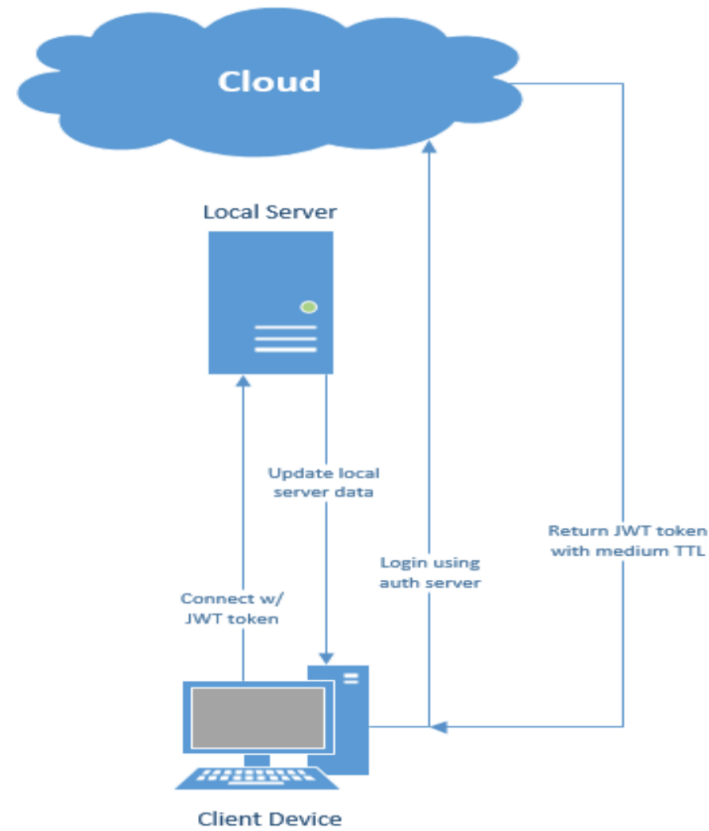


JWT Introduction  
by  
Michael Claudius

# JWT Authentication



# JWT Structure

<b>Header</b>	<pre>{   "alg": "HS256",   "typ": "JWT" }</pre>	<p>Identifies which algorithm is used to generate the signature</p> <p>HS256 indicates that this token is signed using HMAC-SHA256.</p> <p>Typical cryptographic algorithms used are <a href="#">HMAC</a> with <a href="#">SHA-256</a> (HS256) and <a href="#">RSA signature</a> with SHA-256 (RS256). JWA (JSON Web Algorithms) <a href="#">RFC 7518</a> introduces many more for both authentication and encryption.<sup>[9]</sup></p>
<b>Payload</b>	<pre>{   "loggedInAs": "admin",   "iat": 1422779638 }</pre>	<p>Contains a set of claims. The JWT specification defines seven Registered Claim Names which are the <a href="#">standard fields</a> commonly included in tokens<sup>[1]</sup>. Custom claims are usually also included, depending on the purpose of the token.</p> <p>This example has the standard Issued At Claim ( <code>iat</code> ) and a custom claim ( <code>loggedInAs</code> ).</p>
<b>Signature</b>	<pre>HMAC-SHA256(   base64urlEncoding(header) + '.' +   base64urlEncoding(payload),   secret )</pre>	<p>Securely validates the token. The signature is calculated by encoding the header and payload using <a href="#">Base64url Encoding</a> and concatenating the two together with a period separator. That string is then run through the cryptographic algorithm specified in the header, in this case HMAC-SHA256. The <i>Base64url Encoding</i> is similar to <a href="#">base64</a>, but uses different non-alphanumeric characters and omits padding.</p>