Full url: https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0

```
========All Claims======
Array
    [id_token_encryption_alg_values_supported] => Array
            [0] => RSA1_5
            [1] => RSA-OAEP
            [2] => RSA-OAEP-256
            [3] => A128KW
            [4] => A192KW
            [5] => A256KW
            [6] => ECDH-ES
            [7] => ECDH-ES+A128KW
            [8] => ECDH-ES+A192KW
            [9] => ECDH-ES+A256KW
    [id_token_encryption_enc_values_supported] => Array
        (
            [0] => A128CBC-HS256
            [1] => A192CBC-HS384
            [2] => A256CBC-HS512
            [3] => A128GCM
            [4] => A192GCM
            [5] => A256GCM
    [token_endpoint_auth_methods_supported] => Array
            [0] => client_secret_post
            [1] => client_secret_basic
            [2] => client_secret_jwt
            [3] => private_key_jwt
    [userinfo_signing_alg_values_supported] => Array
            [0] => RS256
            [1] => RS384
            [2] => RS512
            [3] => ES256
            [4] => ES384
            [5] => ES512
            [6] => HS256
            [7] => HS384
            [8] => HS512
            [9] => PS256
            [10] => PS384
            [11] => PS512
            [12] => none
    [response_types_supported] => Array
            [0] => code
            [1] => token
            [2] => id token
            [3] => code token
            [4] => code id token
            [5] => id_token token
            [6] => code token id_token
            [7] => none
    [token_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/token
    [jwks_uri] => https://agaton-sax.com:8080/static/jwks_briKgMiZu8z4LoaZ.json
    [userinfo_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/userinfo
    [token_endpoint_auth_signing_alg_values_supported] => Array
        (
            [0] => RS256
            [1] => RS384
            [2] => RS512
            [3] => ES256
            [4] => ES384
            [5] => ES512
            [6] => HS256
            [7] => HS384
            [8] => HS512
            [9] => PS256
            [10] => PS384
            [11] => PS512
    [scopes_supported] => Array
        (
            [0] => profile
            [1] => address
```

```
[3] => offline_access
        [4] => openid
        [5] => phone
        [6] => openid
[claim_types_supported] => Array
   (
        [0] => normal
        [1] => aggregated
        [2] => distributed
[request_object_encryption_alg_values_supported] => Array
   (
        [0] => RSA1_5
        [1] => RSA-OAEP
        [2] => RSA-OAEP-256
        [3] => A128KW
        [4] => A192KW
        [5] => A256KW
        [6] => ECDH-ES
        [7] => ECDH-ES+A128KW
        [8] => ECDH-ES+A192KW
        [9] => ECDH-ES+A256KW
   )
[grant_types_supported] => Array
        [0] => authorization_code
        [1] => implicit
        [2] => urn:ietf:params:oauth:grant-type:jwt-bearer
        [3] => refresh_token
[metadata_statements] => Array
   (
        [https://swamid.sunet.se] => eyJhbGciOiJSUzI1NiIsImtpZCI6ImloUnBXellZeDZ5UF9OeTNPR29DbUJ4amw5SzF5Y3NfU3JTRVZ3UDhlRDgifQ.eyJpZ
[userinfo_encryption_alg_values_supported] => Array
        [0] => RSA1_5
        [1] => RSA-OAEP
        [2] => RSA-OAEP-256
        [3] => A128KW
        [4] => A192KW
        [5] => A256KW
        [6] => ECDH-ES
        [7] => FCDH-FS+A128KW
        [8] => ECDH-ES+A192KW
        [9] => ECDH-ES+A256KW
[response_modes_supported] => Array
        [0] => query
        [1] => fragment
        [2] => form_post
[acr_values_supported] => Array
   (
        [0] => PASSWORD
[end_session_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/end_session
[claims_supported] => Array
   (
        [0] => zoneinfo
        [1] => address
        [2] => email
        [3] => family_name
        [4] => locale
        [5] => phone_number
        [6] => website
        [7] => preferred_username
        [8] => sub
        [9] => name
        [10] => birthdate
        [11] => given_name
        [12] => profile
        [13] => phone_number_verified
        [14] => middle_name
        [15] => email_verified
        [16] => picture
        [17] => updated_at
        [18] => gender
        [19] => nickname
```

```
[request_parameter_supported] => 1
    [request_object_signing_alg_values_supported] => Array
           [0] => RS256
           [1] => RS384
           [2] => RS512
           [3] => ES256
           [4] => ES384
           [5] => ES512
           [6] => HS256
           [7] => HS384
           [8] => HS512
           [9] => PS256
           [10] => PS384
           [11] => PS512
           [12] => none
    [subject_types_supported] => Array
           [0] => public
           [1] => pairwise
       )
    [registration_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/registration
    [version] \Rightarrow 3.0
    [id_token_signing_alg_values_supported] => Array
           [0] => RS256
           [1] => RS384
           [2] => RS512
           [3] => ES256
           [4] => ES384
           [5] => ES512
           [6] => HS256
           [7] => HS384
           [8] => HS512
           [9] => PS256
           [10] => PS384
           [11] => PS512
           [12] => none
       )
    [require_request_uri_registration] => 1
    [claims_parameter_supported] => 1
    [issuer] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0
    [request_object_encryption_enc_values_supported] => Array
       (
           [0] => A128CBC-HS256
           [1] => A192CBC-HS384
           [2] => A256CBC-HS512
           [3] => A128GCM
           [4] => A192GCM
           [5] => A256GCM
    [request_uri_parameter_supported] => 1
    [userinfo_encryption_enc_values_supported] => Array
           [0] => A128CBC-HS256
