MINT Software Systems

QR Code Add-On

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Description

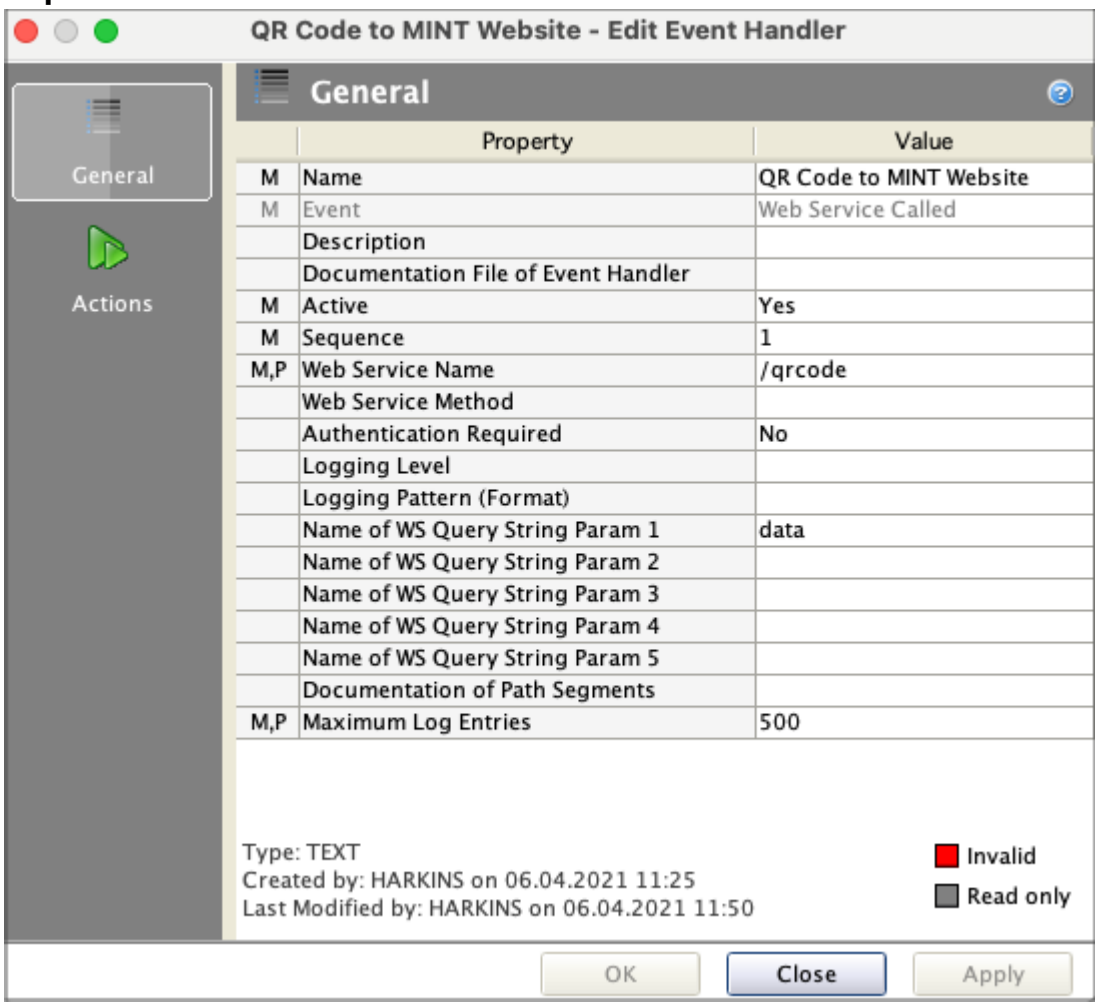
The QR Code Add-On allows users to create a QR code using an event handler action. The generated QR code can then be used as an image URL (e.g. in the **FormBuilder** or **ReportBuilder**).

> Please note that the MINT QR Code Add-On only supports ISO-8859-1 encoding of characters. ISO-8859-1 is a single-byte encoding, which means that some characters and symbols will be invalid if included in the QR Code data (e.g Chinese characters).

