



Notify with Slack on Record Update

Readme

Version 1.0

13th Aug 2019

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1. Introduction

This document contains all essential information for the user to make full use of the Bot or Digital worker. This manual includes a description of the functions and capabilities and step-by-step procedures for setup & configuration of the Bot.

Overview

This Bot reads Sales Lead Information from a [CSV](#) Template based on Filter Conditions & other configurable parameters (as explained below) and sends a notification to a designated Slack Channel.

Detailed steps are as follows:

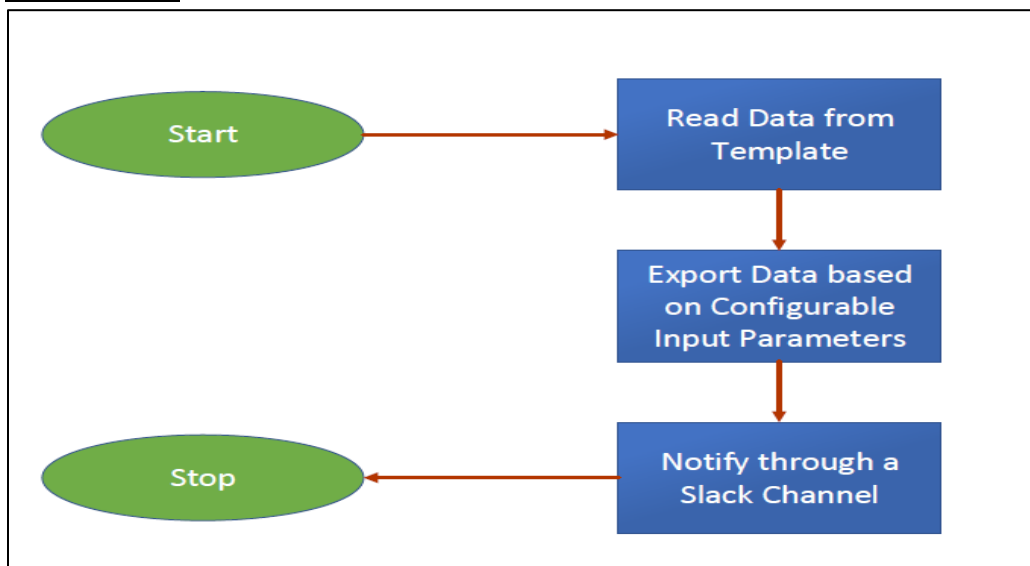
- 1) Reads data from a [CSV](#) Template, e.g. Sales leads (Template may contain any data).
- 2) Exports data from the [CSV](#) Template based on Filter conditions set by a user through a Configuration File.

Filter conditions are as below (Click individual to read details)

- [Filter based on Column Value](#)
- [Customize the column position](#)
- [Flexibility to select the required data from the Input File \(CSV Template\)](#)

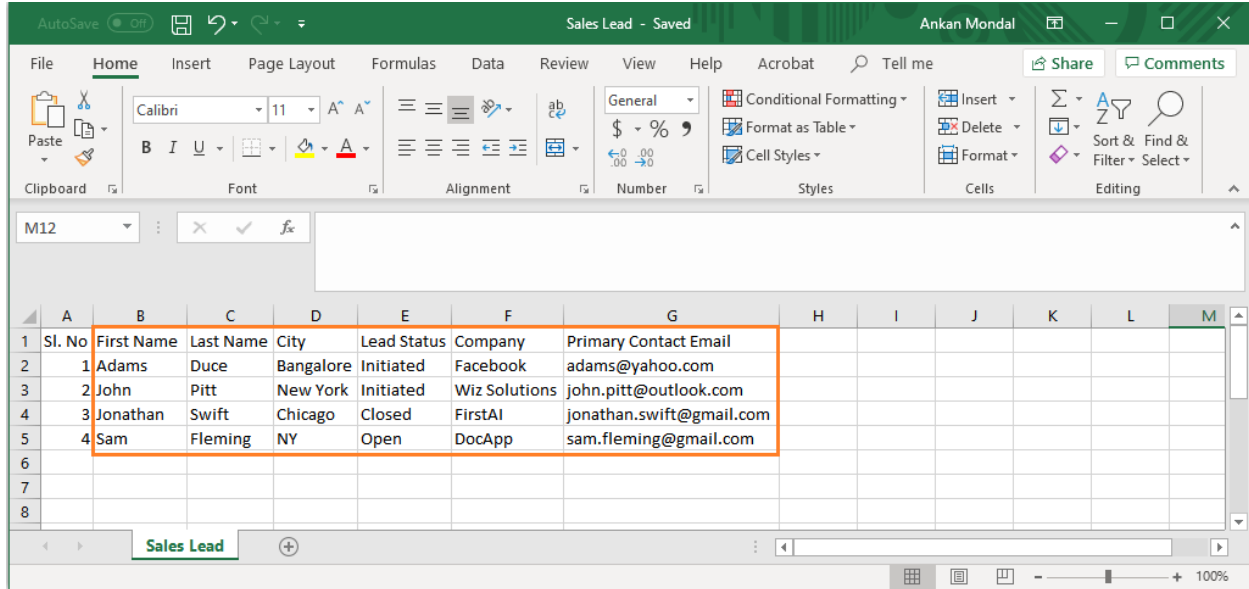
- 3) Sends the Exported data to a Slack Channel that you designate

