

NameAction Connection Kit

API User Manual

Version 1.0.3

Changelog:

- New optional parameter “AuthCode” for Transfers (Management).

Check

Description

Definition

Check the availability of a domain name.

Usage

Use this command to check whether a domain name is already registered.

Availability

The Check command is available to every NCK client.

Constraints

Domain names must meet the following requirements:

- Second-level domain (SLD) must be composed of the letters a through z, the numbers 0 through 9, and the hyphen (-) character.
- Foreign characters must be transmitted using URL encoding format. (http://www.w3schools.com/tags/ref_urlencode.asp)
- The SLD must not begin or end with the hyphen character.
- The SLD must not contain spaces.
- The SLD must not contain special characters other than the hyphen character.
- The third and fourth characters of the SLD must not both be hyphens unless it is an encoded international-character domain name.
- The SLD must contain 2 to 63 characters, inclusive.
- SLD are not case sensitive.
- The SLD-TLD combination must be unique.
- Current valid responses are : “available”, “not available”, “unknown (cannot get current domain status)”, “can be opposed (.cl to request an opposition in NIC Chile)”

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=cl
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Check
SLD	Required	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Required	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl

XML Response

```
-<nck>  
  -<response>  
    <command>Check</command>  
    <value>1</value>  
  </response>  
  <message>Domain nameaction.cl is not available</message>  
</nck>
```

Create

Description

Definition

Create a inquiry for domain name registration, if the TLD has EPP (Extensible Provisioning Protocol) the creation for the domain name is in real time . Example: Brazil, Mexico, Colombia, Peru, Ecuador, Puerto Rico, gTLDs, etc.

Usage

The Create command enables direct real-time domain registration or inquiry. The Create command is typically used for a single-name creation and returns an immediate success/failure .

Most commonly, the Create command is used by resellers who maintain their own databases.

Availability

The Create command is available to every NCK client.

Constraints

The query must meet the following requirements:

- The user and password must be valid.
- The domain name(s) to be created must be valid. (See requirements under the Check command.)
- To register domains in Chile, Brazil and Argentina, a local presence is required (RUT or CNPJ or CUIT) "InfoPL" parameter for local registrants.
- Examples (RUT : 77777777-7, CNPJ : 11.111.111/0001-11, CUIT : 11111111111)
- The domain to create must have at least two name servers.
- Foreign and extended characters must be transmitted using URL encoding format. (http://www.w3schools.com/tags/ref_urlencode.asp)
- Postal code must be numeric and be at least 4 characters (example: 0000)
- The format for phone numbers is country code number dot local phone number (example: 56.2642031)
- IP format for name servers are in Internet Protocol version 4 address representation
- Country code are ISO 3166 definitions

http://www.iso.org/iso/english_country_names_and_code_elements

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Create&SLD=nameaction&TLD=cl&Year=1&RegistrantName=JohnDoe&RegistrantOrganization=NameAction Domain
```

```

LA&RegistrantAddress=1156 High
Street&RegistrantCity=California&RegistrantCountryCode=US&Registrant
PostalCode=95064&RegistrantPhone=1.1234567&RegistrantEmail=j.doe@nam
eaction.com&AdminName=John Doe&AdminOrganization=NameAction Domain
LA&AdminAddress=1156 High
Street&AdminCity=California&AdminCountryCode= US&AdminPostalCode=9506
4&AdminPhone=1.1234567&AdminEmail=j.doe@nameaction.com&TechName=John
Doe&TechOrganization=NameAction Domain LA&TechAddress=1156 High
Street&TechCity=California&TechCountryCode=US&TechPostalCode=95064&T
echPhone=1.1234567&TechEmail=j.doe@nameaction.com&NS1=ns1.nameaction
.com&NS2=ns2.nameaction.com&IP1=200.27.54.210&IP2=200.27.54.211&Info
PL=55555555-5
  
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Create
SLD	Required	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Required	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl
Year	Required	Term to register the domain name
RegistrantName	Required	Registrant name
RegistrantOrganization	Required	Registrant organization
RegistrantAddress	Required	Registrant address
RegistrantCity	Required	Registrant city
RegistrantCountryCode	Required	Registrant ISO country code
RegistrantPostalCode	Required	Registrant postal code
RegistrantPhone	Required	Registrant phone
RegistrantEmail	Required	Registrant electronic address
AdminName	Required	Administrative contact name
AdminOrganization	Required	Administrative contact organization
AdminAddress	Required	Administrative contact address
AdminCity	Required	Administrative contact city
AdminPostalCode	Required	Administrative contact postal code
AdminCountryCode	Required	Administrative contact ISO country code
AdminPhone	Required	Administrative contact phone
AdminEmail	Required	Administrative contact electronic address
TechName	Required	Technical contact name
TechOrganization	Required	Technical contact organization
TechAddress	Required	Technical contact address
TechCity	Required	Technical contact city
TechPostalCode	Required	Technical contact postal code
TechCountryCode	Required	Technical contact ISO country code
TechPhone	Required	Technical contact phone
TechEmail	Required	Technical contact electronic address

