

EOJ Integration

INSTALLATION AND CONFIGURATION, VERSION 1.0

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Planning

System Requirements

SSClient is supported on the following platforms:

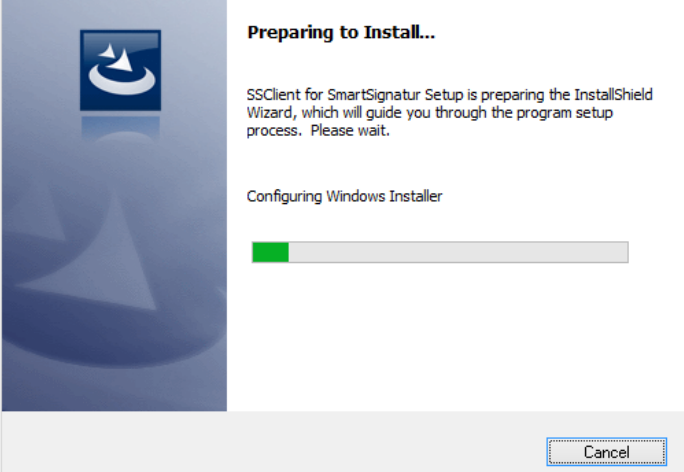
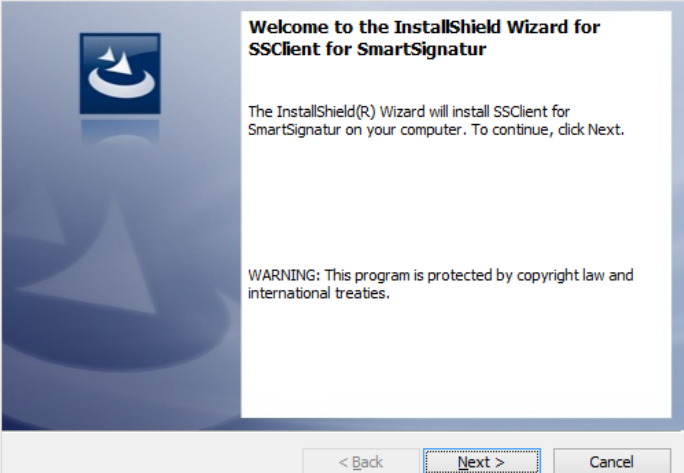
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008
- Windows 8.1
- Windows 8
- Windows 7


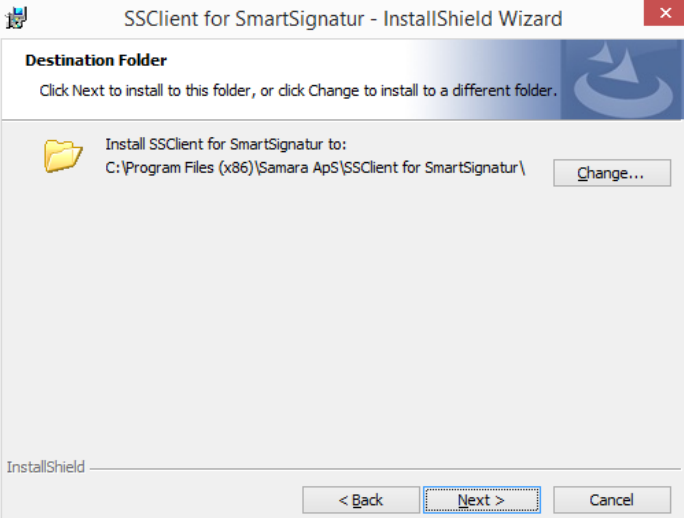
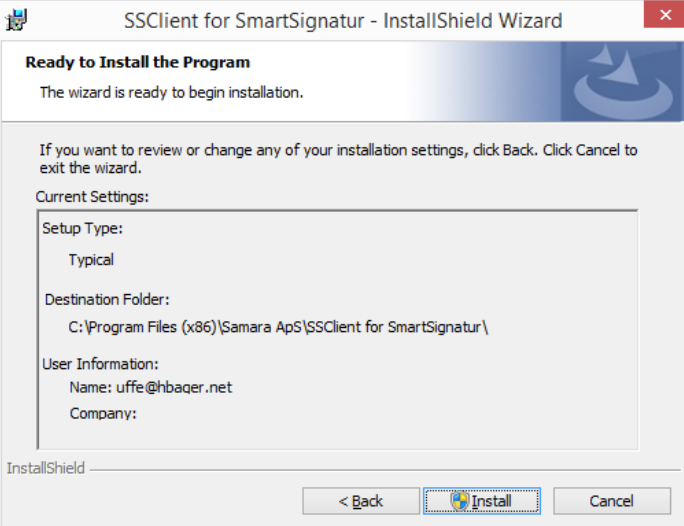
Support for the OS's above will follow Microsoft's End Of Life dates.