Configure the QR Code Event Handler

> Please note that you must first install the QR Code Add-On before starting this configuration.

1. Create an event handler for the **Web Service Called** event
2. In the **New Event Handler** dialog box, on the **General** tab, set **Active** to “Yes” and **Sequence** to “1”.

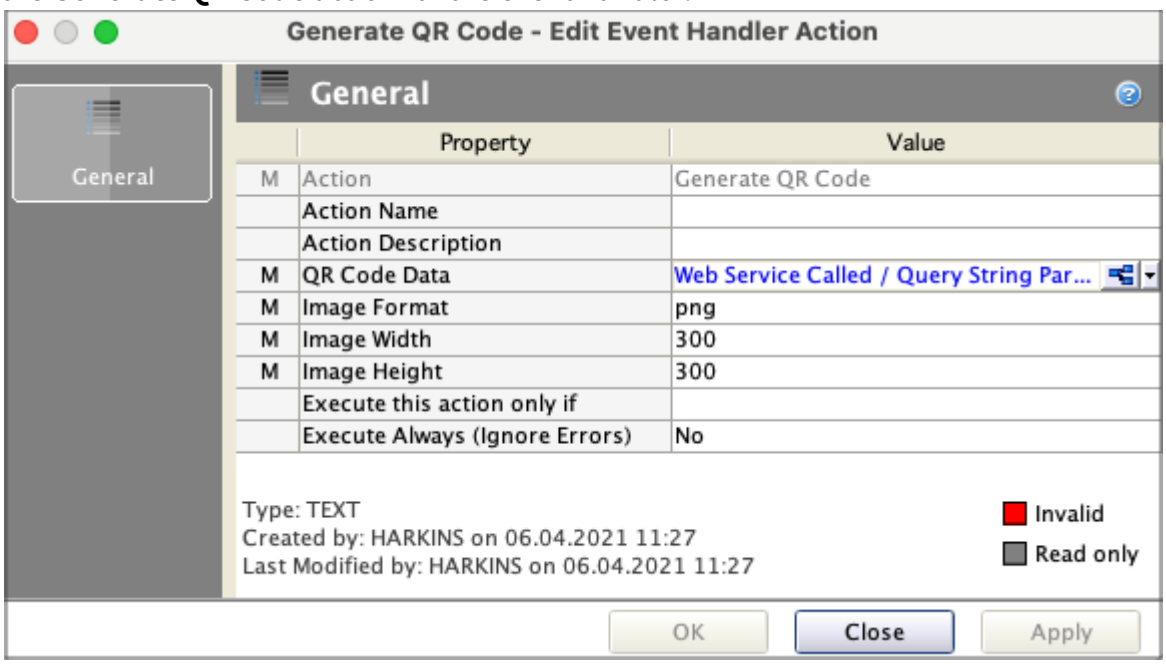


Then, specify the following properties:

- **Web Service Name**
  - The name of the web service that triggers event handler. For this configuration, set the name to “/qrcode”. Note that you can define any name that follows the pattern (e.g. “/[insert_name]”, but you will have to adjust the URL accordingly. Read on for more information.

- **Name of WS Query String Param 1**
  - Input parameters for event handler actions that are passed to the web service using a URL. For this configuration, define this parameter as “data”.

