

EPP Fee Extension

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Background

- CentralNic “pricing” extension (2009)
- New gTLD Application Round (2012-)
- “Fee” extension in development from 2013
- 4 revisions published to date
- Deployment at CNIC, GMO, M&M
- Interest from VRSN, Google

Functionality

- Provides clients with way to query fees for billable transactions:
 - create (including sunrise, landrush, EAP etc)
 - renew
 - transfer
 - RGP restore
 - update

Functionality (ctd)

- Provides metadata about fees:
 - Currency
 - Grace Period
 - Refundable
 - Description
 - Tier/class/category
- Fees can be queried via both <check> and <info>
- Responses can include both <fee> and <credit> elements

Functionality (ctd)

- Provides post-fact information about fees incurred by a command
 - e.g: “you registered example.xyz for 2 years, it cost you 100.00 RMB”
- Also credits
 - e.g: “you deleted example.xyz in the AGP, here’s a refund for 100.00 RMB”

Functionality (ctd)

- Allows servers to provide account information in responses
 - Account Balance
 - Credit Limit

Functionality (ctd)

- Allows servers to force clients to provide the correct fee when submitting a billable command
 - Prevents (for example) situations where client unwittingly registers a \$10,000 domain but only charges their customer \$50
 - Registrar cannot claim that they didn't know the correct fee

<check> command

```
C: <?xml version="1.0" encoding="utf-8" standalone="no"?>
C: <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
C:   <command>
C:     <check>
C:       <domain:check
C:         xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
C:           <domain:name>example.xyz</domain:name>
C:         </domain:check>
C:       </check>
C:     <extension>
C:       <fee:check
C:         xmlns:fee="urn:ietf:params:xml:ns:fee-0.7">
C:           <fee:domain>
C:             <fee:name>example.xyz</fee:name>
C:             <fee:currency>USD</fee:currency>
C:             <fee:command phase="sunrise">create</fee:command>
C:             <fee:period unit="y">1</fee:period>
C:           </fee:domain>
C:         </extension>
C:       <clTRID>ABC-12345</clTRID>
C:     </command>
C: </epp>
```


<check> response

```
S: <?xml version="1.0" encoding="utf-8" standalone="no"?>
S: <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
S:   <response>
S:     <result code="1000">
S:       <msg>Command completed successfully</msg>
S:     </result>
S:     <resData>
S:       <domain:chkData
S:         xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
S:         <domain:cd>
S:           <domain:name avail="1">example.xyz</domain:name>
S:         </domain:cd>
S:       </domain:chkData>
S:     </resData>
S:     <extension>
S:       <fee:chkData
S:         xmlns:fee="urn:ietf:params:xml:ns:fee-0.7">
S:         <fee:cd>
S:           <fee:name>example.xyz</fee:name>
S:           <fee:currency>USD</fee:currency>
S:           <fee:command phase="sunrise">create</fee:command>
S:           <fee:period unit="y">1</fee:period>
S:           <fee:fee description="Application Fee"
S:             refundable="0">5.00</fee:fee>
S:           <fee:fee description="Registration Fee"
S:             refundable="1">5.00</fee:fee>
S:         </fee:cd>
S:       </fee:chkData>
S:     </extension>
S:     <trID>
S:       <clTRID>ABC-12345</clTRID>
S:       <svTRID>54322-XYZ</svTRID>
S:     </trID>
S:   </response>
S: </epp>
```

Transform command

```
C: <?xml version="1.0" encoding="utf-8" standalone="no"?>
C: <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
C:   <command>
C:     <renew>
C:       <domain:renew
C:         xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
C:           <domain:name>example.xyz</domain:name>
C:           <domain:curExpDate>2015-04-03</domain:curExpDate>
C:           <domain:period unit="y">1</domain:period>
C:         </domain:renew>
C:       </renew>
C:     <extension>
C:       <fee:renew xmlns:fee="urn:ietf:params:xml:ns:fee-0.7">
C:         <fee:currency>USD</fee:currency>
C:         <fee:fee>8.00</fee:fee>
C:       </fee:renew>
C:     </extension>
C:     <clTRID>ABC-12345</clTRID>
C:   </command>
C: </epp>
```

Transform response

```
S: <?xml version="1.0" encoding="utf-8" standalone="no"?>
S: <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
S:   <response>
S:     <result code="1000">
S:       <msg>Command completed successfully</msg>
S:     </result>
S:     <resData>
S:       <domain:renData
S:         xmlns:domain="urn:ietf:params:xml:ns:domain-1.0">
S:           <domain:name>example.com</domain:name>
S:           <domain:exDate>2016-04-03T22:00:00.0Z</domain:exDate>
S:         </domain:renData>
S:       </resData>
S:       <extension>
S:         <fee:renData xmlns:fee="urn:ietf:params:xml:ns:fee-0.7">
S:           <fee:currency>USD</fee:currency>
S:           <fee:fee grace-period="P5D">8.00</fee:fee>
S:           <fee:balance>1000.00</fee:balance>
S:         </fee:renData>
S:       </extension>
S:     <trID>
S:       <clTRID>ABC-12345</clTRID>
S:       <svTRID>54322-XYZ</svTRID>
S:     </trID>
S:   </response>
S: </epp>
```

Transform response (ctd)

```
S: <?xml version="1.0" encoding="utf-8" standalone="no"?>
S: <epp xmlns="urn:ietf:params:xml:ns:epp-1.0">
S:   <response>
S:     <result code="1000">
S:       <msg>Command completed successfully</msg>
S:     </result>
S:     <extension>
S:       <fee:delData
S:         xmlns:fee="urn:ietf:params:xml:ns:fee-0.7">
S:           <fee:currency>USD</fee:currency>
S:           <fee:credit description="AGP Credit">-5.00</fee:credit>
S:           <fee:balance>1005.00</fee:balance>
S:         </fee:delData>
S:       </extension>
S:     <trID>
S:       <clTRID>ABC-12345</clTRID>
S:       <svTRID>54321-XYZ</svTRID>
S:     </trID>
S:   </response>
S: </epp>
```

TODO

- Object-agnosticism (e.g. .NAME)
- Fee Check form
- <check> vs <info>
- Add a <dateTime> element to commands
- Fix nits

Related

- This extension provides fee information about individual objects/transactions but not about TLDs as a whole
- Separate solution is required for conveying fee data in bulk

Q&A