How to configure Micro Focus Reflection for use with Blue Prism

Introduction

Micro Focus produce a number of emulator products for emulating and connecting to mainframe sessions. Blue Prism supports the use of several variants of Micro Focus's products for mainframe connectivity. In this guide document we will be describing the use of the **Reflection for Desktop** tool, when it is configured to connect to a UNIX or OpenVMS, or an IBM-compatible mainframe session.

The version of the Micro Focus product used in this guide is Reflection for Desktop 16 (suing .NET API) or Reflection 9.x (using legacy COM API). The Blue Prism software used is v5.0.18.

Blue Prism's Reflection mainframe connector uses either the Micro Focus **Legacy COM API interface** or the current **.NET API** interface used by more recent versions of the product. The legacy COM API was supported primarily in Reflection versions prior to v14.1. Versions above that converted to using the .NET API.

See the Micro Focus web site for more information.

Pre-Requisites

Before following these instructions you will need the following:-

a) Blue Prism software installed
b) Micro Focus Reflection for Desktop software installed
c) A valid running mainframe session to connect to (*not the demo sessions provided as examples by Micro Focus*)
d) An Micro Focus session file created which can connect to your running mainframe system

Supported File Types

- **R2W**: OpenSystems Legacy sessions for UNIX and OpenVMS mainframes (COM API)
- **R3DX**: IBM-compatible terminal sessions (.NET API)

NOTES:

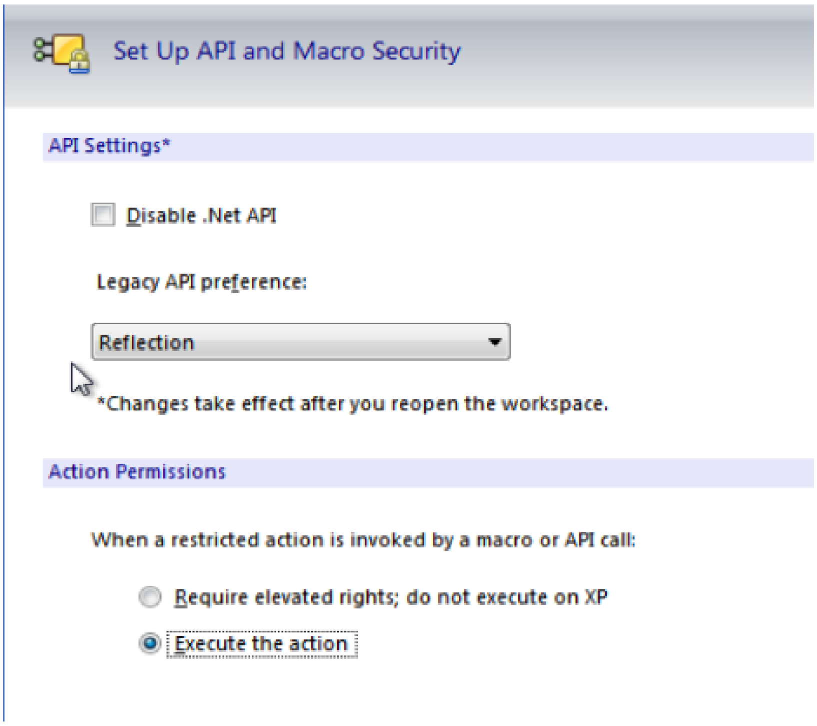
1. **RFW**: This file type is listed, but not supported. It will be removed in future software releases.
2. **R3DX** files are only supported from Blue Prism version 5.0.13 onwards.

Configuring Micro Focus Reflection options

The following installation and configuration options are required to support the Blue Prism mainframe connection:-

