Rsam Platform

Microsoft SharePoint Integration Guide

Document Version: 2018.05.09 | May 2018

Contents

Overview

Rsam's SharePoint integration provides the ability to write a file stored within a file attachment attribute in Rsam to a SharePoint site. Example use cases include publishing policies, sharing evidence attachments with response teams (e.g. Legal), or sharing SSRS reports that have been generated by and stored within Rsam attributes. It allows customers to manage documents directly from Rsam without switching between Rsam and SharePoint. This integration is especially useful for Enterprise Policy Management module users who frequently update policies and want the revised policy documents to be available quickly across the organization.

Rsam SharePoint integration provides the following benefits:

- Provides users with the ability to create and overwrite documents in SharePoint
- Saves time and avoids manual tasks
- Prevents users from having to log in to their SharePoint site and make updates to their documents
- Automatically pushes documents to SharePoint via workflow events and scheduled events

Prerequisites

This section contains the prerequisites for integrating Microsoft SharePoint.

1. Your Rsam version is 9.2.2130.2 or above.

2. You have created the destination Object Type (Standard), Record Category/Type, file attachment attributes, workflow buttons, schedule event, reports, and other data elements in your Rsam instance.

3. Your Microsoft SharePoint version is 2013 or above. Keep the following SharePoint details ready: user credentials, SharePoint URL, SharePoint domain details (such as domain name), and folder structure details.

4. You have administrative experience with SharePoint.

SharePoint Integration Setup

This section describes the setup information to integrate SharePoint with Rsam.
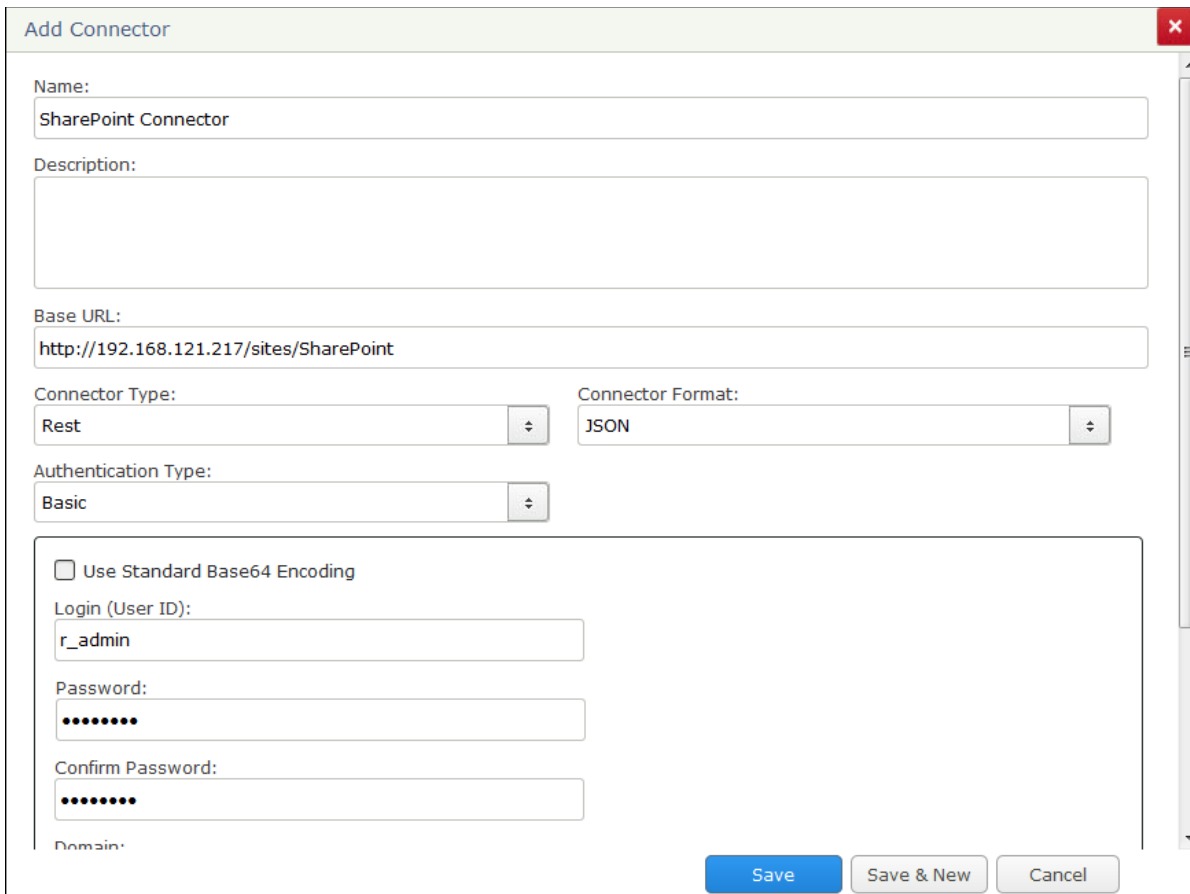
Create a Connector

Create a connector that will connect SharePoint through Basic authentication.

