

Credential Encryption

Creation Date: 2/4/2022 11:00:00 AM

Table Of Contents

Introduction	3
Details	4
QR Code Method	4
Encrypting username/passwords	4
Usage:	5
XML Method	7
Usage.....	8

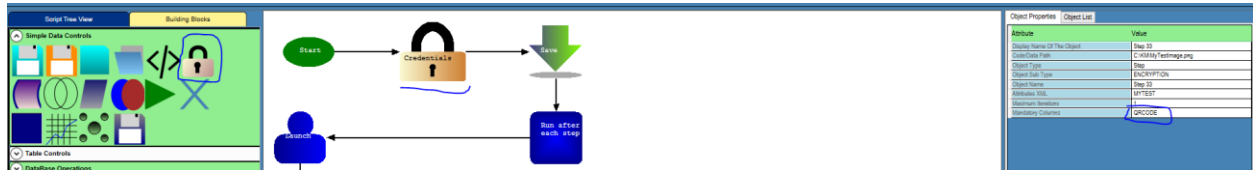
Introduction

The purpose of this document is to underline the credential management for the automation scripts when using Nested Flow framework. Credentials should not be exposed to the unauthorized users especially when the test cases are executed from the remote dedicated machines.

Details

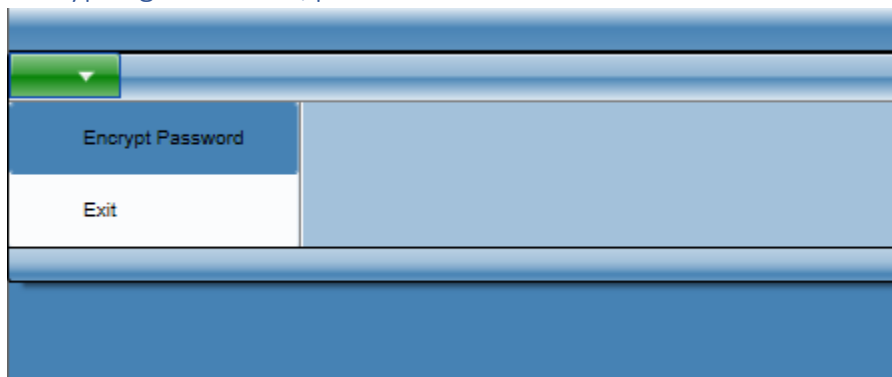
Nested Flow framework allows 2 distinct ways of encrypting the credentials. One involving encrypted credentials in the xml and another using the QR Code. In this section we will go over both

QR Code Method



Use Encryption code block from Simple Data Controls section in the Left-hand side components section for both types of encryptions.

Encrypting username/passwords

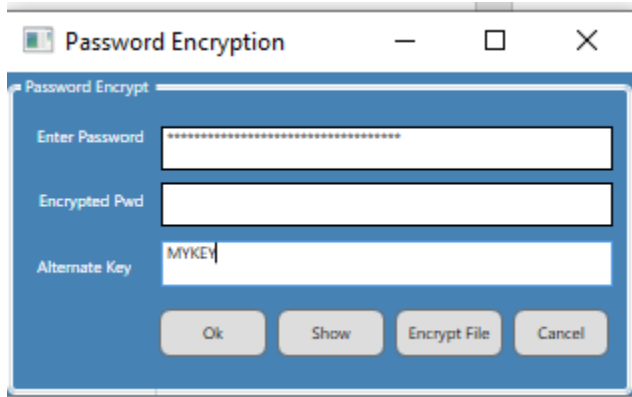


On the Top green ribbon menu select Encrypt Password Menu.



In the resulting **Password Encryption** window enter username and password in the below format

USERNAME/PASSWORD enter KEY string (MYKEY in this case) and Click on **Encrypt File** button

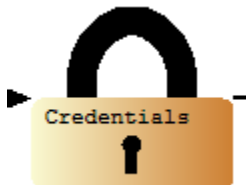


Save the image in png or any other image format

Encrypted URLs are store in QR Code format



Usage:



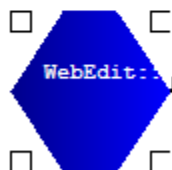
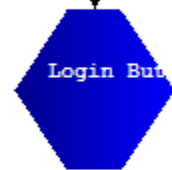
Object Properties	
Attribute	Value
Display Name Of The Object	Credentials
Code/Data Path	C:\KM\Image.png
Object Type	Step
Object Sub Type	ENCRYPTION
Object Name	Step 33
Attributes XML	MYKEY
Maximum Iterations	1
Mandatory Columns	QRCODE

For the Encrypt block choose Code/Data Path as image file name as QR Code image file

Attributes XML → Enter KY text chosen while encryption

Mandatory Columns → Enter **QRCODE**

When the block is executed 2 system variables are created { :USERNAME }, { :PASSWORD } which store username and password successfully