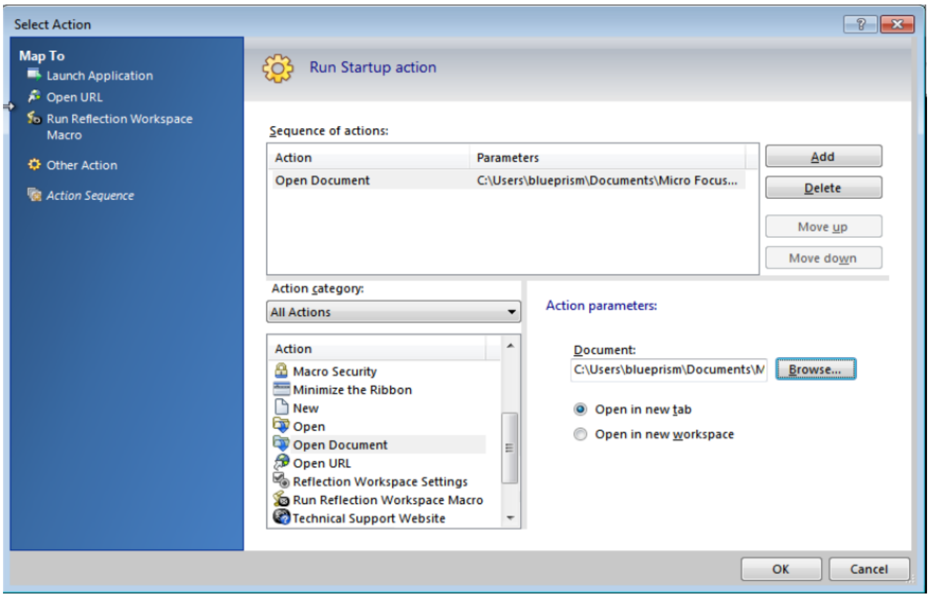
TRUST CENTER

- Set up API compatibility

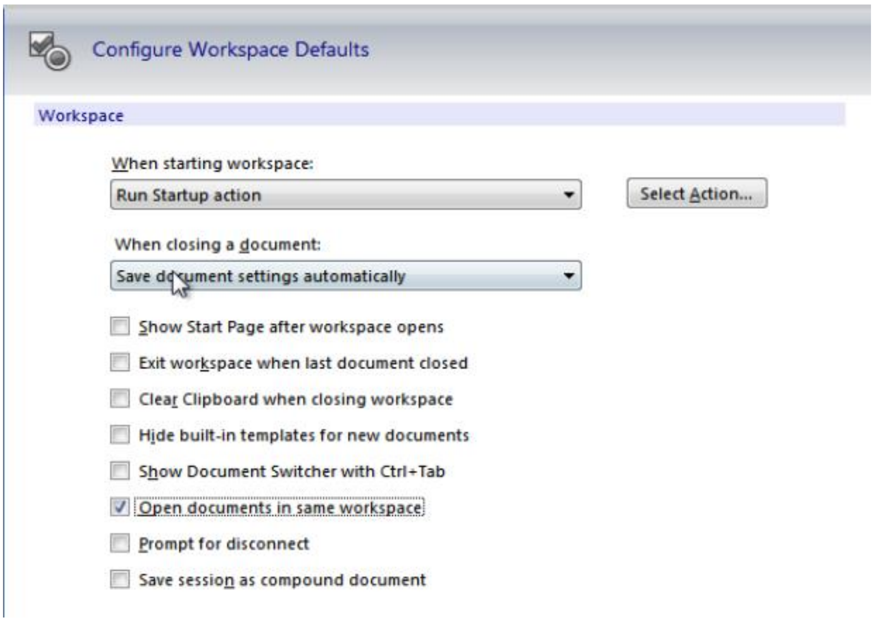


WORKSPACE SETTINGS

- Set the startup action to open your Session file



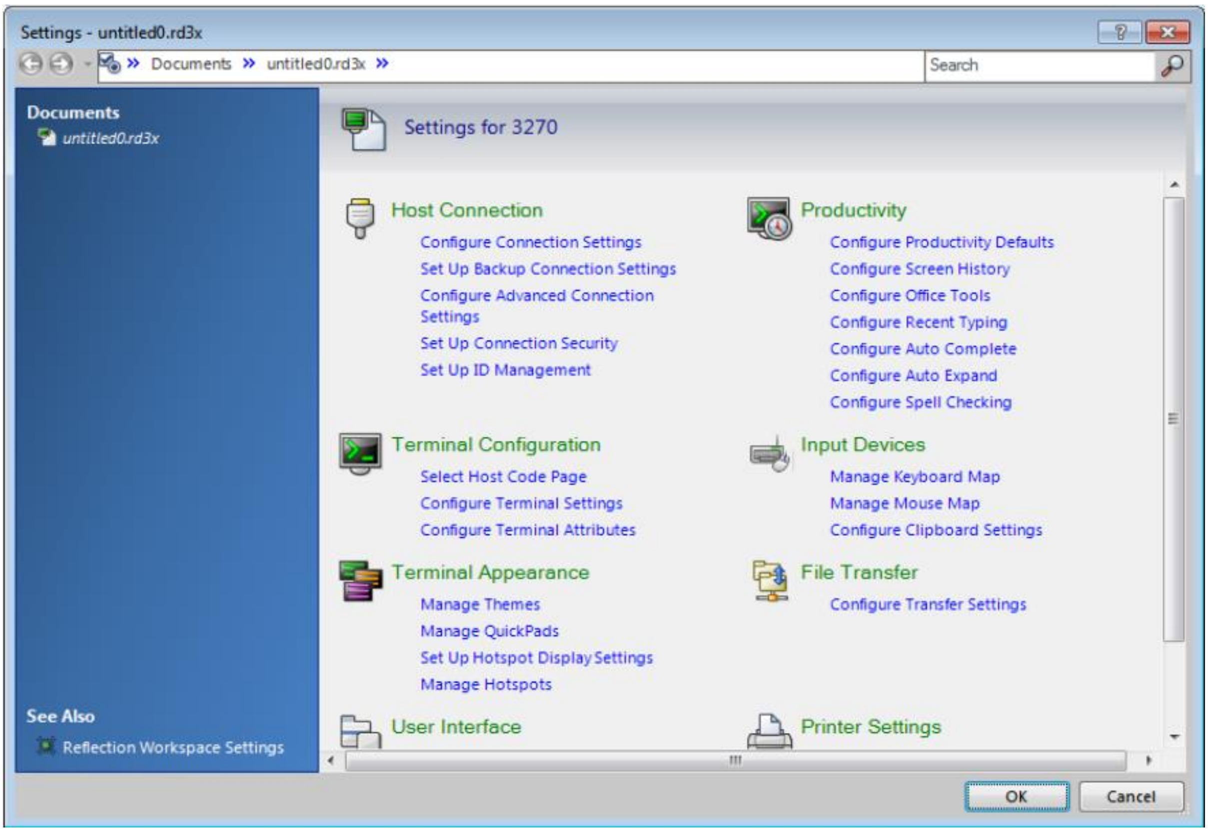
- Uncheck “Show Start Page after workspace opens” option



