Interleaved Loaders Test:
- Load 40000 classes
- release them randomly in 5 steps
- observe Metaspace used and committed size

Original test sources:

Raw test results:
https://github.com/tstuefe/JEP-Improve-Metaspace-Allocator/tree/master/test/test1
Stock VM (jdk 14), Metaspace used (red) vs committed (blue)

- Spikes in used metaspace carry over
- After the first spike, almost 300M of unused data retained
Patched VM (jdk 14), Metaspace used (red) vs committed (blue) (default settings with 64K commit granule size)

- We recover almost completely from the spikes
- In this scenario, almost no discernable advantage over default settings
- (A) After releasing 4/5\textsuperscript{th} of the test classes, we retain about 260M (~70\%) less memory than the stock VM
- (B) Spikes are about 5\% lower
- (C) After the test ran, we are back to base line, Stock VM is not.
- measured with AlwaysPreLoad
- RSS shows the same reduction by ~260M
Stock VM, jcmd VM.metaspace output, after unloading 4/5 of all classes

27265:

Total Usage - 291 loaders, 10982 classes (972 shared):
  <snip>

Virtual space:
   Non-class space:  332,00 MB reserved, 331,26 MB (>99%) committed
   Class space: 1,00 GB reserved, 42,22 MB ( 4%) committed
   Both: 1,32 GB reserved, 373,48 MB ( 28%) committed

<snip>

Waste (percentages refer to total committed size 373,48 MB):
   Committed unused: 280,00 KB ( <1%)
   Waste in chunks in use: 2,45 KB ( <1%)
   Free in chunks in use: 6,34 MB ( 2%)
   Overhead in chunks in use: 186,75 KB ( <1%)
   In free chunks: 269,56 MB ( 72%)
   Deallocated from chunks in use: 998,98 KB ( <1%) (1763 blocks)
   -total-: 277,33 MB ( 74%)
Patched VM, jcmd VM.metaspace output, after unloading 4/5 of all classes

27149:

Total Usage - 291 loaders, 10986 classes (980 shared):

<snip>

Virtual space:

Non-class space: 408,00 MB reserved, 94,06 MB (23%) committed, 51 nodes.
Class space: 1,00 GB reserved, 11,38 MB (1%) committed, 1 nodes.
Both: 1,40 GB reserved, 105,44 MB (7%) committed.

<snip>

Waste (unused committed space):(percentages refer to total committed size 105,44 MB):

Waste in chunks in use: 15,86 KB (<1%)
Free in chunks in use: 1,59 MB (2%)
In free chunks: 11,14 MB (11%)
Deallocated from chunks in use: 194,36 KB (<1%) (2085 blocks)
-total-: 12,93 MB (12%)