

## Appendix: Virtual Memory Usage by GSI Floating-Point 32

The following tables describe the usage of virtual memory consumed by Floating-Point 32 API server service.

### Impact of Changing Number of Epochs Over the Virtual Memory Usage

Records number of features: 256

Records number of bits: 256

Dataset Number of Records	Epochs	Virtual Memory Usage (GB)
2.5k	5	1.30
2.5k	10	1.33
2.5k	20	1.38
2.5k	40	1.36
10k	5	1.52
10k	10	1.69
10k	20	1.70
10k	40	1.77
50k	5	4.52
50k	10	4.58
50k	20	4.70
50k	40	4.83
1m	5	6.26
1m	10	6.35
1m	20	6.78
1m	40	6.65
3m	5	15.51
3m	10	15.61
3m	20	15.82
3m	40	15.81
5m	5	25.18
5m	10	25.20
5m	20	15.81
5m	40	25.43

### Impact of Changing Number of Bits Over the Virtual Memory Usage for a Records with Number of Features of 256.

Records number of features: **256**

Number of epochs: 10

Dataset Number of Records	Number of Bits	Virtual Memory Usage (GB)
2.5k	256	1.33
2.5k	384	1.34
10k	256	1.69
10k	384	1.59
500k	256	4.58
500k	384	5.23
1m	256	6.35
1m	384	7.53
3m	256	15.61
3m	384	20.07
5m	256	25.20
5m	384	31.29

### Impact of Changing the Number of Bits Over the Virtual Memory Usage for a Records with Number of Features of 96.

Records number of features: **96**

Number of epochs: 10

Dataset Number of Records	Number of Bits	Virtual Memory Usage (GB)
2.5k	256	1.36
2.5k	384	1.30
10k	256	1.39
10k	384	1.42
500k	256	3.29
500k	384	3.89
1m	256	4.70
1m	384	5.77
3m	256	11.30
3m	384	14.93
5m	256	17.94
5m	384	23.80