

Nines Availability

- With no replication, availability of object =
= $(1 - f)$
- With k replicas, availability of object =
= $(1 - f^k)$

Availability Table

f =failure probability	No replication	$k=3$ replicas	$k=5$ replicas
0.1	90%	99.9%	99.999%
0.05	95%	99.9875%	6 Nines
0.01	99%	99.9999%	10 Nines