NS1	Required	Name server 1 (ex. ns1.nameaction.com)
IP1	Required	IP address name server 1 (v4)
NS2	Required	Name server 2
IP2	Required	IP address name server 2 (v4)
NS3	Optional	Name server 3
IP3	Optional	IP address name server 3 (v4)
NS4	Optional	Name server 4
IP4	Optional	IP address name server 4 (v4)
NS5	Optional	Name server 5
IP5	Optional	IP address name server 5 (v4)
NS6	Optional	Name server 6
IP6	Optional	IP address name server 6 (v4)
InfoPL	Optional	Local presence information (CUIT, CNPJ, RUT)

XML Response

```

-<nck>
  -<response>
    <command>Create</command>
    <value>1000</value>
  </response>
  -<message>
    Request to Create the domain nameaction.cl was successfully received for 2 year(s). (Cost USD$95.0)
  </message>
</nck>

```

Renew

Description

Definition

Create a inquiry for domain name renew, if the TLD has EPP (Extensible Provisioning Protocol) the domain name is renewed in real time. Example: Brazil, Mexico, Colombia, Peru, Ecuador, Puerto Rico, gTLDs, etc.

Usage

The Renew command enables direct real-time domain name renew or inquiry. The Renew command is typically used for a single-name renew and returns an immediate success/failure.

Availability

The Renew command is available to every NCK client.

Constraints

The query must meet the following requirements:

- The user and password must be valid.
- The domain name(s) to be renewed must be valid and belong to the user account. (See requirements under the Check command.)
- Term has been valid for the TLD.

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Renew&SLD=nameaction&TLD=cl&Year=1
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Renew
SLD	Required	Second-level domain name (for example, nameaction in nameaction.com)
TLD	Required	Top-level domain name (extension). Permitted values: Any single TLD, for example, com
Year	Required	Term to renew the domain name

XML Response

```
-<nck>  
  -<response>  
    <command>Renew</command>  
    <value>1000</value>  
  </response>  
  -<message>  
    Request to Renew the domain nameaction.cl was successfully received for 2 year(s). (Cost USD$80.0)  
  </message>  
</nck>
```

Modify

Description

Definition

Create a inquiry for domain name modification, if the TLD has EPP (Extensible Provisioning Protocol) the domain name is modified in real time . Example: Brazil, Mexico, Colombia, Peru, Ecuador, Puerto Rico, gTLDs, etc.

Usage

The Modify command enables direct real-time domain name modification or inquiry. The Modify command is typically used for a single-name modification and returns an immediate success/failure .

Availability

The Modify command is available to every NCK client.

Constraints

The query must meet the following requirements :

- The user and password must be valid.
- The domain name(s) to be modified must be valid and belong to the user account. (See requirements under the Check command.)
- The format for phone numbers is country code number dot local phone number (example: 56.2642031)
- IP format for name servers are in Internet Protocol version 4 address representation
- Using the parameter "Remove" to a NS tag the name server is deleted.
- Cannot remove name servers primary and secondary .
- Country code are ISO 3166 definitions

http://www.iso.org/iso/english_country_names_and_code_elements

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Modify&SLD=nameaction&TLD=cl&AdminName=John Doe&AdminOrganization=NameAction Domain LA&AdminAddress=1156 High Street&AdminCity=California&AdminCountryCode=US&AdminPostalCode=95064&AdminPhone=1.1234567&AdminEmail=j.doe@nameaction.com&TechName=John Doe&TechOrganization=NameAction Domain LA&TechAddress=1156 High Street&TechCity=California&TechCountryCode=US&TechPostalCode=95064&TechPhone=1.1234567&TechEmail=j.doe@nameaction.com&NS1=ns1.nameaction.com&NS2=ns2.nameaction.com&IP1=200.27.54.210&IP2=200.27.54.211 &NS3=Remove
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Create
SLD	Required	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Required	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl
AdminName	Optional	Administrative contact name
AdminOrganization	Optional	Administrative contact organization
AdminAddress	Optional	Administrative contact address
AdminCity	Optional	Administrative contact city
AdminPostalCode	Optional	Administrative contact postal code
AdminCountryCode	Optional	Administrative contact ISO country code
AdminPhone	Optional	Administrative contact phone
AdminEmail	Optional	Administrative contact electronic address
TechName	Optional	Technical contact name
TechOrganization	Optional	Technical contact organization
TechAddress	Optional	Technical contact address
TechCity	Optional	Technical contact city
TechPostalCode	Optional	Technical contact postal code
TechCountryCode	Optional	Technical contact ISO country code
TechPhone	Optional	Technical contact phone
TechEmail	Optional	Technical contact electronic address
NS1	Optional	Name server 1 (ex. ns1.nameaction.com)
IP1	Optional	IP address name server 1 (v4)
NS2	Optional	Name server 2
IP2	Optional	IP address name server 2 (v4)
NS3	Optional	Name server 3 (Use "Remove" to delete the name server)
IP3	Optional	IP address name server 3 (v4)
NS4	Optional	Name server 4 (Use "Remove" to delete the name server)
IP4	Optional	IP address name server 4 (v4)
NS5	Optional	Name server 5 (Use "Remove" to delete the name server)
IP5	Optional	IP address name server 5 (v4)
NS6	Optional	Name server 6 (Use "Remove" to delete the name server)
IP6	Optional	IP address name server 6 (v4)

