

Addendum 3
to .MOSCOW and .MOCKBA Registry-Registrar Agreement

.MOSCOW and .MOCKBA Operational Test and Evaluation Certification Policy

This .MOSCOW and .MOCKBA Operational Test and Evaluation Certification Policy ("Policy") lists conditions, procedures, and operations that Registrar must meet and perform before getting access to the Registry of .MOSCOW and .MOCKBA.

Terms and Definitions

Test Registry means structured records that contain information on registered .MOSCOW and .MOCKBA domains and are stored in the database structured like the Registry. Test Registry shall be used by Registrar to test and debug its software and hardware and to pass the operational test and evaluation required for getting access to the Registry.

EPP Client means Registrar's software and hardware allowing Registrar to interact with the Registration System through EPP in accordance with RFC 5730.

EPP Server means Registry Holder's software and hardware processing requests sent from Registrar's EPP Client to the Registration System through EPP in accordance with RFC 5730.

Other terms used herein are defined in **Terms and definitions used for the registration of second-level domain names in .MOSCOW and .MOCKBA**, published on the official website of the Foundation for Assistance for Internet Technologies and Infrastructure Development at the section "Documents" at: <http://en.faitid.org/projects/moscow/documents>

1. General Provisions

1.1. This Policy sets forth the procedure to be used by the Registry Operator to evaluate correctness of interaction of Registrar's software and hardware with the domain name Registration System.

1.2. The purpose of operational test and evaluation is to confirm that Registrar can meet the technical requirements for interaction with the domain name Registration System when using the EPP Client. Each of the following sections of this Policy describes actions that Registrar should perform to demonstrate correct implementation of the EPP Client and its interaction with the Registry. Prior to taking the test, Registrar should have a detailed knowledge of the following RFCs:

- Extensible Provisioning Protocol (EPP) RFC: 5730
- Extensible Provisioning Protocol Domain Name Mapping RFC: 5731
- Extensible Provisioning Protocol Host Mapping RFC: 5732
- Extensible Provisioning Protocol Contact Mapping RFC: 5733
- Extensible Provisioning Protocol Transport Over TCP RFC: 5734
- Domain Name System (DNS) Security Extensions Mapping for the Extensible Provisioning Protocol (EPP) RFC: 5910
- Domain Registry Grace Period Mapping for the Extensible Provisioning Protocol RFC: 3915

To find additional information, it is also recommended to use the following standard: The Transport Layer Security (TLS) Protocol RFC: 5246.

1.3. After successful passing the operational test and evaluation, Registrar will be given access to the Registry through EPP.

2. Procedure for Operational Test and Evaluation

2.1. Before commencing operational test and evaluation, Registrar should submit to the Registry Operator at accreditation@faitid.org the filled-up form Registrar's Details in accordance with the form in Addendum 1 hereto.

2.2. Registry Operator shall review Registrar's Details form within three (3) business days after receiving it. After the review, Registry Operator will give Registrar host names and port numbers to be activated for interaction with the Registrar's software, as well as address for getting the certificate required to establish connection with the Test Registry. In addition, Registry Operator will give Registrar entries (domain names, host and contact data) to use when completing test procedures, as well as details of two test accounts (ClientX and ClientY).

2.3. When getting access to the Test Registry, Registrar should via email discuss with the Registry Operator the date and time of operational test and evaluation. Before the start of operational test and evaluation, Registry Operator will give Registrar a test task.

2.4. To pass the test successfully, Registrar must make sure that all the commands submitted to the Test Registry are identical to the ones in this Policy, and that all the data is identical to the data received by Registrar from Registry Operator before the testing. **The data in this Policy is given for reference only.**

If during the testing the resulting code is different from the one provided in the description, Registrar should stop the testing and contact the technical support service of the Registry Operator.

2.5. Registrar must complete the test perfectly (with no typographical errors and following the procedure established by this Policy) from start to finish. The time allotted to pass the test — from the first operation to the last one — is **four hours**. If the test is successful, Registry Operator will send Registrar an email notification. If the test is unsuccessful, Registry Operator will send Registrar the data on the unsuccessful operation, namely:

- Time of operation
- Type of operation
- Data used
- Result code
- Expected result code

2.6. If the test fails, Registrar and Registry Operator may choose the date and time for conducting a new test. Registrar will still have access to the Test Registry.

3. Registry Policy on Contacts and Domain Name Servers

The Registry has the following policy on contacts and domain name servers:

- When creating a domain, there should be provided one “registrant” contact, one administrative contact, and one technical contact.
- Domains may be created both without reference to a domain name server and with one or several name servers. The term "host" is used hereinafter as a synonym to "name server".

