

InternetNZ Registry System (IRS) registrar technical testing guide

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IRS Platform Technical Testing Introduction

Connections

Access the IRS Registry Platform using the following interface links:

URL for the IRS Portal is https://ote.irs.net.nz/portal/

URL for EPP: <u>epp.ote.irs.net.nz</u> Port 700

URL for Droplist To Be Released (TBR): tbr.ote.irs.net.nz Port 700

URL for WHOIS: whois.ote.irs.net.nz Port 43

Credentials

As part of the IRS OTE onboarding, you will be provided two portal profiles and a unique variable number for each for testing in the IRS OT&E environment. Please see the credentials email you have been sent for the specific details. As part of the technical testing process, you will create at least one EPP user to use for testing the EPP environment and one portal Support user for testing the portal functionality

Assistance 📀

At any time while in the portal, click the Help icon in the top right corner to access context-sensitive information on any topic related to the portal or EPP.

If after reading through the enclosed material, you have any questions about this process or have any issues, please contact registry.replacement@internetnz.net.nz.

Users

You will need to create additional users and assign the appropriate roles to those. Eg you will need a Portal Support user to be able to manage domain names, contacts and hosts from the portal and you will need an EPP user if you plan to use the EPP and / or Droplist systems.



Create a Portal User

In the IRS portal, click the Admin tab.

irsnz .	🖶 HOME 🔮 DOMAINS 🛔 CONTACTS 🖵 HOSTS	🗲 ADMIN 🔻
	Users	BULK OPERATIONS
ACTIONS ~		CREDIT PROGRAMS
+ Create User		DROPLIST SETTINGS
	Search	EMAIL TEMPLATES
		PASSWORD POLICY
X Delete User		REGISTRAR SETTINGS
	Users	REGISTRY SETTINGS
		REPORTS
	Show 10 v entries	TAGS
		TAX RATES
	Username La	USERS
		ZONE SETTINGS

- Select Users.
- In the action bar, click **Create User**.
- In the Create User page, type or select the properties to be assigned to the new user. Mandatory properties are identified with a red asterisk (*).
- Assign the Account Type as Portal and the appropriate roles based on the roles listed.
- Enter and confirm the password for that user based on the following rules:
 - Passwords should have 16 characters and can be any combination of digits, special characters and upper and lowercase letters.
- Click the Create User button which will now be green to save the user.

Create an EPP User (if you will be using the EPP environment)

In the IRS portal, click the Admin tab.

- Select Users.
- In the action bar, click **Create User**.
- In the Create User page, type or select the properties to be assigned to the new user. Mandatory properties are identified with a red asterisk (*).
- Assign the Account Type as EPP.
- Enter and confirm the password for that user based on the following rules:
 - Passwords should have 16 characters and can be any combination of digits, special characters and upper and lowercase letters.
- Click Create User.



Technical Testing

IRS Portal Tests

In order to become familiar with the IRS Portal, execute the following steps to ensure a basic understanding of the IRS platform.

Hint: For additional information on any page, clicking the help icon in the top right corner will link to more details on that page as well as access to all the online and PDF versions of the help. As well, Appendix B contains instructions for the common portal functions.

There is a language toggle in the top right corner of every screen, including the login screen, so any portal work may be done in either English or French as desired. This includes the online help.

User Sign-On

 Sign into the portal using the login credentials of your 'Portal' profile as supplied in the Credentials for OTE connection to the InternetNZ Registry System (IRS) email you have been sent.

Contact Create and Update (with Language)

- 2. Create a contact with:
 - a. Contact ID with your registrar ID prefixed with your prefixed with the letters ccu (e.g. ccu275)??
 - b. Name, full postal information, email address, phone number, fax number and language.
- 3. Perform a search to locate the contact created in #2.
- 4. Update the contact created in #2 by modifying the phone number.
- 5. Save the changes by clicking **Update Contact** in the Action Bar.

Domain Create

- 6. Create a domain using the registrar id variable number provided in the accompanying email:
 - a. domain name: **test**<registrar ID>**a.nz** (e.g. test275a.nz).
 - b. select a 1 year term.
 - c. record the Authorization Code assigned.
 - d. set the domain privacy to Private.



- e. Using the **Link Contact** in the Action Bar, set the contact created in operation #2 to be the Registrant.
- f. Using the **Add Contact** in the Action Bar, create a second contact Contact ID as your variable prefixed with the word 'admin' (e.g. admin275).
- g. use all mandatory elements required for a contact.
- h. select Contact Type of Administrative and Technical.
- i. Save the changes by clicking Add Contact button on the form.
- j. Do not add any hosts at this time.
- k. Create the domain.

Domain Renew

- 7. Perform a search on the domain created in #6.
- 8. **Renew** the domain created in operation #6 for 2 years.

Domain Delete and Restore

Note: For the purposes of OTE testing, addPeriod is set to 1 day and after that time the life cycle state changes to registered. In production, addPeriod will be set at 5 days. When deleting a newly created domain after 1 day it goes into redemptionPeriod and it can be restored at any time over the next 2 days. In production, redemptionPeriod will be set at 90 days.

- 9. Search for the domain created in operation #6. Verify that the Life Cycle Stage is 'registered'. This will take up to 1 day.
- 10. **Delete** this domain.
- 11. **Restore** the domain that was just deleted in the previous step by entering some text in the Reason field of the Restore Domain dialog box.

Host Create

- 12. From within the Edit Domain page, create two (2) subordinate hosts for the domain created in operation #6 by selecting Add a New Host from the Action Bar:
 - a. with format ns1.<domain> and ns2.<domain>
 - b. with IPv4 address information.
- 13. Click Update Domain to complete the link of the hosts created in operation #12 to the domain.

Host Update

- 14. Perform a search on the host ns1.<domain>created in operation #12.
- 15. Update host ns1.<domain> created in operation #12 to add an IPv6 address.



- 16. Update host ns1.<domain> created in operation #12 to remove the IPv4 address.
- 17. Update the status of the host ns1.<domain> to apply the clientUpdateProhibited status and save the host.

IDN Test

- 18. Create a domain using:
 - a. The u-label set to <variable>x1-cafē.nz (e.g. 275x1-cafē.nz).
 - b. Select a 2-year term.
 - c. Record the Authorization Code assigned.
 - d. Set the Registrant to the contact created in operation #2.
 - e. Set the Administrative Contact and Technical Contact to the contact created during operation #6.
 - f. Do not add any hosts at this time.
- 19. Create another domain using:
 - a. The u-label set to <variable>x1-cāfē.nz (e.g. 275x1-cāfē.nz). Domain names are allowed to consist of 26 basic English (Latin) alphabet characters a-z, digits, the '-' hyphen, and characters ā, ē, ī, ō and ū.
 - b. Select a 1-year term.
 - c. Record the Authorization Code.
 - d. Set the Administrative and Technical contact to the contact created during operation #6.
 - e. Do not add any hosts at this time.
- 20. Perform a search on the domain created in operation #18 using either the a-label or u-label.

