NetIQ Identity Manager 4.8 Service Pack 7 Form Builder and Form Renderer Release Notes

June 2023

This release provides updates to the Form Builder and Form Renderer components. The document outlines the manual instructions to apply this patch.

What's New?

The FormIO version has been upgraded to 4.14.6 in Form Renderer and Designer's Form Builder. This version of FormIO is not fully backward compatible with the previous version shipped with Identity Manager. As a result, several form components and functionality in this version may behave differently than in previous versions. If you have workflows that use custom JSON forms, we recommend that you read the "Backward Compatibility Issues" on page 6 before applying the patch. Before implementing Form Builder upgrades in production environments, you must first ensure that all forms are rendered correctly and that all functionality is working as expected in a pre-production environment.

In addition, this release addresses several previous issues in the Form Builder and Form Renderer. Of the many issues resolved in this patch, the following section lists a few of them:

Dashboard Successfully Loads a JSON Form With Multiple Tabs

When requesting a workflow in Identity Manager Dashboard, if the associated JSON form has multiple tabs, the application renders all tabs correctly.

Refresh On and Clear Value on Refresh Functionality in Form Builder's Data Grid Component Works as Expected

If you enable the Data Grid component to clear and refresh the value, the values in Data Grid component reloads when another field is changed. The user must provide a logic in the Calculated Value to reload the default value.

JSON Form Displays an Error If the Validation Check on a Dynamic Form Field Fails

This release fixes a previous issue wherein JSON forms did not display an error when the validation check on a dynamic form field failed. If there is a validation error, users will no longer be able to submit the form.

Form Builder: RoleVault.getRolesUserIn Function Modified

Prior to Identity Manager 4.8.7 version, the `RoleVault.getRolesUserIn` function could only retrieve 10 role assignment permissions for a given user by default when making a REST API call to `/rest/access/assignments/role/list`. This release onwards, you can add the second attribute `true` to retrieve information on all roles.

Syntax: Here is the method signature:

```
RoleVault.getRolesUserIn('IDM','/rest/access/assignments/role/list',userDN,true)
```

Form Builder: RoleVault.getRoleAssignmentCause Function Modified

Prior to Identity Manager 4.8.7 version, the `RoleVault.getRoleAssignmentCause` function could only retrieve 10 roles by default when making a REST API call to `/rest/access/assignments/list/v2`. This release onwards, you can add the third attribute `true` to retrieve all roles.

Syntax: Here is the method signature:

```
RoleVault.getRoleAssignmentCause('IDM','/rest/access/assignments/list/
v2',identityDn, roleDn, true)
```

Searching Long Texts in a Select Form Field Works as Expected

This release fixes an issue in the Select component's search functionality that prevented values longer than 50 characters from appearing in the search result. The Select component now allows searching values up to 1,000 characters in length.

Planning Your Upgrade

This service pack contains the `Identity_Manager_4.8.7_Forms_update.zip` with the following deliverables:

- `FormBuilder-4.8.7.zip` for Linux platform
- `FormBuilder-4.8.7.zip` for Windows platform
- `FormBuilder-4.8.7.zip` for macOS platform
- `IgaFormRendererUI-1.0.6-bundle.zip` for Windows and `netiq-forms-1.0.6-1.noarch` for Linux platforms
- `NOVLUABASE_4.8.7.20230523234433` for updating User Application Driver package on Identity Manager Designer

Considerations for Upgrade

- The update process requires at a minimum a base version for the following Identity Manager components:
  - Identity Applications 4.8.6 or 4.8.7
  - Identity Manager Designer 4.8.6 or 4.8.7
- All three deliverables in this patch, namely Form Builder, Form Renderer, and User Application Driver package, are interdependent. If you upgrade Form Builder on your Designer, you must also upgrade Form Renderer on Identity Applications and the User Application Driver package on Designer.

Upgrading Form Builder

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Upgrading Form Builder on Linux

1. Log in to the computer where Designer is installed.
2. Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Downloads (https://sld.microfocus.com/) portal and extract all the files to a local directory.
3. Navigate to the `<extracted_location>/Formbuilder/Linux` directory, then unzip the `FormBuilder-4.8.7.zip` and copy all the files.
4. In Designer installation location, navigate to the `plugins` directory and locate the latest Linux Form Builder `com.mf.linux.gtk.formbuilder_4.0.0.<timestamp>`. To determine the latest version, look for the most recent `<timestamp>` in the `plugins` directory.

   For example, `com.mf.linux.gtk.formbuilder_4.0.0.202306021258`
5. Take a backup of all the files in the `lib` directory.
6. Now delete the files in the `lib` directory and replace them with the files copied in Step 3.
7. Launch Designer.
8. In the **Provisioning** view, go to the **Workflow Forms** and open a custom JSON form in Form Builder. Go to **Settings** > **About** and ensure that the Identity Manager Form Builder version is `4.8.7`.

