Badly Scaling Architecture: Big Cluster
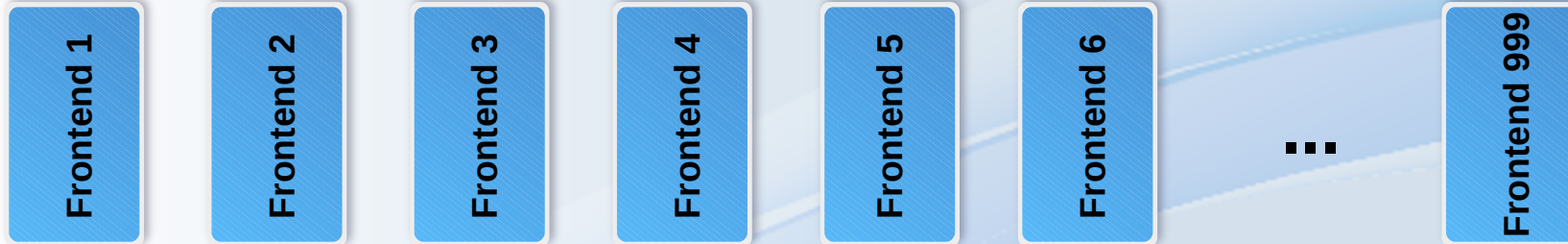
1&1

User 1 User 2 User 3 User 4 User 5 User 6 User 7 User 8 User 9 User 10 User 11 User 12 User 13 User 14 ... User 999999

Internet O(n*k)

Frontend 1 Frontend 2 Frontend 3 Frontend 4 Frontend 5 Frontend 6 ... Frontend 999

$O(n^2)$ REALTIME Access

like cross-bar

Internal Storage (or FS) Network

Storage 1 Storage 2 Storage 3 Storage 4 Storage 5 Storage 6 ... Storage 999

x 2 for geo-redundancy