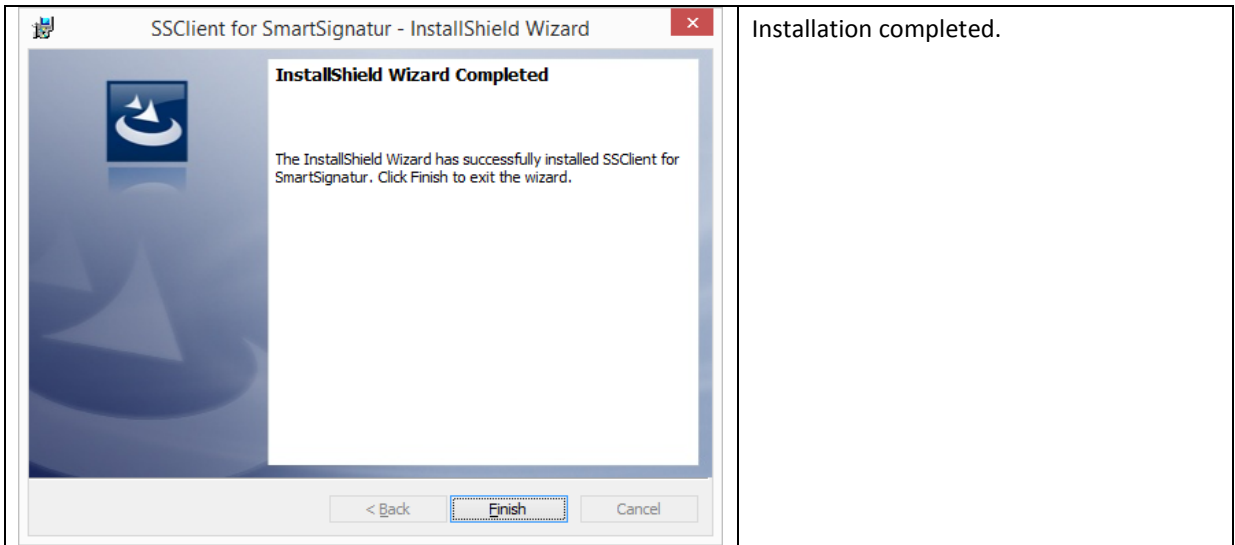
The following software needs to be installed:

- Microsoft .NET Framework 4.5, Full package

Installation

| | |
|---|---|
| | <p>Run Setup.exe from the SSClient installation set.</p> |
|  | <p>Wait a few seconds for the installation to initialize.</p> |
|  | <p>Click Next</p> |

| | |
|---|--|
|  | <p>Click "I accept the terms in the license agreement" and click "Next"</p> |
|  | <p>Please click "Browse" and select the path for in EOJ applications binaries.</p> |
|  | <p>Just a overview, Select "Install".</p> |



Configuration

For each SmartSignatur Server that the EOJ application have integration with the setting below must be configured in the SSCLIENT.INI configuration file.