XML Response

```
-<nck>  
  -<response>  
    <command>Modify</command>  
    <value>1000</value>  
  </response>  
  <message>Domain nameaction.com successfully modified.</message>  
</nck>
```

Transfer

Description

Definition

Create a request for domain name transfer.

Usage

The Transfer command enables a request for domain name owner transfer or management domain transfer. The Transfer command is typically used for a single-name ownership or management transfer and returns an immediate success/failure.

Availability

The Transfer command is available to every NCK client.

Constraints

General requirements:

- The user and password must be valid.
- You must specify the type of transfer to request. (**Owner or Management**).
- The format for phone numbers is country code number dot local phone number (example: 56.2642031)
- IP format for name servers are in Internet Protocol version 4 address Representation.
- Country code are ISO 3166 definitions (http://www.iso.org/iso/english_country_names_and_code_elements)

Ownership transfer requirements:

- The domain name(s) to be transferred must be valid and belong to the user account.
- A new registrant data must be entered in this action.

Management transfer requirements:

- The domain name(s) to be transferred must be valid.
- Registrant data are optional.
- Contacts data are optional.
- Primary and secondary name servers are optional.
- Can include an authorization code for a more expedited operation.

Input parameters

Build the query string using this syntax:

Ownership Transfer:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Transfer&Type=Owner&SLD=nameaction&TLD=cl&RegistrantName=JohnDoe&RegistrantOrganization=NameAction Domain LA&RegistrantAddress=1156 High Street&RegistrantCity=California&RegistrantCountryCode=US&RegistrantPostalCode=95064&RegistrantPhone=1.1234567&RegistrantEmail=j.doe@nameaction.com
```

Management Transfer:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Transfer&Type=Management&SLD=nameaction&TLD=cl&AuthCode=ABC1234
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Transfer
SLD	Required	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Required	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl
Type	Required	Owner or Management
RegistrantName	Optional / Required	Registrant name (Owner Transfer Required)
RegistrantOrganization	Optional / Required	Registrant organization (Owner Transfer Required)
RegistrantAddress	Optional / Required	Registrant address (Owner Transfer Required)
RegistrantCity	Optional / Required	Registrant city (Owner Transfer Required)
RegistrantCountryCode	Optional / Required	Registrant ISO country code (Owner Transfer Required)
RegistrantPostalCode	Optional / Required	Registrant postal code (Owner Transfer Required)
RegistrantPhone	Optional / Required	Registrant phone (Owner Transfer Required)
RegistrantEmail	Optional / Required	Registrant contact electronic address (Owner Transfer Required)
AdminName	Optional	Administrative contact name
AdminOrganization	Optional	Administrative contact organization

AdminAddress	Optional	Administrative contact address
AdminCity	Optional	Administrative contact city
AdminPostalCode	Optional	Administrative contact postal code
AdminCountryCode	Optional	Administrative contact ISO country code
AdminPhone	Optional	Administrative contact phone
AdminEmail	Optional	Administrative contact electronic address
TechName	Optional	Technical contact name
TechOrganization	Optional	Technical contact organization
TechAddress	Optional	Technical contact address
TechCity	Optional	Technical contact city
TechPostalCode	Optional	Technical contact postal code
TechCountryCode	Optional	Technical contact ISO country code
TechPhone	Optional	Technical contact phone
TechEmail	Optional	Technical contact electronic address
NS1	Optional	Name server 1 (ex. ns1.nameaction.com)
IP1	Optional	IP address name server 1 (v4)
NS2	Optional	Name server 2
IP2	Optional	IP address name server 2 (v4)
NS3	Optional	Name server 3
IP3	Optional	IP address name server 3 (v4)
NS4	Optional	Name server 4
IP4	Optional	IP address name server 4 (v4)
NS5	Optional	Name server 5
IP5	Optional	IP address name server 5 (v4)
NS6	Optional	Name server 6
IP6	Optional	IP address name server 6 (v4)
AuthCode	Optional	Authorization code of the domain. (Management)

XML Response

