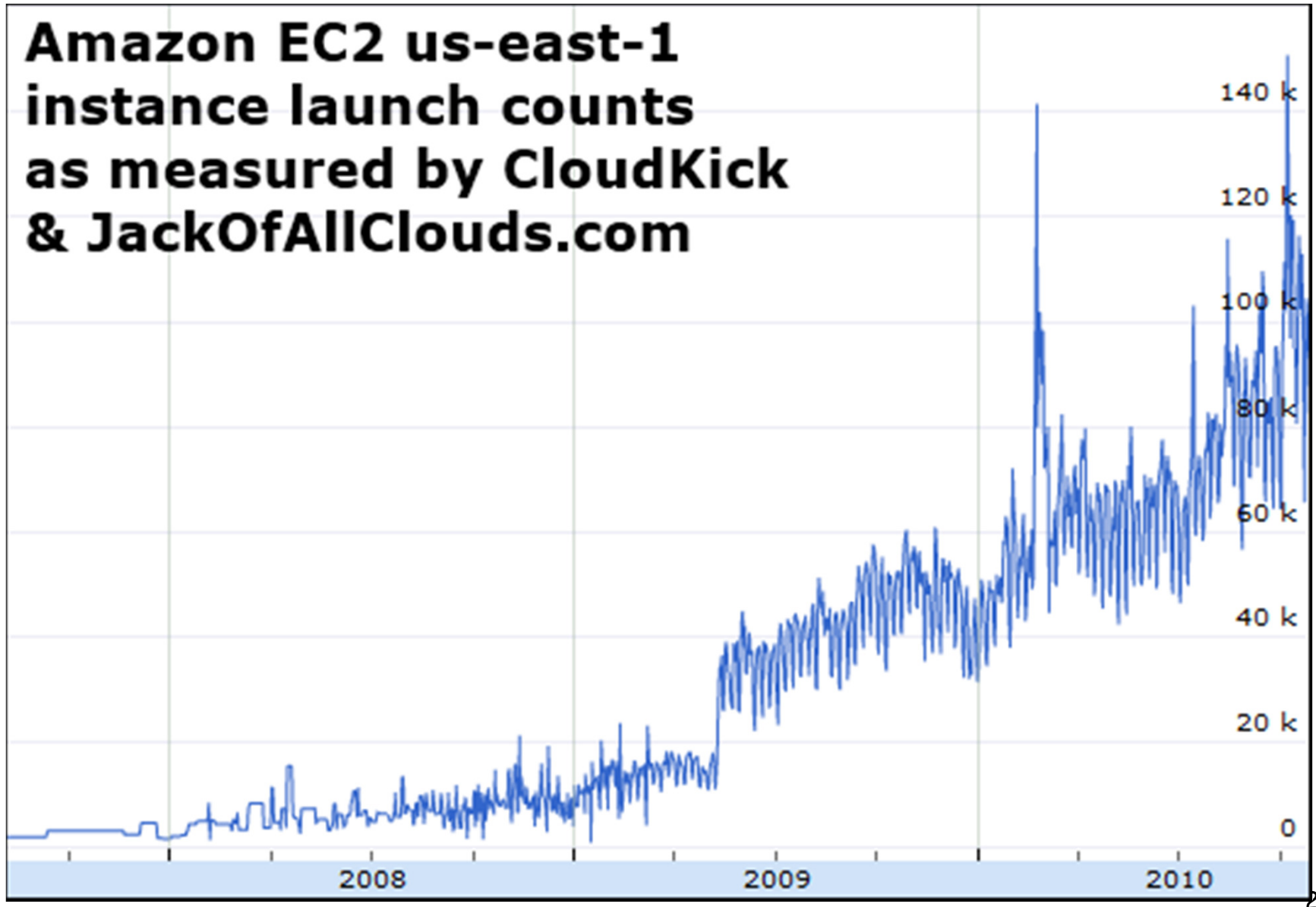


Cutting MapReduce Cost with Spot Market

Huan Liu