The needed setting are:

- SSL certificate for communication with the SmartSignatur Server on the Client side.
- Network configuration for communication with the SmartSignatur Server on the Client side.
- The following LDAP setting:
 - Host DNS or IP
 - Port for Secure LDAP communication
 - Base OU for user search.

Configuration – SSCLIENT.INI

All configuration are in the SSCLIENT.INI file in the application installation catalog.

The settings in the file is accessed on every call to SSCLIENT and can be modified on runtime.

The SSCLIENT.INI contains multiply sections for each customer/SmartSignatur Server.

The [General] section is only used if EOJ and SSCLIENT is used in a client client setup and don't support multiply SmartSignatur Servers. The configuration parameters are the same.

When supporting mulitply SmartSignatur Servers, a configuration section for each SmartSignatur Server with the folowing configuration parameters must be set.

- UniqueID, that the caller of SSCLIENT uses to identify the config to use, it can be a customerID, CVR or any unique identifier.
- Host, the DNS or IP of the SmartSignatur Server
- Port, LDAPS port of the SmartSignatur Server
- CertificateFile, SSL certificate for communcation with the SmartSignatur Server

- BaseOU, LDAP context to search for users

Settings in SSCLIENT.INI

```
[<UNIQUEID>]
## Host DNS or IP
Host=<HOST>
## Secure LDAP port number (636), please note SSClient can't run without a certificate
Port=<PORT>
## SSL certificate for LDAP communication
Cert=<PATH AND CERTIFICATEFILE>
## base OU for certificat user search
BaseOU=<BASEOU>
```

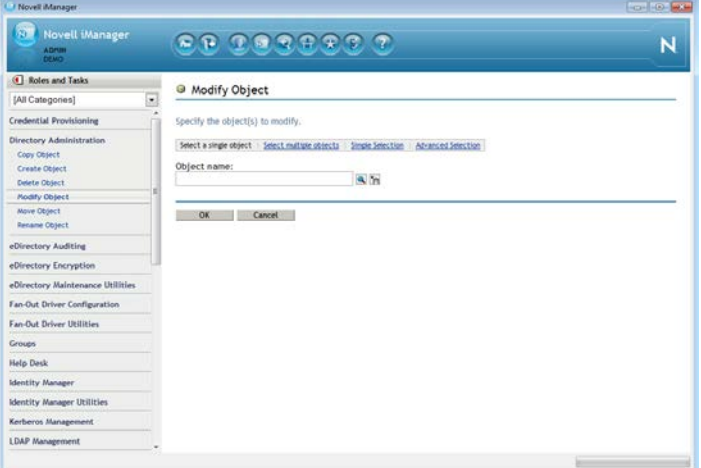
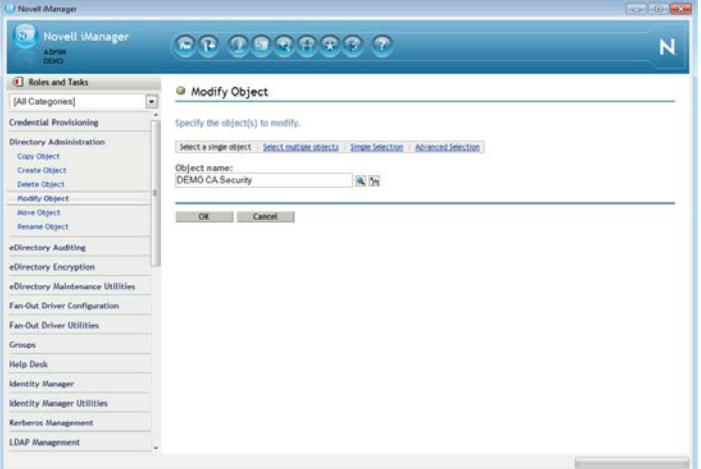
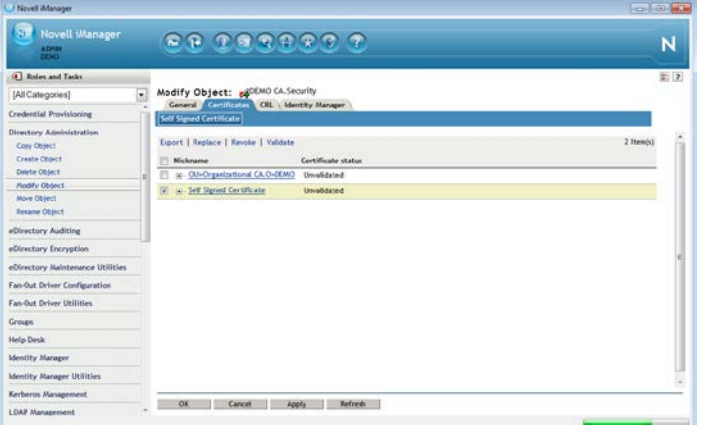
Sample SSCLIENT.INI