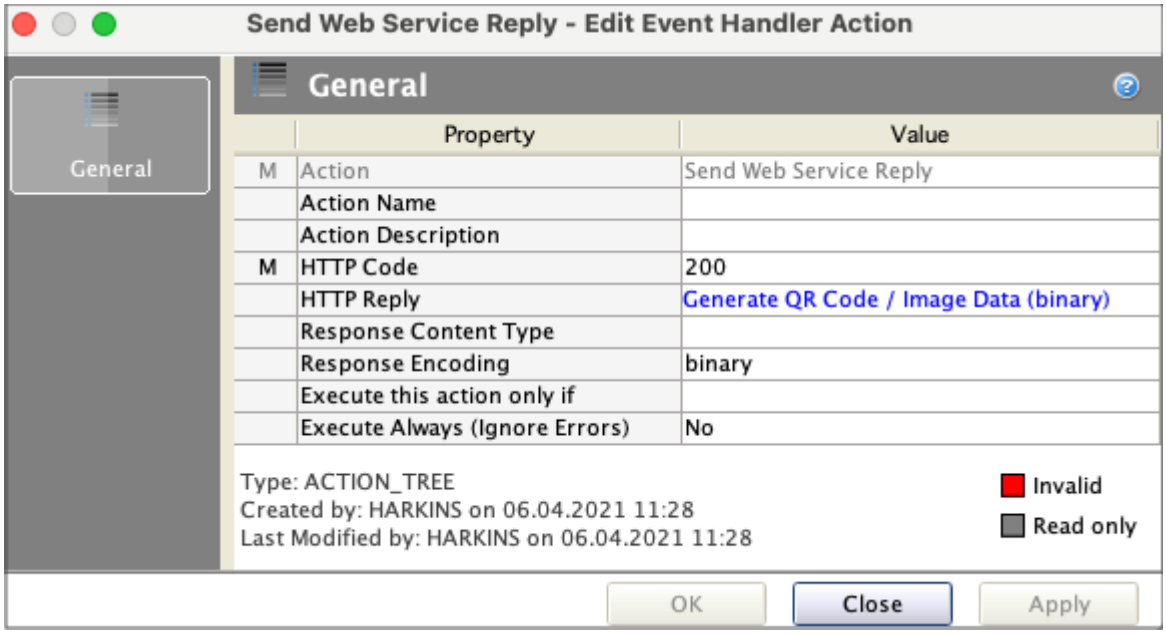
3. In the **New Event Handler** dialog box, on the **Actions** tab, create and configure the **Generate QR Code** action for the event handler.



To configure the action, specify the following properties:

- **QR Code Data**
  - Data to include in QR code. To configure this property for our example, click the dropdown arrow and select **Select value from context**. Expand **Web Service Called**, select **Query String Param 1**, and click **OK**.
- **Image Format**
  - Enter the image file format. By default, the value will be PNG.
- **Image Width**
  - Define the width of the QR code image in pixels. You must define a width/height that is greater than 0 or an exception will be thrown.
- **Image Height**
  - Define the height of the QR code image in pixels. You must define a width/height that is greater than 0 or an exception will be thrown.

4. Press **OK** and close the **Generate QR Code - Create Event Handler Action** dialog.
5. In the **New Event Handler** dialog box, on the **Actions** tab, create and configure the **Send Web Service Reply** action for the event handler.