• Visual Flow –



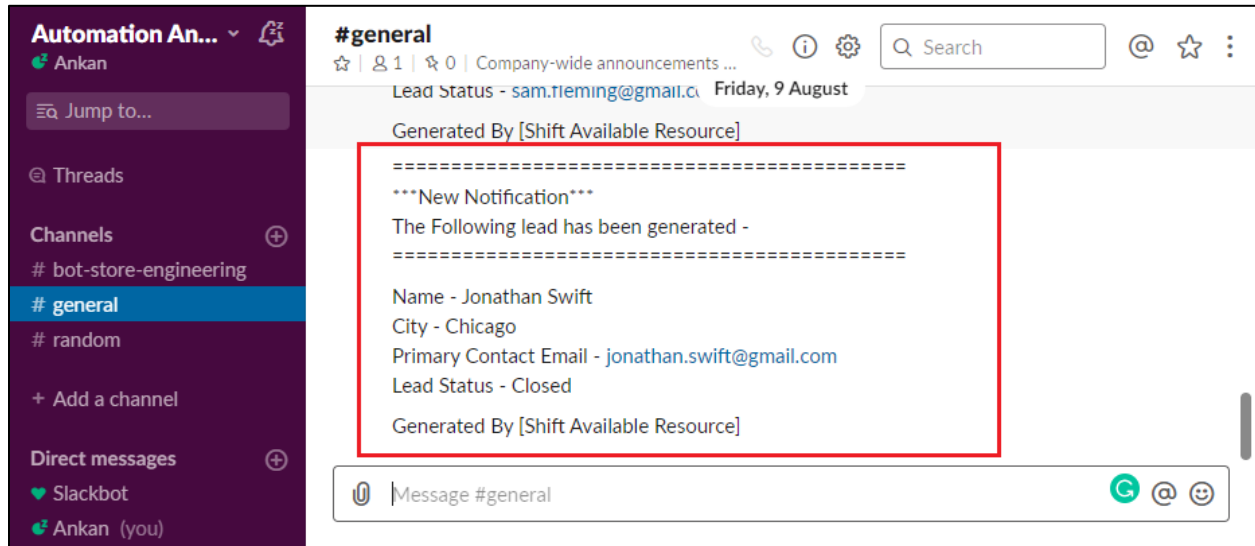
• Input and Output Example –


- **Input: Sales Lead CSV File:**



Sl. No	First Name	Last Name	City	Lead Status	Company	Primary Contact Email
1	Adams	Duce	Bangalore	Initiated	Facebook	adams@yahoo.com
2	John	Pitt	New York	Initiated	Wiz Solutions	john.pitt@outlook.com
3	Jonathan	Swift	Chicago	Closed	FirstAI	jonathan.swift@gmail.com
4	Sam	Fleming	NY	Open	DocApp	sam.fleming@gmail.com

- **Output: Notification to the Slack Channel:**



Automation An... 

Jump to...

Threads





Channels

- # bot-store-engineering
- # general
- # random

+ Add a channel

Direct messages

- Slackbot
- Ankan (you)





#general 1 | 0 | Company-wide announcements ...  Search   

Lead Status - [sam.fleming@gmail.com](#) Friday, 9 August

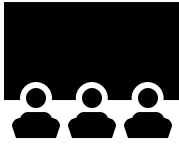
Generated By [Shift Available Resource]

=====
 New Notification
 The Following lead has been generated -
 =====

Name - Jonathan Swift
 City - Chicago
 Primary Contact Email - [jonathan.swift@gmail.com](#)
 Lead Status - Closed
 Generated By [Shift Available Resource]

 Message #general   

Common Use cases



A common use case, as shown above, is to have a notification sent to the recipient via Slack around new Sales Leads, which have been downloaded from a [CRM](#) system to a [CSV](#).

The fields in the [CSV](#) can be changed to whatever data that needs to be sent via Slack. Examples of other use cases includes:

- Send Notification on Slack with New Member Onboarding
- Send Notification on Slack with Payroll Updates
- Send Notification on Slack with Leave Balance Updates

2. Requirements & Prerequisites

System Requirements



For the [PC](#) or server where the bot needs to run:

- ✓ [RAM](#): 8GB or higher
- ✓ PROCESSOR: Intel Core i5 or higher and equivalent for any other [OS](#)
- ✓ Hard Disk: Up to 2GB of overall free space in the [AA](#) Client installation drive.

Reference below for [Enterprise Client & Control Room system requirements](#).

Prerequisites



- **Software's needed -**
 - ✓ Slack WebApp
 - ✓ [AA](#) Enterprise Client 11.x
 - ✓ [AA](#) Enterprise Control Room 11.x
- **Accounts/License needed –**
 - ✓ Slack Account. Slack account can be opened at [here](#)
 - ✓ [AA](#) Enterprise License

Security Measures

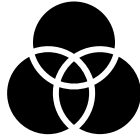


There are some security best practice recommendations that you may follow with your bot.

- It is not recommended to provide admin access to the Windows User Account executing the Bots, to avoid unintended data changes with the [CSV](#) Template.
- It is recommended to update Slack [API](#) Tokens twice or more in a quarter to ensure data safety.

3. Getting Started

Skill Matrix



The functionality of the Bot has been divided into set of skills.

Below is an overview of how the task bots and metabots map to these skills:

Skill	Task Files	MetaBot Files
Read Template based on Filter Condition	01-Check Record.atmx	No Metabots
Notify Slack Channel	02-Send Slack Post.atmx	SlackBot.mbot

Installation Hierarchy



Once the bot is downloaded and installed, the installer creates the files in the folder structure as shown below.

