
	Description:	The cost of the order, including all order items
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Value(s):	Int

product_item	Parameter Name:	product_item
	Type:	Associative array
	Description:	The information required to update a DNS item
	Obligation:	Required
	Location:	Within the 'update_items' associative array
	Value(s):	Values are variable; see the attributes below

service	Parameter Name:	service
	Type:	string
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'product_item' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Information required to update
	Obligation:	Required
	Location:	Within the 'product_item' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

zone	Parameter Name:	zone
	Type:	Associative array
	Description:	Zone data
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'zone' attributes.

create_records	Parameter Name:	create_records
	Type:	List
	Description:	Allows you to add more records to the zone
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Value(s):	Records

update_records	Parameter Name:	update_records
	Type:	List
	Description:	Allows you to change records in the zone
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Value(s):	Records

delete_records	Parameter Name:	delete_records
	Type:	List
	Description:	List of record Ids to be deleted
	Obligation:	Required
	Location:	Within 'zone' associative array
	Value(s):	Valid record ID numbers

template	Parameter Name:	template
	Type:	Associative array
	Description:	The template used to update the items
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	'name' attribute

name	Parameter Name:	name
	Type:	String
	Description:	Name of the template, currently only 'default' is available
	Obligation:	Required
	Location:	Within 'zone' associative array
	Value(s):	'default'

PERL response example for update order

```
{
  'protocol' => 'TPP',
  'object' => 'ORDER',
  'session_id' => 'OSRS-5570136',
  'response_text' => 'Request completed successfully',
  'version' => '1.4.0',
  'action' => 'UPDATE:REPLY',
  'response_code' => '200',
  'attributes' => {
    'contacts' => [],
    'create_items' => [
      {
        'product_item' => {
          'product_data' => {
            'zone_data' => {
              'records' => [
                {
                  'priority' => '5',
                  'response_text' => 'Command successful',
                  'read_only' => '0',
```

```

        'content' => 'mail2.bg.com.',
        'name' => 'ex300',
        'type' => 'MX',
        'id' => '9043',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'www1.pa.com.',
        'name' => 'mail1',
        'type' => 'CNAME',
        'id' => '9044',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => '10.1.10.36',
        'name' => 'www1',
        'type' => 'A',
        'id' => '9045',
        'response_code' => '200'
    },
    {
        'priority' => '0',
        'response_text' => 'Command successful.',
        'read_only' => '0',
        'content' => 'miscellaneous',
        'name' => 'www5',
        'type' => 'TXT',
        'id' => '9046',
        'response_code' => '200'
    }
],
'version' => '0',
'name' => 'user-1080abc.com'
},
'pool_data' => {
    'name' => 'default',
    'nameservers' => []
},
'zone_services' => []
},
'response_text' => '',
'response_code' => '200',
'service' => 'dns'
},
'client_reference' => '',
'status' => 'validated',
'contact_set' => {
    'admin' => '30547',
    'tech' => '30547',
    'billing' => '30547'
},

```

```

    'price' => '242',
    'major_code' => '200',
    'major_text' => '',
    'term' => '1',
    'item_id' => '17681'
  }
],
'cancel_items' => [],
'update_items' => [
  {
    'product_item' => {
      'product_data' => {
        'template' => {
          'name' => 'default'
        },
        'zone' => {
          'delete_records' => [
            {
              'id' => '9041'
            },
            {
              'id' => '9042'
            }
          ],
          'update_records' => [
            {
              'content' => 'mail.opensrs.com.',
              'id' => '9040'
            }
          ],
          'create_records' => [
            {
              'priority' => '5',
              'name' => 'pa-mx',
              'content' => 'mail3.ye.com.',
              'type' => 'MX'
            },
            {
              'name' => 'mail2',
              'content' => 'www2.com.',
              'type' => 'CNAME'
            },
            {
              'name' => 'www2',
              'content' => '10.2.10.36',
              'type' => 'A'
            }
          ]
        }
      }
    },
    'response_text' => '',
    'response_code' => '200',
    'service' => ''
  },
  'client_reference' => '',
  'status' => '',
  'contact_set' => {

```

```

        'admin' => '30547',
        'tech' => '30547',
        'billing' => '30547'
    },
    'price' => '0',
    'major_code' => '200',
    'major_text' => 'Request completed successfully',
    'item_id' => '17680'
}
],
'reverse_items' => []
},
'is_success' => '1'
};

```

XML response example for update order

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header><version>0.9</version></header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-5570136</item>
        <item key="protocol">TPP</item>
        <item key="object">ORDER</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="create_items">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="status">validated</item>
                    <item key="major_code">200</item>
                    <item key="contact_set">
                      <dt_assoc>
                        <item key="tech">30547</item>
                        <item key="admin">30547</item>
                        <item key="billing">30547</item>
                      </dt_assoc>
                    </item>
                  </dt_assoc>
                </item>
                <item key="item_id">17681</item>
                <item key="term">1</item>
                <item key="price">242</item>
                <item key="client_reference"/>
                <item key="major_text"/>
                <item key="product_item">
                  <dt_assoc>
                    <item key="service">dns</item>
                    <item key="response_text"/>
                    <item key="product_data">
                      <dt_assoc>
                        <item key="zone_services">
                          <dt_array/>

```

```

</item>
<item key="pool_data">
  <dt_assoc>
    <item key="nameservers">
      <dt_array/>
    </item>
    <item key="name">default</item>
  </dt_assoc>
</item>
<item key="zone_data">
  <dt_assoc>
    <item key="version">0</item>
    <item key="name">user-1080abc.com</item>
    <item key="records">
      <dt_array>
        <item key="0">
          <dt_assoc>
            <item key="name">ex300</item>
            <item key="read_only">0</item>
            <item key="response_text">Command
successful</item>
            <item key="content">mail2.bg.com.</item>
            <item key="id">9043</item>
            <item key="response_code">200</item>
            <item key="type">MX</item>
            <item key="priority">5</item>
          </dt_assoc>
        </item>
        <item key="1">
          <dt_assoc>
            <item key="name">mail1</item>
            <item key="read_only">0</item>
            <item key="response_text">Command
successful.</item>
            <item key="content">www1.pa.com.</item>
            <item key="id">9044</item>
            <item key="response_code">200</item>
            <item key="type">CNAME</item>
            <item key="priority">0</item>
          </dt_assoc>
        </item>
        <item key="2">
          <dt_assoc>
            <item key="name">www1</item>
            <item key="read_only">0</item>
            <item key="response_text">Command
successful.</item>
            <item key="content">10.1.10.36</item>
            <item key="id">9045</item>
            <item key="response_code">200</item>
            <item key="type">A</item>
            <item key="priority">0</item>
          </dt_assoc>
        </item>
        <item key="3">
          <dt_assoc>
            <item key="name">www5</item>

```

```

        <item key="read_only">0</item>
        <item key="response_text">Command
successful.</item>

        <item key="content">miscellaneous</item>
        <item key="id">9046</item>
        <item key="response_code">200</item>
        <item key="type">TXT</item>
        <item key="priority">0</item>
    </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
<item key="response_code">200</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_array>
</item>
<item key="update_items">
    <dt_array>
        <item key="0">
            <dt_assoc>
                <item key="status"/>
                <item key="contact_set">
                    <dt_assoc>
                        <item key="tech">30547</item>
                        <item key="admin">30547</item>
                        <item key="billing">30547</item>
                    </dt_assoc>
                </item>
                <item key="major_code">200</item>
                <item key="item_id">17680</item>
                <item key="price">0</item>
                <item key="client_reference"/>
                <item key="product_item">
                    <dt_assoc>
                        <item key="service"/>
                        <item key="response_text"/>
                        <item key="product_data">
                            <dt_assoc>
                                <item key="template">
                                    <dt_assoc>
                                        <item key="name">default</item>
                                    </dt_assoc>
                                </item>
                                <item key="zone">
                                    <dt_assoc>
                                        <item key="delete_records">
                                            <dt_array>
                                                <item key="0">
                                                    <dt_assoc>
                                                        <item key="id">9041</item>

```