4. EPP-Based Communication

Test tasks below are given for reference only. They allow to check accuracy of interaction of Registrar's software with the Registry for standard registrar operations. They do not cover all possible errors and exceptions. Registrar's client application is responsible for correct handling of all erroneous situations.

Registrar-to-Registry communication is carried out using the Extensible Provisioning Protocol (EPP) over TCP (Transport Control Protocol). EPP commands are formulated using the Extensible Markup Language (XML). Registrar's software should use XML to send commands to the Registry and should use an XML parser to interpret responses from the Registry. For the sake of security, EPP itself functions solely through the authentication of Registrar. Additional security is ensured by employing the Transport Layer Security (TLS) to encrypt the session. Registrars should communicate with the EPP server using a commercial or open source implementation of TLS, such as OpenSSL. Additional information concerning mapping EPP over TCP is available in "RFC 5734 - Extensible Provisioning Protocol Transport Over TCP". Additional information concerning the TLS can be found in RFC 5246.

4.1. Session Management

4.1.1. Start Session

After making an initial connection to the Registry, the server shall reply with a prompt. A Registrar must receive the prompt message before attempting authentication and other commands.

4.2.1. Authentication

After the initial prompt the Registrar client shall send the Login command to authenticate itself to the Test Registry with the following information:

Client ID: ClientX

Password: foo-BAR2

The response should include "result code: 1000".

4.2. Operations With Objects: Creation, Modification, and Information Operations

4.2.1. Check Contact TEST-C1 (Contact Available)

Use the Check command with the following parameter:

Contact ID: TEST-C1

Expected result:

result code: 1000

contact:id avail: True

4.2.2. Create Contact TEST-C1

Use the Create command with the following parameters:

Contact ID: TEST-C1

Contact Voice: +7.4957654321

Contact Email: petrov@example.qq

Contact Auth Info: password

Contact Int Name: Petrov Petr Petrovitch

Contact Int Address street: 1, Primernaya st.

Contact Int Address City: Moscow

Contact Int Address Postal Code: 123456

Contact Int Address Country: ru

Contact Loc Name: Петров Петр Петрович

Contact Loc Address street: ул. Примерная, д. 1

Contact Loc Address City: Москва

Contact Loc Address Postal Code: 123456

Contact Loc Address Country: ru
Contact Ext Contact Type: person
Contact Ext Birthday: 1980-11-10
Contact Ext Passport: 01 23 123456, выдан ОВД энского р-на
The response should include "result code: 1000".

4.2.3. Check Contact TEST-C1 (Contact Not Available)

Use the Check command with the following parameter:
Contact ID: TEST-C1
Expected result:
result code: 1000
contact:id avail: False

4.2.4. Query Contact TEST-C1

Use the Info command with the following parameter:
Contact ID: TEST-C1
The response should include "result code: 1000".

4.2.5. Check Contact TEST-C2 (Contact Available)

Use the Check command with the following parameter:
Contact ID: TEST-C2
Expected result:
result code: 1000
contact:id avail: True

4.2.6. Create Contact TEST-C2

Use the Create command with the following parameters:
Contact ID: TEST-C2
Contact Voice: +7.4991234567
Contact Fax: +7.4991234567
Contact Email: info@example.qq
Contact Auth Info: password
Contact Int Name: Petrov Petr Petrovitch
Contact Int Org: "Domainer" Ltd.
Contact Int Address street: 98, Primernaya st.
Contact Int Address City: Moscow
Contact Int Address Postal Code: 123456
Contact Int Address Country: ru
Contact Loc Name: Петров Петр Петрович
Contact Loc Org: ЗАО "Домейнер"
Contact Loc Address street: ул. Примерная, д. 98
Contact Loc Address City: Москва
Contact Loc Address Postal Code: 123456
Contact Loc Address Country: ru
Contact Ext Contact Type: org
Contact Ext TIN: 1234567890
Contact Ext Int Org: "Domainer" Ltd.
Contact Ext Int Address street: 98, Primernaya st.
Contact Ext Int Address City: Moscow
Contact Ext Int Address Postal Code: 123456
Contact Ext Int Address Country: ru
Contact Ext Loc Org: ЗАО "Домейнер"
Contact Ext Loc Address street: ул. Примерная, д. 98

Contact Ext Loc Address City: Москва
Contact Ext Loc Address Postal Code: 123456
Contact Ext Loc Address Country: ru
The response should include "result code: 1000".