           [1] => A192CBC-HS384
           [2] => A256CBC-HS512
           [3] => A128GCM
           [4] => A192GCM
           [5] => A256GCM
    [authorization_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/authorization
========Keys Bundle=======
eyJhbGciOiJSUzzlNiIsImtpZCI6ImNabVpUZ05aVzg4SEE1RTRBNHJFMnY2bzBmMjFKYXlsMDNfSkJHOGphTE0ifQ.eyJpYXQiOiAxNTA1MzEwMTQ1LCAiYnVuZGxlljogeyJodH
========SIGKEY========
=======JWKSet (SigKey)========
Jose\Object\JWKSet Object
    [keys:protected] => Array
           [0] => Jose\Object\JWK Object
                   [values:Jose\Object\JWK:private] => Array
                          [kid] => cZmZTgNZW88HA5E4A4rE2v6o0f21Jayl03_JBG8jaLM
                          [kty] => RSA
                          [use] => sig
                          [e] => AQAB
                      )
```

```
[1] => Jose\Object\JWK Object
                    [values:Jose\Object\JWK:private] => Array
                        (
                            [kty] => EC
                            [crv] => P-256
                            [y] => I9b9dDOSfUp2C-0SOmE1bHgRJ0EFUkcmxRU48wR32K0
                            [use] => sig
                            [x] => Efy9Ve_JP6OeakR7XUvw3F1yh4TxaMS2TsFlcgK_dUc
                            [kid] => B0TBUjumBZrm1ZmHsS1Q-Pz57pLc-A6G2vhE88f3l3U
                )
        )
    [position:Jose\Object\JWKSet:private] => 0
=======Verify (Keys Bundle) signature result=======
Jose\Object\JWS Object
    [is_payload_detached:Jose\Object\JWS:private] =>
    [encoded_payload:Jose\Object\JWS:private] => eyJpYXQiOiAxNTA1MzEwMTQ1LCAiYnVuZGxlIjogeyJodHRwczovL3d3dy5mZWlkZS5ubyI6IHsia2V5cyI6IFt7
    [signatures:Jose\Object\JWS:private] => Array
            [0] => Jose\Object\Signature Object
                (
                    [encoded_protected_headers:Jose\Object\Signature:private] => eyJhbGciOiJSUzI1NiIsImtpZCI6ImNabVpUZ05aVzg4SEE1RTRBNHJF
                    [protected_headers:Jose\Object\Signature:private] => Array
                            [alg] => RS256
                            [kid] => cZmZTgNZW88HA5E4A4rE2v6o0f21Jayl03_JBG8jaLM
                    [headers:Jose\Object\Signature:private] => Array
                    [signature:Jose\Object\Signature:private] => F��(�[��G^\uf�k``W�#♣��e�^{���\\\ Ø$�
                )
        )
    [payload:Jose\Object\JWS:private] => Array
            [iat] => 1505310145
            [bundle] => Array
                    [https://www.feide.no] => Array
                            [keys] => Array
                                    [0] => Array
                                            [kid] => rYMbPoOm8coyar99IuueCmw0zj-Jfw_iUixIPJXVSb4
                                            [kty] => RSA
                                            [use] => sig
                                            [n] => 0KYqihtkUYCoPtcaSN-PkofcGBhSsLbC5_rsDLtdP6dJJDeEgSsLi2LHUJsG_CRmP2ao_csWqPf4yx4ituNZzQ
                                            [e] => AQAB
                                    [1] => Array
                                        (
                                            [kty] => EC
                                            [crv] => P-256
                                            [y] => FvnRLMiWCIeQ0tQ_IIwPqfoTpVAnUJ1MWucU6jtRWnA
                                            [use] => sig
                                            [x] => 5t2Aar9dGt6DhcQHH6h-VZRwMkF6lLXLDCo7LInERL0
                                            [kid] => D83wp7iqD74HCE8oA6AlyHW6vVJvjMd1j_NgLabvags
                                )
                        )
                    [https://example.org/op] => Array
                            [keys] => Array
                                    [0] => Array
                                        (
                                            [kid] => j2HoeEz5f4U8KkWW1a6tJ5SXJCfxOTTN6vL7jE7ZpJ4
                                            [kty] => RSA
                                            [use] => sig
                                            [n] => t0L_IJGiE6McN0f16GeR5ZiR8W0jb_pzJErQtRm3xpsbHRrBuYSLYM0ea4R-eZvU8X9G7J9qVeYZ6ILZ2pS2TS
                                            [e] => AQAB
                                    [1] => Array
```

```
[kty] => EC
                       [crv] => P-256
                       [y] => CFSdvlmJkhLq1TMkmw8slkfWzHhJqlcdqnM7a-geBuc
                       [use] => sig
                       [x] => 1sEpNSicJNolci4TBJ1bTCW-zmKSPuKB6irwhHtFopE
                      [kid] => c5DIPFhC3LmNoiwAx1Qu-La3tvFbQ4uZq_VbrTp0WbM
           )
   )
[https://example.com] => Array
       [keys] => Array
           (
               [0] => Array
                   (
                       [kid] => 7TnWOKF0Znlsf-ok08w7oFL474A4IuxOQqwSIlz3MS4
                       [kty] => RSA
                       [use] => sig
                       [e] => AQAB
               [1] => Array
                       [kty] => EC
                       [crv] => P-256
                       [y] => iahOyb361kjkx9jW82dKiPBbzmlbdhOGrw5deoruMIA
                       [x] => _vTc68Qzjye3BAjBxuP3AwCPWDAK2jKM_7dvoFZgwPQ
                       [kid] => OAP6u4sbyKjnaAl3vFdAAW0xZln5LYk_RYfCJgAQTZc
           )
[https://example.org] => Array
       [keys] => Array
               [0] => Arrav
                   (
                       [kid] => TOs-IBoRy224E8-Xhs7IfgBwwubT9rEf4JRvDE5eIQo
                      [ktv] => RSA
                       [use] => sig
                      [n] => t7GNJVeSMoSeOnD6UgArZGQ_vjIciNxSmyUB8q5KM9UZF_6npQG5zDUfKXmWwQM8e9-Tw14dyWina3eQlin1Q2
                      [e] => AOAB
                  )
               [1] => Array
                   (
                       [kty] => EC
                       [crv] => P-256
                       [y] => f1nionL1n7Fsl4RY1iae_Y1430cA27dWE8njPZZC_1s