Folder Structure on your Machine

Folder Structure	Description
<p><AA Application Path></p> <p>1. My Tasks</p> <p>1.1. Bot Store</p> <p>1.1.1. Notify with Slack on Record Update</p> <ul style="list-style-type: none"> ➤ Error Folder <ul style="list-style-type: none"> • Logs <ul style="list-style-type: none"> ○ Error logs Month-Day-Year Hour Min Sec.txt • Snapshots <ul style="list-style-type: none"> ○ Error Snap Month-Day-Year.png ➤ Input Folder <ul style="list-style-type: none"> • ConfigurationFile.txt • Sales Lead.csv ➤ My Tasks <ul style="list-style-type: none"> • 01 – Check Record.atmx • 02 – Send Slack Post.atmx <p>2. My MetaBots</p> <ul style="list-style-type: none"> ➤ SlackBot.mbot 	<p><AA Application Path> is the location where AA files are stored on your machine</p> <p>1. My Tasks</p> <p>My Task Folder is the default directory where Bot Files are saved.</p> <p>1.1 Bot Store</p> <p>Bot Store Folder contains the Bot Name Folder which the installer creates while installation of the Bot.</p> <p>1.1.1 Notify with Slack on Record Update</p> <p>This folder gets created by the installer and contains files and folders needed for the bot execution.</p> <ul style="list-style-type: none"> ➤ Error folder is where logs and snapshots of screens will be placed if something goes wrong with the bot during execution ➤ Input Folder is where the input files that the bot needs for execution of the use case is saved <ul style="list-style-type: none"> • ConfigurationFile.txt is where the values need to be setup for the bot to run. • Sales Lead.csv provides an example of the type of content that can be provided as an input to the bot. ➤ My Tasks folder contains all the Developed Platform Source Code <p>2. My MetaBots folder contains the Developed Metabots needed for the bot execution.</p>

Quick Start

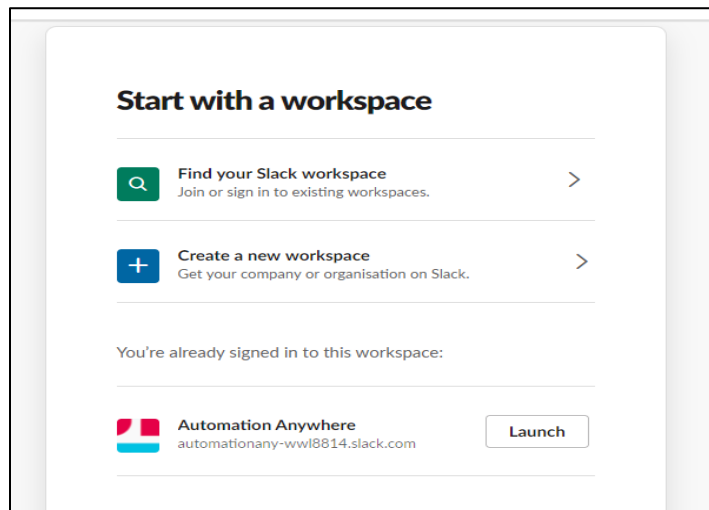
3.1.1 Setup



STEP 1 (Setting up a Slack Account):

Click [here](#)

The below page will appear once the above link is clicked -

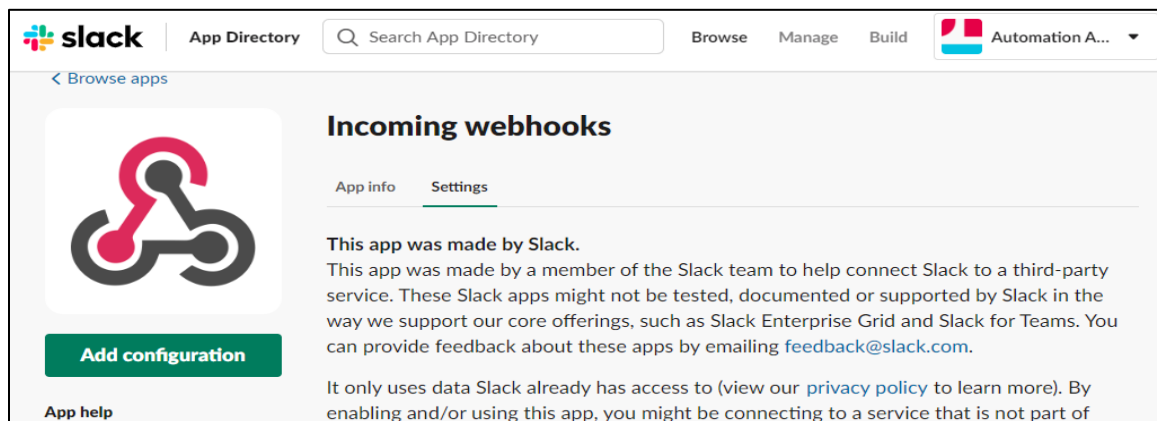


- If you already have an account, click on '**Launch**'.
- For new users, click on '**Create a new Workspace**' and sign in to your account.