```

        </dt_assoc>
      </item>
      <item key="1">
        <dt_assoc>
          <item key="id">9042</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
  <item key="update_records">
    <dt_array>
      <item key="0">
        <dt_assoc>
          <item key="content">mail.tcws.com.</item>
          <item key="id">9040</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
  <item key="create_records">
    <dt_array>
      <item key="0">
        <dt_assoc>
          <item key="content">mail3.ye.com.</item>
          <item key="type">MX</item>
          <item key="priority">5</item>
          <item key="name">pa-mx</item>
        </dt_assoc>
      </item>
      <item key="1">
        <dt_assoc>
          <item key="content">www2.com.</item>
          <item key="type">CNAME</item>
          <item key="name">mail2</item>
        </dt_assoc>
      </item>
      <item key="2">
        <dt_assoc>
          <item key="content">10.2.10.36</item>
          <item key="type">A</item>
          <item key="name">www2</item>
        </dt_assoc>
      </item>
    </dt_array>
  </item>
</dt_assoc>
</item>
</dt_assoc>
</item>
<item key="response_code">200</item>
</dt_assoc>
</item>
<item key="major_text">Request completed successfully</item>
</dt_assoc>
</item>
</dt_array>
</item>

```

```
<item key="cancel_items">
  <dt_array/>
</item>
<item key="reverse_items">
  <dt_array/>
</item>
</dt_assoc>
</item>
<item key="response_code">200</item>
<item key="version">1.4.0</item>
<item key="action">UPDATE:REPLY</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>
```

The Update Inventory Item Command

The **update inventory item** command allows you to make changes to the DNS zone once it's been created.

Note: In order to update an inventory item, you need that item's ID. To retrieve the ID, see "[Query Inventory Item – by ID](#)".

Request parameters for update inventory item

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: update inventory item
	Obligation:	Required
	Location:	Within the 'update inventory item' request
	Allowed Value(s):	UPDATE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the inventory to be updated
	Obligation:	Required
	Location:	Within the 'update inventory item' request
	Allowed Value(s):	INVENTORY_ITEM.DNS

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes
	Obligation:	Required
	Location:	Within the 'update inventory item' request
	Allowed Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	dns

inventory_item_id	Parameter Name:	service
	Type:	Int
	Description:	The ID of the inventory item that you want to update. To retrieve an inventory item ID, see " Query Inventory Item – by ID ".
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Valid inventory item ID.

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see the 'product_data' attributes.

zone	Parameter Name:	zone
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone' attributes.

create_records	Parameter Name:	create_records
	Type:	List
	Description:	Allows you to add more records to the zone
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Allowed Value(s):	Records

update_records	Parameter Name:	update_records
	Type:	List
	Description:	Allows you to change records in the zone
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Allowed Value(s):	Records

delete_records	Parameter Name:	delete_records
	Type:	List
	Description:	List of record Ids to be deleted
	Obligation:	Required
	Location:	Within 'zone' associative array
	Allowed Value(s):	Valid record ID numbers

flags	Parameter Name:	flags
	Type:	Associative array
	Description:	<p>These flags allow you specify certain operations that are allowed on the zone.</p> <p>The status of these flags are returned in the order query result.</p> <p>These flags are <i>not enforced</i> by the system when using the API, and the ability to set/retrieve them is provided as a convenience to you when building your own business logic and front-end. It is up to you to enforce these settings when using the API.</p> <p>For example, if you set "allow zone management" to 0 (i.e. don't allow), you can still send an API command that manages the zone - the system does not prevent this.</p> <p>However, these <i>flags</i> are honoured by the DNS Management web interface.</p>
	Obligation:	<p>Optional</p> <p>Only flags that are sent in the update will be modified, otherwise they remain unchanged.</p>
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable. See the 'flags' attributes.

allow_zone_management	Parameter Name:	allow_zone_management
	Type:	String
	Description:	Indicates if zone management is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified in the update, it remains unchanged.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow zone management (false)</p> <p>1 = allow zone management (true)</p>

allow_url_forwarding	Parameter Name:	allow_url_forwarding
	Type:	String
	Description:	Indicates if URL forwarding is allowed on this zone
	Obligation:	<p>Optional</p> <p>If this flag is not specified in the update, it remains unchanged.</p>
	Location:	Within the 'flags' associative array
	Allowed Value(s):	<p>0 1</p> <p>0 = don't allow URL forwarding (false)</p> <p>1 = allow URL forwarding (true)</p>

allow_templates	Parameter Name:	allow_templates
	Type:	String
	Description:	Indicates if templates are allowed on this zone
	Obligation:	Optional If this flag is not specified in the update, it remains unchanged.
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow templates (false) 1 = allow templates (true)

zone_services	Parameter Name:	zone_services
	Type:	Associative array
	Description:	Allows zone services to be created, updated or deleted.
	Obligation:	Optional
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone_services' attributes.

create_services	Parameter Name:	create_services
	Type:	Associative array
	Description:	Allows zone services to be created.
	Obligation:	Optional
	Location:	Within the 'zone_services' associative array
	Allowed Value(s):	Values are variable; see the 'create_services' attributes.

type	Parameter Name:	type
	Type:	String
	Description:	The type of zone service
	Obligation:	Required
	Location:	Within the "create_services" list.
	Allowed Value(s):	One of: <ul style="list-style-type: none"> ▪ 'redirector' ▪ 'url-cloak' ▪ 'template' Where, 'redirector' is used for a location redirect, 'url-cloak' is used for a location redirect with cloaking, and 'template' allows a template to be used.

prefix	Parameter Name:	prefix
	Type:	String
	Description:	<p>The prefix for the zone name. The prefix is prepended to the zone name to obtain the final name.</p> <p>Example, if the zone is "abcd.com", and the prefix is "www", then the service is for www.abcd.com</p> <p>To create a zone service for the entire domain, us "@" as the prefix.</p> <p>When you specify a prefix for use with a zone service, a read-only record with this prefix is created in the zone in order to allow the zone service to work. You cannot change this record so long as the zone service for that prefix exists.</p>
	Obligation:	Required
	Location:	Within the "create_services" list.
Allowed Value(s):	<p>Any string that contains valid DNS characters.</p> <p>You cannot add a prefix for a zone service that is already defined in your zone record as an A Record or CNAME record if that zone service is of type 'redirector, url-cloak, or template'. (this restriction does not exist for an MX record)</p> <p>For example, if you have defined a CNAME or A record of "www" you cannot use the prefix "www" for a 'redirector' zone service (or url-cloak or template service).</p> <p>Similarly, the reverse is also true – if you create a zone service with a certain prefix, you cannot use that prefix in your zone's CNAME or A Record, because it would conflict. You could, however, create an MX record with that same prefix and this is not a conflict.</p>	

content	Parameter Name:	content
	Type:	String
	Description:	This is the data for the service.
	Obligation:	Required
	Location:	Within the "create_services" list.
	Allowed Value(s):	<p>The allowed values depend on the particular type chosen (see "type" parameter).</p> <p>Where the type is 'redirector' or 'url-cloak', the content is the full URL to redirect to (this must include the protocol portion, e.g. http://www.somedomain.com)</p> <p>Where the type is 'template' the content must be set to one of the available templates as listed below:</p> <ul style="list-style-type: none"> ▪ 'for-sale' is used to specify domain-for-sale template ▪ 'under-construction' is used to specify the domain-under-construction template

parameters	Parameter Name:	parameters
	Type:	Associative Array
	Description:	Associative array that contains parameters for the 'template' type of zone service. At this time, only the 'for-sale' template has parameters associated with it. If you are using the 'under-construction' template, then the parameters section is not used.
	Obligation:	Optional Even if you are using the 'for-sale' template, this section is still optional, because if not specified, then the system defaults are used for all values in this section.
	Location:	Within the "create_services" list.
	Allowed Value(s):	See attributes for 'parameters' associative array below.

heading	Parameter Name:	heading
	Type:	String
	Description:	The heading that will be used in the 'for-sale' template.
	Obligation:	Optional System defaults will be used if this parameter is not specified.
	Parameter Name:	Within the 'parameters' associative array
	Allowed Value(s):	Any string with maximum length of 255 characters. Both plain text and HTML are accepted.

description	Parameter Name:	description
	Type:	String
	Description:	The description that is used in the 'for-sale' template
	Obligation:	Optional System defaults are used if this parameter is not specified.
	Location:	Within the 'parameters' associative array
	Allowed Value(s):	Any string with maximum length of 3999 characters.

update_services	Parameter Name:	update_services
	Type:	Associative array
	Description:	Allows zone services to be updated.
	Obligation:	Optional
	Location:	Within the 'zone_services' associative array
	Allowed Value(s):	Values are variable; see the 'update_services' attributes.

id	Parameter Name:	id
	Type:	Integer
	Description:	The id of the zone service that you are updating.
	Obligation:	Required
	Location:	Within the 'update_services' list.
	Allowed Value(s):	Integer greater than 0

content	Parameter Name:	content
	Type:	String
	Description:	This is the data for the service.
	Obligation:	Required
	Location:	Within the `update_services` list
	Allowed Value(s):	<p>The allowed values depend on the particular type chosen (see "type" parameter).</p> <p>Where the type is `redirector` or `url-cloak`, the content is the full URL to redirect to (this must include the protocol portion, e.g. http://www.somedomain.com)</p> <p>Where the type is `template` the content must be set to one of the available templates as listed below:</p> <ul style="list-style-type: none"> ▪ `for-sale` is used to specify domain-for-sale template ▪ `under-construction` is used to specify the domain-under-construction template

parameters	Parameter Name:	parameters
	Type:	Associative Array
	Description:	<p>Associative array that contains parameters for the `template` type of zone service.</p> <p>At this time, only the `for-sale` template has parameters associated with it.</p>
	Obligation:	<p>Optional</p> <p>Only relevant when type is set to `template` and content is set to `for-sale`.</p> <p>If parameters are not specified in an update_services they will be reset to system defaults.</p>
	Location:	Within the `update_services` list.
	Allowed Value(s):	See attributes for `parameters` associative array below.

heading	Parameter Name:	heading
	Type:	String
	Description:	The heading that is used in the `for-sale` template
	Obligation:	<p>Optional</p> <p>If not specified, the value is reset to the heading specified in the Reseller defaults.</p>
	Location:	Within the `parameters` associative array
	Allowed Value(s):	Any string with maximum length of 255 characters. Both plain text and HTML are accepted.

description	Parameter Name:	description
	Type:	String
	Description:	The description that is used in the `for-sale` template
	Obligation:	<p>Optional</p> <p>If not specified, the description is reset to the value specified in the Reseller defaults.</p>
	Location:	Within the `parameters` associative array
	Allowed Value(s):	Any string with maximum length of 3999 characters.

delete_services	Parameter Name:	delete_services
	Type:	List
	Description:	Allows zone services to be deleted.
	Obligation:	Optional
	Location:	Within the 'zone_services' associative array
	Allowed Value(s):	Values are variable; see the 'delete_services' attributes.

id	Parameter Name:	id
	Type:	Integer
	Description:	The id of the zone service you wan to delete.
	Obligation:	Required
	Location:	Within the 'delete_services' list.
	Allowed Value(s):	Integer greater than 0

PERL request example for update inventory item