Domain Transfer Request

- 21. Sign-out of your primary portal account and sign into your secondary account in order to create domains to transfer.
- 22. Create two domains (one for a portal transfer and one for an EPP transfer). They can use the same contact as a Registrant and no hosts are required:
 - a. domain names:
 - i. **transfer**<*variable*>**a.nz** (e.g. transfer275a.nz)
 - ii. transfer<variable>b.nz
 - b. record the Authorization Code:
 - c. Using the **Add Contact** in the Create Domain Action Bar or **Create Contact** on the Contact Search page, create a contact to use as a registrant, administrative and technical contact for use with one or both of these domains:
 - i. set the Contact ID as your variable prefixed with the word 'transfer' (e.g. transfer275).
 - ii. use all mandatory elements required for a contact.



Note: For the purposes of testing, a domain may be transferred 1 day after being created. In production, there will be a 5-day waiting period before a transfer to a different Registrar is allowed.

- 23. Log back into your main portal account with the credentials you used in step #1.
- 24. On the Domains page select the transfer option
- 25. Type in the domain you wish to transfer
- 26. Request a transfer on this domain by selecting a renewal term(you can also transfer without selecting a renewal term) and using the Authorization Code you should have recorded.
- 27. Transfer the domain.

DNSSEC Test

- 28. Continuing to use the domain just transferred, add a DNSKey record to the domain using:
 - a. Flag set to 256
 Protocol of 3
 Algorithm of 7 RSASHA1-NSEC3-SHA1
 DNSKey of

AwEAAa3+iFv0xS8+f1WBcQjw/SaPRH/UstWTWD2N9BBd5GmaRRW/Au34W24HiB9eCU OKLqXW8e7WN5KKwFc4XXQ33QuOdAvNkohypWy48SHEDSotbkKMN9mfNwLOSYiMxU TG7J3huoT61nfNvtomSuCO6Ll1IhtHdVrjOdhlp4ID6vqp6H3IQgz/6js8a572l45gMH2pq/7 cFNsSKV0p4NB+3pO4SmZHBEJn5y5OqMd4nRoky6Ot6viSesjMEZhZi1qN7TWInn98UX PYIyVS2+4qXYi8dA91EdSLNXaJpknrlDcdWh1Ev2w3ciQW9VHFACXgqfAKy0/yqqAid74th ShUQq0=

29. Add the DS Record and Update the domain.

History Records

30. Scroll to the bottom of the Edit Domain page and view the History records for that domain. Click on an Action ID to view the details.

Hint: When viewing history detail records, toggle the 'Show only changed values' checkbox in the top right corner to view all the fields or just the changed values.

Poll Messages

31. On the Home page, click **Pending Messages** to view your poll messages.

Registrar Settings

32. Navigate to your **Registrar Settings** page through the **Admin** option in the header to review your company and contact information. This data will be



used to populate your production accounts, so feel free to edit as needed to ensure the correct information is displayed.

- 33. While still on the Registrar Settings page, review the options available in the Action Bar on the left. Besides maintaining your list of Registrar contacts, you are also able to produce a CSV file of all your domains by selecting the Domain List option.
- 34. As well, if you have a Finance role, you will also see an option to produce a CSV of your Transaction Details showing individual charges or refunds within a specified time range.

User Settings

35. Navigate to the **Users** page through the **Admin** option in the header to view or edit existing users or create new ones. You can also modify your current user account using the **User Settings** option in the dropdown under your username in the top right corner. Feel free to change passwords or update other account details.

Sign Out

36. Sign out of your portal account.



IRS EPP Tests

If you will be using EPP to perform your tasks on the IRS platform, execute the following steps to ensure a successful transition of your EPP processes.

For additional information on any of the EPP commands, the help icon in the top right corner of the portal will link to all the online and PDF versions of the help. As well, **Appendix C** contains common EPP command examples.

Hint: If necessary, review Appendix A for a summary of the more complex IRS-specific EPP commands using our customized EPP extensions.

User Sign-on

Establish the SSL connection

1. Use the EPP <login> command of your EPP account using the login credentials as supplied in the accompanying email.

Contact Create and Update (with Language)

- 2. Create a contact with full postal information, phone number, fax number, and email address
 - a. Contact ID as your variable prefixed with the word 'rantepp' (e.g. rantepp275)
 - b. Name, full postal information, email address, phone number and fax number
 - c. Language of EN

Hint: View an example of the EPP format for using properties in Appendix A: Contact Create

- 3. Create a second contact
 - a. Contact ID as your variable prefixed with the word 'adminepp' (e.g. adminepp75)
 - b. using all mandatory elements required for a contact
- 4. Perform a contact:info to view the information of the contact created in EPP operation #2
- 5. Update the contact created in EPP operation #2 and remove the fax number



Domain Create

- 6. Do a domain:check on **test**<*variable*>**c.nz** (e.g. test275c.nz)
- 7. Create a domain using:
 - a. domain name: **test**<*variable*>**c.nz** (e.g. test275c.nz)
 - b. set a valid Authorization Code and record that.
 - c. the Registrant set to the contact created in EPP operation #2
 - d. the administrative contact and technical contact set to the contactcreated in EPP operation #3
 - e. do not add hosts at this time

Host Create

- 8. Create 2 subordinate hosts for the domain created in EPP operation #7:
 - a. with format ns1.<*domain*> and ns2.<*domain*>
 - b. with IPv4 address information

Domain Update

9. Update the domain created in EPP operation #7 to link the hosts created in EPP operation #8 to the domain

Host Update

Perform a single Host Update command to do steps 10, 11 and 12:

- 10. Update host ns1.<domain> created in EPP operation #8 to add an IPv6 address
- 11. Update host ns1.<domain> created in EPP operation #8 to remove the IPv4 address
- 12. Update the status of the host ns1.<domain> such that it can no longer be updated

Host Info

13. Do a host:info on the host you just updated

Domain Info

14. Using a Domain Info request, get information on the domain created in EPP step #7

Domain Renew

15. Renew the domain created in EPP operation #7 for 2 more years



IDN Test

- 16. Create a domain using:
 - a. The u-label set to <variable>x1-ēpptēst.nz, checking puny code on the website of <u>http://pir.org/products/org-domain/punycode</u> to get the domain name, (e.g. xn--275x1-pptst-mlbd.nz, if your variable is 275)
 - b. the Registrant set to the contact created in EPP operation #2
 - c. the administrative and technical contact set to the contact created in EPP operation #3
 - d. repertoire set to "Latn"
 - e. 0 technical contacts
 - f. 0 hosts
 - g. set and record the authorization code
 - h. a 2-year term
- 17. Perform a domain:info on the domain created in operation #16