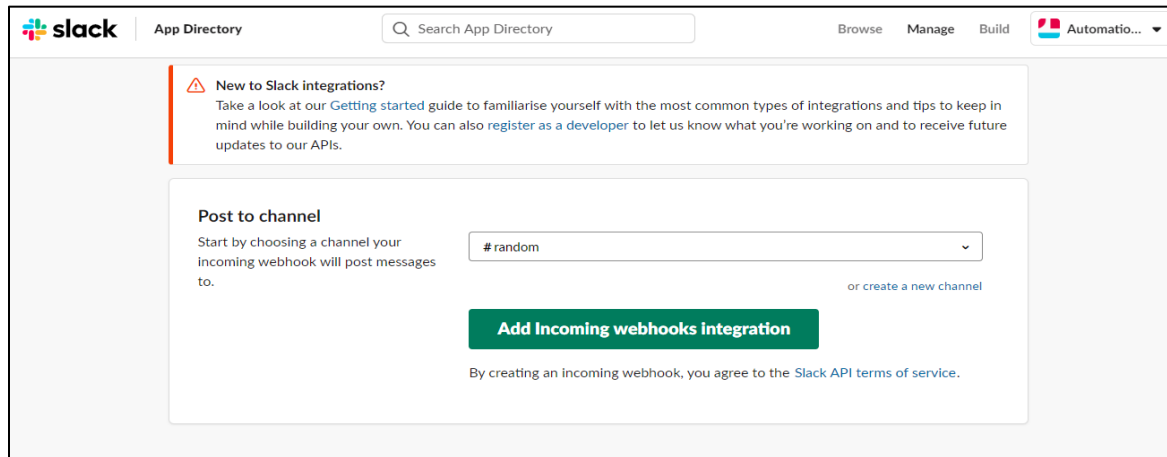
Step 2 (Generating URL & Keys):

Click [here](#)

The below page will appear once the above link is clicked -



- Click on the “Add Configuration” option.



- It will take you to another page and give you an option to choose a channel. Choose a channel to which you want the bot to post and click “Add Incoming Webhooks Integration”.
- It will give a Webhook URL which contains the token (highlighted part) looks something like the below example:

<https://hooks.slack.com/services/T9LGF7BGV/BBHN68EAF/oaCbQnFWmDNUdsbvk>

- Example of URL – Highlighted in Green.
- Example of Token – Highlighted in Yellow.

3.1.2 Configuration



STEP 1 (Configuring Credential in Control Room’s Credential Vault)

Passwords and other sensitive information such as user credentials, account number, and social security numbers included in automation tasks, should be stored as credentials centrally in the Credential Vault.

These sensitive data items become secured (stored in CR) and can’t be accessed locally which is used by the bots when it executes in the machine.

Below are the step-by-step instructions for what needs to be done to set up the URL and Token for Slack in the Credential Vault.

- ‘Locker Consumer Role’ needs to be assigned to the AA user (bot runner) which ensures the user have full access to the locker.

- Locker needs to be created with name as “Locker_Slack”
- Credential needs to be created with name as “Credential_Slack”, where the URL and Token needs to be saved.

Locker Name	Credentials Name	Attribute Name	Value
Locker_Slack	Credential_Slack	URL	Generated URL (as highlighted above in Green)
Locker_Slack	Credential_Slack	Token	Generated Token (as highlighted above in Yellow)

STEP 2 (Configuring Parameters with an External File)

External file can be configured at -

AA Application Path > My Tasks > Bot Store > Notify with Slack on Record Update - Automation Anywhere > Input Folder > ConfigurationFile.txt

Below is how the configuration file looks:

```
-----
Input File Name (Case-Sensitive) :
-----

vInputFileName=Sales Lead.csv

-----
Compare Parameters (Case-Sensitive) :
-----

vColumnIndex=5
vCompareValue=sam.fleming@gmail.com

-----
Template Index Settings :
-----

vFirstNameIndex=2
vLastNameIndex=3
vCityIndex=
vPrimaryContactEmailIndex=5
vCompanyIndex=7
vLeadStatusIndex=6
```

This is where, the input values for variables are stored which is needed by the bot at the time of execution. (Sensitive variables – like user name, password, and URLs will be an input in the Credential)

In the ConfigurationFile.txt, variable values need to be defined as per the user’s requirement.

Below is a table that summarizes what the variable name is, what it does, and an example of the input & output:

<u>INPUT VARIABLES: NEEDS TO BE CONFIGURED BY THE USERS FOR INPUT PARAMETER</u>				
Variable Name	Type	Mandatory (Yes/No)	Purpose	Example Input
vInputFileName	Text	Yes	File Name for the template from which Bot reads the value from.	Sales Lead.csv
vColumnIndex	Number	Yes	Column Number	5
vCompareValue	Text	Yes	Value	Bangalore
vFirstNameIndex	Number	Yes	Column Number of the First Name Column	1
vLastNameIndex	Number	Yes	Column Number of the Last Name Column	2
vCityIndex	Number	No	Column Number of the City Column	3
vPrimaryContactEmailIndex	Number	No	Column Number of the Email Column	4
vCompanyIndex	Number	No	Column Number of the Company Column	5
vLeadStatusIndex	Number	No	Column Number of the Lead Status Column	6
vUsername	Text	Yes	Username of the Slack Account	john12
vChannel	Text	Yes	Channel name of the Slack Account	#general
vCustomSuccessMessage	Text	No	Custom Success message which will return once the post is successful. Flexibility for the user to select the Success Message	Successful
vHeaderMessage	Text	No	Custom Message that can appended at the top with the data from the template.	**New Lead**
vFootMessage	Text	No	Custom Message that can appended at the end with the data from the template.	Generated by [Any Name]

OUTPUT VARIABLES: DISPLAYS OUTPUT RESPONSE				
Variable Name	Type	Mandatory (Yes/No)	Purpose	Example Output
vSlackInputMessage	Text	No	Extracted Data from the CSV template	Name – XYZ City - Bangalore
vOutputSuccess	Text	No	Displays whether the Slack message has been sent successfully	Slack Message has been sent successfully
vOutputError	Text	No	Displays error message if the Slack message has not been sent	Slack message was not sent, failure due to incorrect URL

Guidance for configuring Filter conditions are described below:

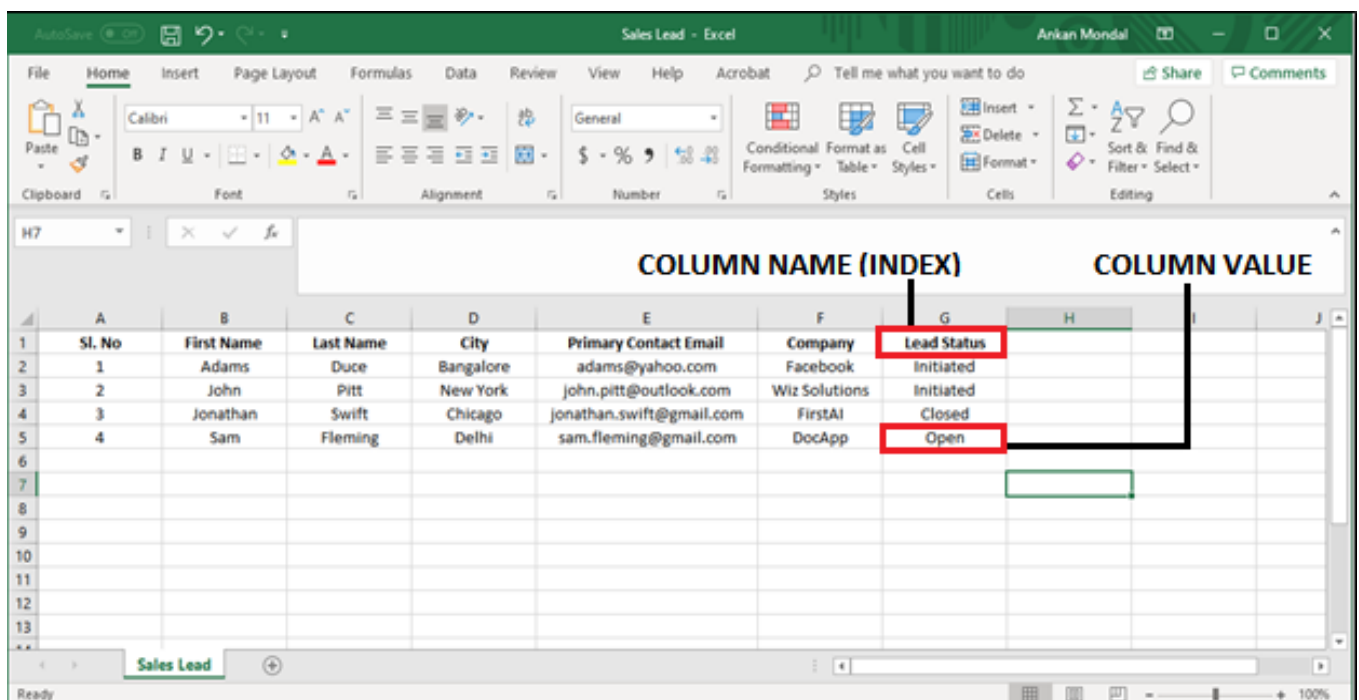
a. Filter based on Column Value

vColumnIndex and **vCompareValue** variables are needed to configure this.

‘**vColumnIndex**’ is the column name which needs to be defined in the config file.

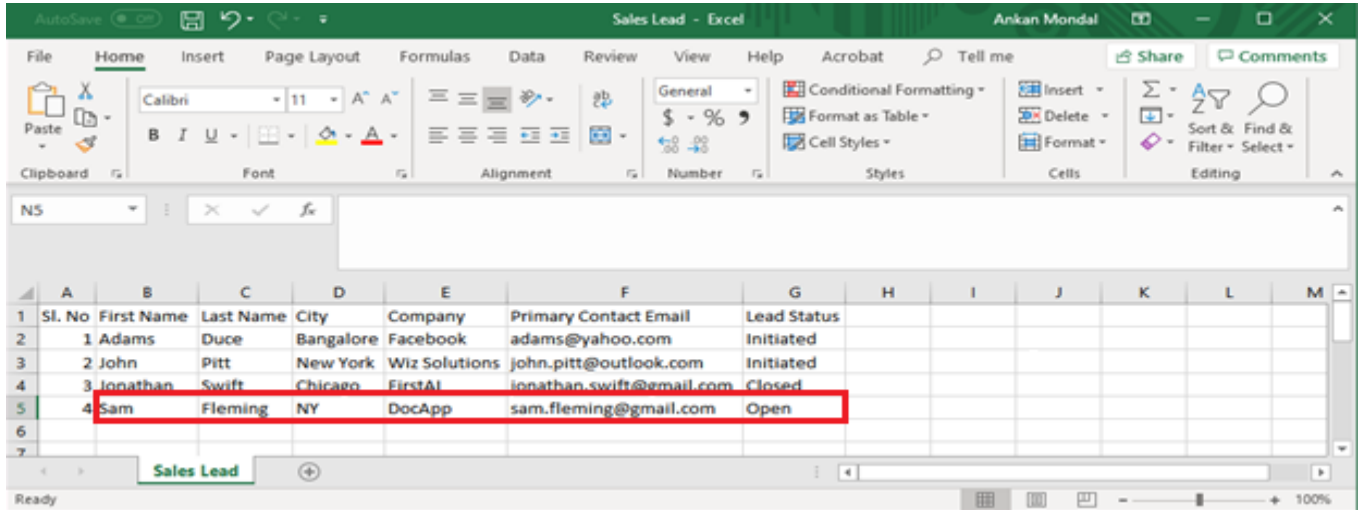
‘**vCompareValue**’ is the value which needs to be matched against the mentioned Column name.

