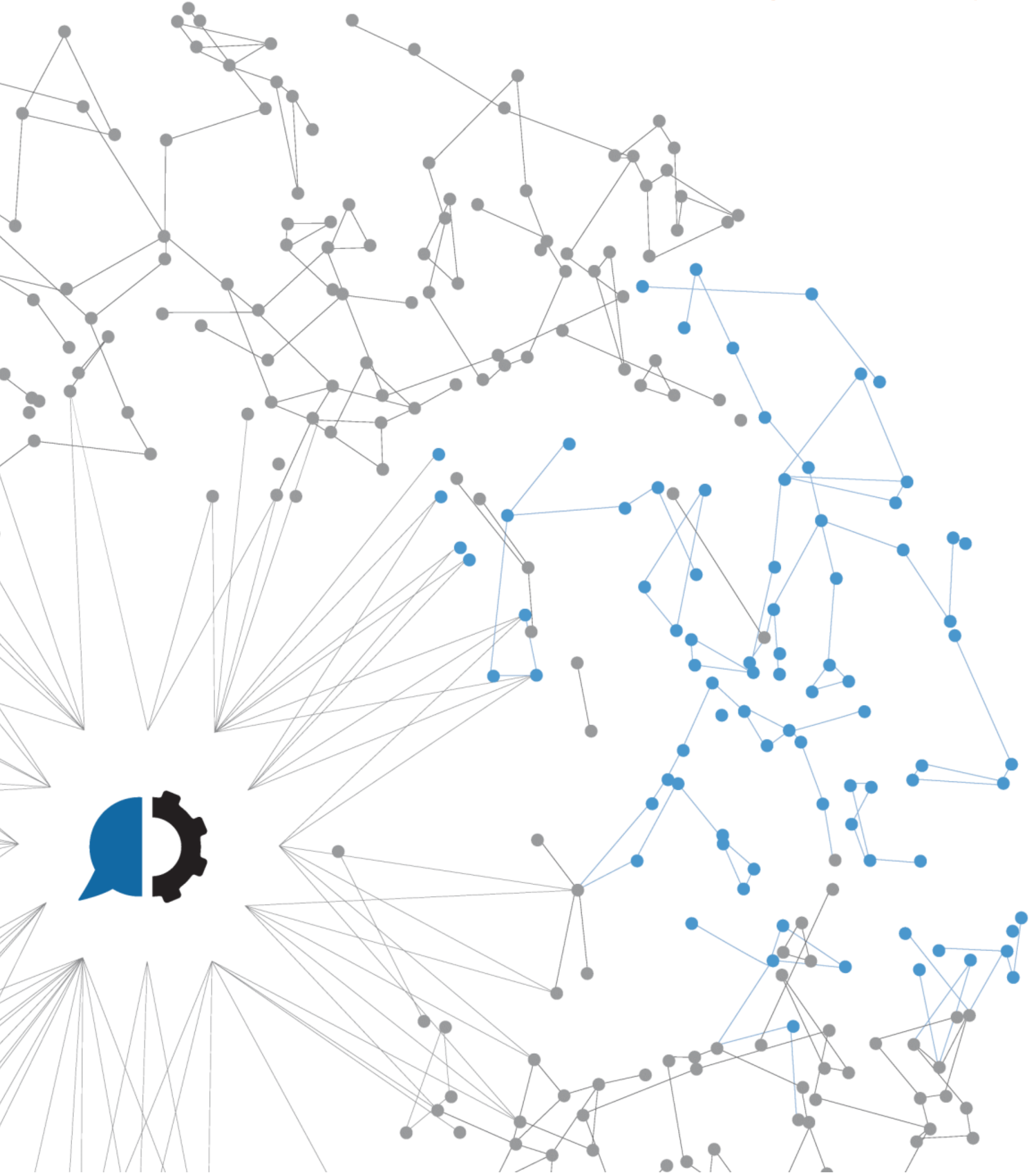
SALESFORCE BOT

GENERATE CONNECTION TOKEN



Content

OVERVIEW

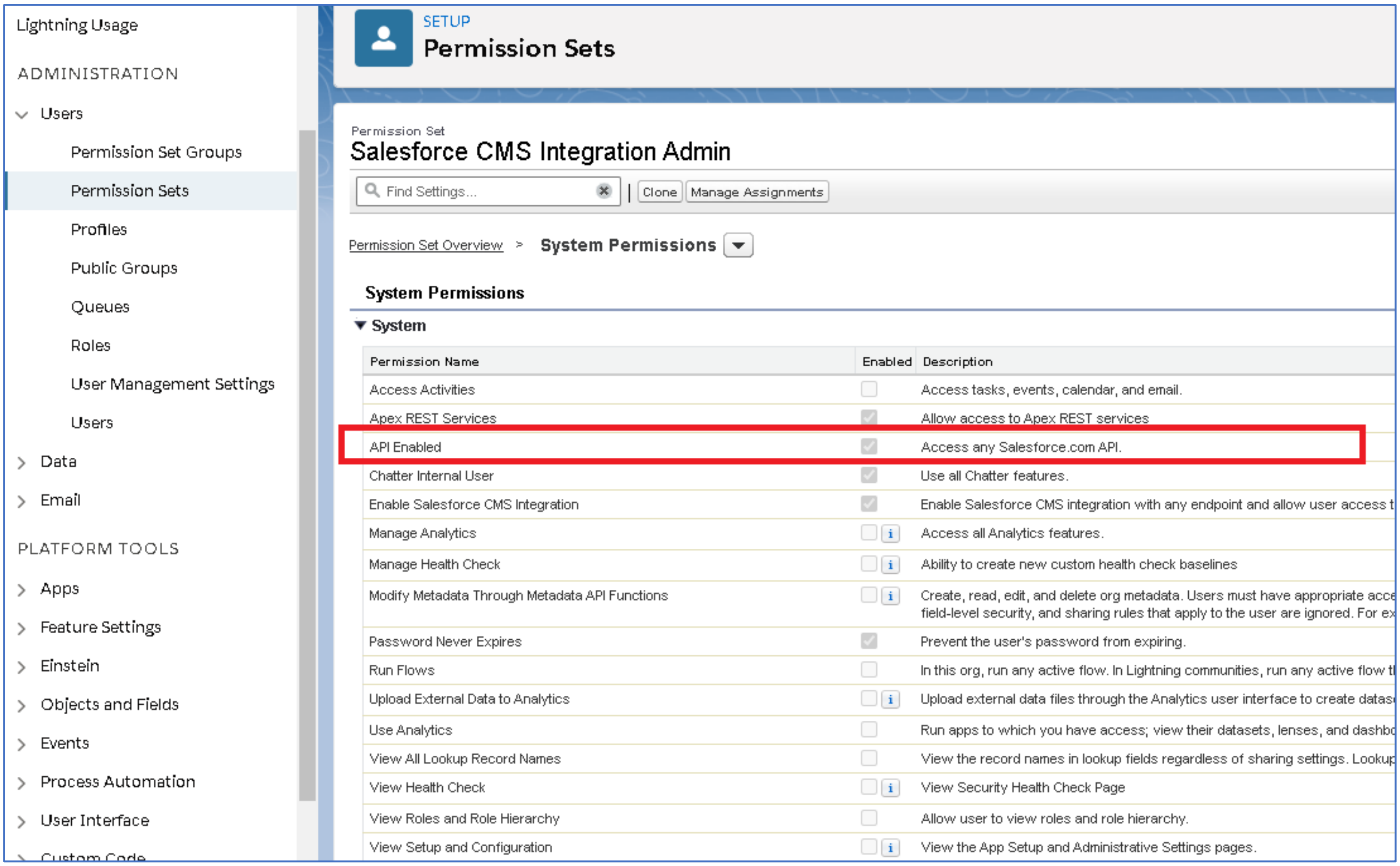
This how to guide introduces the *Salesforce Bot - Generate Connection Token*. Instead of spending precious time and resources on repetitive, manual tasks, let Automate streamline your IT and business processes with robotic process automation. With the help of Automate, we can take over manual steps and greatly reduce the repetitive activities and improve the quality and consistency of the work. The top processes being automated are report generation, file movement, data import and export, and scheduling batch processing.

Salesforce Bot - Generate Connection Token is based in the Salesforce REST API. It generates a **Oauth2** access token requesting the *“login.Salesforce.com/services/oauth2/token”* by using a password grant type. Carefully check the PREREQUISITES and the HOW TO EXECUTE THE SALESFORCE BOT - GENERATE CONNECTION TOKEN sections to get more detailed information.

This bot can be used to generate a token on a daily basis and work with any Salesforce bot.