Domain Transfer Request

 Request a transfer on the domain created during <u>Portal</u> testing in operation #22 (transfer<variable>b.nz) using the Authorization Code you recorded for the domain

Poll Messages

19. Using the correct EPP call, view and acknowledge a poll message

DNSSEC Tests

- 20. Using the domain transferred in EPP operation #19,
 - a. add a DNSKey with Flag 256, Protocol 3, Algorithm 7, DNSKey of

AwEAAa3+iFv0xS8+f1WBcQjw/SaPRH/UstWTWD2N9BBd5GmaRRW/Au34W24HiB9eCU OKLqXW8e7WN5KKwFc4XXQ33QuOdAvNkohypWy48SHEDSotbkKMN9mfNwLOSYiMxU TG7J3huoT61nfNvtomSuCO6Ll1IhtHdVrjOdhlp4ID6vqp6H3IQgz/6js8a572l45gMH2pq/7 cFNsSKV0p4NB+3pO4SmZHBEJn5y5OqMd4nRoky6Ot6viSesjMEZhZi1qN7TWInn98UX PYIyVS2+4qXYi8dA91EdSLNXaJpknrlDcdWh1Ev2w3ciQW9VHFACXgqfAKy0/yqqAid74th ShUQq0=



Logout

- 21. EPP <logout> command
- 22. Disconnect SSL connection

Droplist System Tests

The Droplist system allows a Registry to manage the release of domain names that are about to become available following the expiry of their current registration.

Domain names added to a droplist will become available to Registrars in a controlled fashion using Droplist sessions, periods during which domain names can be re-registered prior to being available to everyone.

Domain names are added automatically when they transition from redemptionPeriod to pendingDelete. If a domain name transitions from addPeriod to pendingDelete, it is not added to a droplist session. Domain names that are claimed during a session are immediately registered to that Registrar. Domain names that are not claimed are released immediately and are available for regular registration when the session ends.

There is no add grace period and no refund if the domain is deleted after being registered.

For each Droplist session, you must adhere to the Registry's requirements for acceptable use, as well as the following rate limits and restrictions:

- You can only submit Droplist commands from pre-registered IP addresses.
- After a Domain Create command is submitted to the Droplist system, all subsequent Domain Create commands will result in an error for the next 5 seconds. Each time that command is executed, the Rate Limit Timestamp is updated with the time for that command plus 10 seconds. This is the case whether the original functional call was successful or resulted in an error.

Connection and Credentials

Connections

Access the Droplist System using the following interface link:

• <u>tbr.ote.irs.net.nz</u> Port 700



Credentials

Please use your EPP credentials for any Droplist System Testing. You may also wish to use the IRS portal to create separate EPP user accounts to be used for droplist.

Note: Whitelisting of IP addresses to access the IRS Platform <u>is required</u> for the Droplist technical testing. Details on setting up your IP addresses are described in the following section.

Droplist Access

To be able to access the droplist system you must whitelist the IP address or addresses that will be used to connect to that. That is done from the portal as an Admin user on the Admin > Registrar Settings page in the IP Addresses for Droplist Servers column in the IP Allowlist Settings section at the bottom left of the page

Up to 10 IP address or IP ranges can be entered. They must be unique and cannot be used by another Registrar.

Droplist System Commands

There are two EPP commands available for use in the Droplist System:

Domain Check

The standard EPP Domain Check (with or without the Fee extension) may be used to ensure the availability of a domain either during or prior to the next droplist session.

- Checks against domains in the current Droplist session that have not yet been claimed will return available = 'true' even though they do currently exist in a pendingDelete state but they are available for claiming during this session.
- Checks against domains that are not in the current session or do not exist will return available = 'false' with the error 'Domain is not in the current Droplist session'.
- Checks against domains claimed during the Droplist session will return available = 'false' and "REGISTERED" as the reason.

Domain Create

The Droplist session uses the standard Domain Create EPP command. The Create command may only be issued against domains that are in the current Droplist session. As a domain in a Droplist session is in a pendingDelete phase, a



successful Droplist Create command will first delete the existing domain and then create it again with the new parameters.

The following messages may occur when issuing the Domain Create command on a domain not in the current Droplist session:

- Claims attempted when the session is not open/active will result in the error
 - 'Droplist Session is not currently open'. For OT&E testing purposes, sessions occur once a day, for one hour at 02:00 (UTC) or 14:00 (NZDT).
- Claims against domains that do not exist will be rejected with the message
 'Domain is not in the Droplist system.'
- In other words, you cannot do a regular domain create in the droplist server during a session. That must be done through regular EPP.
- Claims against domains that do exist but are not marked as available for droplist will be rejected with the message
 - 'Domain is not in the Droplist system.'
- Claims against domains that do exist but are assigned to a different (not active) droplist session will be rejected with the message
 - 'Domain is not in the current Droplist session'.
- Claims against domains that do exist and are assigned to the current session will succeed in being claimed on a first-come, first-served basis.
- These domains will be in pendingDelete state and when claimed, will be deleted then recreated with the new Registrar and Registrant as specified in the Domain Create command.
- The result of a successful Domain Create command will mark the domain as no longer available to be claimed in this session.

Testing the Droplist System

At any point in time, you will be able to test your connection and credentials by logging into the droplist server and running a Domain Check or Domain Create command. However, the create command will not succeed until a session is actually in progress.

In order to do testing of the domain create, you will need to access the system during a Droplist session with available domains. This can be accomplished with the following:

• The OT&E system has Droplist sessions scheduled daily at 02:00(UTC) or 14:00 (NZST) for one hour.



- Any domain in redemption period will automatically be placed into a session once it reaches the end of its lifecycle. If the life cycle changes within 24 hours prior to a session, it will be placed into the following day's session.
- Once a domain exists in a session and the session has begun, you will be able to test the Domain Create command.

Droplist APIs

List of domains in upcoming session

To retrieve a list of all domains in an upcoming Droplist session, use the following API, specifying the date and time of the upcoming session.

Input parameters

Droplist session date and time:

Example:

• https://ote.irs.net.nz/api/tbr/session?datetime=2022/05/14%02:00:00

Output parameters

- The next session's date and time
- The number of domain names in that session
- The name of each domain in the session

Sample output:

```
{"releaseDate":2022-05-
14T02:00:00.000Z","numberOfDomainNames":8154,
"domainNames":["domain-
Name1.nz",
"Domain-name2.nz",
... ]
}
```

List of domains claimed in last Droplist session

This API will provide the list of domains that were registered during a Droplist session.