Example:



							COLUMN NAME (INDEX)	COLUMN VALUE
	A	B	C	D	E	F	G	H
1	Sl. No	First Name	Last Name	City	Primary Contact Email	Company	Lead Status	
2	1	Adams	Duce	Bangalore	adams@yahoo.com	Facebook	Initiated	
3	2	John	Pitt	New York	john.pitt@outlook.com	Wiz Solutions	Initiated	
4	3	Jonathan	Swift	Chicago	jonathan.swift@gmail.com	FirstAI	Closed	
5	4	Sam	Fleming	Delhi	sam.fleming@gmail.com	DocApp	Open	
6								
7								
8								
9								
10								
11								
12								
13								

Expected Output with Column name as ‘Lead Status’ and value as ‘Open’ is below (Highlighted):



Sl. No	First Name	Last Name	City	Company	Primary Contact Email	Lead Status
1	Adams	Duce	Bangalore	Facebook	adams@yahoo.com	Initiated
2	John	Pitt	New York	Wiz Solutions	john.pitt@outlook.com	Initiated
3	Jonathan	Swift	Chicago	FirstAI	jonathan.swift@email.com	Closed
4	Sam	Fleming	NY	DocApp	sam.fleming@gmail.com	Open

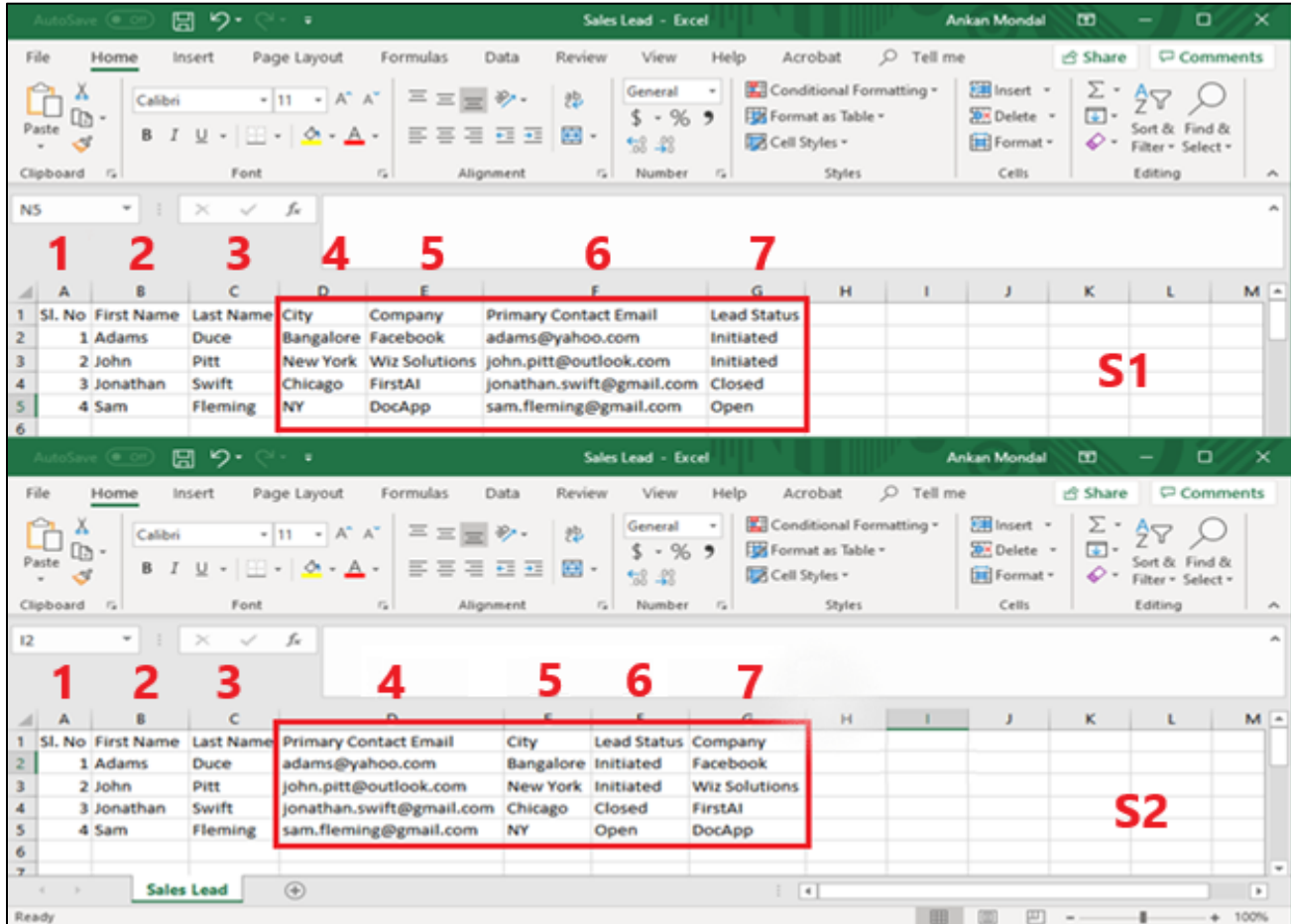
b. Customize the column position

The column position also can be changed with few modifications from the configuration file –

All column position numbers are defined as **index numbers** in the configuration file.

Index number in the configuration file needs to be updated with any change in position of column.