PREREQUISITES

- Automate: The Salesforce Bot depends on Automate software in order to work. The minimal supported versions are:
    - Automate Ultimate 11.2
    - Automate Plus 11.2
    - Automate Desktop 11.2
- Automate Markup Language file (.AML): The primary file type used in Automate which contains the steps of our Salesforce Bot task
- Salesforce: Our minimal requirements are
    - Salesforce REST API – Enabled: You can check this by going to Salesforce Setup > Users (Administration) > Permission Sets > Salesforce CMS Integration Admin > System Permissions:



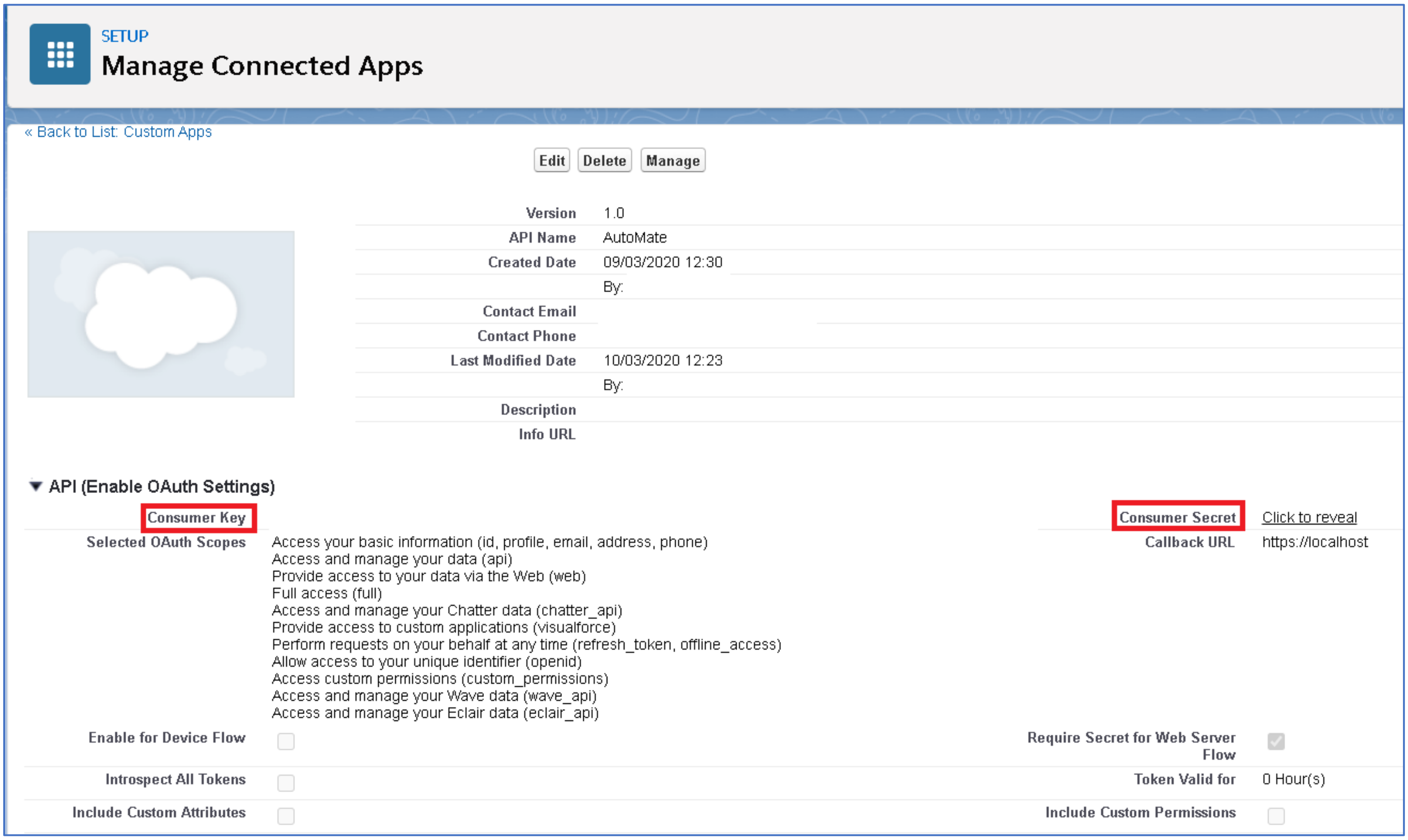
Permission Set
Salesforce CMS Integration Admin

