

*Technical and
functional
specifications for
multi-year
registrations of .fr
domain names*

afnic

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1. Preface

Afnic has decided to set up multi-year registrations for *.fr* domain names. Users will thus be able to register or renew *.fr* Internet addresses for 1 to 10 years.

This document describes how multi-year registrations in the *.fr* namespace operate via the EPP protocol and the Extranet. The purpose of this document is to help you implement the changes in your information system and EPP client, if used.

Provisional schedule:

Publication of specifications	12/15/2014
Availability in sandbox environment	03/16/2015
Availability in production	03/30/2015

2. New functional features

Multi-year registration introduces a new operation and other changes that affect the domain name lifecycle.

2.1. Changes to existing domains

- New values for the number of years of registration will be available: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- What is now the anniversary date (day/month format) will become the expiry date (day/month/year format).

2.2. New operation

- The explicit renew operation will be incorporated to the systems; this new operation will add 1 to 10 years of registration to a domain name.

2.3. Rules on maximum registration period

The maximum registration period for a *.fr* domain name has been set to 10 years.

- o How the "renew" operation works:

The "renew" operation will block any attempt to exceed 10 years between the renewal date and the initial expiry date added to the desired additional number of years.

Example:

- Renew operation date: 15/11/2015
- Initial expiry date: 14/12/2016
- Number of additional years requested: 9

The new expiry date requested is 14/12/2025. The number of years calculated between the operation date and the new expiry date is greater than 10 years; renewal is therefore denied by the registration chain.

- Specific case of transfer, trade/recover and restore operations:

If a transfer, trade, recover or restore operation is performed on a domain name with more than 9 years between the current date and the expiry date, the operation will add one year by default and change the expiry date to reach 10 years of registration. Transfer, trade, recover and restore operations are not blocked in this specific case.

Example:

- Operation date: 17 October 2014
- Domain name expiry date: 9 September 2024
- If the operation is completed successfully, the new expiry date will be: 17 October 2024

3. Migration policy for existing domains

3.1. Migrated data

The "anniversary date" (day/month) will become the "expiry date" (day/month/year).

3.2. Migration process

The migration process is meant to be as seamless as possible for registrars and domain name registrants.

- First migration for go-live:

This migration will apply to all domain names. The "anniversary date" will become the "expiry date", which will use a full date format, including day, month and year.

Example: the anniversary date of the *multiyear.fr* domain name is 09/08.

Its expiry date will therefore become 09/08/2015.

Please note:

- For domain names whose anniversary date is before or on the migration date, one year will be added to the expiry date.

Example: if the migration date is 14/03/2015 and the anniversary date of the *earlierdate.fr* domain name is 12/01, the domain name expiry date will become 12/01/2016.

- For domain names whose anniversary date is after the migration date, the current year will be kept as the year of expiry.

Example: if the migration date is 14/03/2015 and the anniversary date of the *laterdate.fr* domain name is 15/06, the domain name expiry date will become 15/06/2015.

- Second migration after go-live:

If an operation is being performed on a domain name and impacts its "anniversary date" during go-live, the domain name will have a new "expiry date" depending on the operation :

- If the operation is not finalized, the "expiry date" will remain the same as the date defined during the first migration.
- If the operation completes successfully, the expiry date of the domain name will change. The new expiry date will take into account the date of the end of the operation.

4. Rule for calculating expiry dates

The impact of pay operations on the domain name life-cycle remains unchanged. It naturally adapts to the multi-year registration now possible as well as to the display of the year in the expiry date.