Input parameter

None:

• https://api.ote.irs.net.nz/api/tbr/lastSessionResults

Output parameters

- Droplist session time
- Count of domains claimed in that session
- Array of claimed domains containing:
 - Domain name
 - Registrar who claimed the domain
 - Created date and time in ascending order

Sample output:

```
{
    "releaseDate": "2022-05-15T02:00:00.000Z",
    "numberOfDomainNames": 1,
    "domains" : [
    {
        "domainName": "droplist-test.nz",
        "registrarName": "Gaining Registrar",Zoozoo9911
        "timestamp": "2022-05-15T02:01:24.201Z"}
    }
}
```



Appendix A — IRS-specific EPP Extensions

In order to provide additional functionality over and above the standard EPP commands,

IRS has introduced two EPP Extensions that, when added to the login command, allows increased flexibility when working with registry objects.

Fury 2.0.xsd

Fury 2.0 makes use of properties using key-value pairs in order to create, update or retrieve information on the custom IRS extensions. The Key values are:

- Privacy
 - Valid values are PRIVATE, PUBLIC
- Language
 - Valid values are EN,FR

Note: To access the functionality provided by the Fury 2.0 extension, the fury-2.0 <extURI> element must be included within the <svcExtension> of the Login request.

• <extURI>urn:ietf:params:xml:ns:fury-2.0</extURI>

Fury-rgp-1.0.xsd

Including this EPP extension will provide the stage of life end date when a domain is in a grace period. Using the standard rgp-1.0 extension provides the grace period stage of life, but it does not identify the stage of life end date.

This extension, **fury-rgp-1.0**, has been created to provide this additional capability and the stage of life end date is returned in the Domain Info response when a domain is in a grace period as defined in RFC 3915. At this time, this extension only needs to be included if you wish to have this extra element in the Domain Info response. To use this, add the extension to your login command as follows:

• <extURI>urn:ietf:params:xml:ns:fury-rgp-1.0</extURI>

For additional information on any of these EPP commands, the help icon in the top right corner of the portal will link to all the online and PDF versions of the help.

Hint: The following are several examples on the use of the key-value properties in the Fury 2.0 xsd extension and a Domain Info response example for the fury-rgp-1.0 extension.



Contact Object XML Examples

Contact Create

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <contact:create xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
                <contact:id>IRScontact</contact:id>
                <contact:postalInfo type="loc">
                    <contact:name>IRS Contact</contact:name>
                    <contact:addr>
                        <contact:street>123 Main Street</contact:street>
                        <contact:city>Aukland</contact:city>
                        <contact:pc>0600</contact:pc>
                        <contact:cc>NZ</contact:cc>
                    </contact:addr>
                </contact:postalInfo>
                <contact:voice>+64.6121221222</contact:voice>
                <contact:email>irscontact@irs.nz</contact:email>
                <contact:authInfo>
                    <contact:pw>password</contact:pw>
                </contact:authInfo>
            </contact:create>
        </create>
        <extension>
            <fury:create xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
                <fury:properties>
                    <fury:property>
                        <fury:key>LANGUAGE</fury:key>
                        <fury:value>EN</fury:value>
                    </fury:property>
                </fury:properties>
            </fury:create>
        </extension>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

Contact Info Request

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
```



```
<command>
<info>
<contact:info xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
<contact:id>irscontact="urn:ietf:params:xml:ns:contact-1.0">
<contact:id>irscontact="urn:ietf:params:xml:ns:contact-1.0">
</contact:id>irscontact="urn:ietf:params:xml:ns:contact-1.0">
</contact:id>irscontact="urn:ietf:params:xml:ns:contact-1.0">
</contact:id>irscontact</contact:id>
</contact:info>
</info>
<clTRID>ABC-12345</clTRID>
</command>
</epp>
```

Contact Info Response

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns:fury="urn:ietf:params:xml:ns:fury-2.0" ...</pre>
    <response>
        <result code="1000">
            <msg>Command completed successfully</msg>
        </result>
        <resData>
            <contact:infData>
                <contact:id>irscontact</contact:id>
                <contact:roid>105-NZ</contact:roid>
                <contact:status s="ok"/>
                <contact:postalInfo type="loc">
                    <contact:name>IRS Contact</contact:name>
                    <contact:addr>
                        <contact:street>123 Main Street</contact:street>
                        <contact:city>Aukland</contact:city>
                        <contact:pc>0600</contact:pc>
                        <contact:cc>NZ</contact:cc>
                    </contact:addr>
                </contact:postalInfo>
                <contact:voice>+64.6121221222</contact:voice>
                <contact:email>irscontact@fury.nz</contact:email>
                <contact:clID>nz_irs</contact:clID>
                <contact:crID>nz irs</contact:crID>
                <contact:crDate>2018-03-21T12:52:12.064Z</contact:crDate>
                <contact:upID>nz_irs</contact:upID>
                <contact:upDate>2018-03-21T12:53:30.867Z</contact:upDate>
            </contact:infData>
        </resData>
         <trID>
            <svTRID>NZ-00000002714-000000002</svTRID>
        </triD>
    </response>
</epp>
```



Domain Privacy, IDN Info and RGP Status

Domain Create

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>xn--mytstr-r3ac.nz</domain:name>
                <domain:registrant>irscontact</domain:registrant>
                <domain:contact type="admin">irscontact</domain:contact>
                <domain:contact type="tech">irscontact</domain:contact>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:create>
        </create>
        <extension>
            <idn:data xmlns:idn="urn:ietf:params:xml:ns:idn-1.0">
                <idn:table>Latn</idn:table>
                <idn:uname>mytester.nz</idn:uname>
            </idn:data>
            <fury:create xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
                <fury:properties>
                    <fury:property>
                        <fury:key>PRIVACY</fury:key>
                        <fury:value>PRIVATE</fury:value>
                    </fury:property>
                </fury:properties>
            </fury:create>
        </extension>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Domain Info Request

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
```



```
<command>
<info>
<domain:info xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:name>xn--mytstr-r3ac.nz</domain:name>
<domain:authInfo>
<domain:pw>password</domain:pw>
</domain:authInfo>
</domain:info>
</info>
<clTRID>ABC-12345</clTRID>
</command>
</epp>
```

Domain Info Response (Privacy & IDN)

Note: The domain info response now displays the domain privacy.

