

Good	Better	Comments
(whiskey)	(?:whiskey)	Capture groups add unnecessary overhead and impact overall performance use them only when necessary.
splunk splash	spl(?:unk ash)	Try to “factor” on the left, when you can, while exposing required text. Less alternation is better.
(?:aussie\$ gypsie\$)	(?:aus gyp)sie\$	Try to “factor” on the right when input text is close to end of the line. Most regex engines will anchor at end of line when “\$” is present.
0{3,7}	0000{0,4}	Typically exposing required or literal text makes the engine execute the regex faster
(.)*	.*	Useless parenthesis add unnecessary overhead. As above, use them only when necessary.
matty[:]	matty:	The character class/set (indicated by []) will add unnecessary overhead when not needed.
^genti ^collar	^(?:genti collar)	Anchoring the regex at the beginning of the line will result in improved performance with most regex engines.
delaney\$ connery\$	(delaney connery)\$	I said, anchor the regex!
^src.*:	^src[^:]*:	Using a negated character class/set instead of lazy/greedy quantifiers will typically result in faster regexes. Lazy/greedy quantifiers will make the regex engines backtrack which ultimately impacts overall performance.
bride brian	bri(?:de an)	Full alternation is more expensive than partial alternation. Also, in this case the regex engine will alternate only AFTER ‘bri’ has been matched.
(?:edu com net ...)	(?:com edu net ...)	Leading the engine to a match by placing the ost popular match first may result in faster execution in some engines.
^.*(answer)	^{42}(answer)	Specifying an exact position inside the string and leading the engine to a match, will help improve performance drastically compared to using a simple greedy/lazy quantifier.
.*?a	^.*a	If ‘a’ is near the end of the input string will match faster as less backtracking will be required.
.*a	^.*?a	If ‘a’ is near the beginning of the input string the regex engine will match faster.
:[^:]*:	:[^:]*+:	Ex. in ‘:destination’ the second regex fails faster .
:[^:]*:	:(?>[^:]*):	Same as above, using different notation. Explanation: Atomic grouping or possessive quantifiers instruct the regex engine not to keep the states captured by * or + therefore preventing it from unsuccessfully backtracking and in turn failing faster.