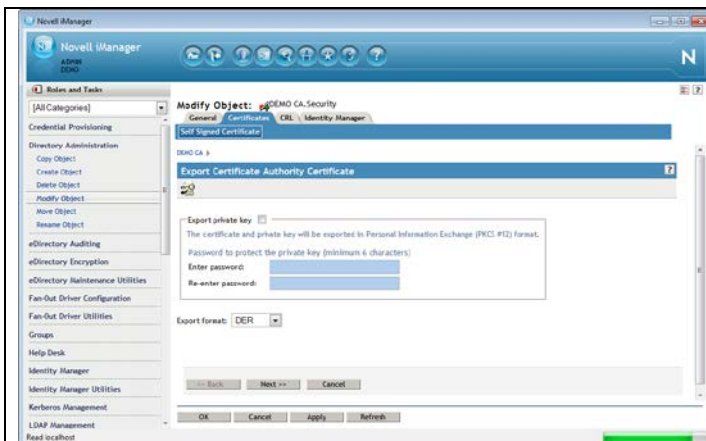
```
[General]
## Logfile for debugging
logfile=d:\SSCLIENT\SSClient.log
## Loglevel = Debug, Error, Warning, Info, None
loglevel=DEBUG
#####DEFAULT SETTINGS IF NO CONFIGURATION-ID / CVR IS PRESENT
## Host DNS or IP
Host=192.168.10.20
## Secure LDAP port number (636), please note SSClient can't run without a certificate
Port=636
## SSL certificate for LDAP communication
Cert=D:\SSClient\12345678.der
## base OU for certificat user search
BaseOU=o=smartsignatur

## Section pr customer, based on customerID (ect. CVR number)
## Identec ApS test server
[35664009]
## Host DNS or IP
Host=mail.identec.dk
## Secure LDAP port number (636), please note SSClient can't run without a certificat and SSL enabled on SmartSignatur Server
Port=636
## SSL certificate for LDAP communication
Cert=D:\SSCLIENT\35664009.der
## base OU for certificat user search
BaseOU=o=smartsignatur
```

Configuration – customer specific SSL certificate

For secure communication with the customer SmartSignatur Server only SSL communication is supported. The customer need to export the current certificate from the SmartSignaturServer. From the customer SmartSignatur Server an export of the current SelfSigned CA.

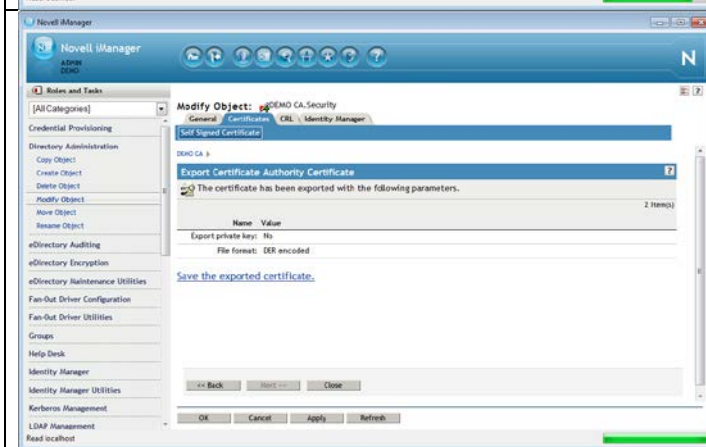
| | |
|---|--|
| | <p>Start iManager Login with a user with administrative rights</p> |
|  | <p>Select "Modify Object"</p> |
|  | <p>Select the CA object in the Security Container</p> |
|  | <p>Select Certificates and select "Self Signed Certificate" Click Export</p> |