                       [use] => sig
                       [x] => C_kXLgdamJp3NF58jGebeCZ505-pKY-4JoWutT_RvVM
                       [kid] => a5QEWqF_nv4lj3H_zhq2pIpUiY4qDftamnXneS2yVp0
           )
[https://sunet.se] => Array
       [keys] => Array
           (
               [0] => Array
                      [kid] => g4WMxVrlEHVN1tLzbKMWGn75ZOcCUlfeZThW-wh27cM
                      [kty] => RSA
                      [use] => sig
                      [n] => vl8QjGp2yUZLbsCGcXBNLxHOrew24wuWER3pGWO36YJYn_NT0RP5zQGBzs48zu-YIGKgXD8kMMRzQB0LzQY_4V
                      [e] => AQAB
               [1] => Array
                   (
                       [ktv] => EC
                       [crv] => P-256
                       [y] => k-lU9W8-sMjIlQMVWSnj5jLTnRU4LdVN73xoKK1ZdYk
                       [use] => sig
                       [x] => TQGk8QFQJrmqS9AbRsu4kQbvjQZftET3RmM_RVWbqPM
                      [kid] => BEfveNQSb6SasVUFKcR-vE9p43axF3zMb00YiUt4uHY
                  )
           )
```

```
[https://uninett.no] => Array
        [keys] => Array
            (
                [0] => Array
                    (
                        [kid] => Gjtc0fNcG3CwapnZ_m_Z3aurjkRBZFIGaI6wSrwL1_E
                        [kty] => RSA
                        [use] => sig
                        [n] => rsvdjcxV276KdcorteRGSdY_mAISnWQql7iJ-M9EWrPVrqvtiP5bAjEzwnY8K0zQdj7Cjz718lAWh5QpNvY3t0
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [y] => V9nYCc0ra7STdEsgYUmK3b-lDkr-n71riY-551Y-VkQ
                        [use] => sig
                        [x] => VeGzY46M84wp5rsv98-sQnb4HQDvPUTF4G8v5Q550tU
                        [kid] => TZI8IKS12a5SGkA4bZpUxU46nR8sllhp-J9BefkLRtg
           )
   )
[https://surfnet.nl/oidc] => Array
        [keys] => Array
                [0] => Array
                    (
                        [kid] => EtVYnlf5DKTAnHwgj3s71s5sBmJX6kJzwMUfGP6o3nI
                        [kty] => RSA
                        [use] => sig
                        [n] => uGOu8IvoykVzbvvnJWMILAfK0jR9C0YLFSFI-g0bWl3CZ5jwZTd2wF0M0S6Q2sKGMCmgIs3kdTWu2zPSTFSYDd
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [v] => V4Rqiu0BUwQkCbdvTn1bwRQ0lI80heoTCItl0ZedSN0
                        [use] => sig
                        [x] => UQ_AzqvES9MVWaGkh1q_JPJfBS7NR8a-hcusSCyAKCg
                        [kid] => iGaT7pJkGjIpr2_-QpoiGdYXXuudl1BZeL7u8Rm4ZDs
           )
[https://swamid.sunet.se] => Array
        [keys] => Array
                [0] => Array
                        [kid] => ihRpWzYYx6yP_Ny30GoCmBxjl9K1ycs_SrSEVwP8eD8
                        [kty] => RSA
                        [use] => sig
                        [n] => ntIVVOM62XOLscH1C8BfAbr2BL67sW1eWEGokGDUabEqsvAKzZCiQfYMvpnhou6kXhtxXOMttzchGpI2rflElW
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [y] => YjeDuiwhxcIHvzS61tUNvyGWpn-PvD0s-E2dXndVmv0
                        [use] => sig
                        [x] => RW5AVta_Jm4CMWEU71rH3e-Fwfmu2oN9poF6jhtJ5XY
                        [kid] => 6VX4aRYeuBpNw-S4ovg1NXs45YiTVDwGs82Pkl3I43I
           )
   )
[https://bogus.example.org] => Array
        [keys] => Array
                [0] => Array
                    (
                        [kid] => jPGFpGx0U476u5f0bGmu0VM0xBCdPV4QXPW7weukKlA
                        [kty] => RSA
                        [use] => sig
```

```
[n] => uWlJPVwskaHu2m3u5PL7Kpk5xZN2uSv9GvR-yWsY905ieAb902S08WUfNZ4uH1zVj02CUx2wl0ZdlbPYvW_wrQ
                                   [1] => Array
                                            (
                                                     [kty] => EC
                                                     [crv] => P-256
                                                     [y] => Gb2BWd2bR5ca61BGlmnt7CU3tj8kOo7uBN-Lm2zgmoo
                                                     [use] => sig
                                                     [x] => xX9lrKm3sKRPERmxWijqxD5VXcDT-hblZk5jajbMR9w
                                                     [kid] => bwdViYIJTCQD_nme26iAv5pgBNBUEsQ220RnoAgmE1U
                          )
        )
[https://edugain.com] => Array
                  [keys] => Array
                                   [0] => Array
                                             (
                                                     [kid] => 2kmUXi6iS9r06BzWst2rJGwwXvZSfwRouR1u8ezSpfA
                                                     [kty] => RSA
                                                     [use] => sig
                                                     [n] => wTc569WwiJU6QBPgnSu8rtQTt4Gq-r0X3COcWNIc_wEhlMX3NjQI5ybNvII_D3PCLA_E0hkxKDKlzQ0zx2z8fM
                                                     [e] => AQAB
                                   [1] => Array
                                                      [kty] => EC
                                                     [crv] => P-256
                                                     [y] => 1iZntic5EqwhkGK9h6AVf7tkcEmuukv1itCbh45xZtc
                                                     [use] => sig
                                                     [x] => XvHoQhsv8v48QL_L86wBYUsywzXf6Uv1790g3zy7LYc
                                                     [kid] => 40bcVvr2xZb0WG3sRpKBc7bgPm8-_4QeQ9cPeURh6C4
                          )
        )
[https://sunet.se/op] => Array
                  [keys] => Array
                          (
                                   [0] => Array
                                                      [kid] => 9P6xnUZKD2yuXnGox-_iSNiDuIIatqaJFDfrX38SbIc
                                                     [kty] => RSA
                                                     [use] => sig
                                                     [n] => 0LxoAzZM47uGLaAv7Hov5yngWVBBYKCSU_Ht3LEuj_L2Dt7iKHoz5QabKvpHgy7IxiJh0Yw3W5weftJuHx6VfT