1. Navigate to **Manage** > **Administration**.

2. From within the left pane, navigate to **Options** > **Connectors**. The **Connectors** page appears, in which any previously added connectors are shown.

3. Click **Add** at the top-right corner. The **Add Connector** dialog appears.

4. Complete the attributes listed in the table below:

Attribute	Description
Name	Enter a connector name to integrate with SharePoint.
Description	Enter the description about the connector.
Base URL	Enter the SharePoint URL.
Connector Type	Select Rest in the drop-down list.
Connector Format	Select JSON in the drop-down list.
Authentication Type	Select Basic in the drop-down list.
Use Standard Base64 Encoding	Make sure that this check box is not selected. SharePoint does not support Base64 encoding for user credentials.
Login (User ID)	Enter a username of the SharePoint user.
Password	Enter the password of the user to authenticate the connection to the SharePoint site.
Confirm Password	Re-enter the same password for confirmation purpose.
Domain	This field is optional. You will need to enter this field if you are connecting to a SharePoint domain.

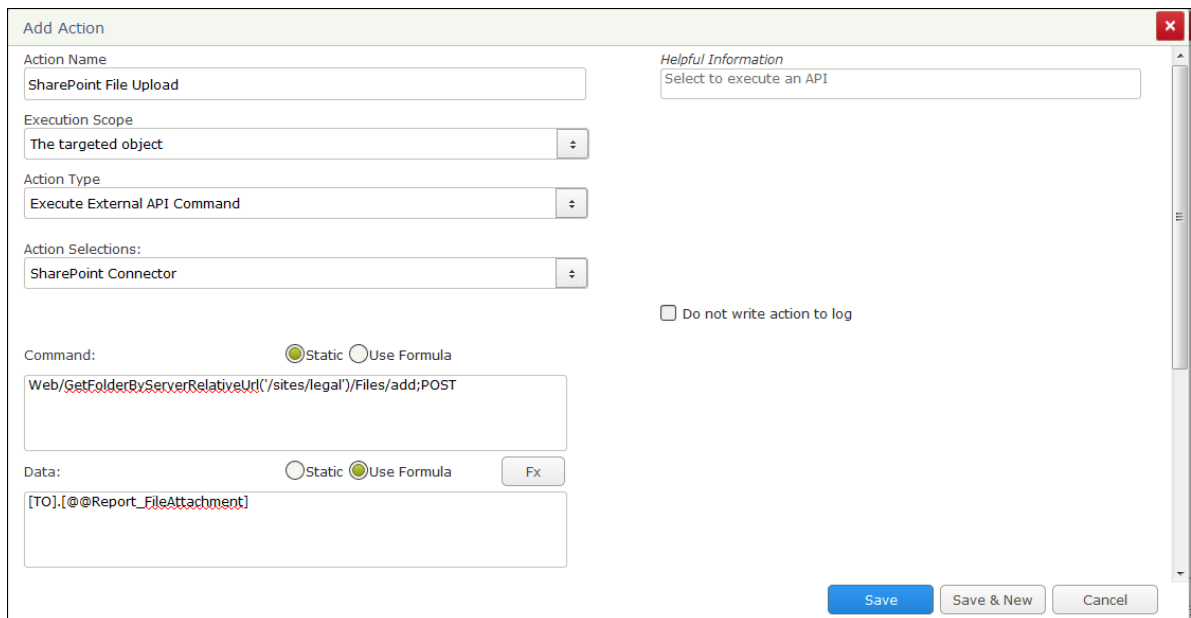| Attribute	Description
Custom Token Headers (name:value, separated by new line)	Optional. Passes additional request headers such as cookies and encryption standard for additional security. Specify each request header on a new line in the name:value format. Example: Cookie: Skin=new Content-Length: 348

5. Click **Save**. The connector is added.

Create a Risk Analytics Handler

Create an event handler to execute the document related action. The event handler can be executed by using a button or a schedule event/job. The following are the high-level steps to create an event handler.

1. Navigate to **Manage** > **Administration**, then navigate to **Workflow** > **Risk Analytics Handlers**, and click **Add** at the top-right corner.