Accenture Technology Labs

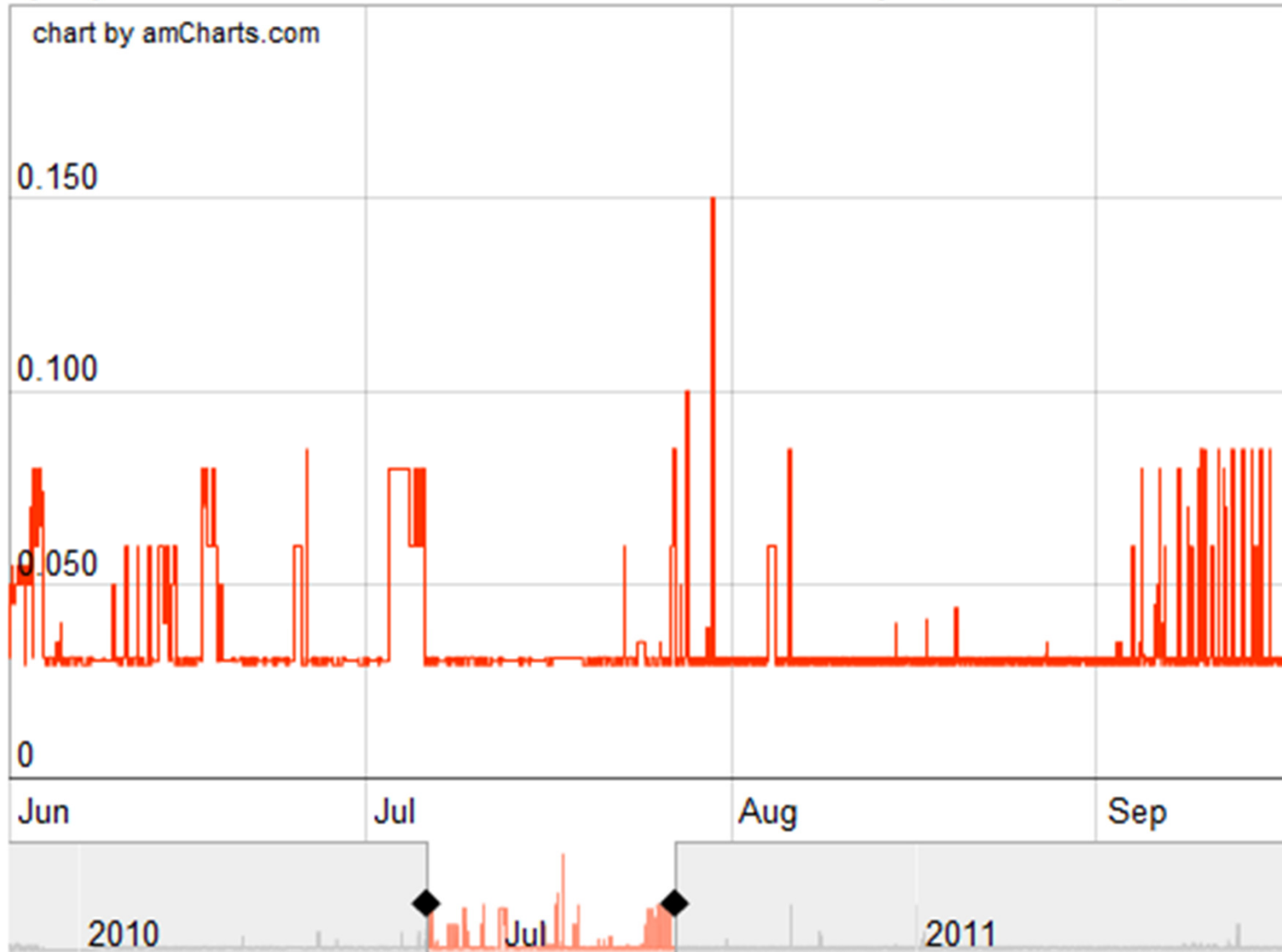
Why spot market?



