## MAC Services Request Formatting Details

The services that make up the MAC System require that the requests be formatted as a ASCII string containing key value pairs separated by a pipe “|” character with the keys separated from the values by a colon “:” character. The pipe and colon are used as special parsing characters.

Note: The keys must be unique with in a request.

Note: To avoid errors in the parsing method any of the values being passed in the request data will need to be encoded or encrypted.

Example 1: key1:value1|key2:value2|key3:value3….

Example 2:

Request:SendOtp|CID:5351674c74846919ec735074|PhoneNumber:4805551212|EmailAddress:bwhite@mobileauthcorp.com|EndUserIpAddress:192.168.168.1|TrxType:2|TrxDetails:4861742031372e39397c4a61636b657420243135302e39387c546f74616c20243136382e3937|API:JS

Note: In the above example the TrxDetails are “Hat $17.99|Jacket $150.98|Shirt $33.98|Total $202.95“ and contain both parsing characters so they are hexadecimal encoded.

## Formatting the Request

Once the request string has been assemble it must be either encoded or encrypted.

1. Example of hexadecimal encoding request
   1. Data=
   2. Break down of components:
      1. Http post header: Data=
      2. Hexadecimal encoded indicator: 99
      3. Length of client id: 24
      4. Client id (as issued by MAC): 5351674C74846919EC735074
      5. Request data (Hexadecimal encoded): 
2. Example of Encrypted request
   1. Data=245351674C74846919EC735074E180DDDF264154A4860B8CE50C8BFBE2FDF8979A65C38771AC632839072352B753C9B07537CB985E98E357C649CD2AA632521DE7A5D8EBAB8FB9DCC1AD3D8AE5D1D86C6F4B8374F85DB85615C5431347ED56CB116EE8CFFD4ECE03AC28333D9807761524FBC818F6785C9E0FE5FDA001B5995BFBC3719C312BACBDCF5FBD1562
      1. Http post header: Data=
      2. Length of client id: 24
      3. Client id (as issued by MAC): 5351674C74846919EC735074
      4. Request data (encrypted request data): E180DDDF264154A4860B8CE50C8BFBE2FDF8979A65C38771AC632839072352B753C9B07537CB985E98E357C649CD2AA632521DE7A5D8EBAB8FB9DCC1AD3D8AE5D1D86C6F4B8374F85DB85615C5431347ED56CB116EE8CFFD4ECE03AC28333D9807761524FBC818F6785C9E0FE5FDA001B5995BFBC3719C312BACBDCF5FBD1562