Upgrading Form Builder on Windows

1. Log in to the computer where Designer is installed.
2. Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Downloads (https://sld.microfocus.com/) portal and extract all the files to a local folder.
3. Navigate to the `<extracted_location>\Formbuilder\Windows` folder, then unzip the `FormBuilder-4.8.7.zip` and copy all the files.
4. In Designer installation location, navigate to the `plugins` folder and locate the latest Windows Form Builder `com.mf.win.win32.formbuilder_4.0.0.<timestamp>` folder. To determine the latest version, look for the most recent `<timestamp>` in the `plugins` folder.

For example, `C:\netiq\idm\apps\Designer\plugins\com.mf.win.win32.formbuilder_4.0.0.20230523 1146`

5 Double-click the selected Windows Form Builder folder and take a backup of all the files in the `lib` folder.

6 Now delete the files in the `lib` folder and replace them with the files copied in Step 3.

7 Launch Designer.

8 In the **Provisioning** view, go to the **Workflow Forms** and open a custom JSON form in Form Builder. Go to **Settings** > **About** and ensure that the Identity Manager Form Builder version is `4.8.7`.

Upgrading Form Builder on macOS

1 Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Downloads (https://sld.microfocus.com/) portal and extract all the files.

2 Navigate to the extracted location > **Mac**, unzip the `FormBuilder-4.8.7.zip` and copy `FormBuilder.app`.

3 Navigate to **Applications** > **Designer** > **plugins** and locate the latest Form Builder for macOS.

For example, `com.mf.mac.cocoa.formbuilder_<timestamp>`

To determine the latest version, look for the most recent `<timestamp>` in `plugins`.

4 Expand the selected MacOS Form Builder and take a backup of all the files in `lib`.

5 Now delete the files in the `lib` folder and replace them with the files copied in Step 2.

6 Launch Designer.

7 In the **Provisioning** view, go to the **Workflow Forms** and open a custom JSON form in Form Builder. Go to **Settings** > **About** and ensure that the Identity Manager Form Builder version is `4.8.7`.

Upgrading the User Application Driver Package

1 Log in to the computer where Designer is installed.

2 Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Downloads (https://sld.microfocus.com/) portal and extract the files to a local folder.

3 Launch Designer.

4 In the Outline view, right-click **Package Catalog**, then select **Import Package**.

5 In Select Package window, click **Browse**, then browse to and select the `NOVLUABASE_4.8.7.20230523234433` package in the `<extracted_location>\Identity_Manager_4.8.7_Forms_update\Packages\plugins` folder and click **OK**.

6 Click **OK** to import the selected packages.

7 Review the import message, then click **OK**.

8 In the Modeler view, right-click the User Application driver, then click **Driver** > **Properties**.

9 Click **Packages**.

A check mark indicates a newer version of a package in the Available Upgrades column.

10 Click Select Operation drop-down for the User Application Base and select Upgrade.

11 Select the radio button against the `NOVLUABASE_4.8.7.20230523234433.jar` package, then click **OK**.

12 Click **Apply**.

13 (Conditional) Fill in the fields with appropriate information to upgrade the package, then click **Next**.

14 Read the summary of the packages that will be installed, then click **Finish**.

15 Review the upgraded package, then click **OK** to close the Package Management page.

16 Deploy the changes and restart the driver.

Upgrading Form Renderer

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- "Upgrading Form Renderer on Windows" on page 6

Upgrading Form Renderer on Linux

1 Stop the NGINX service by executing the following command:

```
systemctl stop netiq-nginx.service
```

2 Navigate to the `/etc/init.d` directory and stop the Golang service by executing the following command:

```
./netiq-golang.sh stop
```

3 Now navigate to the `/opt/netiq/idm/apps/sites/forms` directory and take a back up of all the files.

4 Delete all the files from the `/forms` directory using the following command:

```
rm -r *
```

5 Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Download (https://sld.microfocus.com/) portal and extract the files to a local directory.

6 Navigate to the `<extracted location>/Formrenderer/Linux` directory.

7 Run the following command:

```
rpm -Uvh netiq-forms-1.0.6-1.noarch.rpm
```

8 (Conditional) If you install the rpm as root, navigate to the `/opt/netiq/idm/apps/sites` directory and run the following commands to add execute permission and user rights for the replaced files:

```
chmod +x forms/
chown -R novlua:novlua forms/
```

9 Navigate back to the `/opt/netiq/idm/apps/sites` directory. To extract the `IgaFormRendererUI-1.0.6-bundle.tar.gz` and copy the files to the `forms` directory, run the following command:

```
tar -zxvf IgaFormRendererUI-1.0.6-bundle.tar.gz -C /opt/netiq/idm/apps/sites/forms/
```