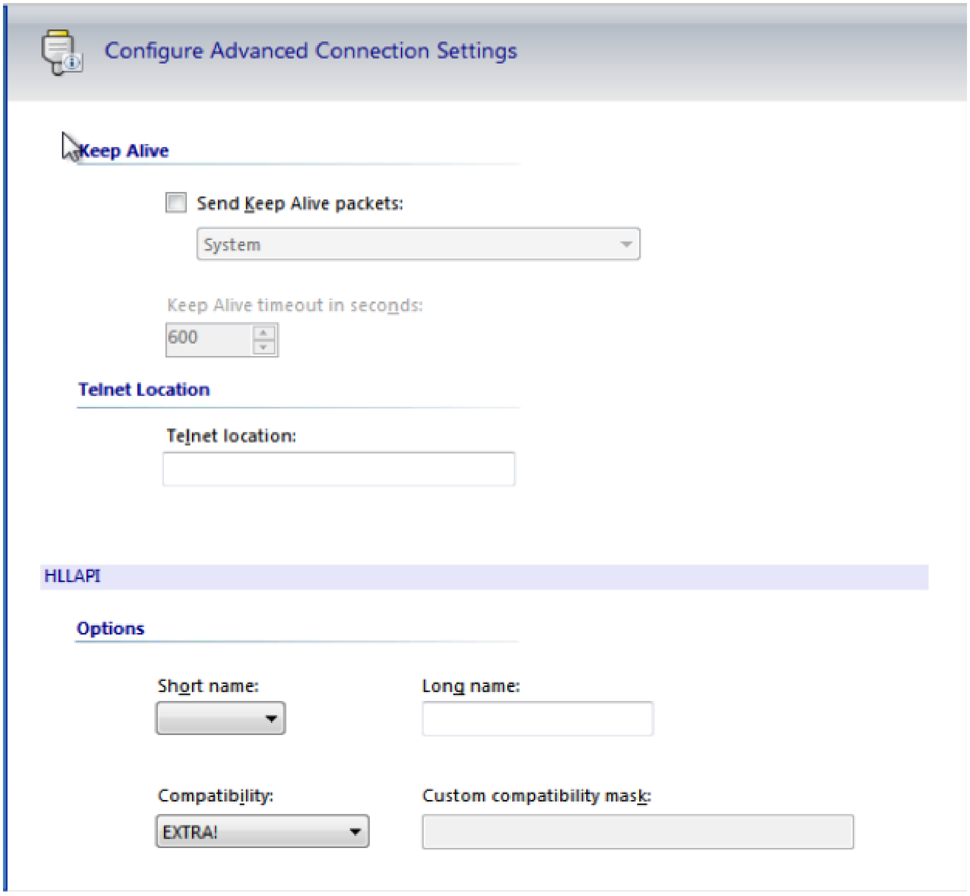
Configuring Micro Focus to run a specific session

The following steps can be followed to configure Micro Focus to run a pre-defined session file:-

1. Run the Micro Focus Reflection Program
2. If prompted, then select to **open a session file**, and browse to your existing REFLECTION Session file (*.r2w)
3. Select the **Configure Connection Settings** option from the **Host Connection** settings screen



4. Select the **Advanced** Connection Settings link to reveal information about the **HLLAPI Shortname** configuration options.



5. Select a **Session Shortname** letter and browse to locate the Reflection Session file (*.rd3x or *.r2w) that you want to associate with this shortname identifier .
    - This character code will be used by Blue Prism's Application Modeller to identify the associated session, and will be called a "**Session Identifier**" in Blue Prism.
6. Click the **OK** button to set this configuration, and then exit from the Micro Focus Reflection Session, ensuring that the session and the emulator are both closed.

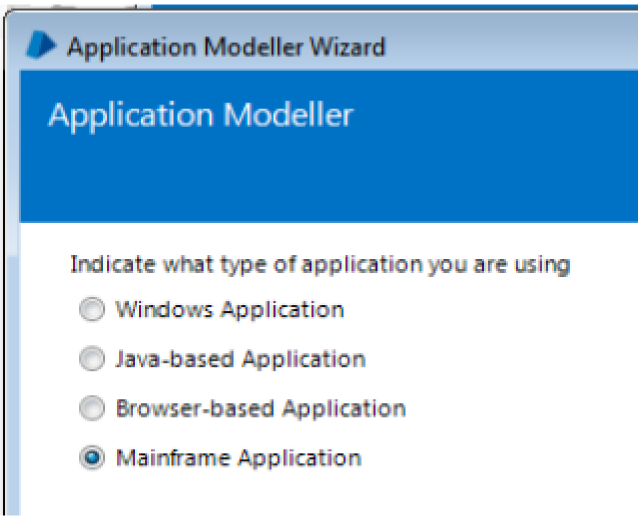
Configuring Blue Prism to run the Reflection for Desktop 16 session

This section will describe the way to configure a Business Object to launch and attach to a Reflection for Desktop 16 emulator session.

