



Table Analytics Command Package

Readme

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1. Introduction

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

The Table Analytics command package helps users to speed up reconciliation activities by providing actions that identify discrepancies in data in A2019 Data Tables. There are 3 actions:

- Diff
- Number Validator
- String Validator

1.2 Use cases

The Table Analytics command package has been designed to help users avoid the cumbersome steps required to perform reconciliation between two data sources. The data can be captured and stored in data tables that share a common key, such as an invoice number, customer number or employee number. The Diff action will then seek out columns that have matching column names in both tables and compare them for a given row that has a matching key.

2. Requirements & Prerequisites

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 exist.

3. Getting Started

3.1 Quick Start

3.1.1 Setup

1. Install the package from Bot Store into your Control Room
2. Enable the package named “Table Analytics Command Package -- Automation Anywhere” and set as default.
3. Navigate to Bot Store/Table Analytics Command Package -- Automation Anywhere to run and examine the TableAnalyticsDemoBot.

3.1.2 Configuration and Use

To begin using the Table Analytics Command Package -- Automation Anywhere, you must first enable the package

1. Navigate to the **Bots > Packages** page.
2. From the list of installed packages, select the **Table Analytics** 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 Table Analytics package and its respective actions will be available in the bot building interface.

3.1.3 Diff Action

The Diff action operates by returning a table of all the discrepancies across two tables identified by a common key. The key must be declared in the Diff action by identifying the column in which the key is found. Columns are 0-index-based, which means the first column is actually 0.

You will also provide a name for table 1 and table 2 so that these tables can be properly identified in the corresponding output table.

The diff operation will look for columns with identical headings in both tables and compare the data in those columns for rows where matching keys are found. If this data is not identical, it will add a row to the returned table that provides the key, the columns in which the data was found and the actual data compared.

All data is compared as strings

Here is an example output from the Demo Bot provided:

	A	B	C	D	E	F
1	Key	InvoicesColumn	InvoicesValue	PaidColumn	PaidValue	
2	12312	1	244	1	244	
3						
4						
5						

Notice that the names you provided at time of configuring the Diff action are appended to the words Column and Value for easier identification.

3.1.4 Number Validator Action

Number Validator takes as input a number or a variable and performs multiple types of validation on this data. The types of validation included are:

- Value Type
- Range
- Compare

Value Type validations include: positive, negative, whole or decimal. You can check to see if your number meets any of these requirements

Range validations allow you to enter a low-end and a high-end for a range and will validate that your number is within that range inclusive of the thresholds.

Compare validations are: greater than, less than, equal to and not equal to. You provide a number or variable for this comparison

If the number validator fails, it will throw an exception, so if it is not created within a Try/Catch block your bot will terminate.

3.1.5 String Validator Action

String Validator will validate that your string matches a valid pattern as defined by industry standard regular expression pattern matching language. More on this language can be read about here:

<https://regexr.com/>

There is a built-in variable with this package for US Social Security Numbers and can be used within the validator by providing `$TableAnalytics:SocialSecurityPattern$` as the regular expression pattern. The pattern value is `^\d{3}-\d{2}-\d{4}$`

3.1.6 Add Computed Column

Add computed column action allows you to add a column of values computed by entering a mathematical formula. The formula can only contain number (0-9), parenthesis, brackets, *, /, -, and +.

Brackets [] are used to denote use the column identified by the number inside the bracket. For example [1] is column 2 as indices are 0-index based.

Examples of valid formulas:

1+2

2*4

[1] * 4

(1 * [5]) + 5

The resulting table will include the computed column after the last index. You can supply a column header for this column if you wish.

3.1.7 Add Field To Record

Add field to record action allows you to add a new field into an Automation Anywhere record object. You need to supply a field name and let the action know if it's okay to add the field if a field name matching the one you supplied does not already exist. If you specify false for adding the field to the schema if missing and the field name does not exist, the action will throw an exception, so you should wrap this case with a Try/Catch block.

When complete, the record can be inserted into a Data Table.

NOTE: the Data Table insert action requires that the column headers and number of columns must match between record and table to succeed.

The action returns a record with the new field inserted.

4. Support & FAQs

4.1 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](#).

4.2 FAQs

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

Appendix A: Record of Changes

No.	Version Number	Date of Change	Author	Notes

Appendix B: References

No.	Topic	Reference Link
1	Overview of Enterprise A2019	Click here
2	Guidance: Building basic A2019 bots	Click here
3	Guidance: Building A2019 action packages	Click here
4	APeople Community Forum	Click here
5	Automation Anywhere University	Click here