                                                     [e] => AQAB
                                   [1] => Array
                                                      [kty] => EC
                                                      [crv] => P-256
                                                      [y] => w4ysBsoCPy4qvoCU7fIrqvbwnrlvQeqoJAL-Xwj1c1c
                                                     [use] => sig
                                                      [x] => JWVPRv1t9Iu_nyhWUsmUILH-ROd5kOuEm97Tv_EJ2pg
                                                     [kid] => u6p5d34mmzCHqYwakPrALsAPR1nVsHQuNuVyw8b6KsA
                          )
[https://cs.example.org] => Array
         (
                  [keys] => Array
                                   [0] => Arrav
                                                     [kid] => Nv2rQSMU1rduk1d6E-0Rqfsz tY4xzlH146R6QLC7Pk
                                                     [kty] => RSA
                                                     [use] => sig
                                                      \verb|[n]| >> 10V0AC5Gk_gFIh1lz5fz08Wto5-GzLZ9x45I1LSZBZHprCX-mwNzZGfoBocGpGfw3DYmFMzibHD6NNqThb0M7l | 10V0AC5Gk_gFIh1lz5fz08Wto5-GzLZ9x45Fz08Wto5-GzLZ9x45Fz08Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9x45Wto5-GzLZ9
                                                     [e] => AOAB
                                   [1] => Array
                                             (
                                                     [kty] => EC
                                                     [crv] => P-256
                                                      [y] => NsEEUZe_etJ8G6Qbvnoa7eFfhjpkVYJNekyHnqevw44
                                                     [use] => sig
                                                     [x] => uxcbQikJyvN1zqbniC9vRiccrT0Lz4h1IN2S4KNU-1Y
```

```
[kid] => gexCBYBxSIxpP-QtsV1LkG1m5AeFbP-Q0awKWR_5vlk
                            )
              )
          [jti] => c1a8a5afab3248f0806bbaa6ea84d501
          [exp] => 1505310145
          [kid] => cZmZTgNZW88HA5E4A4rE2v6o0f21Jayl03_JBG8jaLM
          [iss] => https://localhost
)
=======Verify (Keys Bundle) signature result========
Array
(
   [iat] => 1505310145
   [bundle] => Array
       (
          [https://www.feide.no] => Array
                 [keys] => Array
                         [0] => Array
                            (
                                [kid] => rYMbPoOm8coyar99IuueCmw0zj-Jfw_iUixIPJXVSb4
                               [kty] => RSA
                                [use] => sig
                               [e] => AQAB
                         [1] => Array
                            (
                               [kty] => EC
                               [crv] => P-256
                               [y] => FvnRLMiWCIeQ0tQ_IIwPqfoTpVAnUJ1MWucU6jtRWnA
                               [use] => sig
                               [x] => 5t2Aar9dGt6DhcQHH6h-VZRwMkF6lLXLDCo7LInERL0
                               [kid] => D83wp7iqD74HCE8oA6AlyHW6vVJvjMd1j_NgLabvags
                     )
              )
          [https://example.org/op] => Array
                 [keys] => Array
                         [0] => Array
                            (
                                [kid] => j2HoeEz5f4U8KkWW1a6tJ5SXJCfxOTTN6vL7jE7ZpJ4
                                [kty] => RSA
                                [use] => sig
                               [n] => t0L_IJGiE6McN0f16GeR5ZiR8W0jb_pzJErQtRm3xpsbHRrBuYSLYM0ea4R-eZvU8X9G7J9qVeYZ6ILZ2pS2TSBRrKYWS7
                               [e] => AQAB
                            )
                         [1] => Array
                            (
                                [kty] => EC
                                [crv] => P-256
                               [y] => CFSdvlmJkhLq1TMkmw8slkfWzHhJqlcdqnM7a-geBuc
                                [use] => sig
                               [x] => 1sEpNSicJNolci4TBJ1bTCW-zmKSPuKB6irwhHtFopE
                               [kid] => c5DIPFhC3LmNoiwAx1Qu-La3tvFbQ4uZq_VbrTp0WbM
                    )
          [https://example.com] => Array
              (
                 [keys] => Array
                         [0] => Array
                            (
                               [kid] => 7TnWOKF0Znlsf-ok08w7oFL474A4Iux0QqwSIlz3MS4
                               [kty] => RSA
                               [use] => sig
                               [e] => AQAB
                            )
                         [1] => Array
```

```
[kty] => EC
                       [crv] => P-256
                       [y] => iahOyb361kjkx9jW82dKiPBbzmlbdhOGrw5deoruMIA
                      [use] => sig
                      [x] => _vTc68Qzjye3BAjBxuP3AwCPWDAK2jKM_7dvoFZgwPQ
                      [kid] => OAP6u4sbyKjnaAl3vFdAAW0xZln5LYk_RYfCJgAQTZc
           )
   )
[https://example.org] => Array
       [keys] => Array
               [0] => Array
                       [kid] => TOs-IBoRv224E8-Xhs7IfgBwwubT9rEf4JRvDE5eIOo
                       [kty] => RSA
                      [use] => sig
                      [e] => AQAB
               [1] => Array
                   (
                      [kty] => EC
                       [crv] => P-256
                       [y] => flnionL1n7Fsl4RY1iae_Y1430cA27dWE8njPZZC_1s
                      [use] => sig
                      [x] => C_kXLgdamJp3NF58jGebeCZ505-pKY-4JoWutT_RvVM
                      [kid] => a5QEWqF_nv4lj3H_zhq2pIpUiY4qDftamnXneS2yVp0
           )
[https://sunet.se] => Array
   (
       [keys] => Array
               [0] => Array
                   (
                      [kid] => g4WMxVrlEHVN1tLzbKMWGn75ZOcCUlfeZThW-wh27cM
