



Must Know

- What is a Regular Expression?**
 - ▶ A regular expression is a search pattern that is matched against a string from left to right.

- Which special flavor is used in ApplicationInsights?**
 - ▶ TCL ARE (advanced regular expressions)
For more information on TCL, please check the suggested links below.

- Which characters match exactly?**
 - ▶ Letters and digits like: a b A B 5 0
 - ▶ Special characters: @ _ = %

- Which characters have to be escaped with \ (backslash)?**
 - ▶ : () { } [] \ | / + ? * . ^ & \$ -

- Please note**
 - ▶ Pattern matching in code is all about how one could code and not how you would code.
Covering more variants with a search query makes results more valuable and reliable.

Generic Character Types

Character	Legend	Example*	Sample Match (in blue)
.	Matches almost any character and also new lines	.+	(/021)&%Ab_
\d	Matches any digit: 0 – 9	\d+	(a+b)=123
\D	Matches any character that is not a digit	\D+	(a+b)=123
\w	Matches any word character: a – z, A – Z, 0 – 9, _	\w+	#NCC_1031
\W	Matches any character that is not a word character	\W+	#NCC_1031
\s	Matches whitespaces: new line, space, tab	\s+	#NCC_1031 USS Enterprise
\S	Matches anything that is not a whitespace	\S+	#NCC_1031 USS Enterprise

* Please find further information associated with the quantifier + on the next page

Grouping

Character	Legend	Example	Sample Match (in blue)
(■)	Matches groups of characters within parentheses	(\d\d)	+01 (0)555 12345
[■◆]	Matches any character within brackets	[“;”]	(“Class”,“Cache”,“Server”)
[^■◆]	Matches any character except those within brackets	[^“;”]	(“Class”,“Cache”,“Server”)





Quantifier/Counts			
Character	Legend	Example	Sample Match (in blue)
*	Matches a specific character 0 or more times	Abc*	Abc Abc
+	Matches a specific character 1 or more times	\w+	@dblookup
?	Matches a specific character 0 or 1 times	B?737-800	B737-800 737-800
{■}	Matches exactly ■ times	w{3}	http://www.whatsapp.com
{■,◆}	Matches a range of times between ■ and ◆	AA{2,3}	AA AAA AAAAAA
{■ ◆}	Matches either ■ or ◆ within parentheses	B7(3 7)7	B737 B747 B757 B777

Anchors			
Character	Legend	Example	Sample Match (in blue)
^	Matches any character at the beginning of a string	^\+1	+1 555 010101
\$	Matches any character at the end of a string	1\$	+1 555 010101
\y	Matches any word character that has a word boundary in front of the character	\yname name\y	path name dbname tournament path name dbname tournament
\Y	Matches any word character that has no word boundary in front of the character	\Yname Name\Y	path name dbname tournament path name dbname tournament

Please note that \y and \Y are TCL ARE specific characters

Useful Links

TCL Advanced

- https://www.tutorialspoint.com/tcl-tk/tcl_regular_expressions.htm
- <https://www.regular-expressions.info/tcl.html>

Masterclass Video (by Florian Vogler)

- <https://vimeo.com/243669123>

RegEx Tutorials

- <https://regexone.com/>
- <https://www.regular-expressions.info/tutorial.html>
- <https://www.youtube.com/watch?v=sa-TUpSx1JA>
- <http://www.rexegg.com>

RegEx Editors

- <https://regex101.com>
- <https://regexr.com>
- <https://www.regexbuddy.com>