```
{
  'protocol' => 'TPP',
  'object' => 'inventory_item.dns',
  'version' => '1.3.0',
  'action' => 'update',
  'requestor' => {
    'username' => 'user1'
  },
  'attributes' => {
    'product_data' => {
      'flags' => {
        'allow_zone_management' => '0',
        'allow_templates' => '0',
        'allow_url_forwarding' => '0'
      },
      'zone' => {
        'delete_records' => [
          {
            'id' => '2175'
          },
          {
            'id' => '2176'
          }
        ],
        'update_records' => [
          {
            'priority' => '20',
            'name' => 'user2',
            'content' => 'mail20.smpldmn1.com.',
            'type' => 'MX',
            'id' => '2174'
          }
        ],
        'create_records' => [
          {
            'name' => 'mail1',
```

```

    'content' => 'user1',
    'type' => 'CNAME'
  },
  {
    'priority' => '5',
    'name' => 'user2',
    'content' => 'mail2.smpldmn1.com.',
    'type' => 'MX'
  },
  {
    'name' => 'www1',
    'content' => '10.1.10.36',
    'type' => 'A'
  },
  {
    'name' => 'www7',
    'content' => 'miscellaneous',
    'type' => 'TXT'
  }
]
},
'zone_services' => [
  'create_services',
  [
    {
      'parameters' => {
        'heading' => 'asasd.com',
        'description' => 'a description'
      },
      'content' => 'for-sale',
      'type' => 'template',
      'id' => '123',
      'prefix' => 'www'
    }
  ],
  'update_services',
  [
    {
      'parameters' => {
        'heading' => 'asasd.com',
        'description' => 'a description'
      },
      'content' => 'for-sale',
      'type' => 'template',
      'id' => '123',
      'prefix' => 'www'
    }
  ],
  'delete_services',
  [
    {
      'id' => '123'
    },
    {
      'id' => '99'
    }
  ]
]

```

```

    ]
  },
  'service' => 'dns',
  'inventory_item_id' => '8468'
}
};

```

XML request example for update inventory item

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="version">1.4.0</item>
        <item key="protocol">TPP</item>
        <item key="action">UPDATE</item>
        <item key="object">INVENTORY_ITEM.DNS</item>
        <item key="registrant_ip">216.40.39.5</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">sdsa</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="service">dns</item>
            <item key="inventory_item_id">26718</item>
            <item key="product_data">
              <dt_assoc>
                <item key="zone_services">
                  <dt_assoc>
                    <item key="create_services">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>
                            <item key="type">template</item>
                            <item key="content">for-sale</item>
                            <item key="prefix">mail</item>
                            <item key="parameters">
                              <dt_assoc>
                                <item key="heading">alpha</item>
                                <item key="description">soup</item>
                              </dt_assoc>
                            </item>
                          </dt_assoc>
                        </item>
                      </dt_array>
                    </item>
                    <item key="update_services">
                      <dt_array>
                        <item key="0">
                          <dt_assoc>

```

```

        <item key="content">for-sale</item>
        <item key="id">890</item>
    </dt_assoc>
</item>
</dt_array>
</item>
<item key="delete_services">
    <dt_array>
        <item key="0">
            <dt_assoc>
                <item key="id">891</item>
            </dt_assoc>
        </item>
    </dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response parameters for update inventory item

action	Parameter Name:	Action
	Type:	String
	Description:	The action to be performed: update inventory item
	Obligation:	Required
	Location:	Within the 'update inventory item' response
	Value(s):	UPDATE:REPLY

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the item to be updated
	Obligation:	Required
	Location:	Within the 'update inventory item' response
	Value(s):	INVENTORY_ITEM.DNS

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes
	Obligation:	Required
	Location:	Within the 'update inventory item' response
	Value(s):	Values are variable; see the attributes below.

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	dns

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

zone	Parameter Name:	zone
	Type:	Associative array
	Description:	
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'zone' attributes.

version	Parameter Name:	version
	Type:	Int
	Description:	The 'version' attribute is designed to prevent overwriting resulting from different users making changes to the inventory item. Query the object, then use the version # provided in the response. To overwrite any changes and submit the request in spite of version errors, omit the "version ' => ' ##" line in the request.
	Obligation:	Optional
	Location:	Within the 'zone' associative array
	Value(s):	Valid version #. Version # must be the same as the version you actually submit. If you do not make your changes to the same version that you submit, an error is returned.

create_records	Parameter Name:	create_records
	Type:	List
	Description:	List of records
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Value(s):	Records

update_records	Parameter Name:	update_records
	Type:	List
	Description:	List of records
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Value(s):	Records

delete_records	Parameter Name:	delete_records
	Type:	List
	Description:	List of record Ids indicating deleted records
	Obligation:	Required, but can be left blank
	Location:	Within 'zone' associative array
	Value(s):	Valid record ID numbers

PERL response example for update inventory item