                      [kty] => RSA
                      [use] => sig
                      [n] => vl8QjGp2yUZLbsCGcXBNLxHOrew24wuWER3pGW036YJYn_NT0RP5zQGBzs48zu-YIGKgXD8kMMRzQB0LzQY_4ViTJI9nrZ
                      [e] => AQAB
               [1] => Array
                   (
                       [kty] => EC
                      [crv] => P-256
                       [y] => k-lU9W8-sMjIlQMVWSnj5jLTnRU4LdVN73xoKK1ZdYk
                      [use] => sig
                       [x] => TQGk8QFQJrmqS9AbRsu4kQbvjQZftET3RmM_RVWbqPM
                      [kid] => BEfveNQSb6SasVUFKcR-vE9p43axF3zMb00YiUt4uHY
           )
[https://uninett.no] => Array
       [keys] => Array
               [0] => Array
                   (
                       [kid] => Gjtc0fNcG3CwapnZ_m_Z3aurjkRBZFIGaI6wSrwL1_E
                      [kty] => RSA
                      [use] => sig
                      [n] => rsvdjcxV276KdcorteRGSdY_mAISnWQql7iJ-M9EWrPVrqvtiP5bAjEzwnY8K0zQdj7Cjz718lAWh5QpNvY3t0gewwMpz5
                      [e] => AQAB
                  )
               [1] => Array
                   (
                      [kty] => EC
                       [crv] => P-256
                       [y] => V9nYCc0ra7STdEsgYUmK3b-lDkr-n71riY-551Y-VkQ
                      [use] => sig
                      [x] => VeGzY46M84wp5rsv98-sQnb4HQDvPUTF4G8v5Q550tU
                      [kid] => TZI8IKS12a5SGkA4bZpUxU46nR8sllhp-J9BefkLRtg
                  )
           )
```

```
[https://surfnet.nl/oidc] => Array
        [keys] => Array
                [0] => Array
                    (
                        [kid] => EtVYnlf5DKTAnHwgj3s71s5sBmJX6kJzwMUfGP6o3nI
                        [kty] => RSA
                        [use] => sig
                        [n] => uGOu8IvoykVzbvvnJWMILAfK0jR9C0YLFSFI-g0bWl3CZ5jwZTd2wFOM0S6Q2sKGMCmgIs3kdTWu2zPSTFSYDdad_oASb4
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [y] => V4Rqiu0BUwQkCbdvTn1bwRQ0lI80heoTCItl0ZedSN0
                        [use] => sig
                        [x] => UQ_AzqvES9MVWaGkh1q_JPJfBS7NR8a-hcusSCyAKCg
                        [kid] => iGaT7pJkGjIpr2_-QpoiGdYXXuudl1BZeL7u8Rm4ZDs
            )
   )
[https://swamid.sunet.se] => Array
        [keys] => Array
            (
                [0] => Array
                    (
                        [kid] => ihRpWzYYx6yP_Ny30GoCmBxjl9K1ycs_SrSEVwP8eD8
                        [kty] => RSA
                        [use] => sig
                        [n] => ntIVVOM62XOLscH1C8BfAbr2BL67sW1eWEGokGDUabEqsvAKzZCiQfYMvpnhou6kXhtxXOMttzchGpI2rflElWd581GfyX
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [y] => YjeDuiwhxcIHvzS61tUNvyGWpn-PvD0s-E2dXndVmv0
                        [use] => sig
                        [x] => RW5AVta_Jm4CMWEU71rH3e-Fwfmu2oN9poF6jhtJ5XY
                        [kid] => 6VX4aRYeuBpNw-S4ovg1NXs45YiTVDwGs82Pkl3I43I
           )
   )
[https://bogus.example.org] => Array
        [keys] => Array
                [0] => Array
                    (
                        [kid] => jPGFpGx0U476u5f0bGmu0VM0xBCdPV4QXPW7weukKlA
                        [kty] => RSA
                        [use] => sig
                        [n] => uWlJPVwskaHu2m3u5PL7Kpk5xZN2uSv9GvR-yWsY905ieAb902S08WUfNZ4uH1zVj02CUx2wl0ZdlbPYvW_wrQ_pzcJ2iY
                        [e] => AQAB
                [1] => Array
                    (
                        [kty] => EC
                        [crv] => P-256
                        [y] => Gb2BWd2bR5ca61BGlmnt7CU3tj8kOo7uBN-Lm2zgmoo
                        [use] => sig
                        [x] => xX9lrKm3sKRPERmxWijqxD5VXcDT-hblZk5jajbMR9w
                        [kid] => bwdViYIJTCQD_nme26iAv5pgBNBUEsQ220RnoAgmE1U
           )
   )
[https://edugain.com] => Array
        [keys] => Array
                [0] => Array
                        [kid] => 2kmUXi6jS9rQ6BzWst2rJGwwXvZSfwRouR1u8ezSpfA
                        [kty] => RSA
                        [use] => sig
                        [n] => wTc569WwiJU6QBPgnSu8rtQTt4Gq-rOX3COcWNIc_wEhlMX3NjQI5ybNvII_D3PCLA_E0hkxKDKlzQ0zx2z8fMrX2XqS8m
```

)

```
[1] => Array
                                                                   (
                                                                            [kty] => EC
                                                                            [crv] => P-256
                                                                           [y] => 1iZntic5EqwhkGK9h6AVf7tkcEmuukv1itCbh45xZtc
                                                                           [use] => sig
                                                                           [x] => XvHoQhsv8v48QL_L86wBYUsywzXf6Uv1790g3zy7LYc
                                                                           [kid] => 40bcVvr2xZb0WG3sRpKBc7bgPm8-_4QeQ9cPeURh6C4
                                                 )
                                 )
                         [https://sunet.se/op] => Array
                                          [keys] => Array
                                                           [0] => Array
                                                                   (
                                                                            [kid] => 9P6xnUZKD2yuXnGox-_iSNiDuIIatqaJFDfrX38SbIc
                                                                           [kty] => RSA
                                                                            [use] => sig
                                                                           [n] => 0LxoAzZM47uGLaAv7Hov5yngWVBBYKCSU_Ht3LEuj_L2Dt7iKHoz5QabKvpHgy7IxiJh0Yw3W5weftJuHx6VfTo6GpIKb3
                                                                           [e] => AQAB
                                                                   )
