

Encrypting and Decrypting the SAP Password Using WS

Purpose:

We can encrypt and decrypt SAP password with a simple WS function using 'RC4 Encryption Algorithm'.

Usage:

If password is currently being saved in the 'SAP USER' table. It is saved by default in an unencrypted format. To encrypt the password, please do the following.

Encrypting the SAP Password:

1. Create a new RC4 object as shown in the following example:
`var crp = new system.rc4("12345678");`
The value "12345678" is the encryption key. This is optional –if you do not supply a key, the algorithm will use the Synactive default key.
2. Create new variable containing the encrypted password as shown in the following example:
`Var encryptedpwd = crp.crypt("Password");`
3. The password has now been encrypted.

Decrypting the SAP Password:

To decrypt the password, you will need to create a RC4 object. Please see the instructions below.

1. Create a new RC4 object as in the example below:
`var decrypt = new system.rc4("12345678");`
2. Create new variable containing the decrypted password as shown in the following example:
`Var decryptedpwd = crp.crypt(encryptedpwd);`

Example functions:

You can use this function for Encryption.

```
function EncryptText(){  
    var crp = new system.rc4("12345678");  
    var Encryptedtext = crp.crypt(str);  
    return Encryptedtext;  
}
```

Function to decrypt password.

```
function DecryptText(){  
    var crp = new system.rc4("12345678");  
    var Decryptedtext = crp.crypt(Encryptedtext);  
    return Decryptedtext;  
}
```

Below example demonstrates the encrypting and decrypting of text using single liquid ui function

Liquid UI Code:

Script file : SAPLSMTR_NAVIGATION.E0100.sjs

//pushbutton for calling function

```
pushbutton([10,15], "Encrypt & Decrypt PWD ",{ "process":cryptText, "using":{ "z_crypt":z_password
}});
```

//inputfield to enter text to encrypt and decrypt

```
inputfield( [4,9], "Password", [4,25],{ "name":"z_password", "size":32});
```

```
del("X[IMAGE_CONTAINER]");
```

//function to encrypt and decrypt provided text

```
function cryptText(param){
```

```
    set("V[crypt]",param.z_crypt);
```

```
    var crp = new system.rc4("12345678"); //key for encryption -optional
```

```
    cryptedtext = crp.crypt(crypt);
```

```
    println("-----crypt-----:"+crypt);
```

```
    onscreen 'SAPLSMTR_NAVIGATION.0100'
```

```
    // crypted text assigned to inputfield "password"
```

```
    set("V[z_password]","&V[cryptedtext]");
```

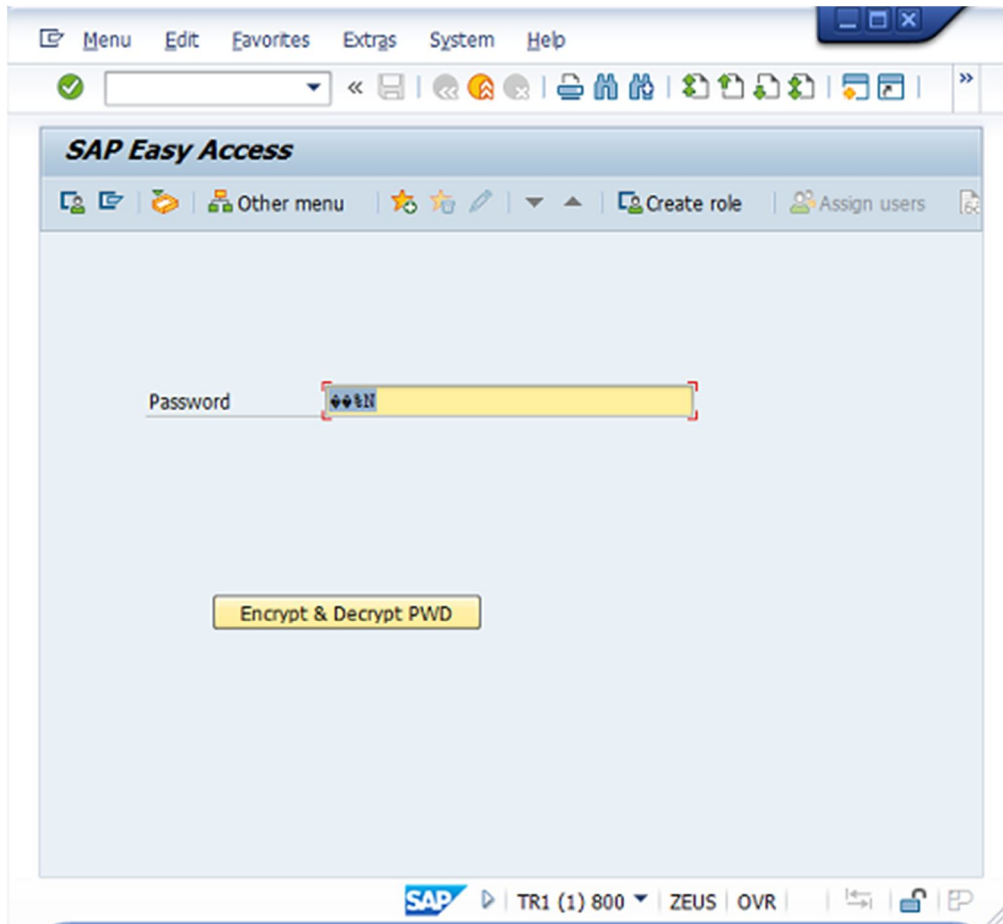
```
        enter('?');
```

```
}
```

Enter input field "password" as "john" and click on pushbutton "Encrypt & Decrypt PWD".

The screenshot displays the SAP Easy Access web interface. At the top, there is a standard browser menu bar with options: Menu, Edit, Favorites, Extras, System, and Help. Below this is a toolbar with various icons for navigation and actions. The main content area has a header titled "SAP Easy Access" and a sub-header with icons and links for "Other menu", "Create role", and "Assign users". In the center of the page, there is a label "Password" followed by a text input field containing the text "john". Below the input field is a yellow button labeled "Encrypt & Decrypt PWD". The bottom of the interface shows the SAP logo and system information: "TR1 (1) 800", "ZEUS", and "OVR".

You can see text in "Password" is encrypted, again click on pushbutton "Encrypt & Decrypt PWD".



You can text is "Password" is decrypted to "john".