```

- <nck>
  - <response>
    <command>Transfer</command>
    <value>1000</value>
  </response>
  - <message>
    Request to Transfer the domain nameaction.cl was successfully received.
  </message>
</nck>

```

Delete

Description

Definition

Create a request for domain name deletion.

Usage

The Delete command enables a request for domain name deletion. The Delete command is typically used for a single -name delete and returns an immediate success/failure.

Availability

The Delete command is available to every NCK client.

Constraints

The query must meet the following requirements:

- A valid account must be required .
- The user and password must be valid.
- The domain name(s) to be deleted must be valid and belong to the user account. (See requirements under the Check command.)

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Delete&SLD=nameaction&TLD=cl
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Delete
SLD	Optional	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Optional	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl

XML Response

```
-<nck>  
  -<response>  
    <command>Delete</command>  
    <value>1000</value>  
  </response>  
  -<message>  
    Request to Delete the domain nameaction.cl was successfully received.  
  </message>  
</nck>
```

Info

Description

Definition

List all the domains of a specific account or details of a specific domain.

Usage

Use this command to getting a list of domains in your account or details of a specific domain.

Availability

The Info command is available to every NCK client.

Constraints

None

- A valid account must be required.

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Info&SLD=nameaction&TLD=cl
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Info
SLD	Optional	Second-level domain name (for example, nameaction in nameaction.cl)
TLD	Optional	Top-level domain name (extension). Permitted values: Any single TLD, for example, cl

XML Response

Info domain list response:

```
-<nck>
  -<response>
    <command>Info</command>
    <value>1000</value>
  </response>
  -<message>
    +<domainlist></domainlist>
  </message>
</nck>
```

Info specific domain response:

```
-<nck>
  -<response>
    <command>Info</command>
    <value>1000</value>
  </response>
  -<message>
    -<details>
      <domain>the-west.com.br</domain>
      -<contacts>
        <registrant>Innogames Gmbh</registrant>
        <admin>Hendrik Klindworth</admin>
        <tech>Hostmaster Of The Day</tech>
      </contacts>
      -<hosts>
        <ns1>ns.inwx.de</ns1>
        <ip1>217.70.142.66</ip1>
        <ns2>ns2.inwx.de</ns2>
        <ip2>213.239.206.103</ip2>
        <ns3>ns3.inwx.de</ns3>
        <ip3>46.165.212.97</ip3>
      </hosts>
      <expirydate>2013-10-13 00:00:00</expirydate>
      <status>Registered</status>
      <reason>None</reason>
    </details>
  </message>
</nck>
```

Info specific domain response with pending status :

```
-<nck>
  -<response>
    <command>Info</command>
    <value>1000</value>
  </response>
  -<message>
    -<details>
      <domain>nameaction-test.cl</domain>
      -<contacts>
        <registrant>NameAction Domain LA</registrant>
        <admin>John Doe</admin>
        <tech>John Doe</tech>
      </contacts>
      -<hosts>
        <ns1>ns1.nameaction.com</ns1>
        <ip1>200.27.54.210</ip1>
        <ns2>ns2.nameaction.com</ns2>
        <ip2>200.27.54.211</ip2>
      </hosts>
      <expirydate>None</expirydate>
      <status>In Process</status>
    </details>
  </message>
</nck>
```

Credit

Description

Definition

Show the available credit of a determined account.

Usage

Use this command to getting the available credit of your account .

Availability

The Credit command is available to every NCK client.

Constraints

None

- A valid account must be required .

Input parameters

Build the query string using this syntax:

```
https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Credit
```

Param Name	Obligation	Definition
User	Required	Account ID
Pass	Required	Account Password
Command	Required	Credit

XML Response