                                                           [1] => Array
                                                                   (
                                                                            [kty] => EC
                                                                            [crv] => P-256
                                                                           [y] => w4ysBsoCPy4qvoCU7fIrqvbwnrlvQeqoJAL-Xwj1c1c
                                                                            [use] => sig
                                                                           [x] => JWVPRv1t9Iu_nyhWUsmUILH-ROd5kOuEm97Tv_EJ2pg
                                                                           [kid] => u6p5d34mmzCHqYwakPrALsAPR1nVsHQuNuVyw8b6KsA
                                                 )
                                 )
                         [https://cs.example.org] => Array
                                          [keys] => Array
                                                           [0] => Array
                                                                   (
                                                                           [kid] => Nv2rQSMU1rduk1d6E-0Rqfsz_tY4xzlH146R6QLC7Pk
                                                                           [kty] => RSA
                                                                           [use] => sig
                                                                            [n] \implies 10 VOAC5 Gk\_gFIh1lz5 fz08 Wto5-GzLZ9 x45 IILSZBZ HprCX-mwNzZGfoBocGpGfw3DYmFMzibHD6NNqThb0M7luZhZNUrs All Statement of the control o
                                                                           [e] => AQAB
                                                                  )
                                                           [1] => Array
                                                                            [kty] => EC
                                                                            [crv] => P-256
                                                                            [y] => NsEEUZe_etJ8G6Qbvnoa7eFfhjpkVYJNekyHnqevw44
                                                                            [use] => sig
                                                                           [x] => uxcbQikJyvN1zqbniC9vRiccrT0Lz4h1IN2S4KNU-1Y
                                                                            [kid] => gexCBYBxSIxpP-QtsV1LkG1m5AeFbP-Q0awKWR_5vlk
                                                  )
                                 )
        [jti] => cla8a5afab3248f0806bbaa6ea84d501
        [exp] => 1505310145
        [kid] => cZmZTgNZW88HA5E4A4rE2v6o0f21Jayl03_JBG8jaLM
        [iss] => https://localhost
                              Metadata Statements=====
    =>>> Verified MS index: https://swamid.sunet.se <<<=
Jose\Object\JWS Object
        [is_payload_detached:Jose\Object\JWS:private] =>
        [encoded_payload:Jose\Object\JWS:private] => eyJpZF90b2tlbl9lbmNyeXB0aW9uX2FsZ192YWx1ZXNfc3VwcG9ydGVkIjogWyJSU0ExXzUiLCAiUlNBLU9BRVAi
        [signatures:Jose\Object\JWS:private] => Array
                         [0] => Jose\Object\Signature Object
                                 (
                                          [encoded protected headers:Jose\Object\Signature:private] => evJhbGciOiJSUzI1NiIsImtpZCI6ImloUnBXellZeDZ5UF9OeTNPR29D
                                          [protected headers:Jose\Object\Signature:private] => Array
```

```
[alg] => RS256
                      [kid] => ihRpWzYYx6yP_Ny30GoCmBxjl9K1ycs_SrSEVwP8eD8
               [headers:Jose\Object\Signature:private] => Array
               [signature_key:Jose\Object\Signature:private] =>
           )
   )
[payload:Jose\Object\JWS:private] => Array
       [id_token_encryption_alg_values_supported] => Array
               [0] => RSA1_5
               [1] => RSA-OAEP
               [2] => RSA-OAEP-256
               [3] => A128KW
               [4] => A192KW
               [5] => A256KW
               [6] => ECDH-ES
               [7] => ECDH-ES+A128KW
               [8] => ECDH-ES+A192KW
               [9] => ECDH-ES+A256KW
       [id_token_encryption_enc_values_supported] => Array
               [0] => A128CBC-HS256
               [1] => A192CBC-HS384
               [2] => A256CBC-HS512
               [3] => A128GCM
              [4] => A192GCM
              [5] => A256GCM
       [token_endpoint_auth_methods_supported] => Array
               [0] => client_secret_post
               [1] => client_secret_basic
               [2] => client secret iwt
              [3] => private_key_jwt
       [userinfo_signing_alg_values_supported] => Array
               [0] => RS256
               [1] => RS384
               [2] => RS512
               [3] => ES256
               [4] => ES384
               [5] => ES512
               [6] => HS256
               [7] => HS384
               [8] => HS512
               [9] => PS256
               [10] => PS384
              [11] => PS512
              [12] => none
       [response_types_supported] => Array
               [0] => code
               [1] => token
               [2] => id_token
               [3] => code token
              [4] => code id_token
               [5] => id token token
              [6] => code token id_token
              [7] => none
       [token_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/token
       [jwks_uri] => https://agaton-sax.com:8080/static/jwks_briKgMiZu8z4LoaZ.json
       [token_endpoint_auth_signing_alg_values_supported] => Array
               [0] => RS256
              [1] => RS384
               [2] => RS512
               [3] => ES256
               [4] => ES384