Example:



Scenario 1 Data:

Sl. No	First Name	Last Name	City	Company	Primary Contact Email	Lead Status
1	Adams	Duce	Bangalore	Facebook	adams@yahoo.com	Initiated
2	John	Pitt	New York	Wiz Solutions	john.pitt@outlook.com	Initiated
3	Jonathan	Swift	Chicago	FirstAI	jonathan.swift@gmail.com	Closed
4	Sam	Fleming	NY	DocApp	sam.fleming@gmail.com	Open

Scenario 2 Data:

Sl. No	First Name	Last Name	Primary Contact Email	City	Lead Status	Company
1	Adams	Duce	adams@yahoo.com	Bangalore	Initiated	Facebook
2	John	Pitt	john.pitt@outlook.com	New York	Initiated	Wiz Solutions
3	Jonathan	Swift	jonathan.swift@gmail.com	Chicago	Closed	FirstAI
4	Sam	Fleming	sam.fleming@gmail.com	NY	Open	DocApp

For Scenario 1:

Values defined in configuration file.txt:

Template Index Settings :

```
vFirstNameIndex=2
vLastNameIndex=3
vCityIndex=4
vCompanyIndex=5
vPrimaryContactEmailIndex=6
vLeadStatusIndex=7
```

For Scenario 2:

Values defined in configuration file.txt:

Template Index Settings :

```
vFirstNameIndex=2
vLastNameIndex=3
vCityIndex=5
vCompanyIndex=7
vPrimaryContactEmailIndex=4
vLeadStatusIndex=6
```

c. Flexibility to select the required data from the Input File (CSV Template)

The data selection can also be chosen from the configuration as per the requirement. The [Index](#) number for the desired field needs to be left blank in order to unselect the required data.

Below example shows the '**Company**' as unselected out of the available Column data.

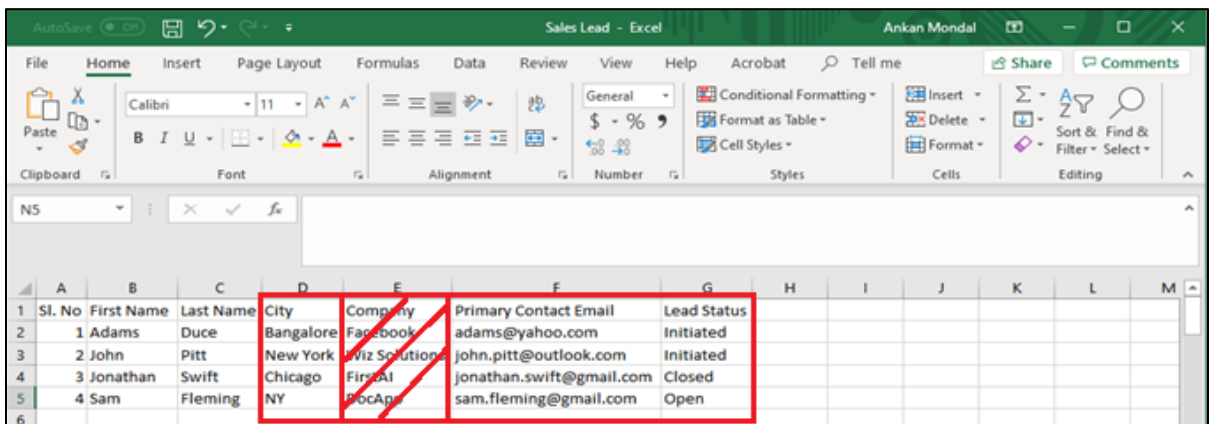
Configuration File Changes:

```

-----
Template Index Settings :
-----

vFirstNameIndex=2
vLastNameIndex=3
vCityIndex=5
vCompanyIndex=
vPrimaryContactEmailIndex=4
vLeadStatusIndex=6
  
```

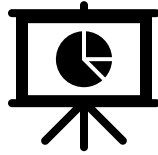
Changing the value of '**vCompanyIndex**' to blank will instruct the bot to unselect the data for the '**Company**' column.



Sl. No	First Name	Last Name	City	Company	Primary Contact Email	Lead Status
1	Adams	Duce	Bangalore	Facebook	adams@yahoo.com	Initiated
2	John	Pitt	New York	Wiz Solutions	john.pitt@outlook.com	Initiated
3	Jonathan	Swift	Chicago	FirstAI	jonathan.swift@gmail.com	Closed
4	Sam	Fleming	NY	RobApp	sam.fleming@gmail.com	Open

The output will only show the details of '**Name**', '**City**', '**Primary Contact Email**' and '**Lead Status**'.

4. Reports



There are no Bot Insight Reports generated for this Bot.

5. Logs



In case of Errors, Error Logs & Screenshots are generated within Error Folder (Highlighted below in yellow)

- My Tasks
 - Bot Store
 - Bot Name
 - Error Folder
 - Logs (Folder)
 - Error Logs Month-Day-Year.txt
 - Snapshots (Folder)
 - Error Snap Month-Day-Year HourMinSec.png

Error Logs will contain the below information -

- Task Name
- Error Line Number
- Error Description
- Generated Timestamp

Example of Log File:

Name	Date modified	Type	Size
Error Logs 8-6-2019	8/6/2019 1:16 PM	Text Document	3 KB
Error Logs 8-7-2019	8/7/2019 3:13 PM	Text Document	1 KB
Error Logs 8-12-2019	8/12/2019 9:22 PM	Text Document	1 KB

Error Logs 8-12-2019 - Notepad

File Edit Format View Help
 |(8/12/2019 9:22:31 PM)
 =====
 Task - D:\Ankan.mondal\My Desktop\Tasks\Automation Anywhere Files\Automation Anywhere\My Tasks\Bot Store\Notify with Slack on Record Update - Automation Anywhere\My Tasks\02 - Send Slack Post.atmx
 Error Line Number: "22"
 Error Description: The Variable 'vOutput' does not exist.
 =====