System Permissions

System

Permission Name	Enabled	Description
Access Activities	☐	Access tasks, events, calendar, and email.
Apex REST Services	☑	Allow access to Apex REST services
API Enabled	☑	Access any Salesforce.com API.
Chatter Internal User	☑	Use all Chatter features.
Enable Salesforce CMS Integration	☑	Enable Salesforce CMS integration with any endpoint and allow user access t
Manage Analytics	☐ ℹ	Access all Analytics features.
Manage Health Check	☐ ℹ	Ability to create new custom health check baselines
Modify Metadata Through Metadata API Functions	☐ ℹ	Create, read, edit, and delete org metadata. Users must have appropriate acce field-level security, and sharing rules that apply to the user are ignored. For ex
Password Never Expires	☑	Prevent the user's password from expiring.
Run Flows	☐	In this org, run any active flow. In Lightning communities, run any active flow t
Upload External Data to Analytics	☐ ℹ	Upload external data files through the Analytics user interface to create datas
Use Analytics	☐	Run apps to which you have access; view their datasets, lenses, and dashbo
View All Lookup Record Names	☐	View the record names in lookup fields regardless of sharing settings. Lookup
View Health Check	☐ ℹ	View Security Health Check Page
View Roles and Role Hierarchy	☐	Allow user to view roles and role hierarchy.
View Setup and Configuration	☐ ℹ	View the App Setup and Administrative Settings pages.

- Salesforce REST API – Connected App Created and OAuth Enabled: You can check the Salesforce documentation on how to create a connected application in this link. Once you create and configure your connected app, it will look as follows:



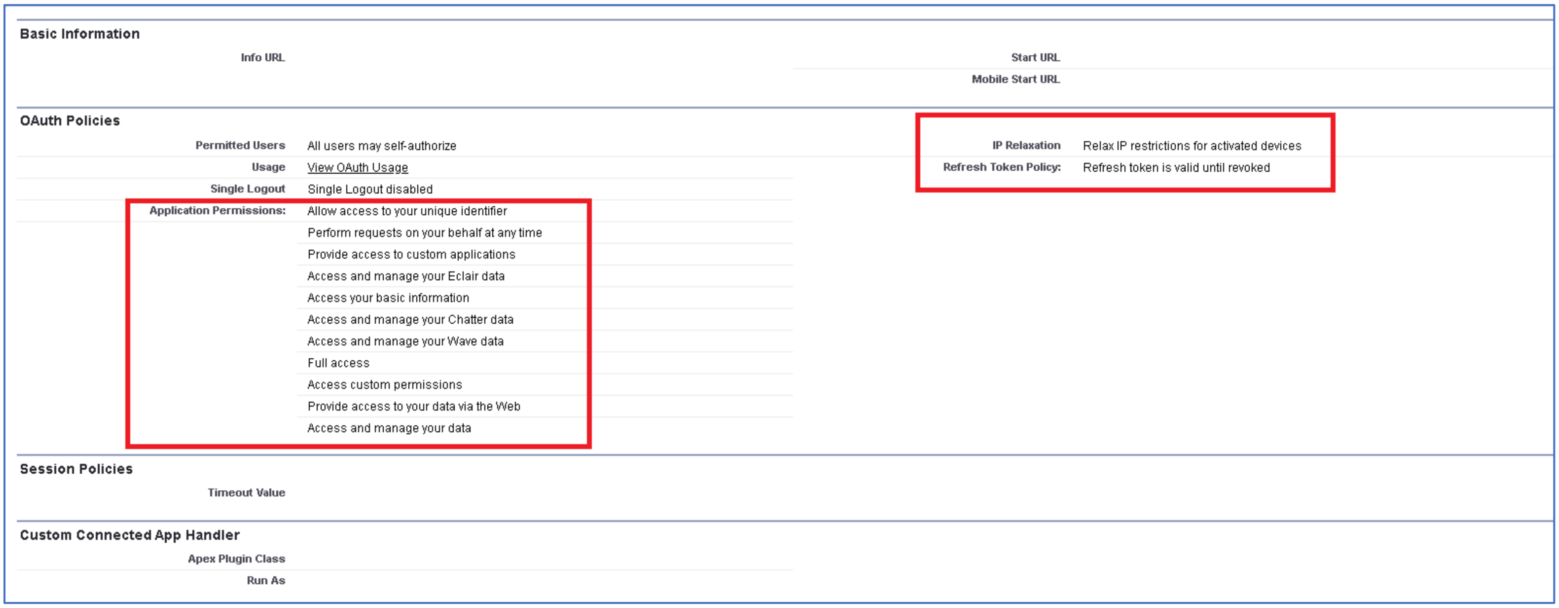
Version	1.0
API Name	AutoMate
Created Date	09/03/2020 12:30
	By:
Contact Email	
Contact Phone	
Last Modified Date	10/03/2020 12:23
	By:
Description	
Info URL	