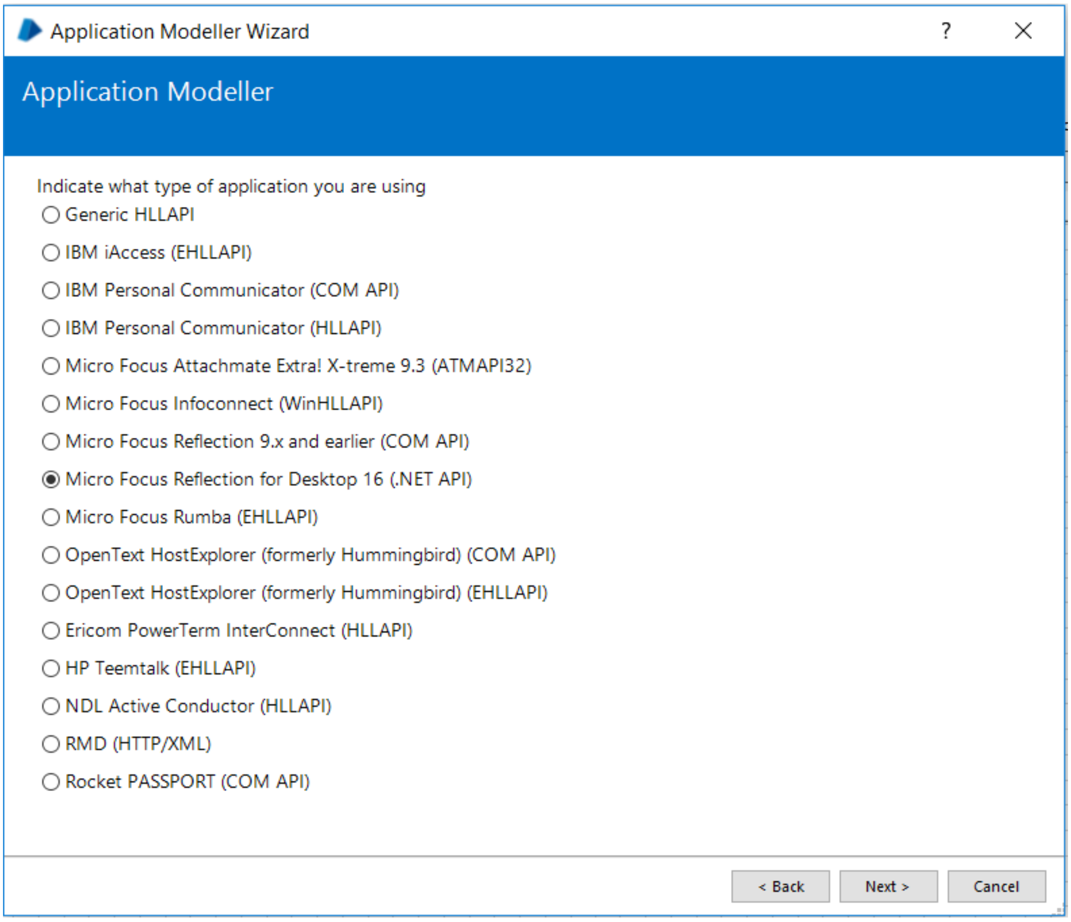
Once Micro Focus has been configured to associate the session file with a specific session shortname, then Blue Prism can be configured to Launch and Attach to the same session.

1. Run the Blue Prism client software.
2. Using Object Studio create a new Business Object with the following configuration:

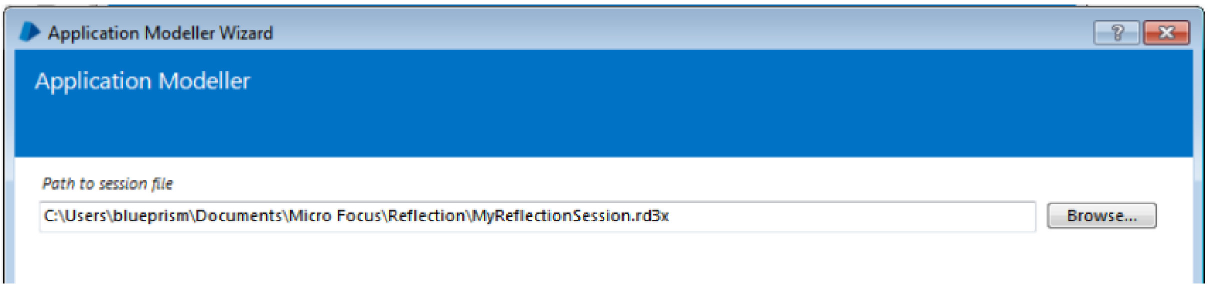
    a) Select a **Mainframe** type of application



b) Choose the '**Micro Focus Reflection for Desktop 16 (.NET API)**' type of connector