```
<?xml
version="1.0" encoding="UTF-8"?>
. . .
    <response>
        <result
code="1000">
            <msg>Command completed successfully</msg>
        </result>
        <resData>
            <domain:infData>
                <domain:name>xn--mytstr-r3ac.nz</domain:name>
                <domain:roid>106-NZ</domain:roid>
                <domain:status s="inactive"/>
                <domain:registrant>irscontact</domain:registrant>
                <domain:contact type="admin">irscontact</domain:contact>
                <domain:contact type="tech">irscontact</domain:contact>
                <domain:clID>nz_irs</domain:clID>
                <domain:crID>nz irs</domain:crID>
                <domain:crDate>2018-03-21T12:52:37.823Z</domain:crDate>
                <domain:upID>NZ_RAR_1</domain:upID>
                <domain:upDate>2018-03-26T12:56:17.473Z</domain:upDate>
                <domain:exDate>2019-03-21T12:52:37.823Z</domain:exDate>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:infData>
        </resData>
        <extension>
```



```
<fury-rgp:rgpInfo>
<fury-rgp:rgpStatusEnd>2019-03-21T12:52:37.823Z</fury-rgp:rgpStatusEnd>
            </fury-rgp:rgpInfo>
            <idn:data>
                <idn:table>Latn</idn:table>
                <idn:uname>mytester.nz</idn:uname>
            </idn:data>
            <fury:info>
                <fury:properties>
                    <fury:property>
                        <fury:key>PRIVACY</fury:key>
                        <fury:value>PRIVATE</fury:value>
                    </fury:property>
                </fury:properties>
            </fury:info>
        </extension>
        <trID>
            <svTRID>NZ-00000002714-000000004</svTRID>
        </triD>
    </response>
</epp>
```

Domain Info Response (RGP Status)

```
<?xml version="1.0" encoding="UTF-8"?>
    <response>
        <result code="1000">
            <msg>Command completed successfully</msg>
        </result>
        <resData>
            <domain:infData>
                <domain:name>testing.nz</domain:name>
                <domain:roid>10-NZ</domain:roid>
                <domain:status s="inactive"/>
                <domain:status s="pendingDelete"/>
                <domain:status s="serverHold"/>
                <domain:status s="serverRenewProhibited"/>
                <domain:status s="serverTransferProhibited"/>
                <domain:status s="serverUpdateProhibited"/>
                <domain:clID>NZ002</domain:clID>
                <domain:crDate>2018-11-05T20:59:37.964Z</domain:crDate>
                <domain:upDate>2018-11-06T15:00:35.668Z</domain:upDate>
                <domain:exDate>2020-11-05T20:59:37.964Z</domain:exDate>
            </domain:infData>
```



```
</respata>
</respata
</respata
</respata
</respata
</respata
```

Appendix B — Portal Instructions

Contacts

Create a Contact

- 1. In the IRS portal, click the **Contacts** tab.
- 2. In the action bar, click **Create Contact**.
- 3. In the **Create Contact** page, type or select the properties to be assigned to the new contact. Mandatory Contact properties are identified with a red asterisk (*).
- 4. Click Create Contact in the action bar.

Contact Search / Edit

- 1. In the IRS portal, click the **Contacts** tab.
- 2. In the **Contact Search** field, type in the name of the contact or the contact id for which you want to search.
- 3. Or, click Advanced for additional options to use as search criteria
- 4. Click the search icon.
- 5. From the search results, click on the Contact Name or select the checkbox and select Edit Contact from the Action Bar to edit the contact.



Delete a Contact

In the IRS portal, click the **Contacts** tab.

- 1. Perform a search to display the contact name that you want to delete.
 - a. A delete may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the contact that you want to delete go to the EditContact page
- 2. Click **DeleteContact** in the action bar.
- 3. In the Delete Contact dialog box, click Delete Contact to confirm.

Hosts

Create a Host

- 1. In the IRS portal, click the **Hosts** tab.
- 2. In the action bar, click **Create Host**.
- 3. In the **Create Host** page, type or select the properties to be assigned to the new host. Mandatory Host properties are identified with a red asterisk (*).
- 4. Click Create Host.

Host Search / Edit

- 1. In the IRS portal, click the **Hosts** tab.
- 2. In the **Host Search** field, type alphanumeric characters in the name of the host for which you want to search.
- 3. Or, click Advanced for additional options to use as search criteria
- 4. Click the search icon.
- 5. From the search results, click on the Host Name or select the checkbox and select Edit Host from the Action Bar to edit the host.

Delete a Host

- 1. In the IRS portal, click the **Hosts** tab.
- 2. Perform a search to display the host name that you want to delete.
 - a. A delete may be done from the search landing page by selecting the checkbox or
 - b. Click the host name that you want to delete go to the Edit Host page
- 3. Click **Delete Host** in the action bar.
- 4. In the Delete Host dialog box, click Delete Host to confirm.

Note: Hosts linked to domains cannot be deleted until the association is removed.



Domains

Create a Domain

- 1. In the IRS portal, click the **Domains** tab.
- 2. In the action bar, click **Create Domain**.
- 3. In the **Create Domain** page, type or select the properties to be assigned to the new domain name. Domain name properties that are mandatory are indicated with a red asterisk (*).
- 4. In the action bar, click **Link Contact** or **Add Contact** to create an association for the new domain name with either an existing contact or a new contact to have a registrant, administrative and technical contact for each domain.
- 5. In the action bar, click **Link Host** or **Add a New Host** to create an association for the new domain name with either an existing host or a new host.
- 6. Once the domain name has been associated with a contact, click **Create Domain**.

Domain Search / Edit

- 1. In the IRS portal, click the **Domains** tab.
- 2. In the **Domain Search** field, type alphanumeric characters in the name of the domain for which you want to search.
- 3. Or, click Advanced for additional options to use as search criteria
- 4. Click the search icon.
- 5. From the search results, click on the Domain Name or select the checkbox and select Edit Domain from the Action Bar to edit the domain.

Renew a Domain

- 1. In the IRS portal, click the **Domains** tab.
- 2. Perform a search to display the domain name that you want to renew.
 - a. A renew may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the domain that you want to renew and go to the **Edit Domain** page
- 3. Click **Renew Domain** in the action bar.
- 4. In the **Renew Domain** page, select the period in the Renew For drop-down menu for which you want to extend the length of the registration term.
- The values that will be available for Renew For will be based on the Registry configuration with the maximum period allowed being no greater than ten (10) years.
- 6. Click Renew Domain.



Delete a Domain

- 1. In the IRS portal, click the **Domains** tab.
- 2. Perform a search to display the domain name that you want to delete.
 - a. A delete may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the domain that you want to delete go to the **Edit Domain** page
- 3. Click **Delete Domain** in the action bar.
- 4. In the Delete Domain dialog box, click Delete Domain to confirm.

Transfer a Domain

- 1. In the IRS portal, click the **Domains** tab.
- 2. Perform a search to display the domain name that you want to transfer.
 - a. A transfer may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the domain that you want to transfer and go to the **Edit Domain** page
- 3. Click Transfer Domain in the action bar.
- 4. In the Domain Transfer dialog box, configure the following properties:
 Renewal Period The length of time that the domain name will be registered with the new Registrar.

- **Authorization Code** - The Registrar Authorization Info / domain transfer key.

5. Click **Transfer Domain**.

Restore a Domain

- 1. In the IRS portal, click the **Domains** tab.
- 2. Perform a search to display the domain name that you want to restore ensuring it's in redemptionPeriod.
 - a. A restore may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the domain that you want to restore and go to the **Edit Domain** page
- 3. Click **Restore Domain** in the action bar.
- 4. In the Domain Restore dialog box, enter the Restore Report and click **Restore Domain**.

Bulk Operations

1. In the IRS portal, click the **Admin** tab.



2. Select Bulk Operations.

3. This page shows the results of any bulk action that was taken. So, for example, if 2 or more domains were deleted from the domain landing page, this is considered a bulk action and the results of that would be shown here. If the operation was successful, the status of Completed x/x would be displayed in green in the Progress column. If there was a failure, the status would be displayed in red and the number of failures indicated. Clicking on the Job ID of a failed operation will identify which object caused the failure and display the associated error message.

View/Edit Registrar Settings

- 1. In the IRS portal, click the **Admin** tab.
- 2. Select Registrar Settings.
- 3. From the **Edit Registrar** page, edit information or add/edit/delete contacts or IP addresses as needed.
- 4. Click **Update Registrar** in the Action Bar to save the changes.

Note: Some Registrar Settings are updateable by the Registry only and are read-only for the Registrar.

- 5. This page also provides the ability to produce a CSV file containing all domains associated to your Registrar by selecting the Domain List option in the action bar.
- 6. For Registrar users with the Finance role, the ability to produce a CSV file of all transaction details for a specified time range is also available from this page by selecting Transaction Details in the action bar.

Users

Create a User

- 1. In the IRS portal, click the **Admin** tab.
- 2. Select **Users**.
- 3. In the action bar, click **CreateUser**.
- 4. In the Create User page, type or select the properties to be assigned to the new user. Mandatory properties are identified with a red asterisk (*).
- 5. Assign the appropriate roles based on the roles listed.
- 6. 2-Factor Authentication is on by default and cannot be disabled by registrars
- 7. Enter and confirm the password for that user based on the following rules:
 - a. Password must have 16 characters



- b. Password can be any combination of digits, special characters and upper and lowercase letters
- 8. Click Create User.

User Search / Edit

- 1. In the IRS portal, click the **Admin** tab.
- 2. Select **Users**.
- 3. Scroll to find the user or in the **Search** field, type the full or partial name of the user to search.
- 4. Click the search icon or hit Enter.
- 5. From the search results, click on the Username or select the checkbox and select **Edit User** from the Action Bar to edit the user.

Delete a User

- 1. In the IRS portal, click the **Admin** tab.
- 2. Select Users.
- 3. Perform a search to display the username that you want to delete.
 - a. A delete may be done from the search landing page by selecting the checkbox or
 - b. Click the name of the user that you want to delete go to the **Edit User** page
- 4. Click **Delete User** in the action bar.
- 5. In the Delete User dialog box, click **Delete User** to confirm.

Change a Password

- 1. If you wish to update your password (including EPP passwords), there are two methods to do so:
 - a. One is to click on **Admin** then choose **Users** and select the user whose password you wish to change.
 - b. If it's the password of the account you are currently logged in as, you may select User Settings from the dropdown below the username in the top right corner.
- 2. From either **Edit User** screen, enter a new password and confirm that password.

Note: The password must be 16 characters long and can contain combination of digits, special characters and upper and lowercase letters.

View / Acknowledge Service Messages

1. In the IRS portal, click the **Home** tab.



- 2. Click the **Service Messages** box on the dashboard.
- 3. Select one or more of the messages by selecting the appropriate checkboxes.
- 4. Click **Clear Message** in the Action Bar.
- 5. From the Clear Selected Service Messages dialog box, select **Clear Message** to confirm.

Sign out of the portal

- 1. In the IRS portal, click the username in the top right corner to show the dropdown.
- 2. Click Sign out.



Appendix C — EPP XML Sample Commands

EPP Samples

Hello

Login

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
    <command>
        <login>
            <cliD>rarepp</cliD>
            <pw>abCD12#$</pw>
            <options>
                <version>1.0</version>
                <lang>en</lang>
            </options>
            <svcs>
                <objURI>urn:ietf:params:xml:ns:epp-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:host-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
                <svcExtension>
                    <extURI>urn:ietf:params:xml:ns:fury-2.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:fury-rgp-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:idn-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:secDNS-1.1</extURI>
                    <extURI>urn:ietf:params:xml:ns:launch-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:mark-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:signedMark-1.0</extURI>
                    <extURI>http://www.w3.org/2000/09/xmldsig#</extURI>
                    <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:fee-0.9</extURI>
                    <extURI>urn:ietf:params:xml:ns:fee-0.11</extURI>
                </svcExtension>
            </svcs>
        </login>
        <cltRID>ABC-12345</cltRID>
```