API (Enable OAuth Settings)

Consumer Key		**Consumer Secret**	Click to reveal
Selected OAuth Scopes	Access your basic information (id, profile, email, address, phone) Access and manage your data (api) Provide access to your data via the Web (web) Full access (full) Access and manage your Chatter data (chatter_api) Provide access to custom applications (visualforce) Perform requests on your behalf at any time (refresh_token, offline_access) Allow access to your unique identifier (openid) Access custom permissions (custom_permissions) Access and manage your Wave data (wave_api) Access and manage your Eclair data (eclair_api)	**Callback URL**	https://localhost
Enable for Device Flow	☐	**Require Secret for Web Server Flow**	☑
Introspect All Tokens	☐	**Token Valid for**	0 Hour(s)
Include Custom Attributes	☐	**Include Custom Permissions**	☐

Note: From this configuration you will get some of the configuration values that you will need to configure this bot (Consumer Key and Consumer Secret). The Callback URL can be https://localhost

- Salesforce OAuth Policies: It is important to properly configure the OAuth Policies. Specifically, the permissions and the ***IP Relaxation*** options to permit a successful request. In here you can also configure the ***refreshing token policy***. As shown in the next image:



Basic Information

Info URL		Start URL	
		Mobile Start URL	

OAuth Policies

Permitted Users	All users may self-authorize	IP Relaxation	Relax IP restrictions for activated devices
Usage	View OAuth Usage	Refresh Token Policy:	Refresh token is valid until revoked
Single Logout	Single Logout disabled		
Application Permissions:	Allow access to your unique identifier Perform requests on your behalf at any time Provide access to custom applications Access and manage your Eclair data Access your basic information Access and manage your Chatter data Access and manage your Wave data Full access Access custom permissions Provide access to your data via the Web Access and manage your data		

Session Policies

Timeout Value	

Custom Connected App Handler

Apex Plugin Class	
Run As	

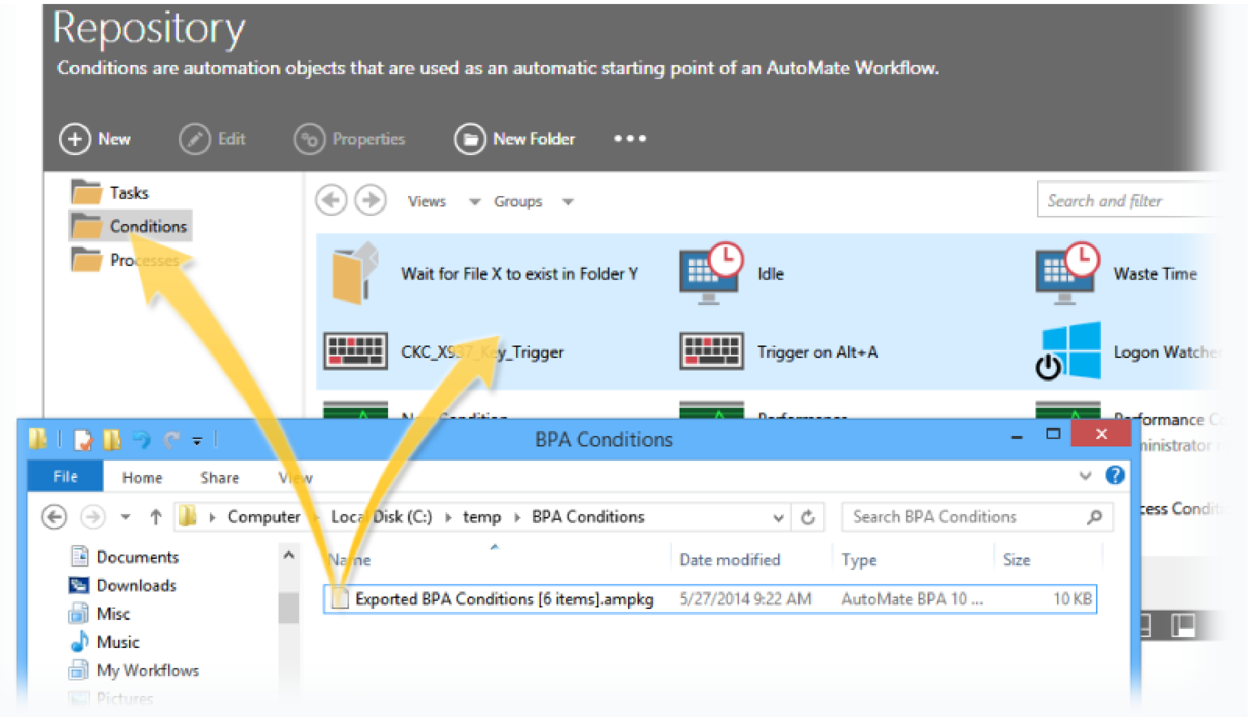
- Salesforce User account with the appropriate permissions to execute Salesforce API requests. It is recommended that you check the Salesforce documentation to give the user account the authority needed for this bot to work. You will find information related to the user account and the OAuth configuration in this link.