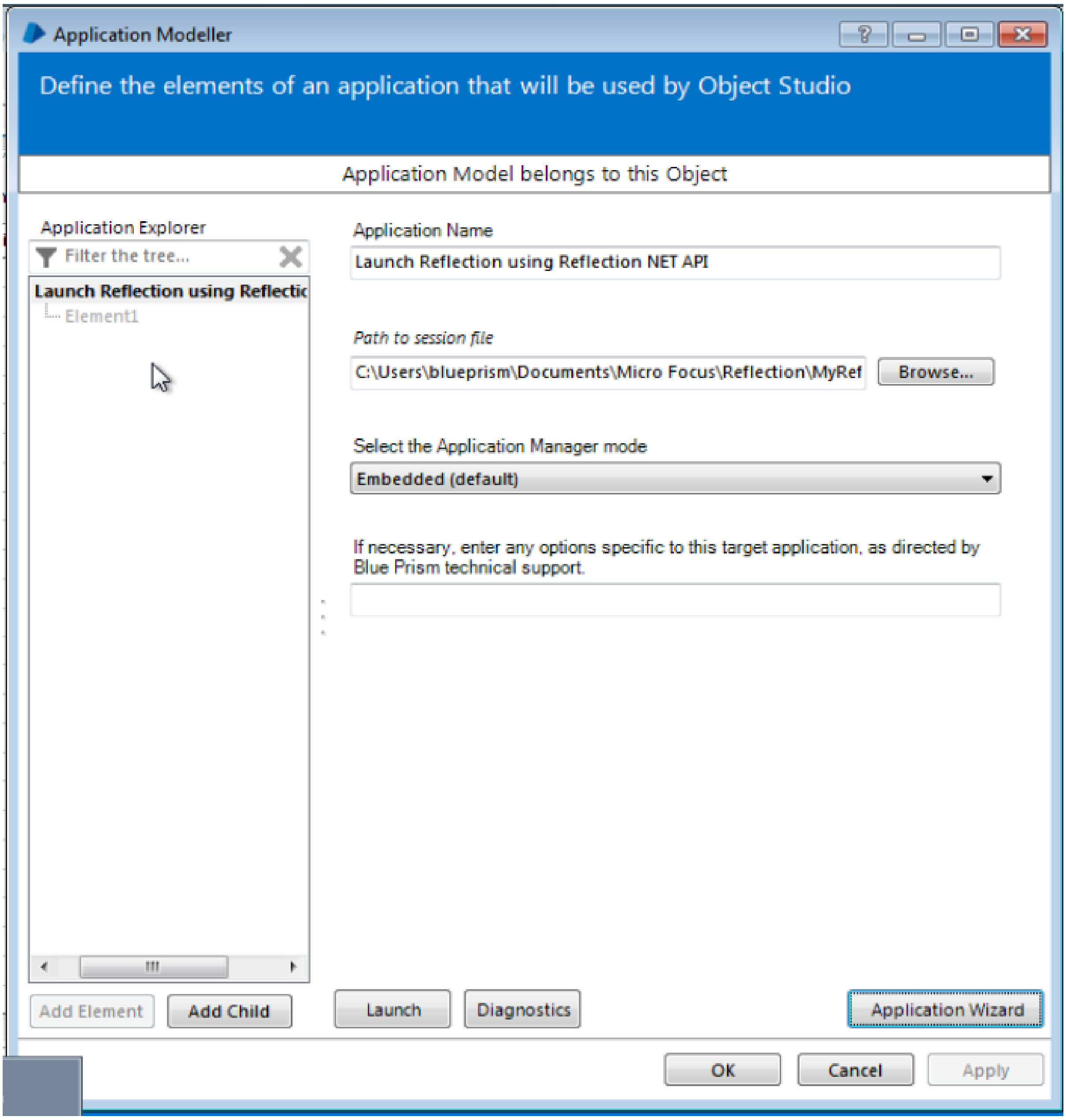


c) Browse for the path to your RD3X session file



d) Leave the remaining options at their default settings and conclude the Application Modeller wizard screens.

Test the connectivity by clicking on the "**Launch**" button to check that Micro Focus launches the correct session file and connects as expected to your running mainframe session.



If successful, your Reflection for Desktop session will launch and connect, and the Launch button will become disabled indicating that the session is attached.

You are now ready to spy the elements in your terminal session.

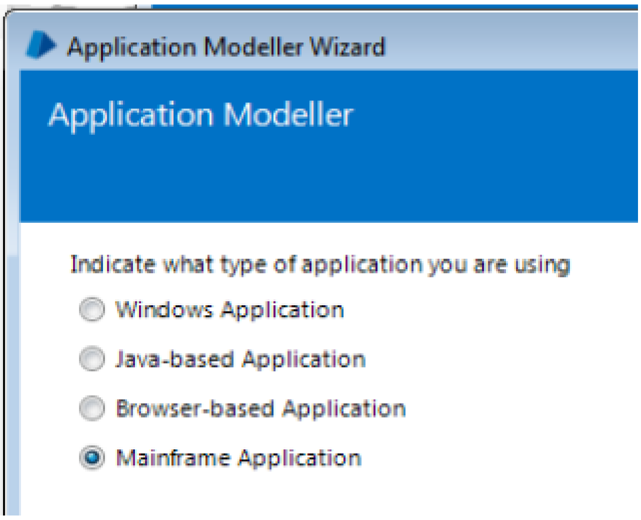
Configuring Blue Prism to run the Reflection for Desktop 9 session

This section will describe the way to configure a Business Object to launch and attach to a Reflection for Desktop 9 emulator session.