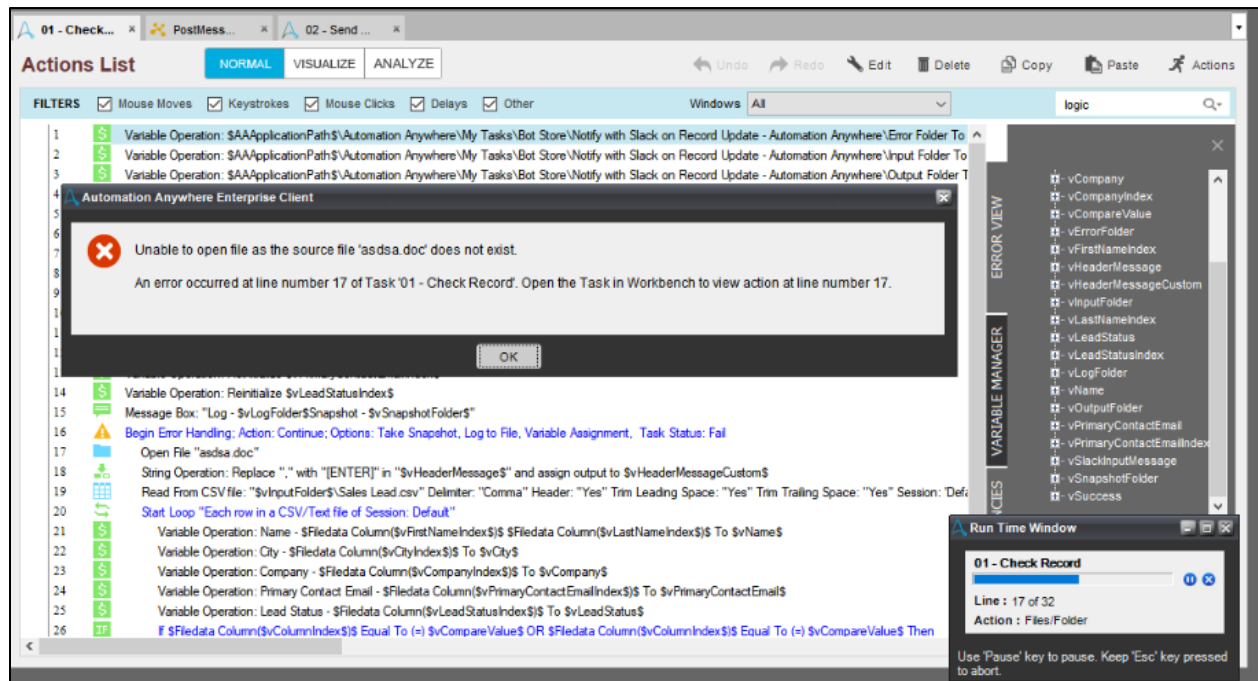
Ln 1, Col 1 100% Windows (CRLF) UTF-8

Note: There are no Custom Logs generated for this Bot.

Example of Screenshot Generated Error File:

re Files > Automation Anywhere > My Tasks > Bot Store > Notify with Slack on Record Update-Automation Anywhere > Error Folder > Snapshots

Name	Date	Type	Size	Tags
Error Snap 8-6-2019...	8/6/2019 12:44 PM	PNG File	160 KB	
Error Snap 8-6-2019...	8/6/2019 12:44 PM	PNG File	160 KB	
Error Snap 8-6-2019...	8/6/2019 12:44 PM	PNG File	160 KB	



The screenshot displays the Automation Anywhere Enterprise Client interface. The main window shows the 'Actions List' for a task named '01 - Check Record'. The list includes various actions such as 'Variable Operation', 'Message Box', 'Begin Error Handling', 'Open File', 'String Operation', 'Read From CSV file', 'Start Loop', and 'Variable Operation'. An error message is displayed in the center, stating: 'Unable to open file as the source file 'asdsa.doc' does not exist. An error occurred at line number 17 of Task '01 - Check Record'. Open the Task in Workbench to view action at line number 17.' The error message is highlighted with a red box. The 'Run Time Window' is also visible, showing the current line number (17 of 32) and the action being executed (Files/Folder).

6. Troubleshooting & Support



Support



Free bots are currently not supported directly.



Questions on Bot Functionality or Feature can also be posted to our Community site [Apeople](#)



Automation Anywhere provides a [Product Documentation portal](#) which can be accessed for more information about [AA](#)'s products and guidance on building bots and Digital Workers.

The "Build" section of the portal includes these sections:

- Getting Started - information on building bots recommended practices (including use of the Credential Vault)
- Build Advanced Bots - details on MetaBots and the approach to integrating code into them
- Build Digital Workers - high level architecture

FAQs



Q: The 'Create Locker' button not visible in the Credential Vault Page. What do I do?

A: Please check if the role 'Locker Consumer' is assigned to the user and you are using an Enterprise Client version.

Appendix A: Record of Changes

No.	Version Number	Date of Change (DD/MM/YYYY)	Author	Notes
1	1.0	12/08/2019	Ankan Mondal	Version 1 Release

Appendix B: Acronyms

No.	Acronym	Description
1	AA	Automation Anywhere
2	CSV	Comma Separated File
3	DW	Digital Worker
4	CR	Credential Vault
5	CRM	Customer Relationship Management
6	API	Application Programming Interface
7	PC	Personal Computer
8	RAM	Random Access Memory
9	OS	Operating System

Appendix C: References

No.	Topic	Reference Link
1	System Requirements - Client	Click here
2	System Requirements – Control Room	Click here
3	How to create credential & Locker?	Click here
4	Credential Overview	Click here
5	Apeople Community Site	Click here
6	Product Documentation portal	Click here