

PoC of “Zettar zx”

Rated outbound network bandwidth at KEK: **10 Gbps**
NiR benchmark dataset size: **1.2 TiB**



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KEK to AWS S3 in Tokyo region

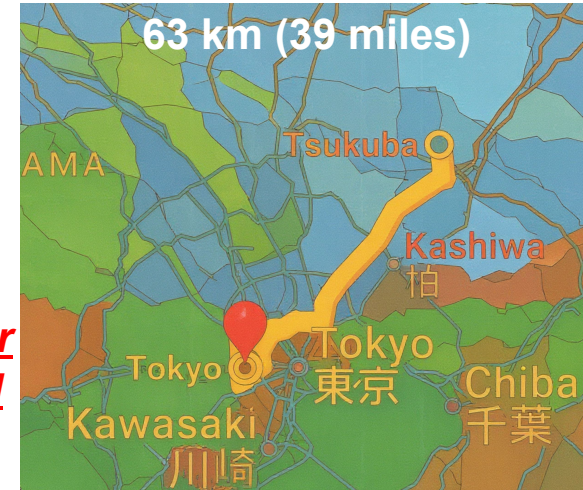
aws-cli (AWS native)

	Xfer Rate (Gbps)	Xfer Time (mins)
1 st run	2.02	75.13
2 nd run	1.99	76.33
3 rd run	1.99	76.07
Mean	2.00	75.84
SD	0.017	0.63

Zettar zx

	Xfer Rate (Gbps)	Xfer Time (mins)
1 st run	6.71	22.67
2 nd run	6.72	22.62
3 rd run	6.70	22.7
Mean	6.71	22.66
SD	0.01	0.04

**3.34x faster
xfer speed**



172x the distance

aws-cli (AWS native)

	Xfer Rate (Gbps)	Xfer Time (mins)
1 st run	-	238.55
2 nd run	-	234.35
3 rd run	-	232.65
Mean	-	235.18
SD	-	2.48

Zettar zx

	Xfer Rate (Gbps)	Xfer Time (mins)
1 st run	4.10	44.57
2 nd run	4.74	38.52
3 rd run	4.96	36.83
Mean	4.60	39.97
SD	0.36	3.32

Better!

**5.88x faster
xfer speed**



**3.1x longer
xfer time**

Better!

**1.8x longer
xfer time**