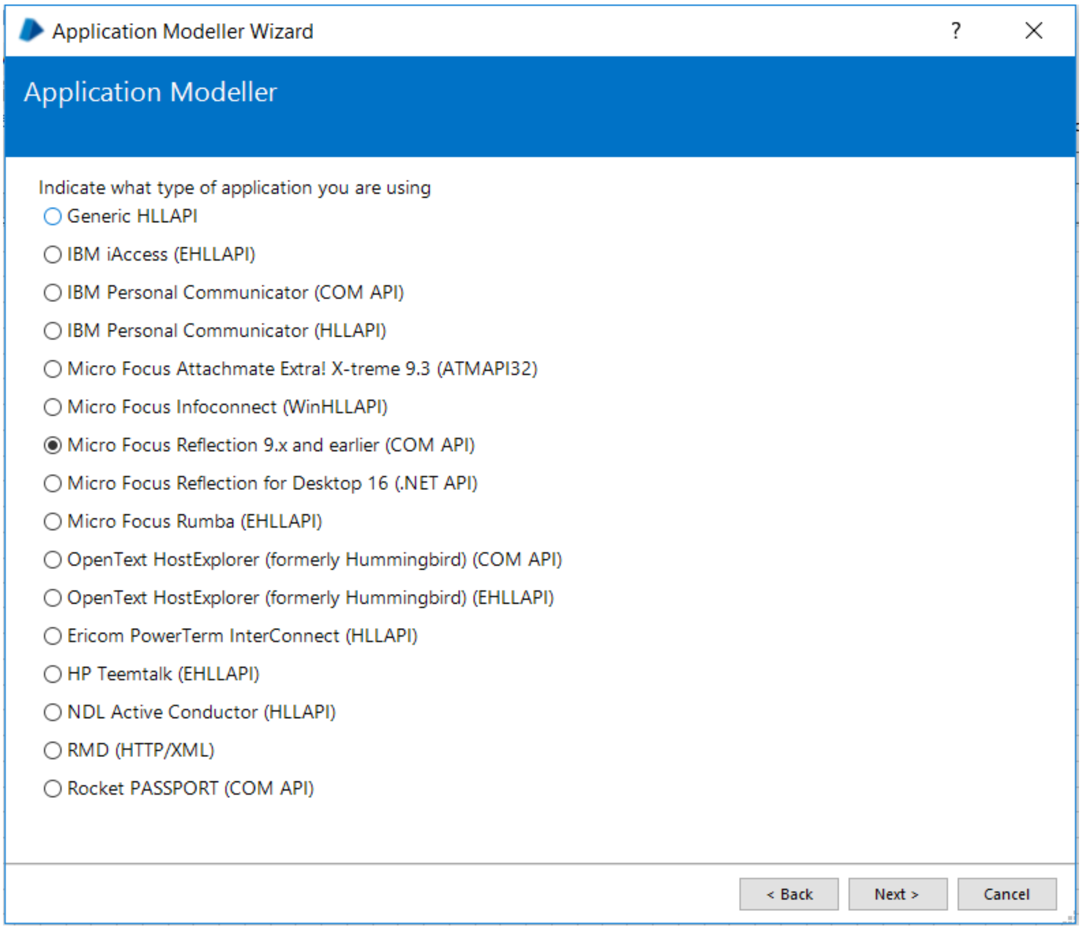
Once Micro Focus has been configured to associate the session file with a specific session shortname, then Blue Prism can be configured to Launch and Attach to the same session.

3. Run the Blue Prism client software.
4. Using Object Studio create a new Business Object with the following configuration:

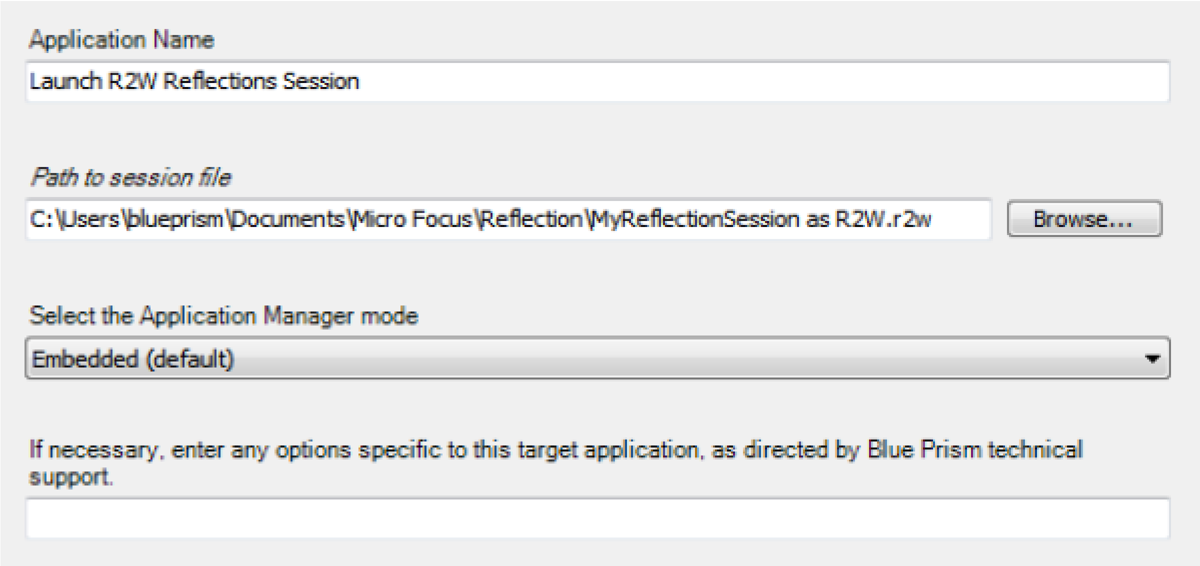
   e) Select a **Mainframe** type of application



   f) Choose the '**Micro Focus Reflection for Desktop 9.x and earlier (COM API)**' type of connector



   g) Browse for the path to your RD3X session file



h) Leave the remaining options at their default settings and conclude the Application Modeller wizard screens.