```
-<nck>
  -<response>
    <command>Credit</command>
    <value>1000</value>
  </response>
  -<message>
    -<detail>
      <creditavail>USD$49705.0</creditavail>
    </detail>
  </message>
</nck>
```

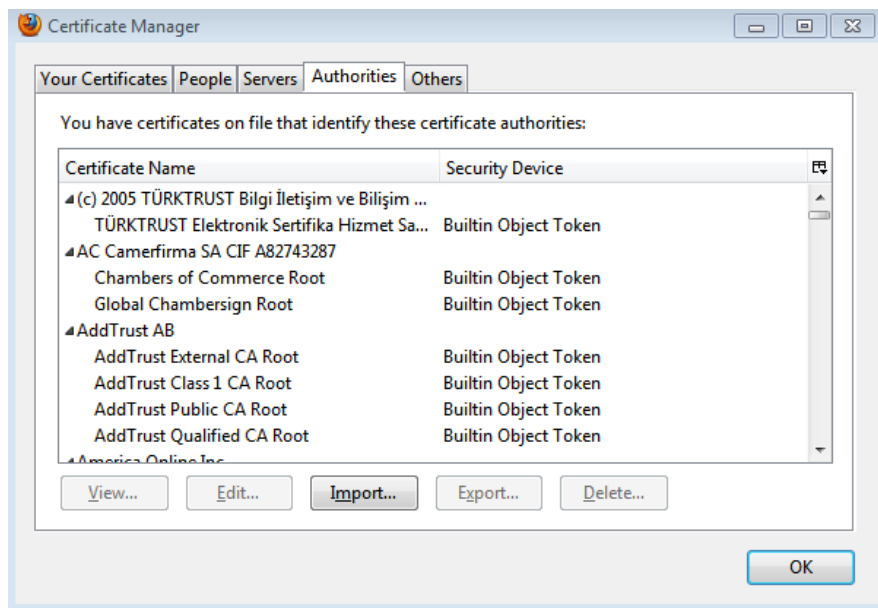
NCK Client Generator Tool

This visual tool allows you as a customer to generate real-time, valid commands to be sent via NCK, the only requirement is to have valid certificates installed in your web browser in order to make a secure connection (SSL) to our test server with the generated url.

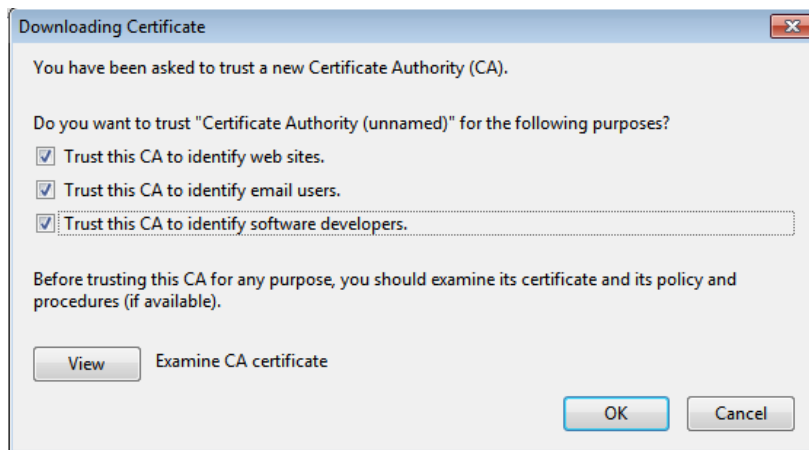
<http://ncktest.nameaction.com/nckclient/>

The following instructions show how to import and install the SSL Certificate of Authority (ca.crt) in Mozilla Firefox:

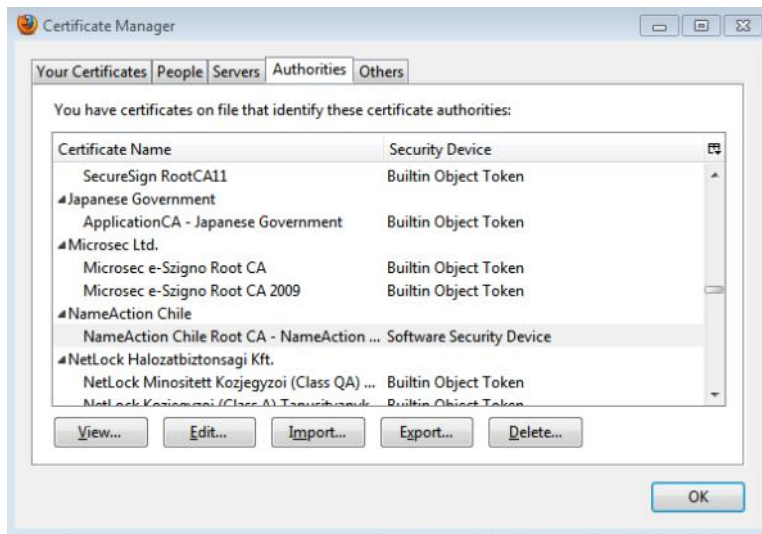
Tools --> Options --> Advanced --> Encryption Tab --> View Certificates --> Authorities Tab --> Import Button



You will be prompted on how to install the Certificate, check the three Trust this CA and click OK