```
{
  'protocol' => 'TPP',
  'session_id' => 'OSRS-5522032',
  'object' => 'INVENTORY_ITEM.DNS',
  'version' => '1.3.0',
  'response_code' => '200',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'action' => 'UPDATE:REPLY',
  'attributes' => {
    'product_data' => {
      'flags' => {
        'allow_zone_management' => '0',
        'allow_templates' => '0',
        'allow_url_forwarding' => '0'
      },
      'zone' => {
        'delete_records' => [
          {
            'response_text' => 'Record successfully deleted',
            'id' => '2175',
            'response_code' => '200'
          },
          {
            'response_text' => 'Record successfully deleted',
            'id' => '2176',
            'response_code' => '200'
          }
        ],
        'update_records' => [
          {
            'priority' => '20',
            'response_text' => 'Record successfully updated',
            'name' => 'user1',
            'content' => 'mail20.smpldmn1.com.',
            'type' => 'MX',
            'id' => '2174',
            'response_code' => '200'
          }
        ],
        'version' => '1250',
        'create_records' => [
          {
            'response_text' => 'Record successfully created',
```

```

        'name' => 'mail1',
        'content' => 'user1',
        'type' => 'CNAME',
        'id' => '2178',
        'response_code' => '200'
    },
    {
        'priority' => '5',
        'response_text' => 'Record successfully created',
        'name' => 'user1',
        'content' => 'mail2.smpldmn1.com.',
        'type' => 'MX',
        'id' => '2179',
        'response_code' => '200'
    },
    {
        'response_text' => 'Record successfully created',
        'name' => 'ww1',
        'content' => '10.1.10.36',
        'type' => 'A',
        'id' => '2180',
        'response_code' => '200'
    },
    {
        'response_text' => 'Record successfully created',
        'name' => 'www7',
        'content' => 'miscellaneous',
        'type' => 'TXT',
        'id' => '2181',
        'response_code' => '200'
    }
]
}
},
'response_text' => 'Request completed successfully',
'service' => 'dns',
'response_code' => '200'
}
};

```

XML response example for update inventory item

```

<?xml version='1.0' encoding="UTF-8" standalone="no" ?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="action">UPDATE:REPLY</item>
        <item key="object">INVENTORY_ITEM.DNS</item>
        <item key="is_success">1</item>
        <item key="version">1.4.0</item>
        <item key="session_id">OSRS-7333649</item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```



```

<item key="response_code">200</item>
<item key="response_text">Request completed successfully</item>
<item key="attributes">
  <dt_assoc>
    <item key="inventory_item_id">26718</item>
    <item key="service">dns</item>
    <item key="product_data">
      <dt_assoc>
        <item key="zone">
          <dt_assoc>
            <item key="delete_records">
              <dt_array/>
            </item>
            <item key="update_records">
              <dt_array/>
            </item>
            <item key="version">10128</item>
            <item key="create_records">
              <dt_array/>
            </item>
          </dt_assoc>
        </item>
        <item key="zone_services">
          <dt_assoc>
            <item key="update_services">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="content">for-sale</item>
                    <item key="response_text">Service successfully
updated</item>
                    <item key="id">890</item>
                    <item key="response_code">200</item>
                    <item key="prefix">www</item>
                    <item key="type">template</item>
                    <item key="parameters">
                      <dt_assoc/>
                    </item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
            <item key="create_services">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="content">for-sale</item>
                    <item key="response_text">Service successfully
created</item>
                  <item key="id">892</item>
                    <item key="response_code">200</item>
                    <item key="prefix">mail</item>
                    <item key="type">template</item>
                    <item key="parameters">
                      <dt_assoc>
                        <item key="description">soup</item>
                        <item key="heading">alpha</item>

```

```

        </dt_assoc>
      </item>
    </dt_assoc>
  </item>
</dt_array>
</item>
<item key="delete_services">
  <dt_array>
    <item key="0">
      <dt_assoc>
        <item key="content"/>
        <item key="response_text">Service successfully
deleted</item>

        <item key="id">891</item>
        <item key="response_code">200</item>
        <item key="prefix"/>
        <item key="type"/>
        <item key="parameters">
          <dt_assoc/>
        </item>
      </dt_assoc>
    </item>
  </dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
<item key="response_text">Request completed successfully</item>
<item key="response_code">200</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

The Suspend Inventory Item Command

The **suspend** command allows you to suspend the DNS service for inventory items (i.e. order items that have been completed/processed).

Suspending DNS service stops zone information from being published to the Managed DNS nameservers, causing the domain zone records to no longer resolve. Zone record management, domain forwarding settings, and end user management permissions are not available through the RWI 2, API, or through the Public DNS Management interface.

Suspended services can be reactivated at any time; all zone information, domain forwarding settings, and domain forwarding permissions are retained so that if the service is reactivated, the zone can be republished to the nameservers. Zone information, domain forwarding settings, and end user management permissions are retained until the zone is cancelled.

PERL examples for suspend inventory item

Request

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'suspend',
  'object' => 'inventory_item',
  'requestor' => {
    'username' => 'default_user'
  },
  'attributes' => {
    'user_id' => '9522',
    'inventory_items' => [
      {
        'service' => 'dns',
        'inventory_item_id' => '22913'
      }
    ]
  }
};
```

Response

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'SUSPEND:REPLY',
  'object' => 'INVENTORY_ITEM',
  'session_id' => 'OSRS-5623399',
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'attributes' => {
    'inventory_items' => [
      {
        'response_text' => 'Request completed successfully',
```

```

        'response_code' => '200',
        'service' => 'dns',
        'inventory_item_id' => '22913'
    }
]
},
'is_success' => '1'
};

```

XML examples for suspend inventory item

Request

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='version'>1.4.0</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='user_id'>9522</item>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='service'>dns</item>
                    <item key='inventory_item_id'>22913</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
        <item key='object'>inventory_item</item>
        <item key='requestor'>
          <dt_assoc>
            <item key='username'>default_user</item>
          </dt_assoc>
        </item>
        <item key='action'>suspend</item>
        <item key='protocol'>TPP</item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```

Response

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='is_success'>1</item>
        <item key='session_id'>OSRS-5623399</item>
        <item key='protocol'>TPP</item>
        <item key='object'>INVENTORY_ITEM</item>
        <item key='response_text'>Request completed successfully</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='inventory_item_id'>22913</item>
                    <item key='service'>dns</item>
                    <item key='response_text'>Request completed
successfully</item>
                    <item key='response_code'>200</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
        <item key='response_code'>200</item>
        <item key='version'>1.4.0</item>
        <item key='action'>SUSPEND:REPLY</item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

Request parameters for suspend inventory item

The suspend DNS service command uses some of the standard request and response keys. Keys that are specific to this command are described below.

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed
	Obligation:	Required
	Location:	Within the suspend request
	Allowed Value(s):	suspend

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon
	Obligation:	Required
	Location:	Within the suspend request
	Allowed Value(s):	inventory_item

user_id	Parameter Name:	user_id
	Type:	String
	Description:	The ID of the user that provisioned the service
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Valid user ID

inventory_items	Parameter Name:	inventory_items
	Type:	Array of arrays
	Description:	List that identifies the inventory items to suspend
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values include the 'service' and 'inventory_item_id' keys

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the inventory item to be suspended
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	dns

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The ID of the inventory item to suspend
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	Valid inventory item ID

The Activate Inventory Item Command

The **activate** command allows you to reactivate the DNS service for inventory items that have expired or been suspended — suspended due to insufficient funds in the Reseller account, or suspended by the Reseller using the Suspend Inventory Item command.

When a DNS inventory item is reactivated, the zone information is resubmitted to the primary and secondary nameservers, and that the domain will once again resolve.

If an expired DNS inventory item is reactivated, the new expiry date is the current date plus one year. The expiry date can be changed at any time using the **update inventory item** command.

Note: If you reactivate a service on the same day that it was suspended, the reactivation charge may not appear on your Reseller account until the following business day.

PERL examples for activate inventory item

Request

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'activate',
  'object' => 'inventory_item',
  'requestor' => {
    'username' => 'default_user'
  },
  'attributes' => {
    'user_id' => '9522',
    'inventory_items' => [
      {
        'service' => 'dns',
        'inventory_item_id' => '22913'
      }
    ]
  }
};
```

Response

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'ACTIVATE:REPLY',
  'object' => 'INVENTORY_ITEM',
  'session_id' => 'OSRS-5623424',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'attributes' => {
    'inventory_items' => [
```