2. Complete all the required details for the handler.

3. Add the criteria that you want the handler to check for.

4. Add actions that you want the handler to perform document related actions. For example, you will create an action that will upload the document to your SharePoint site.

   a) When creating an action, remember to select **Execute External API Command** from the Action Type drop-down list.

   b) Select the connector for SharePoint from the Action Selections drop-down list.

   c) In the Command box, select **Static** or **Use Formula** and enter a command for the action you wish to perform. The following example command uploads a file:
   Web/GetFolderByServerRelativeUrl('/sites/legal')/Files/add;POST

   d) In the Data box, select **Static** or **Use Formula** and enter the attribute that holds the attachment. This is the file attachment attribute used by the handler to perform the changes as per the Command.

   e) Under **Special Connector Options**, select **SharePoint** from the Connector Type drop-down list.

   f) As required, you may select the Overwrite the file checkbox. When this option is not selected, SharePoint connector will upload the file with a new name if there is an existing file with the same name. The new file will be named with a suffix "_1" and all subsequent uploads will follow the pattern of _2, _3, and so on.

For example, if you have uploaded the ExamplePolicy.pdf file, the new file will be uploaded as ExamplePolicy_1.pdf. Subsequent uploads by the handler action will name the files as ExamplePolicy_2.pdf, ExamplePolicy_3.pdf, and so on.

Associate the Handler

In order to execute the handler, you will need to associate it with a schedule event or a workflow button.

Associate the Handler to a Button

If you want to associate the handler to a record or object button, perform the following steps:

1. Navigate to **Workflow** > **Workflow Buttons – Records** / **Workflow Buttons – Objects**.

2. In the **Record Buttons** panel, select the desired button to which you wish to associate the handler.

3. Select the **Event Handlers** tab.

4. Select the Show All checkbox.

5. Select the search icon and enter the search criteria to locate the event handler.

6. After locating the event handler, select the associated checkbox.

7. In the **Event - > Event Handler Options** dialog, enter Execution Order, Execution Scope, and other desired options.

8. Click **Update**.

Associate the Handler to a Schedule Event

If you want to associate the handler to a schedule event, perform the following steps:

1. Select the scheduled event.

2. On the right-hand panel, search for the event handler that you wish to associate with a scheduled event.

3. Select the checkbox for the event handler.

4. In the **Event - > Event Handler Options** dialog, enter Execution Order and Execution Scope.

5. Click **Update**.

Review the Results

Once all the required setup is complete, execute the handler and check if the document operation is successful. To review the results, perform the following steps:

1. Navigate to the record type that has the attribute type where the file is stored.

2. Click **Action** and select the button that will perform the document related changes in your SharePoint site.

3. Sign in to your SharePoint site.

4. Navigate to the folder where the report changes are affected.

   Depending on the instructions fed to the handler action, you will notice the changes in the SharePoint folder. For example, if you have uploaded a file existing on the SharePoint by choosing not to overwrite the existing file, the file will be uploaded with a new name different from the previously uploaded file's name.

Appendix 1: Using a Report Generator

You can use a Report Generator to execute an SSRS report and store the resulting Word Doc or PDF in a file attachment attribute of a targeted record / object. The resultant reports can be directly written to SharePoint by an event handler or schedule event. This appendix walks you through the high-level steps on how to leverage a Report Generator.