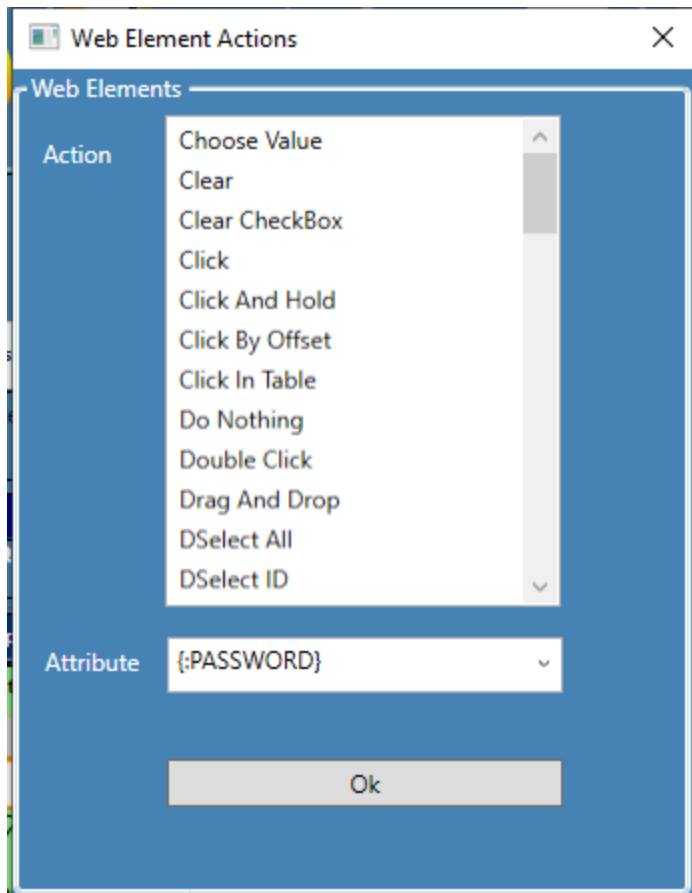
Web Element Actions

Web Elements

Action	
Choose Value	
Clear	
Clear CheckBox	
Click	
Click And Hold	
Click By Offset	
Click In Table	
Do Nothing	
Double Click	
Drag And Drop	
DSelect All	
DSelect ID	

Attribute {;USERNAME}

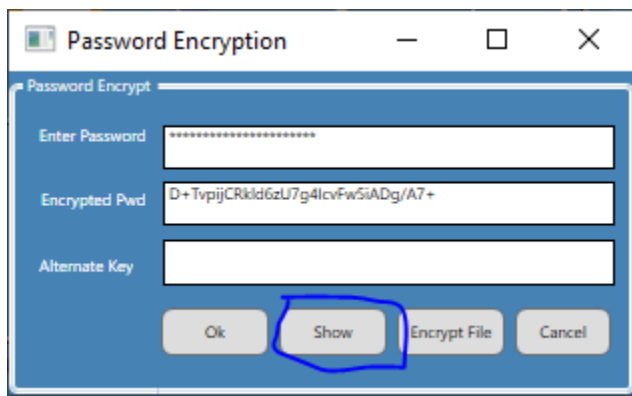
Ok



XML Method

The second method is using the XML Files

Encrypt Username and password separately



Create a simple XML

```
<?xml version="1.0" standalone="yes"?>
```

```
<Credentials>
```

```
  <MyProject>
```

```

<UserName>D+TvpIjCRkld6zU7g4IcvFw5iADg/A7+</UserName>

<Password>bFHUE+h4iuTon5QN31eYRQ==</Password>

</MyProject>

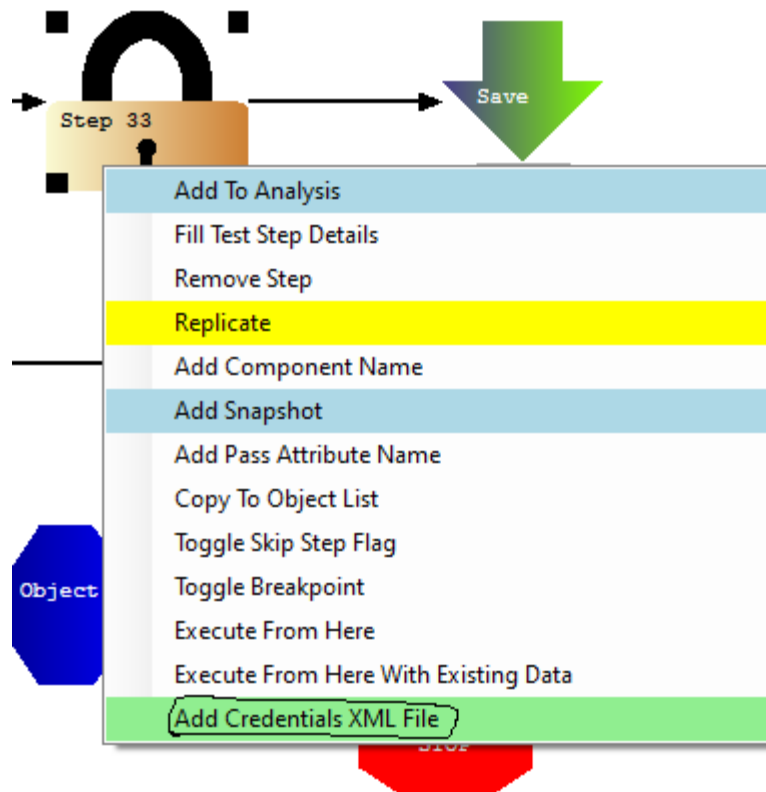
</Credentials>

```

The last part of the XPath must be **UserName** and **Password** respectively

Usage

On the Encryption Block, Right click and choose the last green option (Add Credentials XML File)



Choose credentials XML created before.

Object Properties	
Object List	
Attribute	Value
Display Name Of The Object	Step 33
Code/Data Path	C:\KMI\Credxml.xml
Object Type	Step
Object Sub Type	ENCRYPTION
Object Name	Step 33
Attributes XML	Credentials/MyProject
Maximum Iterations	1
Mandatory Columns	

Attribute XML → Enter Xpath (Except UserName or Password nodes)

Mandatory Columns → Blank

It works exactly as the Encryption option explained in the previous section