```

    {
      'response_text' => 'Request completed successfully',
      'response_code' => '200',
      'service' => 'dns',
      'inventory_item_id' => '22913'
    }
  ]
}
};

```

XML examples for activate inventory item

Request

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='protocol'>TPP</item>
        <item key='version'>1.4.0</item>
        <item key='action'>activate</item>
        <item key='object'>inventory_item</item>
        <item key='requestor'>
          <dt_assoc>
            <item key='username'>default_user</item>
          </dt_assoc>
        </item>
        <item key='attributes'>
          <dt_assoc>
            <item key='user_id'>9522</item>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='service'>dns</item>
                    <item key='inventory_item_id'>22913</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```


Response

```
<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='is_success'>1</item>
        <item key='session_id'>OSRS-5623424</item>
        <item key='protocol'>TPP</item>
        <item key='object'>INVENTORY_ITEM</item>
        <item key='response_text'>Request completed successfully</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='inventory_item_id'>22913</item>
                    <item key='service'>dns</item>
                    <item key='response_text'>Request completed
successfully</item>
                    <item key='response_code'>200</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
        <item key='response_code'>200</item>
        <item key='version'>1.4.0</item>
        <item key='action'>ACTIVATE:REPLY</item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

Request parameters for activate inventory item

The activate DNS inventory item command uses some of the standard request and response keys. Keys that are specific to this command are described below.

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed
	Obligation:	Required
	Location:	Within the activate request
	Allowed Value(s):	activate

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon
	Obligation:	Required
	Location:	Within the activate request
	Allowed Value(s):	inventory_item

user_id	Parameter Name:	user_id
	Type:	String
	Description:	The ID of the user that provisioned the service
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Valid user ID

inventory_items	Parameter Name:	inventory_items
	Type:	Array of arrays
	Description:	List that identifies the inventory items to reactivate
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values include the 'service' and 'inventory_item_id' keys

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the inventory item to be reactivated
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	dns

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The ID of the inventory item to reactivate
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	Valid inventory item ID

Changing DNS Inventory Item Expiration Settings

The `update inventory item` command can be used to change the expiration settings of a DNS inventory item, including:

- Requesting a renewal reminder to notify your users when their service is about to expire.
- Assigning, changing, and removing an expiry date.

PERL examples for change inventory item expiration settings

Request

```
{
  'protocol' => 'TPP',
  'object' => 'inventory_item',
  'version' => '1.4',
  'action' => 'update',
  'requestor' => {
    'username' => 'default_user'
  },
  'attributes' => {
    'user_id' => '9522',
    'inventory_items' => [
      {
        'renewal_msg_flag' => '1',
        'expiry_date' => '31-Dec-2006',
        'service' => 'dns',
        'inventory_item_id' => '22915'
      },
      {
        'expiry_date' => '-1',
        'service' => 'dns',
        'inventory_item_id' => '22913'
      }
    ]
  }
};
```

Response

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'ACTIVATE:REPLY',
  'object' => 'INVENTORY_ITEM',
  'session_id' => 'OSRS-5623424',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'response_code' => '200',
  'attributes' => {
```

```

'inventory_items' => [
  {
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns',
    'inventory_item_id' => '22913'
  }
  {
    'response_text' => 'Request completed successfully',
    'response_code' => '200',
    'service' => 'dns',
    'inventory_item_id' => '22915'
  }
]
}
};

```

XML examples for change inventory item expiration settings

Request

```

<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='protocol'>TPP</item>
        <item key='version'>1.4</item>
        <item key='action'>update</item>
        <item key='object'>inventory_item</item>
        <item key='requestor'>
          <dt_assoc>
            <item key='username'>default_user</item>
          </dt_assoc>
        </item>
        <item key='attributes'>
          <dt_assoc>
            <item key='user_id'>9522</item>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='service'>dns</item>
                    <item key='inventory_item_id'>22913</item>
                    <item key='expiry_date'>-1</item>
                  </dt_assoc>
                </item>
                <item key='1'>
                  <dt_assoc>
                    <item key='service'>dns</item>
                    <item key='inventory_item_id'>22915</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```

```

        <item key='expiry_date'>31-Dec-2006</item>
        <item key='renewal_msg_flag'>1</item>
    </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Response

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<!DOCTYPE OPS_envelope SYSTEM 'ops.dtd'>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key='is_success'>1</item>
        <item key='session_id'>OSRS-5623424</item>
        <item key='protocol'>TPP</item>
        <item key='object'>INVENTORY_ITEM</item>
        <item key='response_text'>Request completed successfully</item>
        <item key='attributes'>
          <dt_assoc>
            <item key='inventory_items'>
              <dt_array>
                <item key='0'>
                  <dt_assoc>
                    <item key='inventory_item_id'>22913</item>
                    <item key='service'>dns</item>
                    <item key='response_text'>Request completed
successfully</item>
                    <item key='response_code'>200</item>
                  </dt_assoc>
                </item>
                <item key='1'>
                  <dt_assoc>
                    <item key='inventory_item_id'>22915</item>
                    <item key='service'>dns</item>
                    <item key='response_text'>Request completed
successfully</item>
                    <item key='response_code'>200</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
        <item key='response_code'>200</item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```

```

    <item key='version'>1.4.0</item>
    <item key='action'>ACTIVATE:REPLY</item>
  </dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

Request parameters for change expiration settings

Keys that are specific to requesting a service renewal-reminder and changing expiration settings are described below.

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed
	Obligation:	Required
	Location:	Within the activate request
	Allowed Value(s):	update

object	Parameter Name:	object
	Type:	String
	Description:	The object acted upon
	Obligation:	Required
	Location:	Within the activate request
	Allowed Value(s):	inventory_item

user_id	Parameter Name:	user_id
	Type:	String
	Description:	The ID of the user that provisioned the service
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Value(s):	Valid user ID

inventory_items	Parameter Name:	inventory_items
	Type:	Array of arrays
	Description:	List that identifies the inventory items to update
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable; see attributes below

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the inventory item to be updated
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	dns

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The ID of the inventory item to update
	Obligation:	Required
	Location:	Within the "inventory_items" array
	Allowed Value(s):	Valid inventory item ID

expiry_date	Parameter Name:	expiry_date
	Type:	Int
	Description:	Allows you to add, change, or remove an expiry date on an existing inventory item. To set or change an expiry date: The date specified must be a future date, in the following format: <ul style="list-style-type: none"> ▪ the day must be 2 characters, i.e. "01"-"31" ▪ the month must be the first three characters of the month name, i.e. Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec ▪ the year must be in four character format, i.e. 2005 ▪ example: 27-Aug-2008 To remove an expiry date: Submit '-1'
	Obligation:	Optional
	Location:	Within the "inventory_items" array
	Allowed Value(s):	Future date in valid format, e.g. '27-Aug-2008', or '-1' if removing an expiry date.

renewal_msg_flag	Parameter Name:	renewal_msg_flag
	Type:	Int
	Description:	This flag activates or deactivates the renewal message sent to end users to notify them that their service is about to expire. If activated, renewal reminders are sent 10 days prior to expiry date. This flag can only be applied to active services; it cannot be applied to services that are expired or in suspended state.
	Obligation:	Optional
	Location:	Within the "inventory_items" array
	Allowed Value(s):	1 0 1 = activate renewal reminder 0 = deactivate renewal reminder

The Query Inventory Item Command

In order to update inventory items, you need to query the order to find out the ID number for each inventory item. You may query the order by inventory item ID or by creator user ID. In each case, the format of the result is the same.

Request parameters for query inventory item

See the *OpenSRS TPP API Specification* for the request parameter definitions for this command. Examples of this command are shown below.

