

# PoC of “Zettar zx”

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



Toshio Moriya

Tsukasa Nakamura

## KEK to AWS S3 in Tokyo region

### aws-cli (AWS native)

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

### Zettar zx

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

**3.34x faster  
xfer speed**



## KEK to AWS S3 in N. Virginia region

### aws-cli (AWS native)

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

### Zettar zx

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

**Better!**

**5.88x faster  
xfer speed**

**3.1x longer  
xfer time**

**Better!**

**1.8x longer  
xfer time**