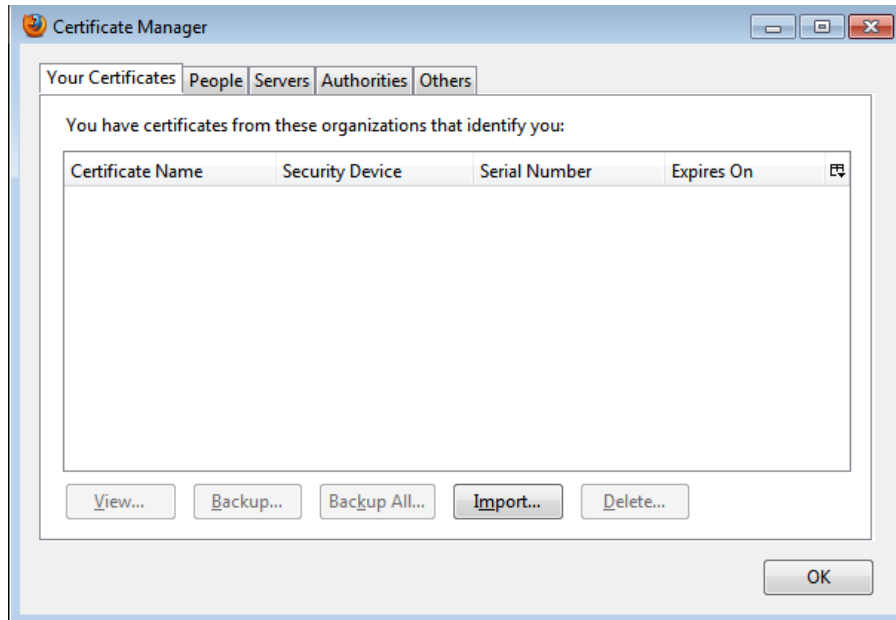


Now the certificate is installed in the web browser .



The following instructions show how to import and install the SSL Client Certificate (clientname.p12) in Mozilla Firefox

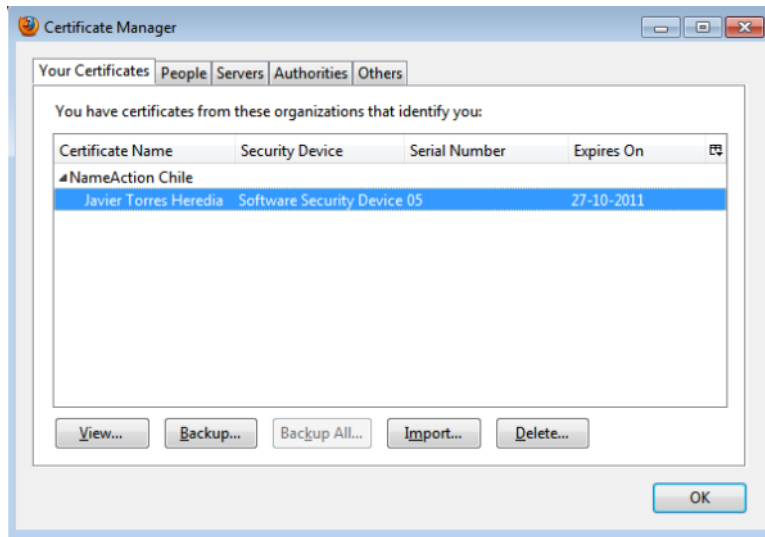
Tools --> Options --> Advanced --> Encryption Tab --> View Certificates --> Your Certificates Tab --> Import Button



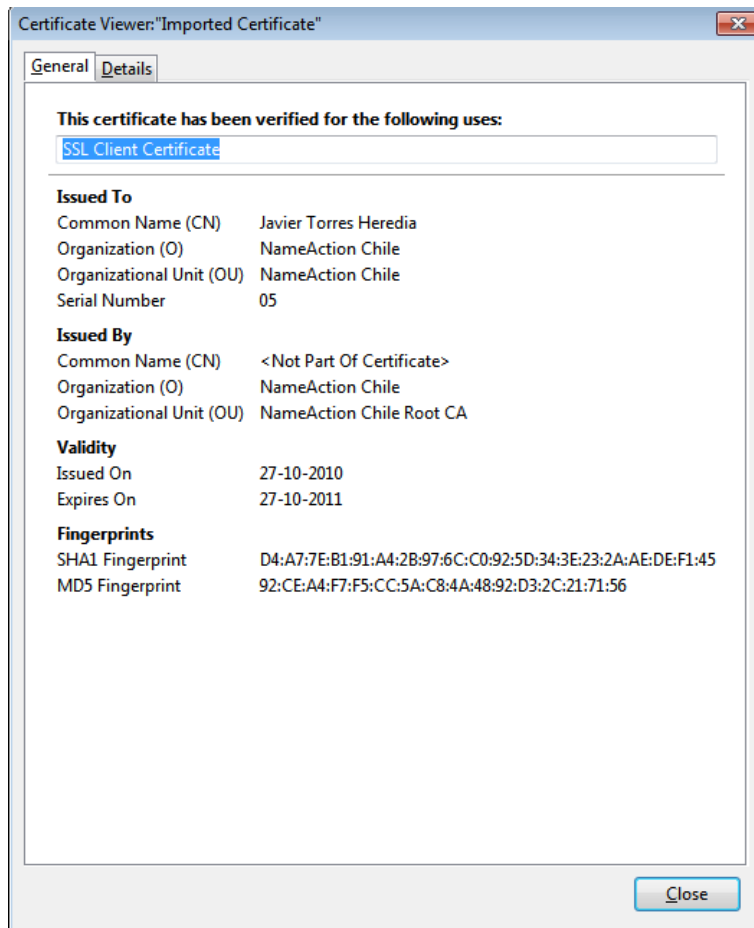
You will be prompted for the client certificate password given by NameAction (README.txt).



Now the certificate is installed in the web browser.



Press the View button to display the certificate.



Getting Started (Code Snippets)

To make simpler the implementation of client applications that connect with our NCK, we give a starting point in some programming languages available and several ways for make a connection via SSL certificate.

NOTE: all the code snippets was tested and work.

PHP + cURL using x509 PEM certificate and certificate authority CA