10 Navigate to the `/etc/init.d` directory and start the Golang service by executing the following command:

```
./netiq-golang.sh start
```

11 Start the NGINX services by executing the following command:

```
systemctl start netiq-nginx.service
```

Upgrading Form Renderer on Windows

1. From the Windows services, stop the **NetIQ IGA Form Renderer Service** and **NetIQ Nginx Service** running on your Identity Applications server.
2. Navigate to the `C:\NetIQ\IDM\apps\sites\forms` location and take a back up of all the files.
3. Delete all the files from the `forms` folder.
4. Download the `Identity_Manager_4.8.7_Forms_update.zip` from the Software License and Download (https://sld.microfocus.com/) portal and extract the files to a local folder.
5. Navigate to the `<extracted location>\Formrenderer\Windows` folder and rename the `IgaFormRenderer-1.0.6` file to `IGA-form-renderer-server`.
6. Now extract the `IgaFormRendererUI-1.0.6-bundle.zip` and copy all the files to the `C:\NetIQ\IDM\apps\sites\forms` folder.
7. Replace `IGA-form-renderer-server` in the `C:\NetIQ\IDM\apps\sites\` folder with `IGA-form-renderer-server` renamed in Step 5.
8. From the Windows services, start the **NetIQ IGA Form Renderer Service** and **NetIQ Nginx Service** on your Identity Applications server.

Known Issues

NetIQ Corporation strives to ensure our products provide quality solutions for your enterprise software needs. The following issues are currently being researched. If you need further assistance with any issue, contact Technical Support.

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NullPointerException Displayed When Launching the Form Builder

Issue: The Designer displays `Java.lang.NullPointerException` when it tries to launch Form Builder. You may encounter this error after upgrading Form Builder in Designer while creating a new JSON form or opening a custom JSON form under **Workflow Forms**.

Workaround: To resolve the error, restart Designer.

Backward Compatibility Issues

This section includes a list of functionality issues you may encounter while using Form Builder to create JSON forms, migrating existing JSON forms to the new forms engine, or when the Form Renderer on the Identity Manager Dashboard renders the forms.

- With the new forms engine, the `Calculated Value()` function is not triggered on every event, as it used to behave earlier. It can now be used to store logic that will be executed in based on a trigger.
- The `Custom Default Value()` function is executed only when a form is loaded, not when the fields are redrawn. If you want to use an existing JSON form with the new forms engine, ensure that you move the logic from the `Custom Default Value()` function to the `Calculated Value()` function.
- It has been observed that at times while using a regional locale, certain components, for example, labels on the buttons, text fields, tabs, select boxes, and drop-down lists, are not rendered properly. The workaround is to manually add the localization key.

- When you try to change a form name, the edit button next to the form name disappears.

  You can resolve the issue by changing the form name in Form JSON view.
- The labels for certain form fields are found missing in the Preview window. This might happen if you change the form name, resulting in incorrect localization keys being added to the form JSON file.

  You can resolve the issue by:

  - Changing the form name in Form JSON view, or
  - Delete the incorrect localization entries from the Form JSON after changing the form name
- Unable to add custom CSS style to a form component via a function.

  You can resolve the issue by deleting the “localization” instance from the JSON file.
- The **Save** button in Designer may not always work for newly produced PRDs. Use the keyboard shortcut `ctrl+S` to save the PRD.
- Unable to use the Data Item Mapping functionality in JSON forms. This issue is specific to the custom components in Form Builder. Data Item Mapping in PRD works as expected.
- Dynamic Entity component does not show the selected eDirectory object.
- Actions like request and approve for buttons are missing from the default request and approval forms. The same capability can be achieved by using custom actions in the **Display** tab of the Button component.
- The labels for certain form fields changes when new form components are added or an existing form component is updated. This issue happens when the localization keys are not present and the **Redraw On** option is selected. You can resolve it by including the keys for localization in the JSON forms.
- Text case such as upper, lower, or mixed case is ignored when the value is set using the `instance.setValue()`, `instance.setFieldValue()` functions. You can provide the values manually in the input fields instead.
- Unable to add the Select Boxes component to a JSON form when using the `CustomDefaultValue()` function to load a DAL list. When adding the Select Boxes, you must define a first value by default, even if the value is set using Custom Default Value. The Custom Default Value will take precedence. It will not have any effect on the existing Select Boxes.
- If the JS Editor’s comparison functionality does not work, you must edit the syntax to achieve the desired functionality.
- References to array items may cause errors in the browser console log. You may need to change it.

  For example, change:

  ```
  value = data.saveUserDetails['TelephoneNumber'][0];
  ```

  to

  ```
  value = data.saveUserDetails['TelephoneNumber'];
  ```

Contact Information

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