



Kuder Single Sign On (SSO) Integration

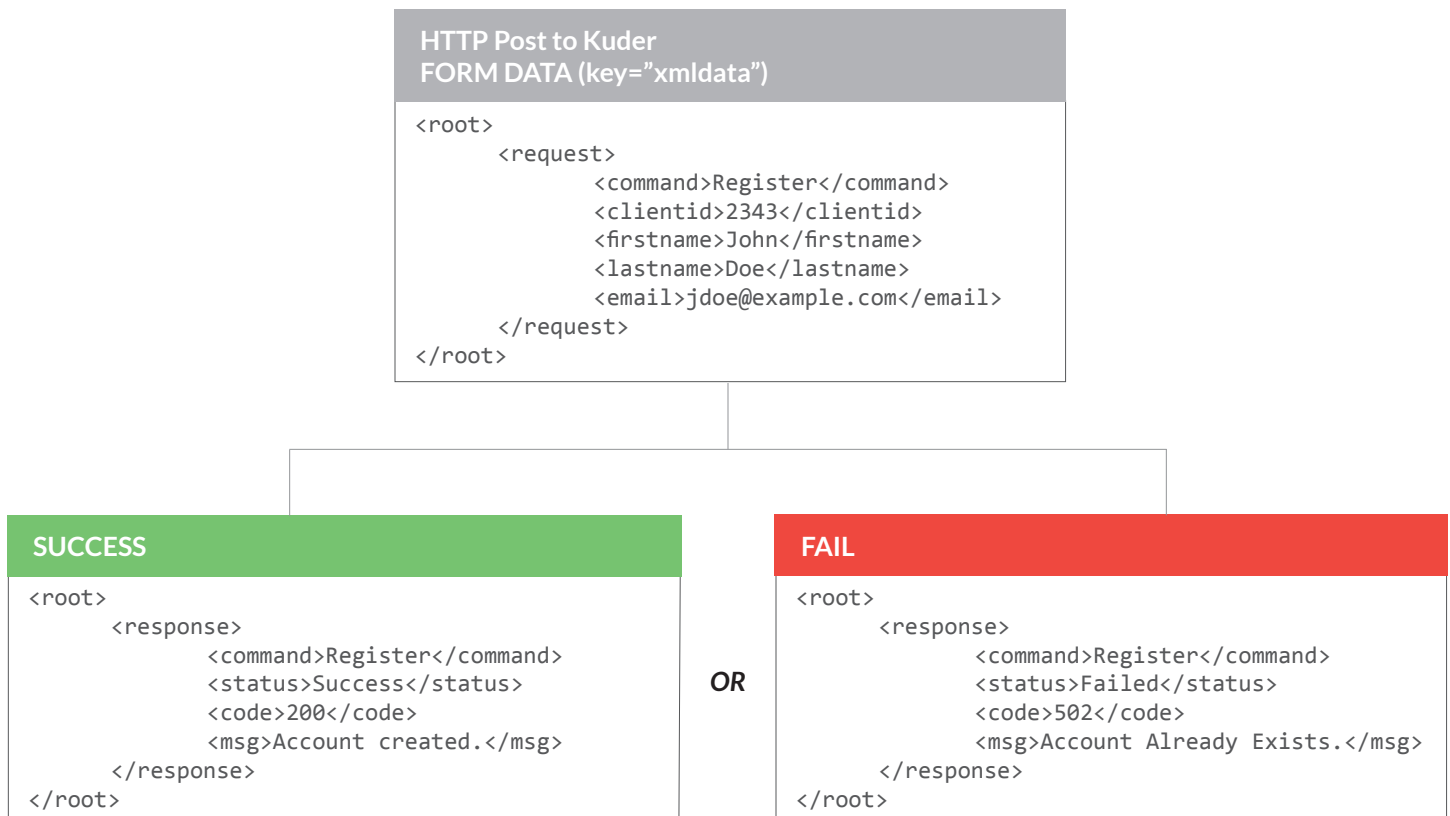
The process of accessing Kuder using SSO is broken in to two pieces. The first is a “Registration” action where the client will send Kuder as much information available for the user. At a minimum, the “clientid” is required and is assumed to be a unique identifier for this user on the client system. We will then create a user within Kuder tied to the clientid contained in the registration request. The response from Kuder indicates success or failure.