Uncheck "Export private key"

Export format = DER

Click Next



Click "Save the exported certificate"

The certificate is exported in DER format without PrivateKey.

Configuration – customer specific network settings

The EOJ server need access to the customer SmartSignatur Server over Secure LDAP, this is normally port 636, but the port is configurable.

Network NAT and Ip or port mapping can be configured.

Configuration – customer specific LDAP settings

LDAP Host or IP

DNS or IP address for the customer specific SmartSignatur Server.

LDAP Port for Secure communcation

LDAP Port for the customer specific SmartSignatur Server.

BaseOU for user search

The Full distinguished LDAP context that the users is located under.

Troubleshooting

Testing with SAMPLEAPP.EXE

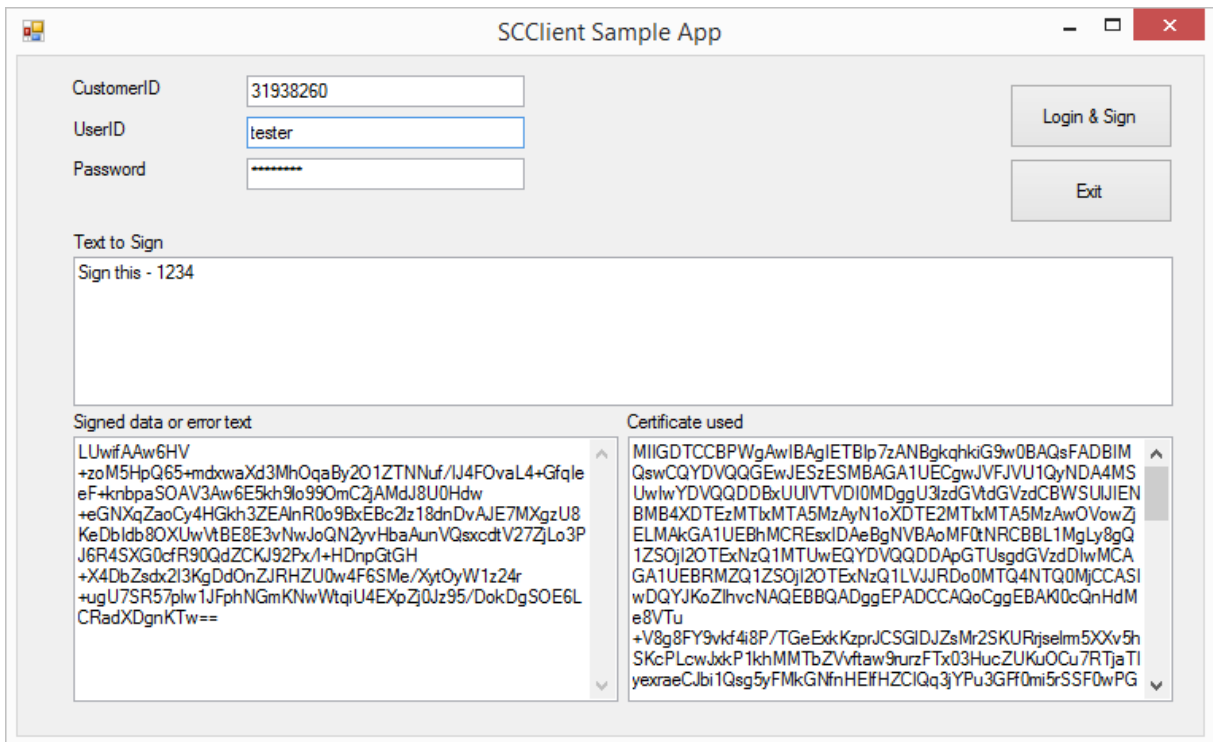
With the installation SampleApp.EXE is installed, SampleApp is a GUI for easy testing of configuration and communication.