PERL request example for query inventory item – by ID

```
{
  'protocol' => 'TPP',
  'object' => 'query',
  'version' => '1.3',
  'action' => 'execute',
  'requestor' => {
    'password' => 'secret',
    'username' => 'purple'
  },
  'attributes' => {
    'query_name' => 'inventory_item.by_id',
    'conditions' => [
      {
        'operand' => {
          'eq' => '16393'
        },
        'type' => 'simple',
        'field' => 'inventory_item_id'
      }
    ]
  }
};
```

XML request example for query inventory item – by ID

```
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="version">1.3</item>
        <item key="attributes">
          <dt_assoc>
            <item key="query_name">inventory_item.by_id</item>
            <item key="conditions">
              <dt_array>
```



```

        <item key="0">
            <dt_assoc>
                <item key="operand">
                    <dt_assoc>
                        <item key="eq">16393</item>
                    </dt_assoc>
                </item>
                <item key="type">simple</item>
                <item key="field">inventory_item_id</item>
            </dt_assoc>
        </item>
    </dt_array>
</item>
</dt_assoc>
</item>
<item key="object">query</item>
<item key="requestor">
    <dt_assoc>
        <item key="password">secret</item>
        <item key="username">purple</item>
    </dt_assoc>
</item>
<item key="action">execute</item>
<item key="protocol">TPP</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

PERL request example for query inventory item – by creator user ID

```

{
    'protocol' => 'TPP',
    'object' => 'query',
    'version' => '1.3.0',
    'action' => 'execute',
    'requestor' => {
        'password' => 'admin',
        'username' => 'user1'
    },
    'attributes' => {
        'query_name' => 'inventory_items.created.by_user_id',
        'conditions' => [
            {
                'operand' => {
                    'eq' => '25442'
                },
                'type' => 'simple',
                'field' => 'user_id'
            }
        ]
    }
};

```

XML request example for query inventory item – by creator user ID

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="protocol">TPP</item>
        <item key="version">1.3.0</item>
        <item key="action">execute</item>
        <item key="object">query</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">user1</item>
            <item key="password">admin</item>
          </dt_assoc>
        </item>
        <item key="attributes">
          <dt_assoc>
            <item key="query_name">inventory_items.created.by_user_id</item>
            <item key="conditions">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="field">user_id</item>
                    <item key="type">simple</item>
                    <item key="operand">
                      <dt_assoc>
                        <item key="eq">25442</item>
                      </dt_assoc>
                    </item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>
```

Response parameters for query inventory item

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: execute query
	Obligation:	Required
	Location:	Within the 'query inventory item' response
	Value(s):	EXECUTE

object	Parameter Name:	object
	Type:	String
	Description:	The object
	Obligation:	Required
	Location:	Within the 'query inventory item' response
	Value(s):	QUERY

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes
	Obligation:	Required
	Location:	Within the 'query inventory item' response
	Value(s):	Values are variable; see the attributes below.

result	Parameter Name:	result
	Type:	Associative array
	Description:	
	Obligation:	Optional
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the attributes below.

user_id	Parameter Name:	user_id
	Type:	String
	Description:	User ID of the owner of the zone
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	Valid user ID

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the product, i.e. DNS
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	dns

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The inventory item ID
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	Valid inventory ID

original_inventory_item_id	Parameter Name:	original_inventory_item_id
	Type:	Int
	Description:	
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	Valid inventory ID

object_type	Parameter Name:	object_type
	Type:	String
	Description:	
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	managed

description	Parameter Name:	description
	Type:	String
	Description:	Includes the domain for which DNS Management was purchased
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	Fully qualified domain name

state	Parameter Name:	state
	Type:	String
	Description:	The state of the inventory item, e.g. active or cancelled
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	active

renewal_ctl_mask	Parameter Name:	renewal_ctl_mask
	Type:	Int
	Description:	
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	

creation_date	Parameter Name:	creation_date
	Type:	String
	Description:	The date and time that the inventory item was created
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	String

start_date	Parameter Name:	start_date
	Type:	String
	Description:	The date and time that the inventory item was processed
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	String

expiry_date	Parameter Name:	expiry_date
	Type:	String
	Description:	
	Obligation:	Optional
	Location:	Within the 'result' associative array
	Value(s):	String

contact_set	Parameter Name:	contact_set
	Type:	Associative array
	Description:	This is an associative array where the key is the contact type, and the value indicates which contact to use from the contacts array described earlier.
	Obligation:	Required: admin, tech, and billing
	Location:	Within the 'result' associative array
	Allowed Value(s):	admin, tech, and billing

product_data	Parameter Name:	product_data
	Type:	Associative array
	Description:	Product data
	Obligation:	Required
	Location:	Within the 'result' associative array
	Value(s):	Values are variable; see the 'product_data' attributes.

zone_data	Parameter Name:	zone_data
	Type:	Associative array
	Description:	Zone data
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'zone_data' attributes.

name	Parameter Name:	name
	Type:	String
	Description:	Name of the zone
	Obligation:	Required
	Location:	Within the 'zone_data' associative array
	Value(s):	Valid zone name

records	Parameter Name:	records
	Type:	List
	Description:	List of records.
	Obligation:	Optional
	Location:	Within the 'zone_data' associative array
	Value(s):	Valid records; see " Record Attributes ".

pool_data	Parameter Name:	pool_data
	Type:	Associative array
	Description:	Pool data
	Obligation:	Required
	Location:	Within the 'product_data' associative array
	Value(s):	Values are variable; see the 'pool_data' attributes, below

name	Parameter Name:	name
	Type:	String
	Description:	Name of the pool
	Obligation:	Required
	Location:	Within the 'pool_data' associative array
	Value(s):	'default'

nameservers	Parameter Name:	nameservers
	Type:	List
	Description:	List of nameservers
	Obligation:	Required
	Location:	Within the 'pool_data' associative array
	Value(s):	

flags	Parameter Name:	flags
	Type:	Associative array
	Description:	<p>These flags allow you specify certain operations that are allowed on the zone.</p> <p>The status of these flags are returned in the order query result.</p> <p>These flags are <i>not enforced</i> by the system, and the ability to set/retrieve them is provided as a convenience to you when building your own business logic and front-end. It is up to you to enforce these settings.</p> <p>For example, if you have set "allow zone management" to 0 (i.e. don't allow), you can still send an API command that manages the zone – the system does not prevent this.</p>
	Obligation:	Optional
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'flags' attributes.

allow_zone_management	Parameter Name:	allow_zone_management
	Type:	String
	Description:	Indicates if zone management is allowed on this zone
	Obligation:	Optional
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow zone management (false) 1 = allow zone management (true)

allow_url_forwarding	Parameter Name:	allow_url_forwarding
	Type:	String
	Description:	Indicates if URL forwarding is allowed on this zone
	Obligation:	Optional
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow URL forwarding (false) 1 = allow URL forwarding (true)

allow_templates	Parameter Name:	allow_templates
	Type:	String
	Description:	Indicates if templates are allowed on this zone
	Obligation:	Optional
	Location:	Within the 'flags' associative array
	Allowed Value(s):	0 1 0 = don't allow templates (false) 1 = allow templates (true)

zone_services	Parameter Name:	zone_services
	Type:	List
	Description:	Allows zone services to be specified.
	Obligation:	Optional
	Location:	Within the 'product_data' associative array
	Allowed Value(s):	Values are variable; see the 'zone_services' attributes.

id	Parameter Name:	id
	Type:	Integer
	Description:	Zone service id
	Obligation:	Optional
	Location:	Within the 'zone_services' list
	Allowed Value(s):	Integer greater than 0

prefix	Parameter Name:	prefix
	Type:	String
	Description:	The prefix for the zone name. The prefix is prepended to the zone name to obtain the final name. Example, if the zone is "abcd.com", and the prefix is "www", then the service is for www.abcd.com If the zone service is for the entire domain, "@" is used as the prefix.
	Obligation:	Required
	Location:	Within the 'zone_services' list
	Allowed Value(s):	Any string that contains valid DNS characters.

type	Parameter Name:	type
	Type:	String
	Description:	The type of zone service
	Obligation:	Required
	Location:	Within the 'zone_services' list
	Allowed Value(s):	One of: <ul style="list-style-type: none"> ▪ 'redirector' ▪ 'url-cloak' ▪ 'template' Where, 'redirector' is used for a location redirect, 'url-cloak' is used for a location redirect with cloaking, and 'template' allows a template to be used.

