

# Class SigUtils Python

This class is a utility class with static methods for calculating and validating cryptographic signatures.

## Method Summary

Method	Description
<pre>static Boolean <b>validateUserSignature</b>(     string UID,     string timestamp,     string secret,     string signature )</pre>	<p>Use this method to verify the authenticity of a <a href="#">socialize.getUserInfo</a> API method response, to make sure it is in fact originating from Gigya, and prevent fraud. The <a href="#">socialize.getUserInfo</a> API method response data include the following fields: UID, signatureTimestamp (a timestamp) and UIDSignature (a cryptographic signature).</p> <p>Pass these fields as the corresponding parameters of the <code>validateUserSignature</code> method, along with your partner's "<b>Secret Key</b>". Your secret key (provided in BASE64 encoding) is located at the bottom of the <a href="#">Dashboard</a> section on Gigya's website.</p> <p>The return value of the method indicates if the signature is valid (thus, originating from Gigya) or not.</p> <p>If you do not have access to the Partner secret, you can use <a href="#">exchangeUIDSignature</a> to generate a new UIDSignature that is able to be verified with a userKey secret or application secret instead.</p> <p>The return value of the method indicates if the signature is valid (thus, originating from Gigya) or not.</p> <p>Properties (standard):</p> <ul style="list-style-type: none"><li>• <b>UID</b> : User's UID</li><li>• <b>timestamp</b> : signatureTimestamp</li><li>• <b>secret</b> : Partner secret</li><li>• <b>signature</b> : UIDSignature</li></ul> <p>Properties (when using <code>accounts.exchangeUIDSignature</code>):</p> <ul style="list-style-type: none"><li>• <b>UID</b> : User's UID</li><li>• <b>timestamp</b> : signatureTimestamp returned from <code>exchangeUIDSignature</code></li><li>• <b>secret</b> : The userKey secret or application secret used with <code>exchangeUIDSignature</code></li><li>• <b>signature</b> : The UIDSignature returned from <code>exchangeUIDSignature</code></li></ul> <div style="border: 1px solid red; padding: 5px;"><p><b>validateUserSignature</b> is only necessary when processing client-to-server calls (where the data in question was received from Gigya to a client and then passed from that client to your server). Server-to-server calls made directly between your server and Gigya do not receive the UIDSignature or signatureTimestamp properties.</p></div>
<pre>static Boolean <b>validateFriendSignature</b>(     string UID,     string timestamp,     string friendUID,     string secret,     string signature )</pre>	<p>Use this method to verify the authenticity of a <a href="#">socialize.getFriendsInfo</a> API method response, to make sure it is in fact originating from Gigya, and prevent fraud. The <a href="#">socialize.getFriendsInfo</a> API method response data include the following fields: UID, signatureTimestamp (a timestamp) and friendshipSignature (a cryptographic signature).</p> <p>Pass these fields as the corresponding parameters of the <code>validateUserSignature</code> method, along with your partner's "<b>Secret Key</b>". Your secret key (provided in BASE64 encoding) is located at the bottom of the <a href="#">Dashboard</a> section on Gigya's website.</p> <p>The return value of the method indicates if the signature is valid (thus, originating from Gigya) or not.</p>

static string	<b>calcSignature</b> ( string baseString, string key )	This is a utility method for generating a HMAC-SHA1 signature.
static string	<b>getDynamicSessionSignature</b> ( string gltCookie, int timeoutInSeconds, string secret )	This is a utility method for generating the cookie value of a dynamic session expiration cookie. Use this method as part of implementing dynamic control over login session expiration, in conjunction with assigning the value '-1' to the <b>sessionExpiration</b> parameter of the client side login methods (i.e. <code>showLoginUI / login</code> ). Learn more in the <a href="#">Control Session Expiration</a> guide. This method's parameters: <ul style="list-style-type: none"> <li>• gltCookie - the login token received from Gigya after successful Login. Gigya stores the token in a cookie named: <b>"glt_" +</b></li> <li>• timeoutInSeconds - how many seconds until session expiration. For example, if you would like the session to expire in 5 minutes set this parameter to 300.</li> <li>• secret - your Gigya <b>"Secret Key"</b>, is provided, in BASE64 encoding, at the bottom of the <a href="#">Dashboard</a> page on the Gigya's website.</li> </ul>
static string	<b>getDynamicSessionSignatureUserSigned</b> ( string gltCookie, int timeoutInSeconds, string userKey, string secret )	This utility is the same as above, <b>getDynamicSessionSignature</b> , however, allows the session cookie to be generated with an application key or user key ( <b>\$userKey</b> ) and the corresponding application key or user key secret, instead of requiring the partner's secret. This is useful when using <a href="#">GConnectors</a> or for 3rd party applications.