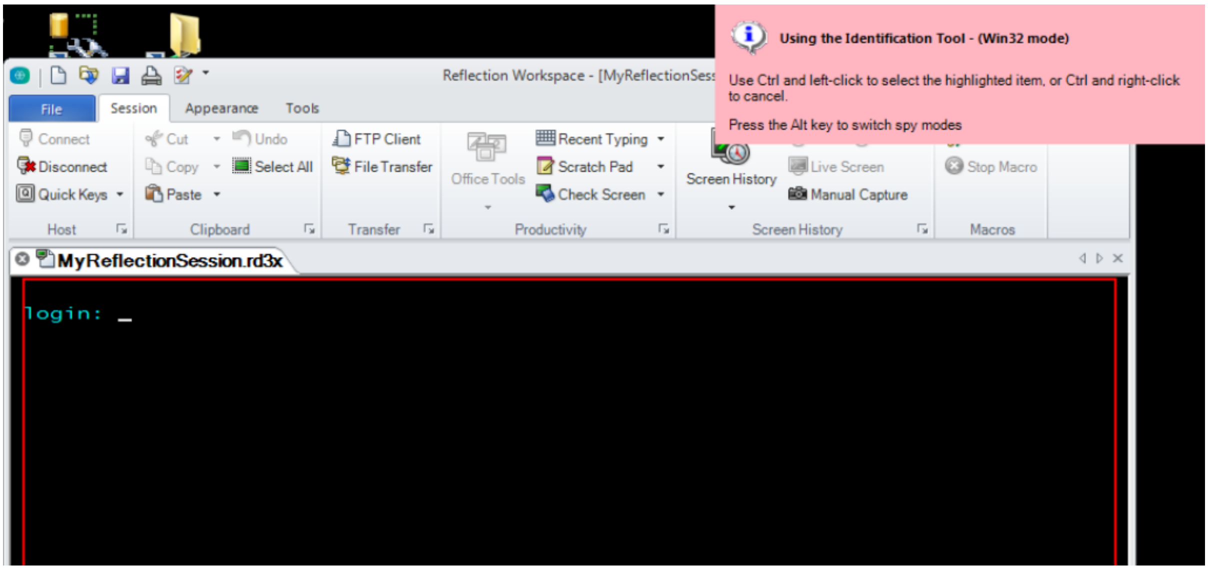
Test the connectivity by clicking on the "**Launch**" button to check that Micro Focus launches the correct session file and connects as expected to your running mainframe session.

<u>NOTE</u>: *R2W files are also supported in Reflection for Desktop 14 and above.*

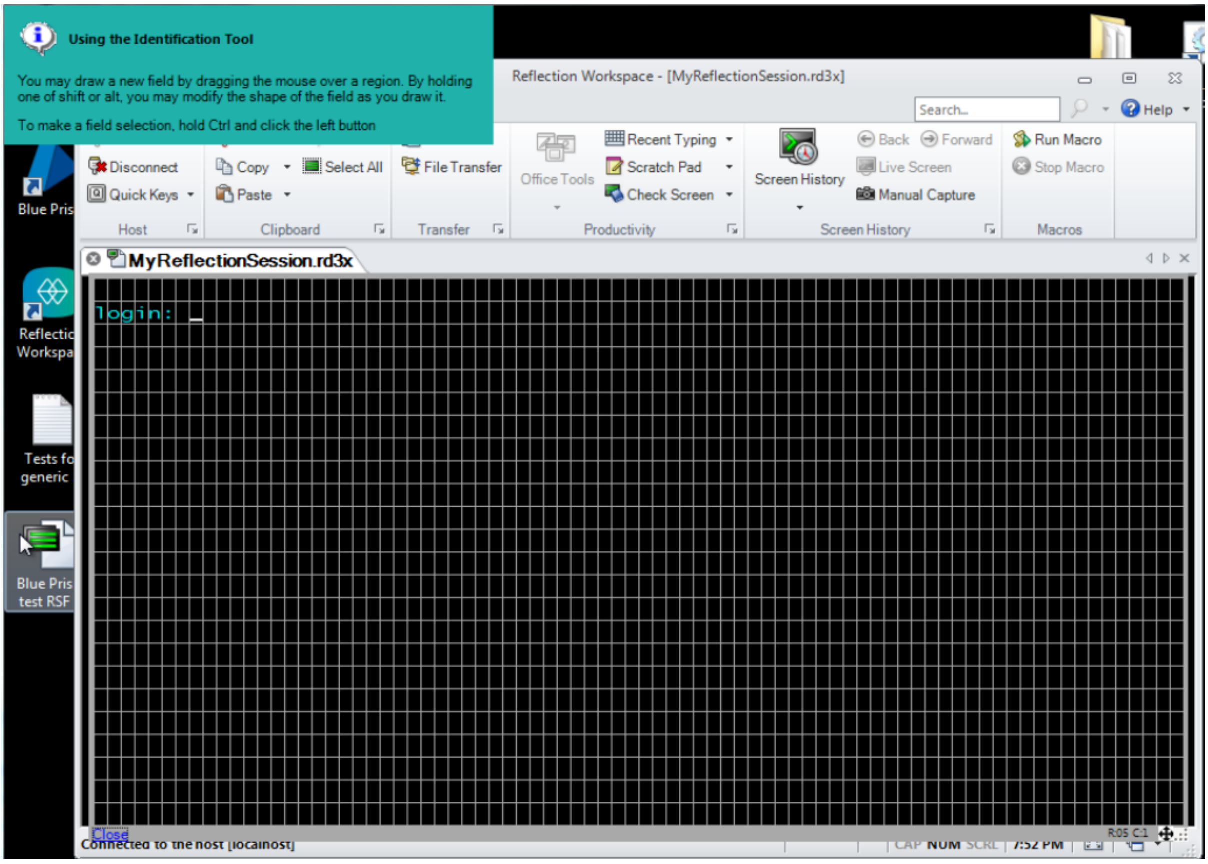
Spying elements in your Reflection session

Your Micro Focus RD3X session should now be launched and ready for spying or interacting with by Blue Prism.