</command> </epp>

Login with Password Change

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <login>
            <clID>irs_epp</clID>
            <pw>abCD12#$</pw>
            <newPW>deFG23#$</newPW>
            <options>
                <version>1.0</version>
                <lang>en</lang>
            </options>
            <svcs>
                <objURI>urn:ietf:params:xml:ns:epp-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:domain-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:host-1.0</objURI>
                <objURI>urn:ietf:params:xml:ns:contact-1.0</objURI>
                <svcExtension>
                    <extURI>urn:ietf:params:xml:ns:fury-2.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:fury-rgp-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:idn-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:secDNS-1.1</extURI>
                    <extURI>urn:ietf:params:xml:ns:launch-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:mark-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:signedMark-1.0</extURI>
                    <extURI>http://www.w3.org/2000/09/xmldsig#</extURI>
                    <extURI>urn:ietf:params:xml:ns:rgp-1.0</extURI>
                    <extURI>urn:ietf:params:xml:ns:fee-0.9</extURI>
                    <extURI>urn:ietf:params:xml:ns:fee-0.11</extURI>
                </svcExtension>
            </svcs>
        </login>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Logout

```
<?xml version="1.0" encoding="UTF-8"?>
```



Retrieve Poll Messages

Acknowledge Poll Messages

Domain Check

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<command>
<check>
<domain:check xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:check xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:name>premiumdomain.nz</domain:name>
<domain:name>otherdomain.nz</domain:name>
</domain:check>
</domain:check>
</check>
<clTRID>ABC-12345</clTRID>
</command>
</epp>
```



Domain Create (simple)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>domain.nz</domain:name>
                <domain:registrant>contactid</domain:registrant>
                <domain:contact type="admin">contactid</domain:contact>
                <domain:contact type="tech">contactid</domain:contact>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:create>
        </create>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

Domain Create (full)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>testdomain4.nz</domain:name>
                <domain:period unit="y">2</domain:period>
                <domain:ns>
                    <domain:hostObj>ns2.testdomain3.nz</domain:hostObj>
                    <domain:hostObj>ns3.testdomain3.nz</domain:hostObj>
                </domain:ns>
                <domain:registrant>testcontact1</domain:registrant>
                <domain:contact type="admin">testcontact1</domain:contact>
                <domain:contact type="tech">testcontact1</domain:contact>
                <domain:contact type="billing">testcontact1</domain:contact>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:create>
        </create>
        <cltrid>ABC-12345</cltrid>
    </command>
```