1. Navigate to **Manage** > Administration.

2. Navigate to **Reports & Views** > Report Generator.

3. In the **Report Generator** panel, click **Add**.

4. In the **Add Report Generator** dialog, enter all the required fields. For the Report File Name field, select **Use Static Text** or **Use Dynamic Text**. Use the **Use Dynamic Text** option to create a formula with **Attributes** or **Others** from the Possible Items Group drop-down list.
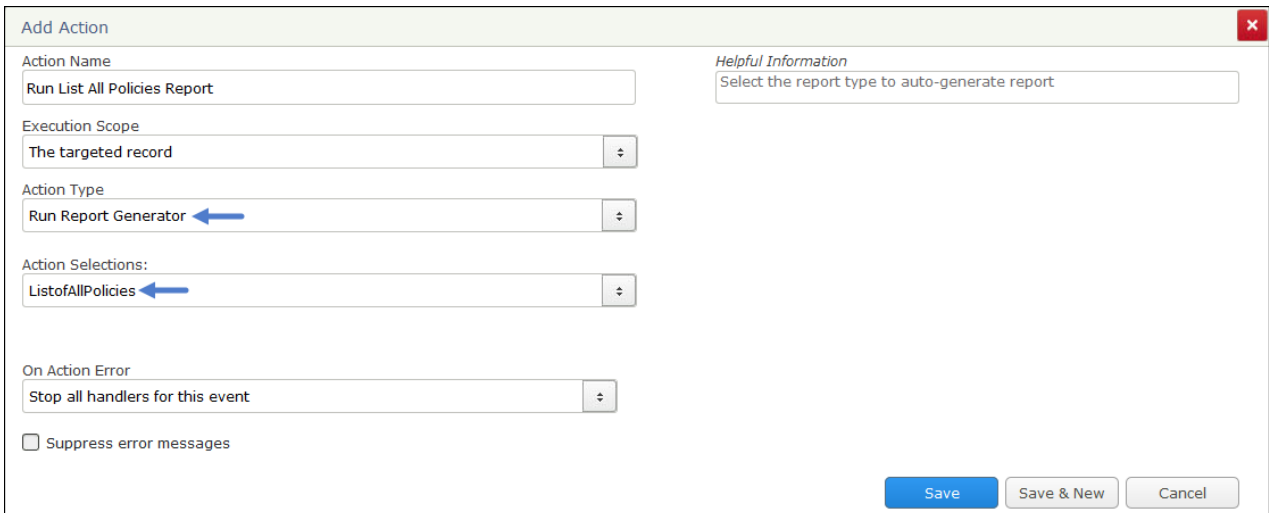
Notes:

1. If the Report File Name is provided with the Use Dynamic Text option and the attribute in which the report will be stored is selected as **Append**, the report will be uploaded with a timestamp if that report already exists with the same name.

2. Only single-select attributes are available for selection as part of the Possible Items Group in the **Create Formula** dialog.

3. When the attributes used in a dynamic formula has blank values in the target record / object, the report filename will be specified with the text specified in the Default Name for the report file when dynamic attribute used is blank option available under General Web Options.

5. Click **Save** to create the report generator.

6. Create a Risk Analytics Handler with the required criteria and action. Select Run Report Generator from the Action Type drop-down list and select the report generator name from the Action Selections drop-down list.

7. Associate the handler with a button or a scheduled event.

8. Create one more handler that will perform an action on the generated document / report. For example, create an action to write the report to SharePoint. For more information, see Create a Risk Analytics Handler.

9. Navigate to the record / object type containing the file attachment attribute that will store the report.

10. Trigger the handler to execute on a workflow event or a schedule to generate the report. After the report is generated, you will see the report in the file attachment attribute.

11. Execute the action that will upload/overwrite the report in SharePoint.

Appendix 2: Example Commands

This appendix provides example commands of document operations.

Upload File

```
Web/GetFolderByServerRelativeUrl('FolderPath')/Files/add;
```

For example, if your SharePoint site is `http://SharePointSite/sites/myspace` and the target folder where you want to upload the file is "publicpolicies", then the full command will look like this:

```
Web/GetFolderByServerRelativeUrl('sites/myspace/publicpolicies')/Files/add;
```

Create Folder

```
lists/getByTitle('BusinessandFinance')/rootfolder/folders/add(url='legal policies')
```

Update Metadata File

Handler Action Command

```
Web/GetFileByServerRelativeUrl('/sites/LegalPolicies/UseofFacilities.pdf')/ListItemAllFields
```

Handler Action Data

```
{"__metadata":{"type":"SP.File"} , "Title": "Any title" }
```

Update Custom Metadata File

The command to update both default and custom column metadata of a file will look like this:

```
Web/GetFileByServerRelativeUrl('/sites/LegalPolicies/UseofFacilities.pdf')/ListItemAllFields;POST
```

The Data field to update the user created custom columns (e.g. Title, ManagementArea, Other_Requirement, and Completion) will look like this:

```
{"__metadata":{"type": "SP.Data.[TR].[@@SP: Root Folder Name]Item" }
,"Title":"[TR].[@@SP: Title]"
,"ManagementArea":"General"
,"Other_Requirement":"Rsam Test Data"
,"Completion":"40"}
```

Where `[TR].[@@SP: Root Folder Name]` is the name of the folder where the file is saved.

Update Metadata Folder

Handler Action Command

```
Web/GetFolderByServerRelativeUrl('/sites/LegalPolicies')/ListItemAllFields
```

Handler Action Data

```
{"__metadata":{"type":"SP.ListItem"} , "Title": "Any title" }
```

Appendix 3: Help and Support

To get familiar with specific Rsam features or to read in-depth information about any topic, access the following documentation:

- End-User Help
- Administrator Help

If you still have any questions, contact **Rsam Technical Support**.