               [5] => ES512
               [6] => HS256
               [7] => HS384
               [8] => HS512
```

```
[9] => PS256
        [10] => PS384
        [11] => PS512
[userinfo_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/userinfo
[scopes_supported] => Array
   (
        [0] => profile
        [1] => address
        [2] => email
        [3] => offline_access
        [4] => openid
        [5] => phone
        [6] => openid
   )
[claim_types_supported] => Array
        [0] => normal
        [1] => aggregated
        [2] => distributed
   )
[request_object_encryption_alg_values_supported] => Array
        [0] => RSA1 5
        [1] => RSA-OAEP
        [2] => RSA-OAEP-256
        [3] => A128KW
        [4] => A192KW
        [5] => A256KW
        [6] => ECDH-ES
        [7] => ECDH-ES+A128KW
        [8] => ECDH-ES+A192KW
        [9] => ECDH-ES+A256KW
[kid] => ihRpWzYYx6yP_Ny30GoCmBxjl9K1ycs_SrSEVwP8eD8
[grant_types_supported] => Array
   (
        [0] => authorization_code
        [1] => implicit
        [2] => urn:ietf:params:oauth:grant-type:jwt-bearer
        [3] => refresh_token
[iss] => https://swamid.sunet.se
[userinfo_encryption_alg_values_supported] => Array
   (
        [0] => RSA1 5
        [1] => RSA-OAEP
        [2] => RSA-OAEP-256
        [3] => A128KW
        [4] => A192KW
        [5] => A256KW
        [6] => ECDH-ES
        [7] => ECDH-ES+A128KW
        [8] => ECDH-ES+A192KW
        [9] => ECDH-ES+A256KW
[response_modes_supported] => Array
        [0] => query
        [1] => fragment
        [2] => form_post
[acr_values_supported] => Array
   (
        [0] => PASSWORD
[end_session_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/end_session
[claims_supported] => Array
   (
        [0] => zoneinfo
        [1] => address
        [2] => email
        [3] => family_name
        [4] => locale
        [5] => phone_number
        [6] => website
        [7] => preferred_username
        [8] => sub
        [9] => name
        [10] => birthdate
        [11] => given_name
        [12] => profile
        [13] => phone_number_verified
        [14] => middle_name
```

```
[15] => email_verified
                   [16] => picture
                   [17] => updated_at
                   [18] => gender
                   [19] => nickname
[request_parameter_supported] => 1
[request_object_signing_alg_values_supported] => Array
                   [0] => RS256
                   [1] => RS384
                   [2] => RS512
                  [3] => ES256
                  [4] => ES384
                  [5] => ES512
                   [6] => HS256
                  [7] => HS384
                   [8] => HS512
                   [9] => PS256
                   [10] => PS384
                  [11] => PS512
                  [12] => none
         )
[exp] => 1505313745
[registration_endpoint] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0/registration
[subject_types_supported] => Array
                   [0] => public
                   [1] => pairwise
         )
[request_uri_parameter_supported] => 1
[id_token_signing_alg_values_supported] => Array
                   [0] => RS256
                  [1] => RS384
                  [2] => RS512
                  [3] => ES256
                  [4] => ES384
                   [5] => ES512
                  [6] => HS256
                   [7] => HS384
                  [8] => HS512
                   [9] => PS256
                  [10] => PS384
                  [11] => PS512
                  [12] => none
         )
[require_request_uri_registration] => 1
[iat] => 1505310145
[issuer] => https://agaton-sax.com:8080/oidcfed-lib-php/rp-sms-single-l0
[signing_keys] => Array
         (
                  [keys] => Array
                            (
                                      [0] => Array
                                                         [use] => sig
                                                         [kty] => RSA
                                                         [kid] => ff_jllMx27uSQRDfeDCA4xd2lj4lD1p7UzPyVTiEBSM
                                                          [n] \implies y CHEVhGXTf0f2laMhwzeCFpDk-qU-ry8Sc7CYIF9Hs0rVaKcGiTeBcHwSB8JCqIXBUEK4Kwtx-C1z-SsFzPXV76LJI0T\_z \\ [n] \implies y CHEVHGXTf0f2laMhwzeCFpDk-qU-ry8Sc7CYIF9Hs0rVaKcGiTeBcHwSB8JCqIXBUEK4Kwtx-C1z-SsFzPXV76LJI0T_z \\ [n] \implies y CHEVHGYTf0f2laMhwzeCFpDk-qU-ry8Sc7CYIF9Hs0rVaKcGiTeBcHwSB8JCqIXBUEK4KWtx-C1z-SsFzPXV76LJI0T_z \\ [n] \implies y CHEVHGYTf0f2laMhwzeCFpDk-qU-ry8Sc7CYIF9Hs0rVaKcGiTeBcHwSB8J
                                                         [e] => AQAB
                                      [1] => Array
                                               (
                                                         [kty] => EC
                                                         [crv] => P-256
                                                         [y] => PKMVI3ZinhRn7kxYKSOQJ5Ysgdsvz0Lj9GqxjGXYm0I
                                                         [kid] => ahXP-3olqapwnDJswKGU5Gh3GuLFMvcEeJpT6GDKFPU
                                                         [x] => M-nCLA1oyegN2_CFkFLhb-32CVggObH8zOeIPsfyBpA
                                                         [use] => sig
                           )
         )
[version] => 3.0
[request_object_encryption_enc_values_supported] => Array
         (
                   [0] => A128CBC-HS256
                  [1] => A192CBC-HS384
                   [2] => A256CBC-HS512
                   [3] => A128GCM
                   [4] => A192GCM
                   [5] => A256GCM
```

=====Register client=====

Variable: path_dataDir_real:

/home/constantin/public_html/oidcfed/github/oidcfed_dataGetting or prepare certificate to use with OIDCFED Client...