</epp>

Domain Create (Privacy)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>testing1.nz</domain:name>
                <domain:registrant>testcontact2</domain:registrant>
                <domain:contact type="admin">testcontact2</domain:contact>
                <domain:contact type="tech">testcontact2</domain:contact>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:create>
        </create>
        <extension>
            <fury:create xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
                <fury:properties>
                    <fury:property>
                        <fury:key>PRIVACY</fury:key>
                        <fury:value>PRIVATE</fury:value>
                    </fury:property>
                </fury:properties>
            </fury:create>
        </extension>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Domain Info



```
</domain:info>
</info>
<clTRID>ABC-12345</clTRID>
</command>
</epp>
```

Domain Update

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <update>
            <domain:update xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>testdomain3.nz</domain:name>
                <domain:add>
                    <domain:ns>
                        <domain:hostObj>ns1.testdomain3.nz</domain:hostObj>
                        <domain:hostObj>ns3.testdomain3.nz</domain:hostObj>
                    </domain:ns>
                    <domain:contact type="tech">testcontact1</domain:contact>
                    <domain:status s="clientDeleteProhibited"/>
                </domain:add>
                <domain:chg>
                    <domain:authInfo>
                        <domain:pw>password2</domain:pw>
                    </domain:authInfo>
                </domain:chg>
            </domain:update>
        </update>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Note:Only one of each contact type is allowed on a domain so if the domain already has a technical contact then you need to use **domain:rem** first

Domain Update (Privacy)



```
<domain:authInfo>
                        <domain:pw>password2</domain:pw>
                    </domain:authInfo>
                </domain:chg>
            </domain:update>
        </update>
        <extension>
            <fury:update xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
                <fury:add>
                    <fury:properties>
                        <fury:property>
                            <fury:key>PRIVACY</fury:key>
                            <fury:value>PUBLIC</fury:value>
                        </fury:property>
                    </fury:properties>
                </fury:add>
                <fury:rem>
                    <fury:properties>
                        <fury:property>
                            <fury:key>PRIVACY</fury:key>
                            <fury:value>PRIVATE</fury:value>
                        </fury:property>
                    </fury:properties>
                </fury:rem>
            </fury:update>
        </extension>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Domain Update using remALL to remove all existing properties



```
<fury:key>PRIVACY</fury:key>
                            <fury:value>PUBLIC</fury:value>
                        </fury:property>
                    </fury:properties>
                </fury:add>
                <fury:rem>
                    <fury:properties>
                        <fury:property>
                            <fury:key>PRIVACY</fury:key>
                            <fury:remAll>true</fury:remAll>
                        </fury:property>
                    </fury:properties>
                </fury:rem>
            </fury:update>
        </extension>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Domain Delete

Domain Renew



```
</domain:renew>
</renew>
<clTRID>ABC-12345</clTRID>
</command>
</epp>
```

Domain Transfer Request

Domain Restore Request

```
<?xml version='1.0' encoding='UTF-8'?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <command>
      <update>
         <domain:update xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
            <domain:name>testdomain3.nz</domain:name>
            <domain:chg/>
         </domain:update>
      </update>
      <extension>
         <rgp:update xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0">
            <rgp:restore op="request"/>
         </rgp:update>
      </extension>
      <cltrid>ABC-12345</cltrid>
  </command>
</epp>
```



Domain Restore Report

```
<?xml version='1.0' encoding='UTF-8'?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
   <command>
      <update>
         <domain:update xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
            <domain:name>testdomain3.nz</domain:name>
            <domain:chg/>
         </domain:update>
      </update>
      <extension>
         <rgp:update xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0">
            <rgp:restore op="report">
               <rgp:report>
                  <rgp:preData>Pre-delete registration data goes here. Both XML
and free text are allowed.</rgp:preData>
                  <rgp:postData>Post-restore registration data goes here. Both
XML and free text are allowed.
</rgp:postData>
                  <rgp:delTime>2003-07-10T22:00:00.0Z</rgp:delTime>
                  <rgp:resTime>2003-07-20T22:00:00.0Z</rgp:resTime>
                  <rgp:resReason>Registrant error.</rgp:resReason>
                  <rgp:statement>This registrar has not restored the Registered
Name in order to assume the rights to use or sell the Registered Name for itself
or for any third Party.
</rgp:statement>
                  <rgp:statement>The information in this report is true to best
of this registrar's knowledge, and this registrar acknowledges that
intentionally supplying false
information in this report shall constitute an incurable material breach of the
Registry-Registrar Agreement.
</rgp:statement>
                  <rgp:other>Supporting information goes here.</rgp:other>
               </rgp:report>
            </rgp:restore>
         </rgp:update>
      </extension>
      <cltrid>ABC-12345</cltrid>
   </command>
</epp>
```

Contact Check

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
```



```
<command>
        <check>
            <contact:check xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
                 <contact:id>contact:id>
                 <contact:id>contactid</contact:id>
                 <contact:id>othercontact</contact:id>
                 </contact:check>
                 </check>
                 <clTRID>ABC-12345</clTRID>
                </command>
</eepp>
```

Contact Create (Simple)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <contact:create xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
                <contact:id>contactid</contact:id>
                <contact:postalInfo type="loc">
                    <contact:name>John Doe</contact:name>
                    <contact:org>Test Organization</contact:org>
                    <contact:addr>
                        <contact:street>123 Main Street</contact:street>
                        <contact:city>Aukland</contact:city>
                        <contact:pc>0600</contact:pc>
                        <contact:cc>NZ</contact:cc>
                    </contact:addr>
                </contact:postalInfo>
                <contact:voice>+64.6132375335</contact:voice>
                <contact:email>jdoe@example.com</contact:email>
                <contact:authInfo>
                    <contact:pw>password</contact:pw>
                </contact:authInfo>
            </contact:create>
        </create>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

Contact Create (Language)

<?xml version="1.0" encoding="UTF-8"?>



```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <contact:create xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
                <contact:id>testcontact6</contact:id>
                <contact:postalInfo type="loc">
                    <contact:name>Test Contact1</contact:name>
                    <contact:org>Test Organization</contact:org>
                    <contact:addr>
                        <contact:street>123 Main Street</contact:street>
                        <contact:city>Auckland</contact:city>
                        <contact:pc>0600</contact:pc>
                        <contact:cc>NZ</contact:cc>
                    </contact:addr>
                </contact:postalInfo>
                <contact:voice>+64.6134375335</contact:voice>
                <contact:fax>+64.6134375366</contact:fax>
                <contact:email>jdoe@example.com</contact:email>
                <contact:authInfo>
                    <contact:pw>password</contact:pw>
                </contact:authInfo>
            </contact:create>
        </create>
        <extension>
            <fury:create xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
                <fury:properties>
                    <fury:property>
                        <fury:key>LANGUAGE</fury:key>
                        <fury:value>EN</fury:value>
                    </fury:property>
                </fury:properties>
            </fury:create>
        </extension>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