Here are a few examples:

Example 1		Example 2		Example 3		Example 4	
Current Expiry Date	20/06/2015	Current Expiry Date	02/01/2016	Current Expiry Date	20/06/2015	Current Expiry Date	20/06/2020
End of a transfer	08/05/2015	End of a transfer	08/05/2015	End of a transfer	20/06/2015	End of a transfer	04/04/2015
New Expiry Date	08/05/2016	New Expiry Date	08/05/2016	New Expiry Date	20/06/2016	New Expiry Date	04/04/2021

5. Documentation

RFC 5731 (renew): <http://tools.ietf.org/html/rfc5731#section-3.2.3>

RFC 5731 (create): <http://tools.ietf.org/html/rfc5731#section-3.2.1>

6. EPP

The set up of multi-year registrations via EPP does not require the addition of any specific extension. Here is a description of the changes only:

- The "domain:create" command, which may have a "period" element ranging from 1 to 10 (included)
- The "domain:renew" command, which renews your domain name for X years

6.1. The "create" command

Example of a domain create request for 8 years:



```

<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-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"
xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-
1.0.xsd">
        <domain:name>multiannees.fr</domain:name>
        <domain:period unit="y">8</domain:period>
        <domain:registrar>ST2652</domain:registrar>
        <domain:contact type="admin">ST2652</domain:contact>
        <domain:contact type="tech">ST2652</domain:contact>
        <domain:authInfo>
          <domain:pw>bzh</domain:pw>
        </domain:authInfo>
      </domain:create>
    </create>
    <clTRID>db9cad6e78fafac1c27653b880792228cd953efe</clTRID>
  </command>
</epp>

```

Server response:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">
  <response>
    <result code="1000">
      <msg>Command completed successfully</msg>
    </result>
    <msgQ count="212097" id="387436"/>
    <resData>
      <domain:creData xmlns:domain="urn:ietf:params:xml:ns:domain-
1.0">
        <domain:name>multiannees.fr</domain:name>
        <domain:crDate>2014-07-03T22:03:50.0Z</domain:crDate>
        <domain:exDate>2022-07-03T22:03:50.0Z</domain:exDate>
      </domain:creData>
    </resData>
    <trID>
      <clTRID>db9cad6e78fafac1c27653b880792228cd953efe</clTRID>
      <svTRID>FR-SANDBOX-epp01-12564-2072-1404425028.54562</svTRID>
    </trID>
  </response>
</epp>

```

6.2. The "renew" command

The explicit renew command requires 3 elements:

- The domain name
- The current expiry date
- The desired number of years of registration (optional, if this element is left blank, the default value is one year)

Example of a request to explicitly renew a domain name for 3 years:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <command>
    <renew>
      <domain:renew
        xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
        <domain:name>multiannees.fr</domain:name>
        <domain:curExpDate>2014-06-11</domain:curExpDate>
        <domain:period unit="y">5</domain:period>
      </domain:renew>
    </renew>
    <clTRID>36bc3ee127ba9e7de23e05a760577e70fa153319</clTRID>
  </command>
</epp>
```

Server response:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
  <response>
    <result code="1000">
      <msg>Command completed successfully</msg>
    </result>
    <resData>
      <domain:renData xmlns:obj="urn:ietf:params:xml:ns:obj">
        <domain:name></domain:name>
        <domain:crDate>2014-07-03T22:03:50.0Z</domain:crDate>
        <domain:exDate>2019-06-11T00:00:00.0Z</domain:exDate>
      </domain:renData>
    </resData>
    <trID>
      <clTRID>ABC-12346</clTRID>
      <svTRID>FR-SANDBOX-epp01-12564-2072-1404425028.54562</svTRID>
    </trID>
  </response>
</epp>
```

6.3. EPP server response codes

The result codes returned by the EPP server are described in RFC 5730. (<http://tools.ietf.org/html/rfc5730#section-3>)

If a problem occurs, EPP server responses generally include a <msg> element containing relevant information for debugging purposes.

7. Extranet

The Extranet interface has been overhauled for multi-year registration management.

- The domain name creation form will be used to select a value from 1 to 10 for the desired number of years of registration.
- An explicit renewal form will be used to renew a domain name by providing the desired number of additional years of registration and the current domain name expiry date.