HOW TO IMPORT AN AUTOMATE TASK

Compatible file types can be imported to the repository via drag-and-drop

From the Server Management Console, navigate to the Repository section

Drag the desired file(s) from its original location and drop them into the folder in the SMC. Files can be dropped into the folder icon or the main panel (as shown below). Imported object(s) are automatically placed into their corresponding repository location.



Repository

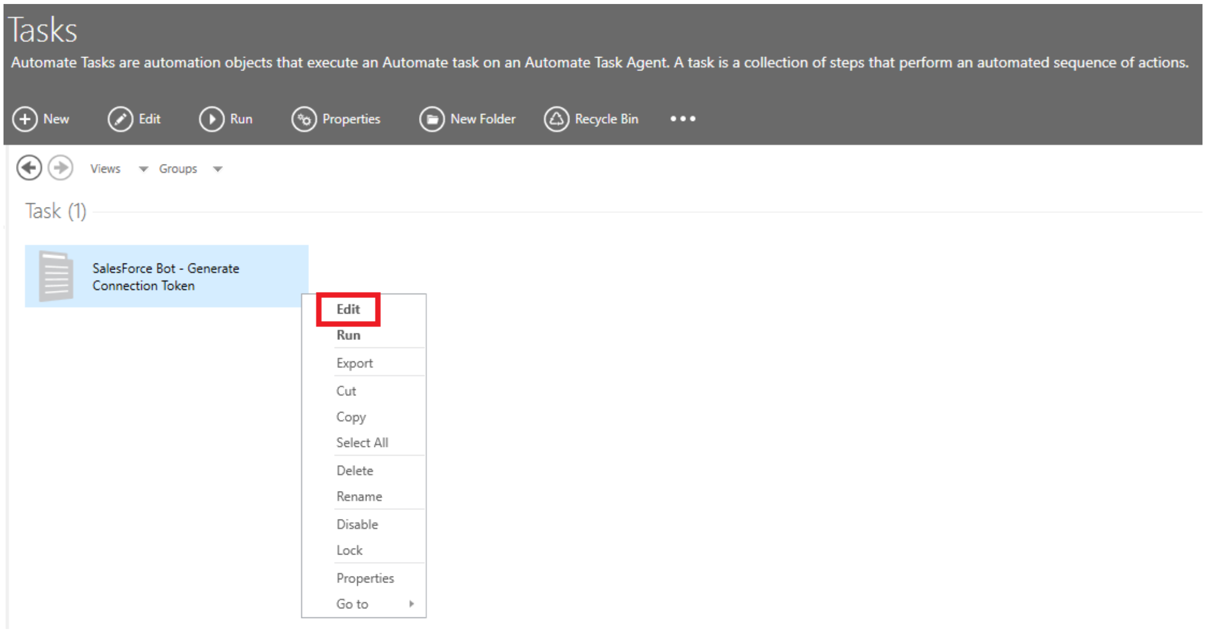
Conditions are automation objects that are used as an automatic starting point of an AutoMate Workflow.

