

EPP Second Level Registration Technical Documentation

Tuesday, 30 September 2014

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Summary

Registrars and Registrants are able to register domains at the second level in the production SRS from 1:00pm on Tuesday 30th September 2014.

Preferential Registration Eligibility (PRE) period begins 1:00pm on Tuesday 30th September 2014 and ends on 1:00pm 30th March 2015.

There are a number of options for second level registrations (eg: nzrs.nz) depending on the domain status. The following table gives a brief summary of the possible :

Second Level Domain Status	Registration options
Available	The domain is available for registration on a first come first served basis
Conflicted	A domain status which means there are at least two registrations at the third level that have rights over this domain and so its registration at the second level may need to go through a conflicted process before it can be registered
Prohibited	For reasons of confusion, this domain name cannot be registered directly at the second level. These names include 'gov', 'government', 'com', 'edu', 'nic' and all macron variations of the current 15 second levels
PRR	Preferential Registration or Reservation (PRR). A domain status indicating that the Registrant of the registered third level domain will be eligible to register or reserve the shorter version of their domain name during the Preferential Registration Eligibility (PRE) period for second level registrations
Reserved	A domain status indicating the domain name has been reserved by a registrant of the registered third level domain
Resolved	A domain status indicating the domain name was conflicted but which agreement has been reached as to which registrant of the registrations at the third level is entitled to register it.
Ok (Active in SRS)	The domain is not available for registration (Already registered)
pendingDelete (PendingRelease in SRS)	The domain is not available for registration.

There are no changes to third level registrations and there are no additional statuses.

Third Level Domain Status	Registration options
Available	The domain is available for registration on a first come first served basis
Ok (Active in SRS)	The domain is not available for registration (Already registered)
pendingDelete (PendingRelease in SRS)	The domain is not available for registration.

Access to a Registrar Testing Environment

The Registrar Test environment (SRSTest) is available for Registrar testing of second level registrations.

You can access the SRSTest environment from:

- EPP: srstestepp.srs.net.nz

If you have any problems connecting to the above systems please contact support@nzrs.net.nz

Second Level Registrations of PRR, Resolved or Reserved Domains

Under the EPP protocol registrars that wish to register a domain at the second level that has Preferential Registration Eligibility (Domain status = **PRR**, **Reserved** or **Resolved**) will need to perform a domain transfer.

The transfer must be a normal domain transfer using an EPP DomainTransfer transaction. The UDAI that is provided for the transfer must be the UDAI of the linked third level domain (3LD).

The SRS will create the domain, copying contact records from the linked 3LD. If the registration is successful the domain status for the second level registration will be changed to "Ok".

Note:

- Period can be provided, but will default to 1 month if not provided.
- Domains at the second level that has statuses of Conflicted or Prohibited will be rejected.
- Domains where the linked 3LD is locked cannot be registered in this way.
- These types of registrations will be rejected before the go-live date.
- Name server details are NOT copied.

Registrars that wish to register a domain at the second level that is available for registration must use the normal domain create transaction under the EPP protocol.

EPP Transactions

EPP Query Domain Status

The EPP domain:check transaction is used to return a status showing if the domain is available or not. Informational messages will be returned only for the new second level registration statuses.

The table below details the possible response values for the 'avail' attribute of the domain:name element and the optional domain:reason values (if returned).