----BEGIN CERTIFICATE----

 ${\tt MIIFVTCCAz2gAwIBAgIBADANBgkqhkiG9w0BAQUFADBFMQswCQYDVQQGEwJBVTET}$ MBEGA1UECAwKU29tZS1TdGF0ZTEhMB8GA1UECgwYSW50ZXJuZXQgV2lkZ2l0cyBQ dHkgTHRkMB4XDTE3MDkxMzEzNDIyNloXDTE4MDkxMzEzNDIyNlowRTELMAkGA1UE ${\tt BhMCQVUxEzARBgNVBAgMClNvbWUtU3RhdGUxITAfBgNVBAoMGEludGVybmV0IFdp}$ ZGdpdHMgUHR5IEx0ZDCCAiIwDQYJKoZIhvcNAQEBBQADggIPADCCAgoCggIBAML3Dc0E41KofhMPYnEbVwUD90anxgHQly6wxwAjkLJYSL0f8nOG1tFNCbfa9mchurAB m/P/ZmUlA8qiOaJFYODdljKYM+qb5k5w67tLN0wvawv1P3T7/LMoLClJDqFnt3D9 EabWh4VyLPFckxFa78h07lhkR8rwpA3TkEH6J3ePeKMYuX8vshkklqnX9Px3JBFt VB+Vz0uABKrRJCc8n49iJ5VPClAwlddgjPWfwupU1wcUvLekZ0MN+ikyXDabcgAX J60CwEM41Zwfk05iKNv82v4CeBvC1yHMnGqDUsYToOTduffEn+gqU3rKgx4tkiZK a44jnBW0G5XFUPA6vvhtd5l9gdfQHbWr6X/MEqCSkVYTb+e9Thxs8+P2OA/MA/oW CZxqChn45NtcfFsKhPvA0YeWVPp66zatg8yOk7HUtgnfSOomJtOYeKK96HM3LPwo QNhVoff//CZtqNi88pUlQWbXpUHMaGp9CnyhUEyPA8qCA1ekuIL6nxagas38AGkx EP9nDhfHiLhbPnsSqdrdm9Q5I9nBAwZSUd0zcJT8fG1DsGx7v5szRLsYZFmS0aTe ckqTNG9o289JGalc7WixnHUlqat9B8P7Zh+xEWovVIprRd2eRkc0gE3vfoJa/N7V /G3vy8FfG3lGIHODISc9D17lTlAueoG6f3VyGUNJAgMBAAGjUDBOMB0GA1UdDgQW BBQtGis+Qo/PKWu0mySGBEQj8QNnKzAfBgNVHSMEGDAWgBQtGis+Qo/PKWu0mySG BEQ;8QNnKzAMBgNVHRMEBTADAQH/MA0GCSqGSIb3DQEBBQUAA4ICAQA8s6KdNBPP xwVXc8CDM1QNf62G5ljvSBRbUpxkFhh6vy8BV1UhVPBi9vjLYqmlVXKJxD1r5C87 $9 \\ \text{Tz} \\ 9 \\ \text{T} \\ \text{P} \\ \text{S} \\ \text{WgAYmH53} \\ \text{dr} \\ 2 \\ \text{kYjg} \\ \text{+} \\ 4 \\ \text{SqLmFlznpm7A} \\ \text{+} \\ 8 \\ \text{JV72VGkXRPv4xYo/3GUDXhg} \\ \text{Temporal of the properties o$ m1RJyFaJdjcq+P9AOktm7ZoBuE/e/Kwu6P4mYwyR5YZs2UBVioi5eyPav2y5HbQb CrxosoAxT2ZV0D0PzEJWw1aQvFeycXG4Lb/DlelUWdLgPXkjxcq9DxZkJqcHUm4l foaqyEJFZPXvccekhSBVKrps9w4Bo3c+hXGYPRxuoOV61IfBHuO2gVD4nsutrC5b eUx9492mG9V7s28RHxBdH4db75JjWkH2mmF33vqoT2hb+EdeABqmH637iSucnY+e RNmGxkbEhA8MwaCCzGb3/C5h6Ga0SrgDYEe3S4wKhVKXGHMOSQrsKvoP5584lVWtqS6D6rgQ+yvK4oqEU7KwjqTjeeYII0gVuzRKnjcLfw5p4lqe5eB+ibDh01Vf0DzR $\verb"NDPZ7mCHN9kZW29nJehd+mC9xL8ewgLe9ThJZ9UpREr3oIqy9HNwkOgBaqdTf0ig"$ $\label{thm:thq+xizofnMT} HnmTHq+XIzOFnMTYqtifNEqxsRpWAMt+OgoFZcXRjhSHsOPNdL47f70XeNSECY2C$ pfzHH6lVv2vkZPxN9fI1wq0ny0IuJ7BgtQ= -END CERTIFICATE--

Here we have registered client with ID: QM3J2p03xUfC

And client secret: 1f78b399d7ce2b40175359839bc55bb7d81aa999a0e111e8a6acb760