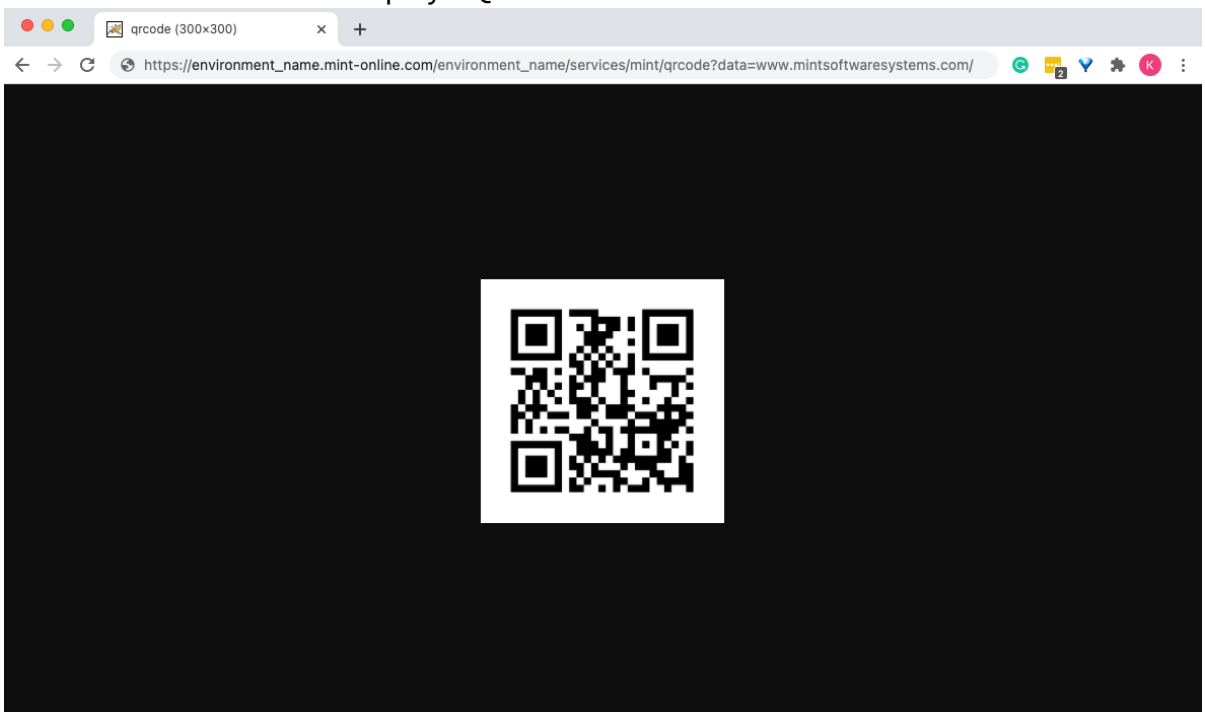
To configure the action, specify the following properties:

- **HTTP Code**
  - Define the HTTP Code for this action as “200”.
- **HTTP Reply**
  - To configure this property for our example, click the dropdown arrow and select **Select value from context**. Expand **Generate QR Code**, select **Image Data (binary)**, and click **OK**.
- **Response Encoding**
  - Set the **Response Encoding** to “binary”

6. Press **OK** to close and save the action.
7. Press **OK** to close and save the event handler.

Using the QR Code as an Image

1. To test out whether your QR code generator is working properly, open a browser (e.g. Chrome).
2. Add the following to the end of the URL address of your environment: “services/mint/qrcode?data=”
    a. The entire address should look like this after this step: “environment_name.mint-online.com/environment_name/services/mint/qrcode?data=”.
    b. **Note:** If you did not use the same naming convention examples for any of the properties, you’ll need to replace them in the URL (e.g. “services/mint/[insert_name]?data=”.
3. After the “=” in the URL, you can input the action that should happen when this code is scanned. For example, we can put a URL in place, and users will be automatically directed to that site. For our example, the whole address should be: “https://environment_name.mint-online.com/environment_name/services/mint/qrcode?data=www.mintsoftwaresystems.com/”.
4. Your browser should now display a QR code.



5. Lastly, copy the URL you just created in your browser and paste it wherever an image URL can be defined in *WebAssistant* (e.g. The **ReportBuilder** or **FormBuilder**).

ⓘ You can also define image format, width, and height as query string parameters. For our example, the full URL would look like this: “https://environment_name.mint-online.com/environment_name/services/mint/qrcode?data=www.mintsoftwaresystems.com&format=png&width=300&height=300”

Use Dynamic Data

In addition to a static URL in your QR code, you can incorporate data from, for example, the **ReportBuilder** query. In the example below, we’re going to use a resource objects key and a URL to create a link to that resource’s page.

1. Start off with the partial URL we created above: “https://environment_name.mint-online.com/environment_name/services/mint/qrcode?data=”.
2. Go to a resource in *WebPortal* to see the URL. It should look something like this: “https://environment_name.mint-online.com/environment_name/en/resource/detail/[object_key]”,
3. Copy the resource URL (minus the object key) and paste it behind the first part of the URL: “https://environment_name.mint-online.com/environment_name/services/mint/qrcode?data=https://environment_name.mint-online.com/environment_name/en/resource/detail/”.
4. Open up the report you’d like to incorporate a QR code into in *WebAssistant*.
5. Add resource object key to the query and incorporate it into your expression (e.g. “https://environment_name.mint-online.com/environment_name/services/mint/qrcode?data=https://environment_name.mint-online.com/environment_name/en/resource/detail/$F{Resource Object Key}”).