```
<?php
$url = "https://ncktest.nameaction.com/interface?";
$port = 443;
$command = "User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=cl";
// the client certificate path MUST be a physical path, not url

$certificate = "/home/ncktest/clientkey.pem"; // unix/linux example
$CAcertificate = "/home/ncktest/ca.crt";

// more details at http://php.net/curl
$ch = curl_init();
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
curl_setopt($ch, CURLOPT_URL, $url.$command);
curl_setopt($ch, CURLOPT_PORT, $port);
curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 1);
curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, 2);
curl_setopt($ch, CURLOPT_CAINFO, $CAcertificate);
curl_setopt($ch, CURLOPT_SSLCERT, $certificate);
curl_setopt($ch, CURLOPT_SSLKEY, $certificate);
curl_setopt($ch, CURLOPT_HTTPHEADER, array("Content-Type: text/xml"));
curl_setopt($ch, CURLOPT_USERAGENT, 'Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0)');
$response = curl_exec($ch);
curl_close($ch);
print $response;
?>
```

Python using x509 PEM certificate

```
#!/usr/bin/env python

import httpLib

CERTFILE = '/home/ncktest/clientkey.pem' # Certificate in PEM format (x509), this
cert contains a password
HOSTNAME = 'ncktest.nameaction.com' # NCK Server
COMMAND = '/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=cl' # NCK
command
conn = httpLib.HTTPSConnection(
    HOSTNAME,443,
    key_file = CERTFILE,
    cert_file = CERTFILE
)
#conn.set_debuglevel(1) #Turn Debug ON
conn.putrequest('GET', COMMAND) #Send NCK command
conn.endheaders()
response = conn.getresponse() #Get XML from NCK in a variable
print response.read() #Output XML to console
```

Python + M2Crypto using x509 PEM certificate and certificate authority CA

```
#!/usr/bin/env python
import M2Crypto

ctx = M2Crypto.SSL.Context()

# load client certificate (used to authenticate the client)
ctx.load_cert_chain('/home/ncktest/clientkey.pem')
ctx.load_verify_locations('/home/ncktest/ca.crt')

# stop if peer's certificate can't be verified
ctx.set_allow_unknown_ca(False)

# verify peer's certificate
ctx.set_verify(M2Crypto.SSL.verify_peer, 1)

con = M2Crypto.httplib.HTTPSConnection("ncktest.nameaction.com", ssl_context=ctx)

con.request("GET" , "/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=c1")
print con.getresponse().read()
```

C# .NET using PKCS12 certificate

```
using System;
using System.IO;
using System.Net;
using System.Security.Cryptography.X509Certificates;
using System.Text;

public class HttpWebRequestClientCertificateTest : ICertificatePolicy {

    static void Main (string[] args)
    {
        string host = "https://ncktest.nameaction.com"; //NCK Server
        string command =
        "/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=c1"; // NCK Command
        string cert = "/home/ncktest/client.p12"; //Path to PKCS12 client certificate
        string password = "a4Cs02k11"; // PKCS12 certificate password key given by
        NameAction
        X509Certificate2 certificate = null;
        certificate = new X509Certificate2 (cert, password);

        ServicePointManager.CertificatePolicy = new HttpWebRequestClientCertificateTest
        ();

        HttpWebRequest req = (HttpWebRequest) WebRequest.Create (host + command);
        if (certificate != null)
            req.ClientCertificates.Add (certificate);

        WebResponse resp = req.GetResponse ();
        Stream stream = resp.GetResponseStream ();
        StreamReader sr = new StreamReader (stream, Encoding.UTF8);
        Console.WriteLine (sr.ReadToEnd ());
    }
}
```

Java using PKCS12 certificate + keytool to store certificate authority C A

Example - Converting the certificate authority to a trust store:

```
keytool -import -alias nck -file ca.crt -storepass abc123 -keystore nck.keystore
```

More information about keytool at:

<http://download.oracle.com/javase/6/docs/technotes/tools/solaris/keytool.html>

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStream;
import java.io.InputStreamReader;
import java.net.URL;

import javax.net.ssl.HttpURLConnection;
import javax.net.ssl.SSLSocketFactory;

public class SSLClient {

    /**
     * @param args
     * @throws IOException
     */
    public static void main(String[] args) throws IOException {
        String Server = "ncktest.nameaction.com"; //NCK Server
        String Path = "/home/ncktest/";
        String p12 = "client.p12";
        String Command =
"/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=nameaction&TLD=c1"; //NCK Command
        System.setProperty("javax.net.ssl.keyStoreType", "pkcs12");
        System.setProperty("javax.net.ssl.trustStoreType", "jks");
        System.setProperty("javax.net.ssl.keyStore", Path + p12);
        System.setProperty("javax.net.ssl.trustStore", Path + "nck.keystore");
        //System.setProperty("javax.net.debug", "ssl");
        System.setProperty("javax.net.ssl.keyStorePassword", "a4Cs02k11"); //Certificate
password given by NameAction
        System.setProperty("javax.net.ssl.trustStorePassword", "a bc123"); //truststore
password

        SSLSocketFactory sslsocketfactory = (SSLSocketFactory)
SSLSocketFactory.getDefault();
        URL url = new URL("https://" + Server + Command);
        HttpURLConnection conn = (HttpURLConnection)url.openConnection();
        conn.setSSLSocketFactory(sslsocketfactory);
        InputStream inputstream = conn.getInputStream();
        InputStreamReader inputstreamreader = new InputStreamReader(inputstream);
        BufferedReader bufferedreader = new BufferedReader(inputstreamreader);

        String string = null;
        while ((string = bufferedreader.readLine()) != null) {
            System.out.println("Received " + string);
        }
    }
}
```

ASP using PKCS12 certificate

```
<%
    URL =
    "https://ncktest.nameaction.com/interface?User=ncktest&Pass=ncktest&Command=Check&SLD=na
    meaction&TLD=cl"

    set objSrvHTTP = Server.CreateObject ("WinHttp.WinHttpRequest.5.1")

    ' WinHttp.WinHttpRequest.5.1
    ' CN from certificate which is in Local Computer\Personal\Certificates
    objSrvHTTP.SetClientCertificate "LOCAL_MACHINE\MY\Client.Cert"

    SslErrorIgnoreFlagsOption = 4
    IgnoreAll = 13056
    objSrvHTTP.Option(SslErrorIgnoreFlagsOption) = IgnoreAll

    objSrvHTTP.open "GET", URL, false
    objSrvHTTP.setRequestHeader "content-Type", "text/xml"

    objSrvHTTP.send

    ' Get result
    res = objSrvHTTP.ResponseText

    ' Empty object
    set objSrvHTTP = Nothing

    Response.Write(res)
%>
```

More information about certificate installation in the Internet Information Server (IIS) at:

<http://support.microsoft.com/default.aspx?scid=kb;EN-US;901183>

ERROR Codes

2003 - *Invalid command*

2003 - *Required parameter missing*

2103 - *This TLD is not supported*

2104 - *SLD is invalid for this TLD*

2105 - *Term not available*

2106 - *Must specify dns or contact for change*

2107 - *NIC does not allow (Min length)*

2108 - *NIC does not allow (Max length)*

2109 - *NIC does not allow (Invalid character)*

2110 - *NIC does not allow (Reserved SLD)*

2200 - *Invalid authentication*

2201 - *(TYPE) Contact error - Name value too short*

2202 - *(TYPE) Contact error - Organization value too short*

2203 - *(TYPE) Contact error - Address value too short*

2204 - *(TYPE) Contact error - City value too short*

2205 - *(TYPE) Contact error - Invalid country code*

2206 - *(TYPE) Contact error - Postal code value too short*

2207 - *(TYPE) Contact error - Invalid email format*

2208 - *(TYPE) Contact error - Invalid phone format*

2307 - *Cannot remove primary or secondary name server*

2308 - *Violation of data management policy*

2310 - *Invalid name server information*

2311 - *Domains are not associated with this account*

2312 - *Account does not have sufficient funds to make this operation*

2313 - *Invalid local presence information*

2314 - Operation not allowed. Domain has a pending operation

2315 - Command failed due to server error. Client should try again

2316 - Must specify Type of transfer Management or Owner

2317 - Must specify local presence information for Brazilian registrant (CNPJ)

2318 - Must specify local presence information for Argentinean registrant (CUIT)

2319 - Must specify local presence information for Chilean registrant (RUT)

2320 - Must specify IPx for parameter NSx

2321 - The domain exists in our system, please verify with Check command

2322 - Operation not allowed. Domain has a service in process. please verify with Info command

2400 - Command failed

(TYPE) = Registrant - Admin - Tech