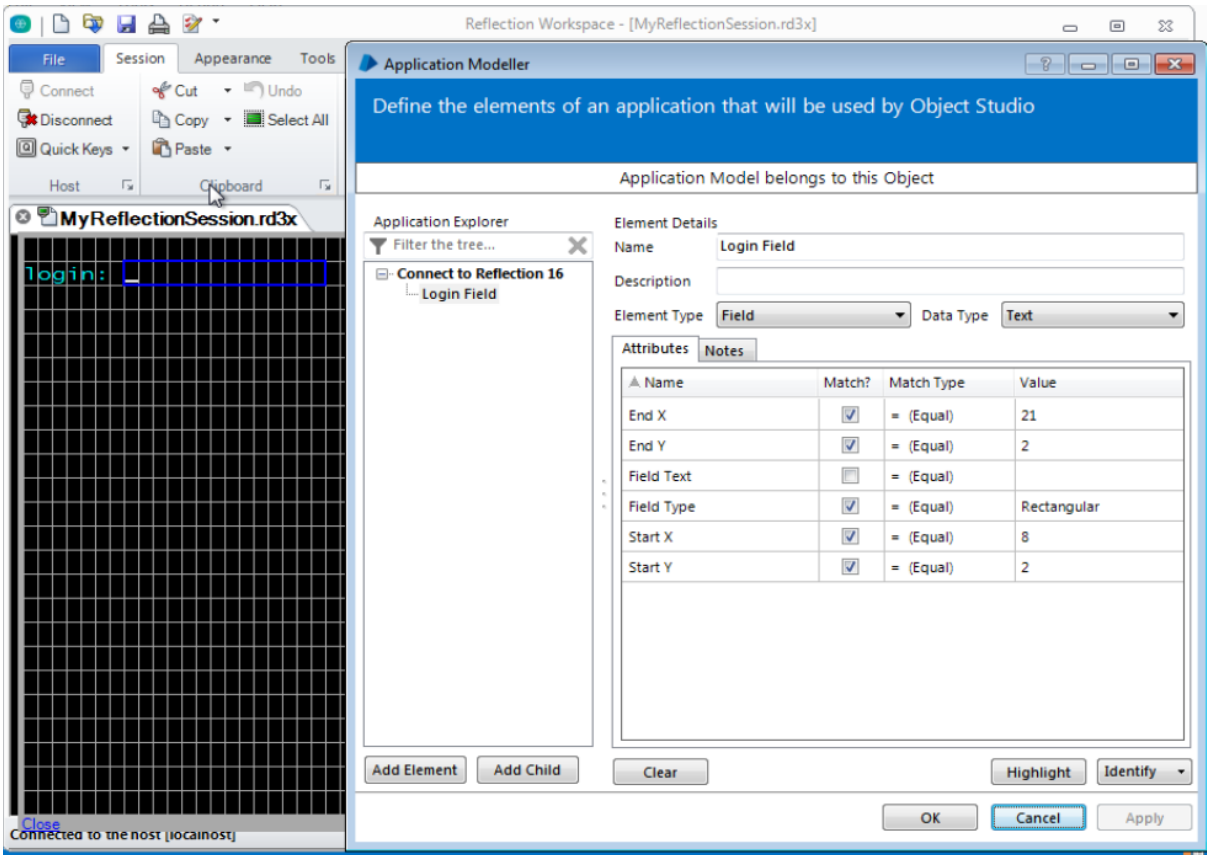
Using the **Win32 spy mode** you can reveal the 8032 grid allowing for field selection, for example:



This will reveal the Identification Tool and the corresponding display grid:



Identify a field by drawing its shape and the holding the Control key and using the left mouse click button to capture the element in Blue Prism:



Reflection Workspace - [MyReflectionSession.rd3x]
File
Session
Appearance
Tools
Connect
Disconnect
Quick Keys
Cut
Copy
Paste
Undo
Select All
Host
Clipboard
MyReflectionSession.rd3x
login:
Close
Connected to the host [localhost]
Application Modeller
Define the elements of an application that will be used by Object Studio
Application Model belongs to this Object
Application Explorer
Filter the tree...
Connect to Reflection 16
Login Field
Element Details
Name
Login Field
Description
Element Type
Field
Data Type
Text
Attributes
Notes
Name
Match?
Match Type
Value
End X
= (Equal)
21
End Y
= (Equal)
2
Field Text
= (Equal)
Field Type
= (Equal)
Rectangular
Start X
= (Equal)
8
Start Y
= (Equal)
2
Add Element
Add Child
Clear
Highlight
Identify
OK
Cancel
Apply