Contact Info



Note: authorisation code is not needed to query on a contact under your own Registrar account however it is needed to run on a contact under a different Registrar

Contact Update

Contact Update (Status)



```
</command> </epp>
```

Contact Update (Language)

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <command>
    <update>
      <contact:update xmlns:contact="urn:ietf:params:xml:ns:contact-1.0">
        <contact:id>testcontact2</contact:id>
        <contact:chg>
          <contact:email>noprops@domain.nz</contact:email>
        </contact:chg>
      </contact:update>
    </update>
    <extension>
      <fury:update xmlns:fury="urn:ietf:params:xml:ns:fury-2.0">
        <fury:add>
          <fury:properties>
            <fury:property>
              <fury:key>language</fury:key>
              <fury:value>fr</fury:value>
            </fury:property>
          </fury:properties>
        </fury:add>
        <fury:rem>
          <fury:properties>
            <fury:property>
              <fury:key>language</fury:key>
              <fury:value>en</fury:value>
            </fury:property>
          </fury:properties>
        </fury:rem>
      </fury:update>
    </extension>
    <cltRID>ABC-12345</cltRID>
  </command>
</epp>
```

Contact Delete

<?xml version="1.0" encoding="UTF-8"?>



Host Check

Host Create



Host Info

Host Update

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <update>
            <host:update xmlns:host="urn:ietf:params:xml:ns:host-1.0">
                <host:name>ns1.domain.nz</host:name>
                <host:add>
                    <host:addr ip="v4">1.2.3.4</host:addr>
                </host:add>
                <host:rem>
                    <host:addr ip="v4">192.0.2.2</host:addr>
                </host:rem>
            </host:update>
        </update>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

Host Delete



Request All Properties

Request Property Details

EPP Samples using the Fee Extension

Domain Check

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
        <command>
        <check>
            <domain:check xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                 <domain:name>premium.nz</domain:name>
```



```
</domain:check>
</check>
<extension>
<fee:check xmlns:fee="urn:ietf:params:xml:ns:fee-0.11">
<fee:command>
<fee:currency>NZD</fee:currency>
<fee:period unit="y"></fee:currency>
<fee:class>premium</fee:class>
</fee:class>premium</fee:class>
</fee:check>
</extension>
<clTRID>ABC-12345</clTRID>
</command>
```

Domain Create

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp
xmlns="urn:ietf:params:xml:ns:epp-1.0"xmlns:xsi="http://www.w3.org/2001/XMLSchem
a-instance" xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <command>
    <create>
      <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"</pre>
       xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd">
        <domain:name>awesome.nz</domain:name>
        <domain:period unit="y">2</domain:period>
        <domain:registrant>fulladdr3</domain:registrant>
        <domain:contact type="admin">fulladdr3</domain:contact>
        <domain:contact type="tech">fulladdr3</domain:contact>
        <domain:authInfo>
          <domain:pw>password</domain:pw>
        </domain:authInfo>
      </domain:create>
    </create>
    <extension>
       <fee:create xmlns:fee="urn:ietf:params:xml:ns:fee-0.11">
          <fee:currency>NZD</fee:currency>
          <fee:fee>9.50</fee:fee>
       </fee:create>
    </extension>
    <cltrid>ABC-12345</cltrid>
  </command>
</epp>
```

Domain Transfer Request

```
<?xml version="1.0" encoding="UTF-8"?>
```



```
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
   <command>
        <transfer op="request">
            <domain:transfer xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>100domain.nz</domain:name>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:transfer>
        </transfer>
        <extension>
            <fee:create xmlns:fee="urn:ietf:params:xml:ns:fee-0.11">
                <fee:currency>NZD</fee:currency>
                <fee:fee>9.50</fee:fee>
            </fee:create>
        </extension>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

EPP Samples using IDN

Domain Create

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
     <command>
            <create>
                  <domain:create
xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                        <domain:name>xn--mytstr-r3ac.nz</domain:name>
                        <domain:period unit="y">1</domain:period>
                        <domain:registrant>testcontact</domain:registrant>
                        <domain:contact
type="admin">testcontact</domain:contact>
                        <domain:contact type="tech">testcontact</domain:contact>
                        <domain:authInfo>
                              <domain:pw>password</domain:pw>
                        </domain:authInfo>
                  </domain:create>
            </create>
```



Domain Info

Domain Check



EPP Samples using DNSSEC

Domain Create with DS Record

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
    <command>
        <create>
            <domain:create xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
                <domain:name>dnsdomain.nz</domain:name>
                <domain:period unit="y">1</domain:period>
                <domain:registrant>testcontact1</domain:registrant>
                <domain:contact type="admin">testcontact1</domain:contact>
                <domain:contact type="tech">testcontact1</domain:contact>
                <domain:authInfo>
                    <domain:pw>password</domain:pw>
                </domain:authInfo>
            </domain:create>
        </create>
        <extension>
            <secDNS:create xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1">
                <secDNS:dsData>
                    <secDNS:keyTag>12345</secDNS:keyTag>
                    <secDNS:alg>3</secDNS:alg>
                    <secDNS:digestType>1</secDNS:digestType>
<secDNS:digest>8cdb09364147aed879d12c68d615f98af5900b72</secDNS:digest>
                </secDNS:dsData>
            </secDNS:create>
        </extension>
        <cltRID>ABC-12345</cltRID>
    </command>
</epp>
```

Domain Update with DS Record



```
<secDNS:update xmlns:secDNS="urn:ietf:params:xml:ns:secDNS-1.1">
                <secDNS:rem>
                    <secDNS:dsData>
                        <secDNS:keyTag>12345</secDNS:keyTag>
                        <secDNS:alg>3</secDNS:alg>
                        <secDNS:digestType>1</secDNS:digestType>
                        <secDNS:digest>8cdb09364147aed879d12c68d615f98af5900b72
                         </secDNS:digest>
                    </secDNS:dsData>
                </secDNS:rem>
                <secDNS:add>
                    <secDNS:dsData>
                        <secDNS:keyTag>12346</secDNS:keyTag>
                        <secDNS:alg>3</secDNS:alg>
                        <secDNS:digestType>1</secDNS:digestType>
                        <secDNS:digest>8cdb09364147aed879d12c68d615f98af5900b72
                          </secDNS:digest>
                    </secDNS:dsData>
                </secDNS:add>
            </secDNS:update>
        </extension>
        <cltrid>ABC-12345</cltrid>
    </command>
</epp>
```