How to execute the Salesforce Bot - Generate Connection Token

If this is the first time running this task, we will need to set some parameters:

Open the Server Management Console and locate the imported task

Edit the imported task by right clicking on the task and selecting edit



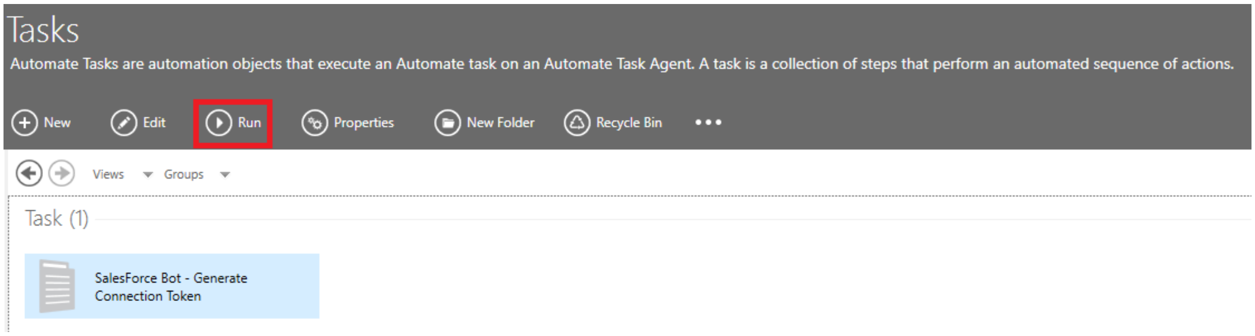
Automate Tasks are automation objects that execute an Automate task on an Automate Task Agent. A task is a collection of steps that perform an automated sequence of actions.

From step 2 edit the next variables according to you desired output:

- var_SalesForceTokenURL: This is the URL used to request a Salesforce Token generation. By default, we use the "https://login.salesforce.com/services/oauth2/token" URL but you can change it. For example, for an instance configured with own domain: "*https://OwnDomain.My.salesforce.com*/services/oauth2/token"
- var_client_id: This will be the **Consumer Key** associated with the *Salesforce connected App* that you created.
- var_client_secret: This will be the **Consumer Secret** generated with the *Salesforce connected App* that you created.
- var_username: Username account to connect.
- var_password: Password account to connect.
- var_SalesForceFileTokenOutput: This will be the path and filename in which you want the bot to create the txt file with the token string generated. Default: ***C:\Automate\SalesForceToken.txt***

Save and close the task

Select the task and click on Run



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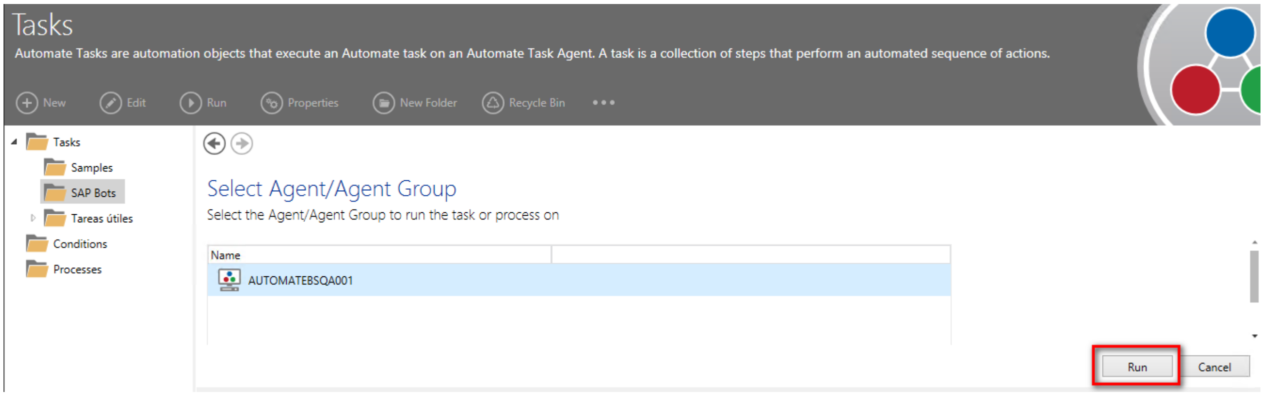
SalesForce Bot - Generate Connection Token

Select your Agent and click on Run again



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Select Agent/Agent Group

Select the Agent/Agent Group to run the task or process on

Name
AUTOMATEBSQA001

APPENDIX A - TROUBLESHOOTING

- Logs: Each iteration of our bot creates a log file for troubleshooting. You can locate the log file under C:\AutoMate\Tasks\<<TASK NAME>>. By Default, the task name is *Salesforce Bot - Generate Connection Token.*