4.2.7. Update Contact (Change Element)

Use the Update command with the following parameters:
Contact ID: TEST-C1
Change Contact Voice: +7.4951234567
The response should include "result code: 1000".

4.2.8. Update Contact (Add Element)

Use the Update command with the following parameters:
Contact ID: TEST-C2
Add Contact Status: clientDeleteProhibited
The response should include "result code: 1000".

4.2.9. Update Contact (Remove Element)

Use the Update command with the following parameters:
Contact ID: TEST-C2
Remove Contact Status: clientDeleteProhibited
The response should include "result code: 1000".

4.2.10. Check Contact TEST-C3

Use the Check command with the following parameter:
Contact ID: TEST-C3
Expected result:
result code: 1000
contact:id avail: True

4.2.11. Create Contact TEST-C3

Use the Create command with the following parameters:
Contact ID: TEST-C3
Contact Voice: +7.4957654321
Contact Email: petrova@example.qq
Contact Auth Info: password
Contact Int Name: Petrova Petra Petrovna
Contact Int Address street: 1, Primernaya st.
Contact Int Address City: Moscow
Contact Int Address Postal Code: 123456
Contact Int Address Country: ru
Contact Loc Name: Петрова Петра Петровна
Contact Loc Address street: ул. Примерная, д. 1
Contact Loc Address City: Москва
Contact Loc Address Postal Code: 123456
Contact Loc Address Country: ru
Contact Ext Contact Type: person
Contact Ext Birthday: 1980-11-10
Contact Ext Passport: 01 23 123457, выдан ОВД энского р-на
The response should include "result code: 1000".

4.2.12. Check Contact TEST-C4

Use the Check command with the following parameter:

Contact ID: TEST-C4

Expected result:

result code: 1000

contact:id avail: True

4.2.13. Create Contact TEST-C4

Use the Create command with the following parameters:

Contact ID: TEST-C4

Contact Voice: +7.4951654321

Contact Email: ivanov@example.qq

Contact Auth Info: password

Contact Int Name: Ivanov Petr Petrovitch

Contact Int Address street: 10, Primernaya st.

Contact Int Address City: Moscow

Contact Int Address Postal Code: 123456

Contact Int Address Country: ru

Contact Loc Name: Иванов Петр Петрович

Contact Loc Address street: ул. Примерная, д. 10

Contact Loc Address City: Москва

Contact Loc Address Postal Code: 123456

Contact Loc Address Country: ru

Contact Ext Contact Type: person

Contact Ext Birthday: 1980-11-10

Contact Ext Passport: 01 23 223456, выдан ОВД энского р-на

The response should include "result code: 1000".

4.2.14. Check Contact TEST-C5

Use the Check command with the following parameter:

Contact ID: TEST-C5

Expected result:

result code: 1000

contact:id avail: True

4.2.15. Create Contact TEST-C5

Use the Create command with the following parameters:

Contact ID: TEST-C5

Contact Voice: +7.4952654321

Contact Email: sidorov@example.qq

Contact Auth Info: password

Contact Int Name: Sidorov Petr Petrovitch

Contact Int Address street: 111, Primernaya st.

Contact Int Address City: Moscow

Contact Int Address Postal Code: 123456

Contact Int Address Country: ru

Contact Loc Name: Сидоров Петр Петрович

Contact Loc Address street: ул. Примерная, д. 111

Contact Loc Address City: Москва

Contact Loc Address Postal Code: 123456

Contact Loc Address Country: ru

Contact Ext Contact Type: person

Contact Ext Birthday: 1980-11-10

Contact Ext Passport: 01 23 523456, выдан ОВД энского р-на

The response should include "result code: 1000".

4.2.16. Check Name Server (Foreign Registry - Available)

Use the Check command with the following parameter:

Host Name: ns1.example.com

Expected result:

result code: 1000

host:name avail: True

4.2.17. Create Name Server (Foreign Registry)

Use the Create command with the following parameters:

Host Name: ns1.example.com

The response should include "result code: 1000".

4.2.18. Check Name Server (Foreign Registry - Available)

Use the Check command with the following parameter:

Host Name: ns2.example.com

Expected result:

result code: 1000

host:name avail: True

4.2.19. Create Name Server (Foreign Registry)

Use the Create command with the following parameters:

Host Name: ns2.example.com

The response should include "result code: 1000".