content	Parameter Name:	content
	Type:	String
	Description:	This is the data for the service.
	Obligation:	Required
	Location:	Within the 'zone_services' list
	Allowed Value(s):	<p>The allowed values depend on the particular type chosen (see "type" parameter).</p> <p>Where the type is 'redirector' or 'url-cloak', the content is the full URL to redirect to (this must include the protocol portion, e.g. http://www.somedomain.com)</p> <p>Where the type is 'template' the content must be set to one of the available templates as listed below:</p> <ul style="list-style-type: none"> ▪ 'for-sale' is used to specify domain-for-sale template ▪ 'under-construction' is used to specify the domain-under-construction template

parameters	Parameter Name:	parameters
	Type:	Associative Array
	Description:	<p>Associative array that contains parameters for the 'template' type of zone service.</p> <p>At this time, only the 'for-sale' template has parameters associated with it. If you are using the 'under-construction' template, then the parameters section is not used.</p>
	Obligation:	<p>Optional</p> <p>Even if you are using the 'for-sale' template, this section is still optional, because if not specified, then the Reseller defaults are used for all values in this section.</p>
	Location:	Within the 'zone_services' list
	Allowed Value(s):	See attributes for 'parameters' associative array below.

heading	Parameter Name:	heading
	Type:	String
	Description:	The heading that will be used in the 'for-sale' template
	Obligation:	<p>Optional</p> <p>If not specified, a default value is used.</p>
	Location:	Within the "parameters" associative array
	Allowed Value(s):	Any string with maximum length of 255 characters. Both plain text and HTML are accepted.

description	Parameter Name:	description
	Type:	String
	Description:	The description that is used in the 'for-sale' template
	Obligation:	<p>Optional</p> <p>If not specified, a default is used.</p>
	Location:	Within the 'parameters' associative array
	Allowed Value(s):	Any string with maximum length of 3999 characters.

result_control	Parameter Name:	result_control
	Type:	Associative array
	Description:	The 'result_control' associative array corresponds with the pagination values submitted in the request. Pagination allows you to choose the number of records to fetch.
	Obligation:	Optional
	Location:	Within the 'attributes' associative array
	Value(s):	Values are variable; see the attributes below.

start_index	Parameter Name:	start_index
	Type:	Int
	Description:	This parameter tells the system which records you want to start with in the result list. This value must be '1' the first time you run the query. On subsequent queries, you can set this to the record you want at which you want the query to start.
	Obligation:	Required
	Location:	Within the 'result_control' associative array
	Value(s):	Int

report_instance	Parameter Name:	report_instance
	Type:	Int
	Description:	
	Obligation:	Required
	Location:	Within the 'result_control' associative array
	Value(s):	

page_size	Parameter Name:	page_size
	Type:	Int
	Description:	The number of records returned in the current query result list, as specified in the request. Repeat the query to retrieve the remaining records. If you do not include this parameter in the request, a page size of 50 is used.
	Obligation:	Required
	Location:	Within the 'result_control' associative array
	Value(s):	Int

record_count	Parameter Name:	record_count
	Type:	Int
	Description:	The total number of records
	Obligation:	Required
	Location:	Within the 'result_control' associative array
	Value(s):	Int

PERL response example for query inventory item – by ID

```
{
  'protocol' => 'TPP',
  'object' => 'QUERY',
  'session_id' => 'OSRS-5594093',
  'version' => '1.3.0',
  'response_code' => '200',
  'is_success' => '1',
  'response_text' => 'Request completed successfully',
  'action' => 'EXECUTE:REPLY',
  'attributes' => {
    'result_control' => {
      'page_size' => '0',
      'record_count' => '0',
      'start_index' => '0',
      'report_instance_id' => '0'
    },
    'result' => [
      {
        'product_data' => {
          'flags' => {
            'allow_zone_management' => '1',
            'allow_templates' => '1',
            'allow_url_forwarding' => '1'
          },
          'zone_data' => {
            'records' => [
              {
                'priority' => '5',
                'response_text' => '',
                'read_only' => '0',
                'content' => 'mail.ex3000.com.',
                'name' => 'www',
                'type' => 'MX',
                'id' => '11077',
                'response_code' => '200'
              },
              {
                'priority' => '0',
                'response_text' => '',
                'read_only' => '0',
                'content' => 'www',
                'name' => 'mail',
                'type' => 'CNAME',
                'id' => '11078',
                'response_code' => '200'
              },
              {
                'priority' => '0',
                'response_text' => '',
                'read_only' => '0',
                'content' => '10.0.10.36',
                'name' => 'www',
```

```

        'type' => 'A',
        'id' => '11079',
        'response_code' => '200'
    }
],
'version' => '7086',
'name' => ' 1083847486115.com'
},
'pool_data' => {
    'name' => 'default',
    'nameservers' => []
},
'zone_services' => []
},
'original_inventory_item_id' => '0',
'object_type' => 'managed',
'expiry_date' => '',
'service' => 'dns',
'description' => '1083847486115.com',
'inventory_item_id' => '16393',
'state' => 'active',
'creation_date' => '06-May-2004 08:46:05',
'renewal_ctl_mask' => '1',
'contact_set' => {
    'admin' => '19977',
    'tech' => '19977',
    'billing' => '19977'
},
'start_date' => '06-May-2004 08:48:04',
'user_id' => '25442'
}
]
}
};

```

XML response example for query inventory item – by ID

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-5594093</item>
        <item key="protocol">TPP</item>
        <item key="action">EXECUTE:REPLY</item>
        <item key="object">QUERY</item>
        <item key="response_text">Request completed successfully</item>
        <item key="response_code">200</item>
        <item key="version">1.3.0</item>
        <item key="attributes">
          <dt_assoc>

```

```

<item key="result_control">
  <dt_assoc>
    <item key="start_index">0</item>
    <item key="record_count">0</item>
    <item key="report_instance_id">0</item>
    <item key="page_size">0</item>
  </dt_assoc>
</item>
<item key="result">
  <dt_array>
    <item key="0">
      <dt_assoc>
        <item key="user_id">7421</item>
        <item key="state">active</item>
        <item key="description">1083847486115.com</item>
        <item key="inventory_item_id">16393</item>
        <item key="original_inventory_item_id">0</item>
        <item key="renewal_ctl_mask">1</item>
        <item key="service">dns</item>
        <item key="expiry_date"/>
        <item key="product_data">
          <dt_assoc>
            <item key="flags">
              <dt_assoc>
                <item key="allow_url_forwarding">1</item>
                <item key="allow_zone_management">1</item>
                <item key="allow_templates">1</item>
              </dt_assoc>
            </item>
            <item key="zone_services">
              <dt_array/>
            </item>
            <item key="pool_data">
              <dt_assoc>
                <item key="nameservers">
                  <dt_array/>
                </item>
                <item key="name">default</item>
              </dt_assoc>
            </item>
            <item key="zone_data">
              <dt_assoc>
                <item key="version">7086</item>
                <item key="name"> 1083847486115.com</item>
                <item key="records">
                  <dt_array>
                    <item key="0">
                      <dt_assoc>
                        <item key="name">www</item>
                        <item key="read_only">0</item>
                        <item key="response_text"/>
                        <item key="content">mail.ex3000.com.</item>
                        <item key="id">11077</item>
                        <item key="response_code">200</item>
                        <item key="type">MX</item>
                        <item key="priority">5</item>
                      </dt_assoc>
                    </item>
                  </dt_array>
                </item>
              </dt_assoc>
            </item>
          </dt_assoc>
        </item>
      </dt_array>
    </item>
  </dt_assoc>
</item>

```