The second action is the “Login” action. The client will send Kuder the user’s clientid. If that user is registered, then the response will contain a URL where the user may be redirected to access their Kuder account.

The first time the user logs in to Kuder, if their registration information is not complete, they will be shown a screen where they can complete the registration. After that, the registration screen will not appear.

Sample XML

Registration API



Login API (submitted after registration is verified)

HTTP Post to Kuder FORM DATA (key="xmldata")

```
<root>
  <request>
    <command>Login</command>
    <clientid>2343</clientid>
  </request>
</root>
```

Kuder Responds with an xml document.

```
<root>
  <response>
    <command>Login</command>
    <status>Success</status>
    <code>200</code>
    <msg>Login Token Created</msg>
    <tokenurl>https://app.kuder.com/
masterweb/sso.aspx?token=93kdsi4
94kdf</tokenurl>
  </response>
</root>
```

OR

Failed - Account Not Found

```
<root>
  <response>
    <command>Login</command>
    <status>Failed</status>
    <code>200</code>
    <msg>Account Not Found</msg>
  </response>
</root>
```

OR

Failed - Account Expired

```
<root>
  <response>
    <command>Login</command>
    <status>Failed</status>
    <code>200</code>
    <msg>Account Expired</msg>
  </response>
</root>
```

Client's Browser will then be redirected to the tokenurl provided by Kuder.

Authentication

HTTP Request Headers for Message Authentication

Kuder will supply the client with a shared secret, in addition to the ID that identifies the client to Kuder (e.g.: URLPassword, PartnerID). The shared secret would then be used to add the following HTTP request headers:

X-Timestamp: {Timestamp}

X-MAC: {MessageAuthenticationCode}

The "Timestamp" is the date/time of the request in ISO8601 format down to seconds.

The "MessageAuthenticationCode" is generated as follows:

Combine the Timestamp used for X-Timestamp with a shared secret provided by Kuder and use this as the key for the HMAC-SHA1 algorithm. This should then be used to encrypt the value of the xmldata variable being posted. The output of this should be Base64-encoded and the result used for "MessageAuthenticationCode".

Example:

Shared secret is "k29dx", the current timestamp is "2008-11-10T13:05:22Z", and the xmldata is:

```
<root>
  <request>
    <command>Register</command>
    <customer>BusinessAccess</customer>
    <clientid>2343</clientid>
    <firstname>John</firstname>
    <lastname>Doe</lastname>
    <email>jdoe@example.com</email>
  </request>
</root>
```

Kuder will use:

2008-11-10T13:05:22Zk29dx

as the key for the HMAC-SHA1 algorithm to encrypt the xmldata.

Let's say that the base-64-encoded result is:

RK5AyVuYkMVioGxrxUFYAWPJdw=

Therefore, the following HTTP headers would be added to the HTTP request:

X-Timestamp: 2008-11-10T13:05:22Z

X-MAC: RK5AyVuYkMVioGxrxUFYAWPJdw=

Registration Parameters

If the user has not yet been linked to a Kuder account, the following parameters may be added which will simplify the process of creating an account in Kuder if needed. These are all optional, if they are not provided, then the registration page will not be pre-filled with these values. The user will need to update them manually within the system.

PARAMETER NAME	TYPE	COMMENT
UserName	Alphanumeric	The Desired username, if it is not available or invalid, Kuder will leave this field empty.
FirstName	Alphanumeric	
MiddleName	Alphanumeric	
LastName	Alphanumeric	
Gender	M or F	
DOB	Date	
EdLevel	Alphanumeric	
Address	Alphanumeric	
Address2	Alphanumeric	
City	Alphanumeric	
State	Alphanumeric	
Country	Alphanumeric	
ZIP	Integer (5 digits)	
Phone	Alphanumeric	
Cell Phone	Alphanumeric	
Cell Carrier	Alphanumeric	
TextFlag	Y or N	Y indicates user is willing to receive text messages to cell phone.
Email	Alphanumeric	
EmailFlag	Y or N	Y indicates user is NOT willing to receive e-mail other than system generated (such as password resets).