4.2.20. Check Domain (Domain Available for Registration)

Use the Check command with the following parameter:

Domain Name: example.MOCKBA

Expected result:

result code: 1000

domain:name avail: True

4.2.21. Create Domain (example.MOCKBA)

Use the Create command with the following parameters:

Domain Name: example.MOCKBA

Domain Description: First domain

Domain Registrant Contact ID: TEST-C1

Domain Admin Contact ID: TEST-C1

Domain Tech Contact ID: TEST-C3

Domain Registration Period (Year): 1

Domain Server: ns1.example.com

Domain Server: ns2.example.com

Domain Auth Info: password

The response should include "result code: 1000".

4.2.22. Check Domain (Domain Not Available for Registration)

Use the Check command with the following parameter:

Domain Name: example.MOCKBA

Expected result:

result code: 1000
domain:name avail: False

4.2.23. Query Domain

Use the Info command with the following parameter:
Domain Name: example.MOCKBA
The response should include "result code: 1000".

4.2.24. Check Name Server (Available)

Use the Check command with the following parameter:
Host Name: dns1.example.MOCKBA
Expected result:
result code: 1000
host:name avail: True

4.2.25. Create Name Server

Use the Create command with the following parameters:
Host Name: dns1.example.MOCKBA
The response should include "result code: 1000".

4.2.26. Check Name Server (Unavailable)

Use the Check command with the following parameter:
Host Name: dns1.example.MOCKBA
Expected result:
result code: 1000
host:name avail: False

4.2.27. Query Name Server

Use the Info command with the following parameter:
Host Name: dns1.example.MOCKBA
The response should include "result code: 1000".

4.2.28. Check Name Server (Available)

Use the Check command with the following parameter:
Host Name: dns2.example.MOCKBA
Expected result:
result code: 1000
host:name avail: True

4.2.29. Create Name Server

Use the Create command with the following parameter:
Host Name: dns2.example.MOCKBA
IP Address: 192.168.0.25
IPv6 Address: 2001:db8: 25
The response should include "result code: 1000".

4.2.30. Update Name Server (Add IP Address)

Use the Update command with the following parameters:

Host Name: dns2.example.MOCKBA
Add IP Address: 192.168.0.26
The response should include "result code: 1000".

4.2.31. Update Name Server (Remove IP Address)

Use the Update command with the following parameters:
Host Name: dns2.example.MOCKBA
Remove IP Address: 192.168.0.25
The response should include "result code: 1000".

4.2.32. Check Domain (Domain Available for Registration)

Use the Check command with the following parameter:
Domain Name: domain.MOCKBA
Expected result:
result code: 1000
domain:name avail: True

4.2.33. Create Domain (domain.MOCKBA)

Use the Create command with the following parameters:
Domain Name: domain.MOCKBA
Domain Description: Second domain
Domain Registrant Contact ID: TEST-C2
Domain Admin Contact ID: TEST-C4
Domain Tech Contact ID: TEST-C5
Domain Registration Period (Year): 1
Domain Auth Info: password
dsData Interface (RFC 5910):
pubKey:
AwEAAbBe1LcvvcCbuV0/cI7gNRdKMkqFgYFzk84e3Kx8Qj2CIrjuFqJTev2aPWa62B
AXkBg6teVus4LftmjXab8WY4U=
keyTag: 46707
keyAlgorithm: RSASHA1
digestType: SHA256
digest:
E8E6FA107705CB9BCD30FAFA23D447C14AC62DF26AC958B0DCB5BA4D8F63A1
3F
keyflags: 256
protocol: 3

The response should include "result code: 1000".

4.2.34. Query Domain

Use the Info command with the following parameter:
Domain Name: domain.MOCKBA
The response should include "result code: 1000".

4.2.35. Renew Domain

Examine the Expiration Date returned from the previous command, output should be similar to the following:

Domain Expiration Date: 2011-06-21T22:00:00.OZ

Use the Renew command with the following parameters:

Domain Name: domain.MOCKBA
Current Expiration Date: 2011-06-21
Domain Years Period: 1
Make sure the registration expiration date in the response is correct and the response includes "result code: 1000".

4.2.36. Update Domain – Change Name Servers

Use the Update command with the following parameters:
Domain Name: domain.MOCKBA
Add Domain Server: ns1.example.com
Add Domain Server: ns2.example.com
The response should include "result code: 1000".

4.2.37. Update Domain - Change Contact

Use the Update command with the following parameters:
Domain Name: domain.MOCKBA
Change Domain Registrant Contact ID: TEST-C1
The response should include "result code: 1000".

