



**BOT DEV**

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**BOT DEV**

**JSON Reader**

**Readme**

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**Version 1.0**

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## 1. Introduction

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This document contains all essential information for the user to make full use of this A2019 Package. It includes a description of the functions and capabilities and step-by-step procedures for setup & configuration of the Package.

### 1.1 Overview

JSON Reader package helps developers to parse JSON data structures which typically come as a response to REST Web services. Accompanying this package is a sample bot: JSON\_Reader which demonstrates using the package's actions against a sample JSON. The included package simplifies the process of parsing responses from REST web services and JSON formatted configuration files.

This package is inspired from popular JSON object manager which fails to deal with Boolean and null valued valid JSON. This package builds on top of that to allow handling of such values as well as manipulate action behavior.

### 1.2 Use cases

JSON Reader package is especially useful when parsing the response from a REST API or a bot configuration file. It allows for bot builders to quickly and easily extract values from a properly formatted JSON document/string and even iterate through array objects within the JSON to extract specific values.

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## 2. Requirements & Prerequisites

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### 2.1 System Requirements

#### [Enterprise A2019 \(Cloud deployed\) and Community Edition device requirements.](#)

Review the machine hardware specifications, operating system versions, and browser types supported by Automation Anywhere Enterprise for creating and running bots and command packages as an Enterprise A2019 (Cloud deployed) or Community Edition user on your local machine.

### 2.2 Prerequisites

No specific prerequisites required besides making sure you are using a properly formatted JSON.

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## 3. Getting Started

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### 3.1 Quick Start

#### 3.1.1 Setup

1. Install the package from Bot Store into your Control Room
  2. Enable the package named “JSON Reader” and set as default.
  3. Navigate to Bot Store/JSONReader-BotDev to run and examine the JSON. Note: The bot-specific logic starts on line 39 within the try block.
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#### 3.1.2 Configuration and Use

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##### To begin using the JSON Reader, you must first enable the package

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1. Navigate to the **Manage > Packages** page.
  2. From the list of installed packages, select the **JSON Reader** by clicking the package name.
  3. Next to the Versions dropdown, click the button that says **Enable and Set as Default**.
  4. Once enabled, the JSON Reader and its respective actions will be available in the bot building interface.
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This will also allow you to run the JSON Reader demo bot which was included in the install from Bot Store located in Bot Store/JSONReader-BotDev

To begin using the package, start by using the Start Session action to establish a session of setting

and extracting values.

1. In the bot building interface - from the actions pane - open the JSON Reader package and drag the Start Session action into your bot’s workflow.
2. Initialize the session by providing a properly formatted JSON Object string
3. Once initialized, select the Get Value action from the JSON Reader package to start querying for values on the session.

- **Accessing root objects**
  - Using the name of the key itself
  - Example: token
- **Accessing child objects through dot notation**
  - Using the name of the parent and relevant child keys
  - Example: user. email
- **Accessing objects through square notation**
  - Using the name of the parent and relevant child keys
  - Example: ['user']['email']
  - Example: ['key.with.dot.in.name']
- **Accessing the length and other functions of an array**
  - Determining the number of objects in an array
  - Example: user.roles.length()

Function	Description
min()	Provides the min value of an array of numbers
max()	Provides the max value of an array of numbers
avg()	Provides the average value of an array of numbers
stddev()	Provides the standard deviation value of an array of numbers
length()	Provides the length of an array
sum()	Provides the sum value of an array of numbers

- **Accessing a specific object within an array**
  - Accessing specific values from within an array
    - Especially useful when used in conjunction with loops
  - Example: user.roles[0].name
  - Note: when accessing specific objects within an array, the position of the object is 0 based, whereas the count is 1 based...so when used in loops, remember that the positional reference should be -1.
- **Returning an entire array as a string**
  - Using the dot notation to access the array itself (without a position) the entirety of the array is returned as a string
  - Example: user.roles

- **Handling missing key /value behavior**
  - In case queried key is missing:
    - 1.throw error
    - 2.return empty string
    - 3.return string of your choice
  - In case queried Value is null:
    - 1.Return empty string
    - 2.Return custom string

Gets queried value from JSON String  
Required bot agent version: 20.11 or above

Session name

Query expression string  
  
expressions can use the dot-notation: store.book[0].title or the bracket-notation: ['store']['book'][0]['title']

**Key not found behavior**

throw error

return empty string

return custom string

Custom not found string (optional)  
  
Provide custom string value to return in case queried key does not exist  
Choose expected behavior in case queried key is not present

**Value not found(null) behavior**

return empty string

return custom string

Custom null value (optional)  
  
Provide custom string value to return in case queried value is null  
Choose expected behavior in case queried key value is null

**Assign output to a string variable (optional)**  
  
Returns queried value in string

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## 4. Support & FAQs

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### 3.2 Support

Free bots are not officially supported. You can get access to Community Support through the following channels:

- You can get access to Community Support, connecting with other Automation Anywhere customers and developers on [APeople](#) – the [Bot Building Forum](#), the [Bot Store Support Forum](#), or the [Developers Everywhere Group](#).
- Automation Anywhere also provides a [Product Documentation portal](#) which can be accessed for more information about our products and guidance on [Enterprise A2019](#).

### 3.3 FAQs

*Instructions: Add any Frequently Asked Questions related to Bot that you think would be helpful to the customer*

For questions relating to Enterprise A2019: See the [Enterprise A2019 FAQs](#).



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## Appendix A: Record of Changes

*Instructions: Provide information on the version number, the date of the version, the author/owner of the version, and a brief description of the reason for creating the revised version.*

No.	Version Number	Date of Change	Author	Notes

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## Appendix B: References

No.	Topic	Reference Link
1	Overview of Enterprise A2019	Click <a href="#">here</a>
2	Guidance: Building basic A2019 bots	Click <a href="#">here</a>
3	Guidance: Building A2019 action packages	Click <a href="#">here</a>
4	APeople Community Forum	Click <a href="#">here</a>
5	Automation Anywhere University	Click <a href="#">here</a>