```

</item>
<item key="1">
  <dt_assoc>
    <item key="name">mail</item>
    <item key="read_only">0</item>
    <item key="response_text"/>
    <item key="content">www</item>
    <item key="id">11078</item>
    <item key="response_code">200</item>
    <item key="type">CNAME</item>
    <item key="priority">0</item>
  </dt_assoc>
</item>
<item key="2">
  <dt_assoc>
    <item key="name">www</item>
    <item key="read_only">0</item>
    <item key="response_text"/>
    <item key="content">10.0.10.36</item>
    <item key="id">11079</item>
    <item key="response_code">200</item>
    <item key="type">A</item>
    <item key="priority">0</item>
  </dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</item>
<item key="object_type">managed</item>
<item key="contact_set">
  <dt_assoc>
    <item key="tech">19977</item>
    <item key="admin">19977</item>
    <item key="billing">19977</item>
  </dt_assoc>
</item>
<item key="start_date">06-May-2004 08:48:04</item>
<item key="creation_date">06-May-2004 08:46:05</item>
</dt_assoc>
</item>
</dt_array>
</item>
</dt_assoc>
</item>
</dt_assoc>
</data_block>
</body>
</OPS_envelope>

```

The Delete DNS Inventory Item Command

Request parameters for delete inventory item

action	Parameter Name:	action
	Type:	String
	Description:	The action to be performed: delete inventory item
	Obligation:	Required
	Location:	Within the 'delete inventory item' request
	Allowed Value(s):	DELETE

object	Parameter Name:	object
	Type:	String
	Description:	The object to be acted upon: the inventory item to be deleted
	Obligation:	Required
	Location:	Within the 'delete inventory item' request
	Allowed Value(s):	INVENTORY_ITEM

attributes	Parameter Name:	attributes
	Type:	Associative array
	Description:	Attributes of the delete inventory item request
	Obligation:	Required
	Location:	Within the 'delete inventory item' request
	Allowed Value(s):	Values are variable; see the attributes below.

inventory_items	Parameter Name:	inventory_items
	Type:	Associative array
	Description:	Array of the inventory items to be deleted
	Obligation:	Required
	Location:	Within the 'attributes' associative array
	Allowed Value(s):	Values are variable

service	Parameter Name:	service
	Type:	String
	Description:	The service provisioning the inventory item to be deleted
	Obligation:	Required
	Location:	Within the 'inventory_items' associative array
	Allowed Value(s):	'dns'

inventory_item_id	Parameter Name:	inventory_item_id
	Type:	Int
	Description:	The inventory item ID of the DNS item that you want to delete
	Obligation:	Required
	Location:	Within the 'inventory_items' associative array
	Allowed Value(s):	Valid inventory item ID

PERL request example for delete inventory item

```
{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'delete',
  'object' => 'inventory_item',
  'requestor' => {
    'username' => 'purple'
  },
  'attributes' => {
    'inventory_items' => [
      {
        'service' => 'dns',
        'inventory_item_id' => '16094'
      }
    ]
  }
};
```

XML request example for query inventory item – by ID

```
<?xml version='1.0' encoding='UTF-8'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="version">1.4.0</item>
        <item key="attributes">
          <dt_assoc>
            <item key="inventory_items">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="service">dns</item>
                    <item key="inventory_item_id">16094</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
        <item key="object">inventory_item</item>
        <item key="requestor">
          <dt_assoc>
            <item key="username">purple</item>
          </dt_assoc>
        </item>
        <item key="action">delete</item>
        <item key="protocol">TPP</item>
      </dt_assoc>
```



```

    </data_block>
  </body>
</OPS_envelope>

```

PERL response example for delete inventory item

```

{
  'protocol' => 'TPP',
  'version' => '1.4.0',
  'action' => 'DELETE:REPLY',
  'object' => 'INVENTORY_ITEM',
  'session_id' => 'OSRS-5600446',
  'is_success' => '1',
  'response_code' => '200',
  'response_text' => 'Request completed successfully',
  'attributes' => {
    'inventory_items' => [
      {
        'response_text' => 'Request completed successfully',
        'response_code' => '200',
        'service' => 'dns',
        'inventory_item_id' => '16094'
      }
    ]
  }
};

```

XML request example for delete inventory item

```

<?xml version='1.0' encoding='UTF-8' standalone='no'?>
<OPS_envelope>
  <header>
    <version>0.9</version>
  </header>
  <body>
    <data_block>
      <dt_assoc>
        <item key="is_success">1</item>
        <item key="session_id">OSRS-5600446</item>
        <item key="protocol">TPP</item>
        <item key="object">INVENTORY_ITEM</item>
        <item key="response_text">Request completed successfully</item>
        <item key="attributes">
          <dt_assoc>
            <item key="inventory_items">
              <dt_array>
                <item key="0">
                  <dt_assoc>
                    <item key="inventory_item_id">16094</item>
                    <item key="service">dns</item>
                    <item key="response_text">Request completed
successfully</item>
                    <item key="response_code">200</item>
                  </dt_assoc>
                </item>
              </dt_array>
            </item>
          </dt_assoc>
        </item>
      </dt_assoc>
    </data_block>
  </body>
</OPS_envelope>

```

```
        </item>
      </dt_assoc>
    </item>
    <item key="response_code">200</item>
    <item key="version">1.4.0</item>
    <item key="action">DELETE:REPLY</item>
  </dt_assoc>
</data_block>
</body>
</OPS_envelope>
```

DNS Error Codes

The following table lists the DNS error codes with an explanation of the error.

Error code	Corresponding error message
200	Command successful
400	Command failed
500	Unspecified error has occurred
30401	Invalid number of SOA records
30402	Invalid domain name
30403	Invalid TTL value
30404	Invalid priority value
30405	Invalid IP address
30406	Invalid expire value
30407	Invalid retry value
30408	Invalid min TTL value
30409	Invalid refresh value
30410	Invalid record name
30411	Invalid record content
30412	Invalid hostmaster email
30413	Invalid primary name
30414	Invalid records
30415	Zone failed validation
30416	Invalid record type
30417	Unspecified error has occurred
30418	Pool not found
30419	Database inconsistency found
30420	Database error has occurred
30421	Attempting to update read only field
30422	Invalid parameter value
30423	Incorrect zone version passed. Re-query zone details
30424	Unable to find zone

Error code	Corresponding error message
30425	Error activating zone
30426	Error checking zone availability
30427	Unable to create zone
30428	Unable to retrieve zone
30429	Unable to suspend zone
30430	Unable to delete zone
30431	Unable to update zone
30432	Zone already exists
30433	Zone state does not allow for operation
30434	Invalid records name/type combination
30435	Unable to obtain exclusive lock, another operation in progress
30436	Existing record not found
30439	Invalid records name/owner combination
30440	Invalid zone service type
30441	Invalid zone service content
30442	Template is not found
30443	Template's placeholder is not found
30444	Zone service is not found
30445	Failed to create zone service
30446	Failed to update zone service
30447	Failed to delete zone service
30448	Failed to activate zone service
30449	Failed to suspend zone service
30450	Zone service is not available
30451	Zone service placeholder is not found
30452	Failed to create zone service's placeholder
30453	Failed to update zone service's placeholder
30454	Failed to delete zone service's placeholder
30455	Invalid zone service prefix

Error code	Corresponding error message
30456	Record already exists
30500	Bulk update criteria weren't applicable for the zone
30501	Zone didn't meet list conditions
30502	Bulk update for the zone failed
30503	Bulk update creation failed
30504	Bulk update deletion failed
30505	Bulk update scheduling failed
30506	Bulk update query failed
30507	Zone service already exists
30508	Conflicting zone record exists
31450	Contact cannot be empty
31451	Contact's last name field is missing
31452	Contact's address1 field is missing
31453	Contact's city field is missing
31454	Contact's city country is missing
31455	Contact's city phone is missing
31456	Contact's email is missing
31457	Product failed validation
31458	Product validation failed
31459	Invalid zone name
31460	Product creation failed
31461	Database error has occurred
31462	Unable to obtain exclusive lock, another operation in progress
31463	Inventory item state does not allow for operation
31464	Unable to fulfill product
31465	Order item failed validation
31466	Unable to update order
31467	Record does not exist
31468	Invalid pool name
31469	Unable to check zone availability

Error code	Corresponding error message
31470	Invalid zone name
31471	Contact validation failed
31472	Product contains invalid records
31473	Inventory item state does not allow for operation
31474	Inventory item activation failed
31475	Inventory item deletion failed
31476	Inventory item fulfillment failed
31477	Inventory item suspension failed
31478	Template not found
31479	Template update failed
31480	Template record validation failed
31481	Template record not found
31482	Failed to create a template
31483	Failed to delete a template
31484	Zone retrieval failed
31485	Records to create must not have an ID
31486	Records to delete/update must have an ID
31487	Template already exists
31488	Contact link missing or invalid
31489	Inventory item has not been found
31490	Inventory item update failed
31491	Invalid inventory item flag
31492	Order creation failed
31493	Bulk update creation failed
31494	No zone operations provided
31495	Bulk update operations are missing
31496	Query execution failed
31497	Database inconsistency found