

ExtraLargeArray:

doublerInsert: 770.418208 ms

Doublerappend: 2.442875 ms

largeArray:

doublerInsert: 8.763416 ms

doublerAppend: 587 μ s

mediumArray:

doublerInsert: 193.542 μ s

doublerAppend: 122.791 μ s

smallArray:

doublerInsert: 32.542 μ s

doublerAppend: 73.041 μ s

tinyArray:

doublerInsert: 48 μ s

doublerAppend: 70.25 μ s

The doublerAppend function using the .push() method is significantly faster. When talking about runtime and the scalability.

push() method is $O(1)$ because you're just adding an item to the end of array, for unshift () method, you must "move" all the other existing elements forward and I suppose that is $O(n)$ or $O(\log n)$?