6. Copy and paste the full QR code URL into the **URL Expr** field for an image on the **Design** tab.
7. Now, when a user scans the QR code in the report, that resource’s page will open in *WebPortal*.

ⓘ This is a simple example of making your QR code dynamic using a URL. More complex use cases can be implemented using expressions.

Actions

- Generate QR Code

Generate QR Code

Use Case

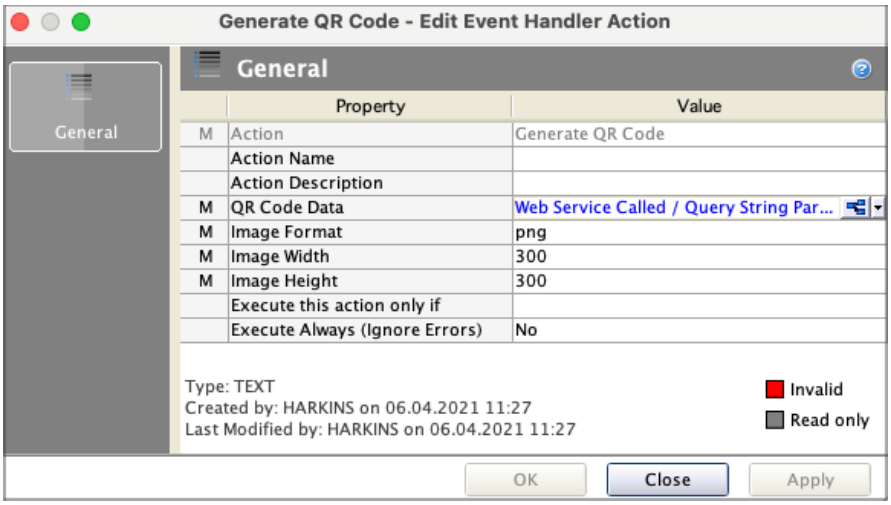
The QR Code Add-On allows users to create a QR code using an event handler action. The generated QR code can then be used as an image URL (e.g. in the **FormBuilder** or **ReportBuilder**).

Properties

Mandatory	Property	Description	Example
✗	Action Name	Specifies the custom name of the action.	
✗	Action Description	Specifies the custom information about the action.	
✓	QR Code Data	Data to include in QR code.	Web Service Called / Query String Param 1
✓	Image Format	Enter the image file format. By default, the value will be PNG. Supported formats: BMP, GIF, JPG or JPEG, PCX, PNG, PNM, RAW, TIF or TIFF, WBMP	PNG
✓	Image Width	Define the width of the QR code image in pixels. You must define a width/height that is	300

Mandatory	Property	Description	Example
		greater than 0 or an exception will be thrown.	
✓	Image Height	Define the height of the QR code image in pixels. You must define a width/height that is greater than 0 or an exception will be thrown.	300
✗	Execute this action only if	Configures the application to perform the action even in case it fails to perform all other actions assigned to the selected event handler.	No
✗	Execute Always (Ignore Errors)	Configures the application to execute the action if the defined condition is met.	

Screenshot


Generate QR Code - Edit Event Handler Action
General
General
Property
Value
M
Action
Generate QR Code
Action Name
Action Description
M
QR Code Data
Web Service Called / Query String Par...
M
Image Format
png
M
Image Width
300
M
Image Height
300
Execute this action only if
Execute Always (Ignore Errors)
No
Type: TEXT
Created by: HARKINS on 06.04.2021 11:27
Last Modified by: HARKINS on 06.04.2021 11:27
Invalid
Read only
OK
Close
Apply