Just type the CustomerID for the configuration in SSCLIENT, UserID, Password and any text that need signing. Click "Login & Sign".

If success the signed data will be displayed and the certificat used ofr signing.

If no success the error text will be displayed.

The screenshot shows a Windows-style application window titled "SCClient Sample App". The interface includes three input fields: "CustomerID" with the value "31938260", "UserID" with "tester", and "Password" with masked characters. To the right are "Login & Sign" and "Exit" buttons. Below these is a "Text to Sign" area containing "Sign this - 1234". At the bottom, there are two scrollable text boxes: "Signed data or error text" and "Certificate used", both currently empty.



SSClient logging

To enable logging on SSCLIENT:

In SSCLIENT:INI set the LOGFILE and LOGLEVEL parameters.

LogFile can be any local file, please not SSCLIENT don't create the path. Path must exist.

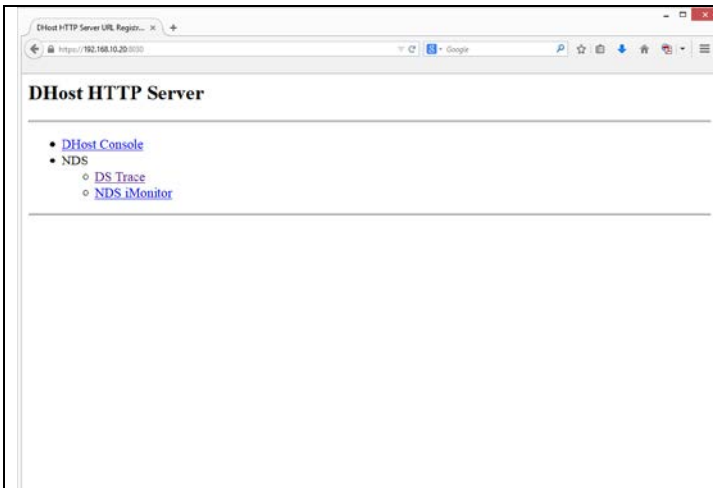
LogLevel can be:

- None No log info will be written.
- Error Only errors will be written.
- Warning Errors and warnings will be written.
- Info Info messages, errors and warnings will be written.
- Debug Log internal processing– PLEASE don't use in production unless needed.

"-8xx" error codes in the logfile are from NetIQ SecretStore, list for errors can found here:

<https://www.netiq.com/documentation/secretstore34/nssadm/data/answj3g.html>

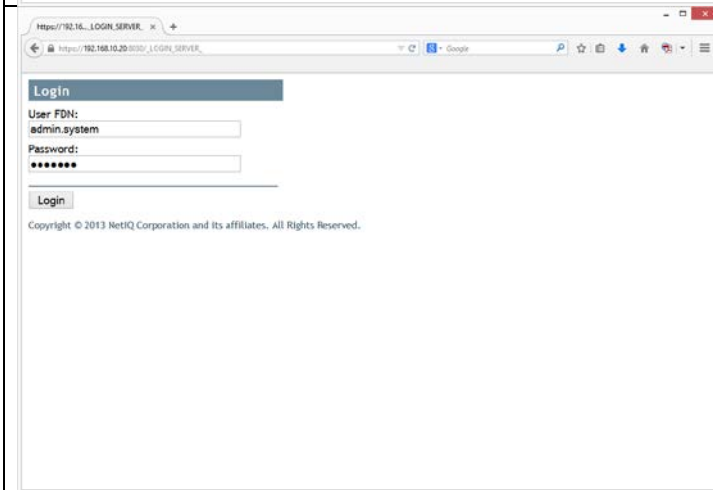
LDAP logging on SmartSignatur Server



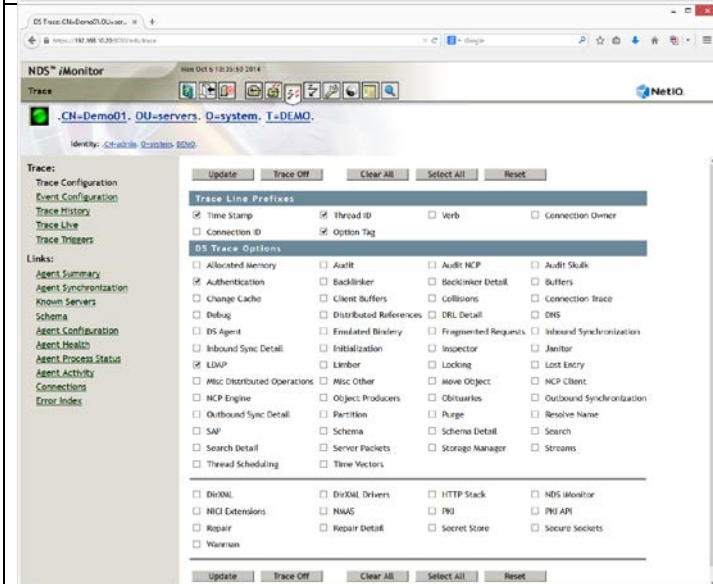
Start browser and goto the DS trace for the SmartSignaturServer.

Please note that the port number can vary

Click "DS Trace"



Type administrative user and password.



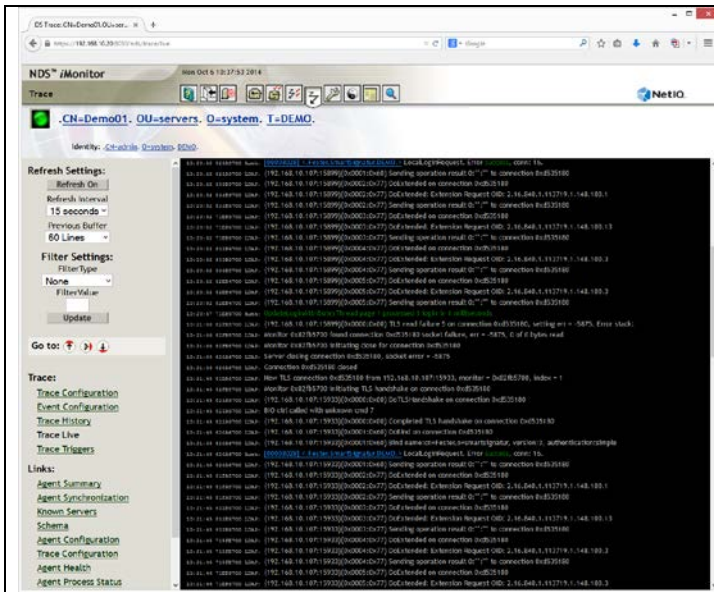
Click "Clear All"

Select "Authentication" and "LDAP"

Click "Update", at top or bottom

Click "Trace Live" in left menu.

If "Trace Live" is not visible, then click "Trace History" and then "Trace Live" will be visible.



Trace will be shown.

Click "Update" to refresh the view.

Supported methodes

SignData

Input:

- Data byte[] Data that need signing.
- UserID string contextless UserID, SSClient search under BaseOU for the user
- Password string Users password
- CustomerID string ID of configuration to use in SSCLIENT.INI.
- DigestType enum SHA256, SHA1, MD5

Output:

- ReturnValue OK, WornngPassword, Locked, UnknowUser, InvalidConfig
- Signatur byte[] Singed data
- Certificate byte[] the certificate used for signing

Version history

Version 1.0

First official release.