avail="1/0"	domain:reason	Registered domain
0	Not returned	The domain is not available for registration (Already registered)
1	Not returned	Domain is available for registration
0	Conflicted	<p>Applies to registrations at the second level only and will be returned after 1:00 pm on Tuesday 30th September 2014.</p> <p>A domain status which means there are at least two registrations at the third level that have rights over this domain and so its registration at the second level may need to go through a conflicted process after 1:00 pm on Tuesday 30th September 2014. See DNCL Registering, Managing and Cancelling Domain Names Policy section 8 and 10 for more details on the criteria for Conflicted domains.</p>
0	Prohibited	<p>Applies to registrations at the second level only and will be returned after 1:00 pm on Tuesday 30th September 2014.</p> <p>For reasons of confusion, this domain name cannot be registered directly at the second level. These names include 'gov', 'government', 'com', 'edu', 'nic' and all macron variations of the current 15 second levels</p>
0	PRR	<p>Applies to registrations at the second level only and will be returned after 1:00 pm on Tuesday 30th September 2014.</p> <p>Preferential Registration or Reservation (PRR). A domain status indicating that the Registrant of the registered third level domain (shown in the source_domain_nn field) will be eligible to register or reserve the shorter version of their domain name during the Preferential Registration Period for second level registrations (See DNCL Registering, Managing and Cancelling Domain Names Policy section 8 and 9)</p>
0	Reserved	<p>Applies to registrations at the second level only and returned after 1:00 pm on Tuesday 30th September 2014.</p> <p>A domain status indicating the domain name has been reserved by a</p>

		registrant of the registered third level domain (shown in the linked_domain_nn field).
0	Resolved	<p>Applies to registrations at the second level only and returned after 1:00 pm on Tuesday 30th September 2014.</p> <p>A domain status indicating the domain name was conflicted but which agreement has been reached as to which registrant of the registrations at the third level is entitled to register it.</p>

EPP Request a new UDAI

The EPP domain::update request with only an empty auth_info will generate a new UDAI. This will work if the domain status is Active or PendingRelease. If the status is PendingRelease it will not uncanceled the domain.

EPP UDAI Validate

The EPP domain::info request can be used to validate the UDAI by populating the domain:authInfo field. The EPP proxy will either return the domain:info details if the UDAI is valid or result code 2202 invalid authorisation details if the UDAI is invalid.

Examples

Example EPP domain:check request

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<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>nzrs.nz</domain:name>
      </domain:check>
    </check>
  </command>
</epp>
```

Example EPP domain:check responses

NOT Available (already registered)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:cd>
          <domain:name avail="0">nzrs.nz</domain:name>
        </domain:cd>
      </domain:chkData>
    </resData>
    <trID>
      <svTRID>5,8668852</svTRID>
    </trID>
  </response>
</epp>
```

Available

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:cd>
          <domain:name avail="1">nzrsnew.nz</domain:name>
        </domain:cd>
      </domain:chkData>
    </resData>
    <trID>
      <svTRID>5,7536248</svTRID>
    </trID>
  </response>
</epp>
```

Conflicted

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

```
<result code="1000"><msg lang="en">Command completed successfully</msg></result>
<resData>
<domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:cd>
<domain:name avail="O">nzrs.nz</domain:name>
<domain:reason>Conflicted</domain:reason>
</domain:cd>
</domain:chkData>
</resData>
<trID><clTRID>checkdomain-2014-06-18-nzrs.nz-019</clTRID><svTRID>8,20925490</svTRID></trID>
</response>
</epp>
```

Prohibited

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
<result code="1000"><msg lang="en">Command completed successfully</msg></result>
<resData>
<domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:cd>
<domain:name avail="O">com.nz</domain:name>
<domain:reason>Prohibited</domain:reason>
</domain:cd>
</domain:chkData>
</resData>
<trID><clTRID>checkdomain-2014-06-18-com.nz-019</clTRID><svTRID>8,20925487</svTRID>
</trID>
</response>
</epp>
```

PRR

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
<result code="1000"><msg lang="en">Command completed successfully</msg></result>
<resData>
<domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:cd>
<domain:name avail="O">dn3.nz</domain:name>
<domain:reason>PRR</domain:reason>
</domain:cd>
</domain:chkData>
</resData>
<trID><clTRID>checkdomain-2014-06-18-dn3.nz-019</clTRID><svTRID>8,20925489</svTRID></trID>
</response>
</epp>
```

Reserved

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
<response>
<result code="1000">
<msg lang="en">Command completed successfully</msg>
</result>
<resData>
<domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
<domain:cd>
<domain:name avail="O">dnw.nz</domain:name>
<domain:reason>Reserved</domain:reason>
</domain:cd>
</domain:chkData>
</resData>
<trID>
```

```
<svTRID>5,8669104</svTRID>
</trID>
</response>
</epp>
```

