Regex Validation CLI Plugin

The "Regex Validation" plugin in Contentstack CLI allows users to search for invalid regexes within the content types and global fields of their stack.

Using the CLI "Regex Validation" plugin, you can find the invalid regexes within your stack and rectify them.

In this guide, let's discuss how to use this plugin.

Prerequisites

- [Contentstack account](#)

- **CLI installed on your machine:**
  ```
  npm install -g @contentstack/cli
  ```

- **CLI Validate Regex plugin installed:**
  ```
  csdx plugins:install
  https://github.com/contentstack/cli-cm-regex-validate/releases/download/v1.1.5/contentstack-cli-cm-regex-validate-1.1.5.tgz
  ```

- [Set the region](#)

- [Configured management token alias](#)

Steps for Execution

1. Use the "`cm:stacks:validate-regex`" command
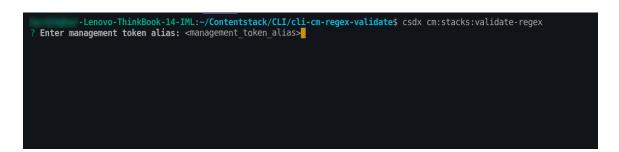
Use the "cm:stacks:validate-regex" command

After successfully adding the management token alias, run the following command to initiate the procedure:

```
csdx cm:stacks:validate-regex
```

This command will prompt you to enter the details for the following options:

1. **Management Token Alias:**
   Enter the Alias you provided while adding the management token to the CLI.

```
          -Lenovo-ThinkBook-14-IML:~/Contentstack/CLI/cli-cm-regex-validate$ csdx cm:stacks:validate-regex
? Enter management token alias: <management_token_alias>
```
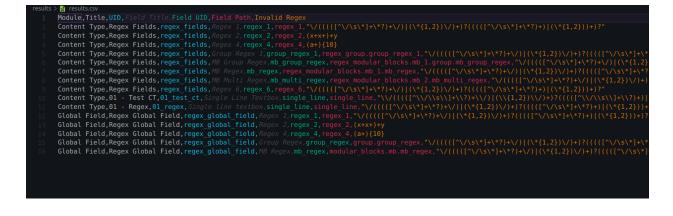
2. **Select Module:**
   Select the modules to be checked for invalid regexes, namely content types or global fields. It is mandatory to select at least one module.

```
          -Lenovo-ThinkBook-14-IML:~/Contentstack/CLI/cli-cm-regex-validate$ csdx cm:stacks:validate-regex
? Enter management token alias: Regex Check
? Select the module you need to check. (Press <space> to select, <a> to toggle all, <i> to invert selection)
)◉ Content Type
 ◉ Global Field
```

After selecting the module, a loader processes your request and returns a table that shows the details of the invalid regexes present in your stack.

```
          -Lenovo-ThinkBook-14-IML:~/Contentstack/CLI/cli-cm-regex-validate$ csdx cm:stacks:validate-regex
? Enter management token alias: Regex Check
? Select the module you need to check. (Press <space> to select, <a> to toggle all, <i> to invert selection)Content Type, Global Field
Connecting stack... Stack connection established. Time taken: 2816 ms
Processing stack... Stack processing completed. Time taken: 3070 ms
The following table shows the invalid regexes present in your stack.
```

Module	Title	UID	Invalid Regex Count
Content Type	Regex Fields	regex_fields	8
Content Type	01 - Test CT	01_test_ct	1
Content Type	01 - Regex	01_regex	1
Global Field	Regex Global Field	regex_global_field	5

```
CSV output stored successfully at: /home/       /Contentstack/CLI/cli-cm-regex-validate/results/results.csv
To know more, visit our documentation site on catastrophic-backtracking: https://www.contentstack.com/docs/developers/create-content-types
/validation-regex/#prevent-catastrophic-backtracking
```