4.2.38. Update Domain – Change Authorization Information

Use the Update command with the following parameters:
Domain Name: domain.MOCKBA
Change Domain Auth Info: 12345678
The response should include "result code: 1000".

4.2.39. Update Domain - Change Domain Status

Use the Update command with the following parameters:
Domain Name: domain.MOCKBA
Change Domain Status: clientHold
The response should include "result code: 1000".

4.3. Transfer of Domains

4.3.1. Domain Transfer Request

Use two Transfer Request commands as Registrar ClientY with the following parameters:
Domain Name: domain.MOCKBA
Domain Auth Info: 12345678
The response should include "result code: 1001".
and
Domain Name: example.MOCKBA
Domain Auth Info: password
The response should include "result code: 1001".

4.3.2. Approve Domain Transfer

The following commands are used by Registrar as ClientX.
First, it is necessary to check that the domain is in the process of transfer. The Transfer Query command should be sent with the following parameters:
Domain Name: domain.MOCKBA
Domain Auth Info: 12345678
Expected result:

result code: 1000
Transfer Status: pending
Now send the Transfer Approve command with the following parameters:
Domain Name: domain.MOCKBA
Domain Auth Info: 12345678
The response should include "result code: 1000".

4.3.3. Reject Domain Transfer

The following commands are used by Registrar as ClientX.
First, it is necessary to check that the domain is in the process of transfer. The Transfer Query command should be sent with the following parameters:
Domain Name: example.MOCKBA
Domain Auth Info: password
Expected result:
result code: 1000
Transfer Status: pending
Now send the Transfer Reject command with the following parameters:
Domain Name: example.MOCKBA
Domain Auth Info: password
The response should include "result code: 1000".

4.4. Deletion of Objects

4.4.1. Delete Contact (TEST-C1)

Use the Delete command with the following parameter:
Contact ID: TEST-C1
The response should include "result code: 2305".

4.4.2. Delete Contact (TEST-C2)

Use the Delete command with the following parameter:
Contact ID: TEST-C2
The response should include "result code: 1000".

4.4.3. Delete Name Server (dns1.example.MOCKBA)

Use the Delete command with the following parameter:
Host Name: dns1.example.MOCKBA
The response should include "result code: 1000".

4.4.4. Delete Name Server (dns2.example.MOCKBA)

Use the Delete command with the following parameter:
Host Name: dns2.example.MOCKBA
The response should include "result code: 1000".

4.4.5. Delete Name Server (ns1.example.com)

Use the Delete command with the following parameter:
Host Name: ns1.example.com
The response should include "result code: 2305".

4.4.6. Delete Name Server (ns2.example.com)

Use the Delete command with the following parameter:

Host Name: ns2.example.com
The response should include "result code: 2305".

4.4.7. Delete Domain (example.MOCKBA)

Use the Delete command with the following parameter:
Domain Name: example.MOCKBA
The response should include "result code: 1000".

4.4.8. Delete Domain (domain.MOCKBA)

Send the Delete command from the second Registrar (ClientY) with the following parameter:
Domain Name: domain.MOCKBA
The response should include "result code: 1000".

4.4.9. Restore Domain (domain.MOCKBA)

Send the Restore command from the second Registrar (ClientY) with the following parameter:
Domain Name: domain.MOCKBA
The response should include "result code: 1000".

4.4.10. Restore Report Domain (domain.MOCKBA)

Send the Restore Report command from the second Registrar (ClientY) with the following parameter:
Domain Name: domain.MOCKBA
Report Pre Data: Pre-delete registration data goes here
Report Post Data: Post-restore registration data goes here
Report Delete Time: 2003-07-10T22:00:00.0Z
Report Restore Time: 2003-07-20T22:00:00.0Z
Report Restore Reason: Registrant error
Report Statement: The information in this report...
The response should include "result code: 1000".

Registrar's Details

| General information | |
|--|--|
| IANA ID | |
| Short name | |
| Full name | |
| Passphrase | |
| Brand | |
| Website | |
| WHOIS address | |
| URL for a link in the list of registrars | |
| Contact emails | |
| General | |
| WHOIS | |
| Financial | |
| Technical | |
| Complaints | |
| IP addresses of subnets for EPP | |
| IP of subnet 1 | |
| IP of subnet 2 | |
| IP of subnet 3 | |
| IP of subnet 4 | |
| IP of subnet 5 | |
| SSL | |
| | |
| Address, phone, fax | |
| Address | |
| City | |
| Region | |
| ZIP code / postal code | |
| Country | |
| Phone number | |
| Fax number | |