Resolved

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:cd>
          <domain:name avail="0">nzrs.nz</domain:name>
          <domain:reason>Resolved</domain:reason>
        </domain:cd>
      </domain:chkData>
    </resData>
  </trID>
  <svTRID>5,8668860</svTRID>
</trID>
</response>
</epp>
```

Existing third level registration

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000"><msg lang="en">Command completed successfully</msg></result>
    <resData>
      <domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:cd><domain:name avail="0">nzrs.net.nz</domain:name>
      </domain:cd>
    </domain:chkData>
  </resData>
  <trID><clTRID>checkdomain-2014-06-18-nzrs.net.nz-019</clTRID><svTRID>8,20925491</svTRID></trID>
</response></epp>
```

Domain not available (Querying a second level domain eg co.nz, net.nz etc)

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="2400">
      <msg lang="en">The supplied domain name is not available for registration</msg>
      <extValue>
        <value>co.nz</value>
        <reason lang="en">(unknown error detail)</reason>
      </extValue>
    </result>
  </trID>
  <clTRID>checkdomain-2014-06-18-co.nz-019</clTRID>
  <svTRID>5,7536263</svTRID>
</trID>
</response>
</epp>
```


Example Second Level Registrations of PRR, Reserved or Reserved Domains

EPP transfer to register a second level domain that has PRR, Reserved or Reserved status

Request - Transfer without period values

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<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>nzrtestdomain.nz</domain:name>
        <domain:authInfo>
          <domain:pw>2smWvUkW</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
    <clTRID>transferdomain- nzrtestdomain.nz-testrun2</clTRID>
  </command>
</epp>
```

Response - Transfer without period values, domain created for 1 month

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:name>nzrtestdomain.nz</domain:name>
        <domain:trStatus>serverApproved</domain:trStatus>
        <domain:reID>999</domain:reID>
        <domain:reDate>2014-07-30T12:08:28+12:00</domain:reDate>
        <domain:acID>999</domain:acID>
        <domain:acDate>2014-07-30T12:08:28+12:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>transferdomain- nzrtestdomain.nz-testrun2</clTRID>
      <svTRID>5,7535891[1]+1</svTRID>
    </trID>
  </response>
</epp>
```

Request - Transfer with 12 month period value

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<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>nzrtestdomain.nz</domain:name>
        <domain:period unit="m">12</domain:period>
        <domain:authInfo>
          <domain:pw>shBaAsaE</domain:pw>
        </domain:authInfo>
      </domain:transfer>
    </transfer>
    <clTRID>transferdomain- nzrtestdomain.nz-testrun2</clTRID>
  </command>
</epp>
```

Response - Transfer with 12 month period value, domain created for 12 months

```
<?xml version="1.0" encoding="UTF-8"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg lang="en">Command completed successfully</msg>
    </result>
    <resData>
      <domain:trnData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:name>nzrstestdomain.nz</domain:name>
        <domain:trStatus>serverApproved</domain:trStatus>
        <domain:reID>999</domain:reID>
        <domain:reDate>2014-07-30T12:08:28+12:00</domain:reDate>
        <domain:acID>999</domain:acID>
        <domain:acDate>2014-07-30T12:08:28+12:00</domain:acDate>
      </domain:trnData>
    </resData>
    <trID>
      <clTRID>transferdomain- nzrstestdomain.nz-testrun2</clTRID>
      <svTRID>5,7535891[1]+1</svTRID>
    </trID>
  </response>
</epp>
```