Along with the above table, a CSV file with additional details for the invalid regexes will be downloaded on your system.

```
results > 🔲 results.csv
  1  Module,Title,UID,Field Title,Field UID,Field Path,Invalid Regex
  2  Content Type,Regex Fields,regex_fields,Regex 1,regex_1,regex_1,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*?)+)|(\*{1,2}))+)?"
  3  Content Type,Regex Fields,regex_fields,Regex 2,regex_2,regex_2,(x+x+)+y
  4  Content Type,Regex Fields,regex_fields,Regex 4,regex_4,regex_4,(a+){10}
  5  Content Type,Regex Fields,regex_fields,Group Regex 1,group_regex_1,regex_group.group_regex_1,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*
  6  Content Type,Regex Fields,regex_fields,MB Group Regex,mb_group_regex,regex_modular_blocks.mb_1.group.mb_group_regex,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2}
  7  Content Type,Regex Fields,regex_fields,MB Regex,mb_regex,regex_modular_blocks.mb_1.mb_regex,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*?
  8  Content Type,Regex Fields,regex_fields,MB Multi Regex,mb_multi_regex,regex_modular_blocks.mb_2.mb_multi_regex,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)
  9  Content Type,Regex Fields,regex_fields,Regex 6,regex_6,regex_6,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*?)+)|(\*{1,2}))+)?"
 10  Content Type,01 - Test CT,01_test_ct,Single Line Textbox,single_line,single_line,"\\/(((([^\\/\\s\\]+\\?)+\\/)|(\\{1,2}\\\/)+)?(((([^\\/\\s\\]+\\?)+)|
 11  Content Type,01 - Regex,01_regex,Single line textbox,single_line,single_line,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*?)+)|(\*{1,2}))+
 12  Global Field,Regex Global Field,regex_global_field,Regex 1,regex_1,regex_1,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*?)+)|(\*{1,2}))+)?
 13  Global Field,Regex Global Field,regex_global_field,Regex 2,regex_2,regex_2,(x+x+)+y
 14  Global Field,Regex Global Field,regex_global_field,Regex 4,regex_4,regex_4,(a+){10}
 15  Global Field,Regex Global Field,regex_global_field,Group Regex,group_regex,group.group_regex,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]+\*
 16  Global Field,Regex Global Field,regex_global_field,MB Regex,mb_regex,modular_blocks.mb.mb_regex,"\/(((([^\/\s\*]+\*?)+\/)|(\*{1,2})\/)+)?(((([^\/\s\*]
```

Additional Resource: Please refer to our detailed documentation on how to [avoid catastrophic backtracking](#).

Alternatively, you can also use various flags to run the `cm:stacks:validate-regex` command and search for invalid regexes as shown below:

```
csdx cm:stacks:validate-regex -a <management_token_alias> -c -g -f <file_path>
```

Note: You can use either the 'c' or 'g' flag or both of them while executing the command.


```
        Lenovo-ThinkBook-14-IML:~/Contentstack/CLI/cli-cm-regex-validate$ csdx cm:stacks:validate-regex -a "Regex Check" -c -g -f "/home/hardik/Downloads"
Connecting stack... Stack connection established. Time taken: 1219 ms
Processing stack... Stack processing completed. Time taken: 4012 ms
The following table shows the invalid regexes present in your stack.
```

Module	Title	UID	Invalid Regex Count
Content Type	Regex Fields	regex_fields	8
Content Type	01 - Test CT	01_test_ct	1
Content Type	01 - Regex	01_regex	1
Global Field	Regex Global Field	regex_global_field	5

```
CSV output stored successfully at: /home/      /Downloads/results.csv
To know more, visit our documentation site on catastrophic-backtracking: https://www.contentstack.com/docs/developers/create-content-types/validation-regex/#prevent-catastrophic-back
tracking
```

Options

- `-a, --alias=alias`: Alias (name) assigned to the management token
- `-c, --contentType`: To search for invalid regexes within the content types
- `-f, --filePath=filePath` *(optional)*: The path or the location in your file system where the CSV output file should be stored, e.g., -f "C:\Users\Name\Desktop\cli\csv"

Note: If the file path is not specified, the CSV file will be stored in the plugin's directory.

- `-g, --globalField`: To search for invalid regexes within the global fields
- `-h, --help`: To show the flags that can be used with this CLI command