CloudApp: Approximate Cloud Store for Multimedia

Djordje Jevdjic¹ Karin Strauss^{1,2} Luis Ceze¹ Henrique Malvar²

jevdjic@cs.washington.edu

¹ University of Washington

² Microsoft Research







bitmap

Approximate Cloud Storage



...01101110010011101...



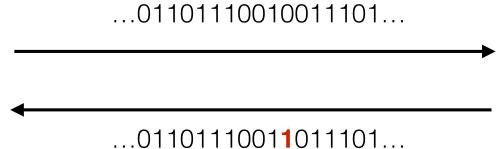




bitmap

Approximate Cloud Storage











JPEG

Approximate Cloud Storage



...01101110010011101...





JPEG

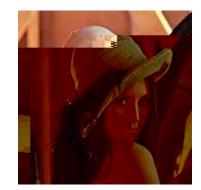
Approximate Cloud Storage

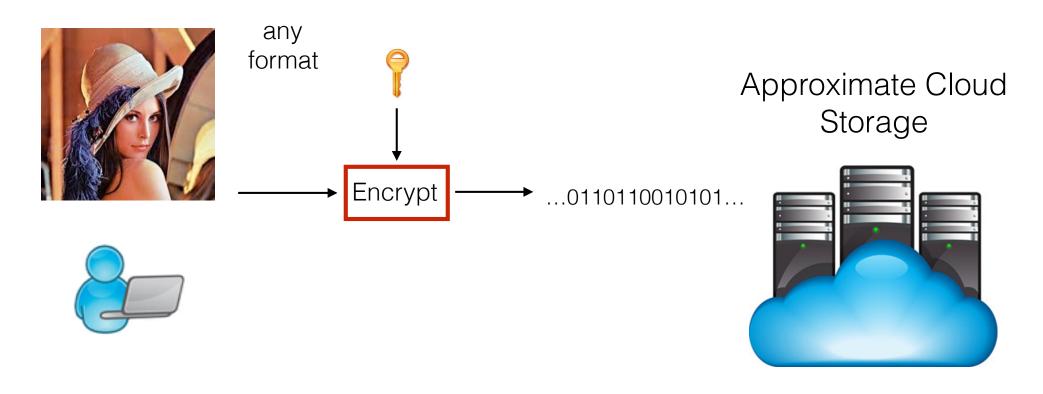


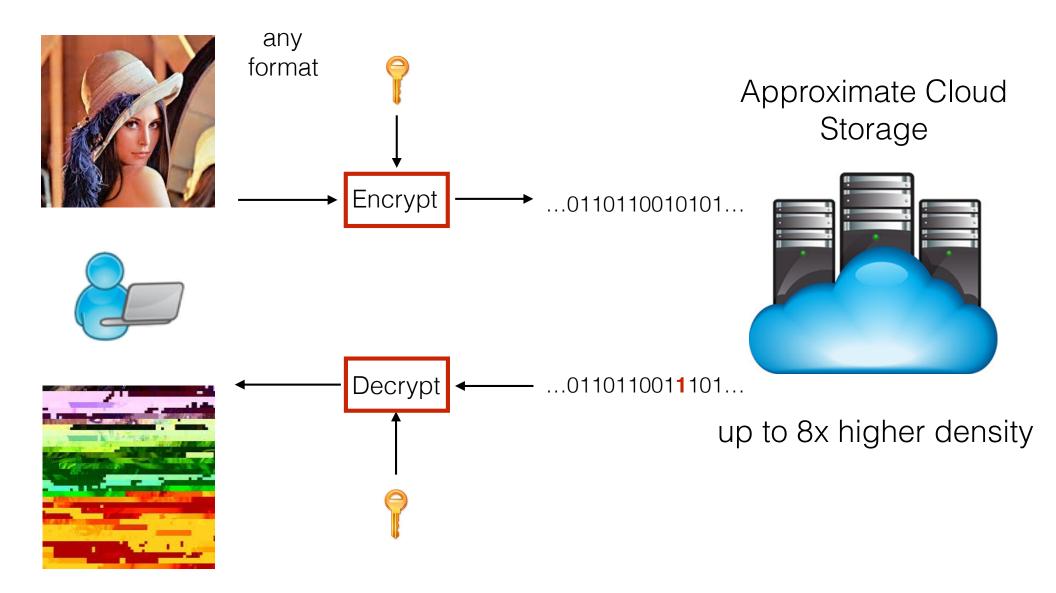
...01101110010011101...

...0110111001**1**011101...











any format







any format





approximation-aware format







any format

transcode



approximation-aware

encryption



approximation-aware format

...0110110010101...





any format

transcode



approximation-aware

encryption



approximation-aware format

...0110110010101...



...0110110011101...

CloudApp



approximation-aware decryption





any format





approximation-aware

encryption





...0110110010101...



transcode



...0110110011101...

CloudApp

approximation-aware decryption