Challenge with Spot Market

spot price 0.029 - 0.150

May 31, 19:37 - Sep 17, 01:57

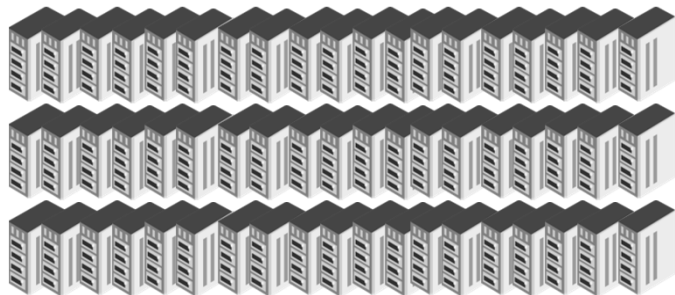


Cloud MapReduce

➤ Hadoop

MapReduce App

Hadoop

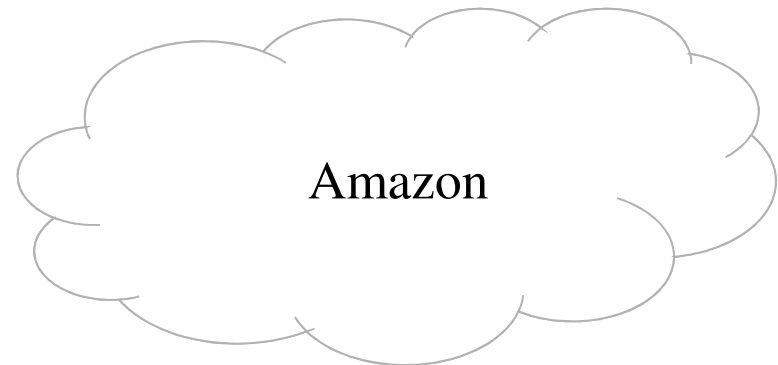


➤ Our prior work

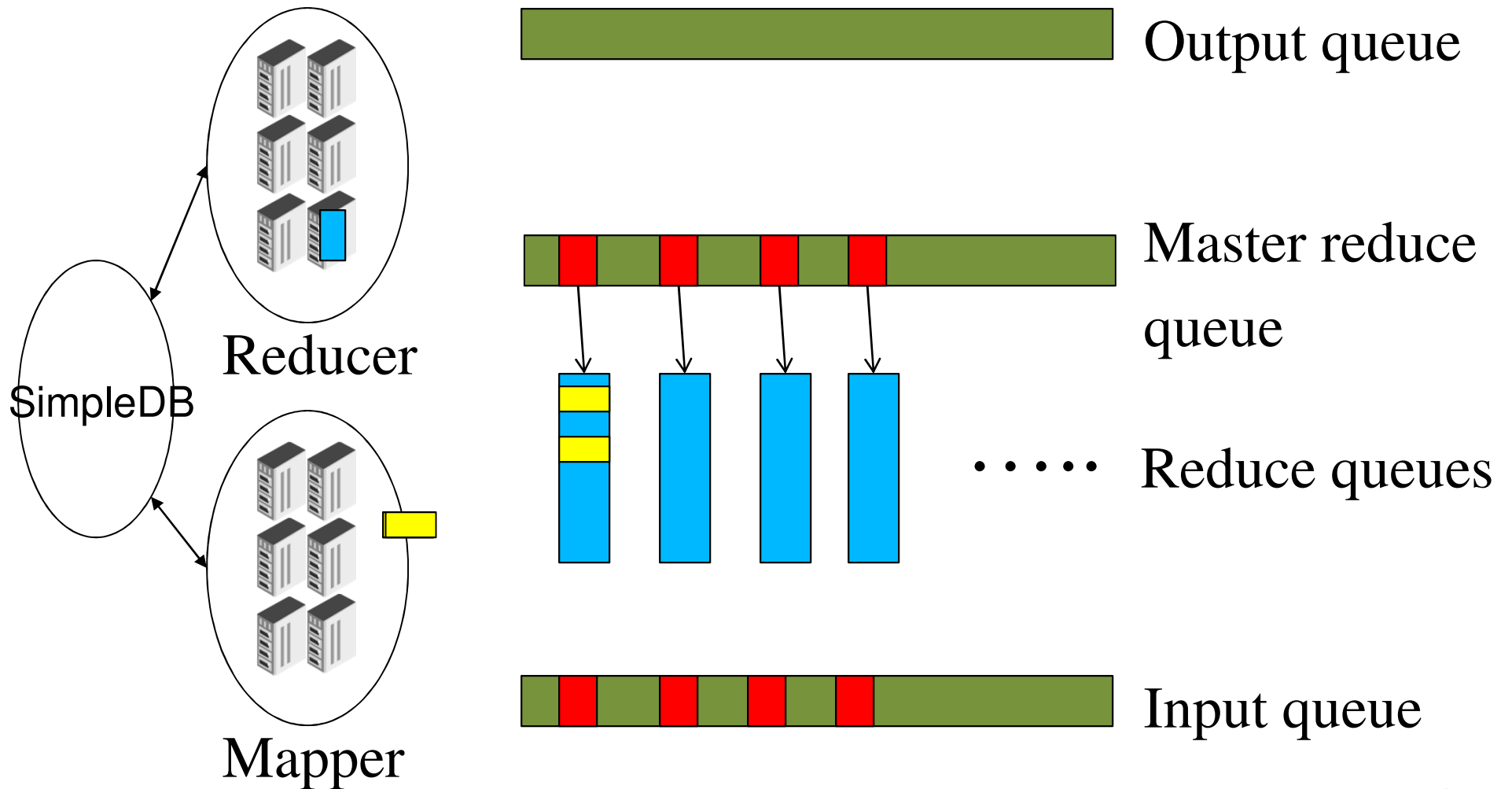
MapReduce App

Cloud MapReduce

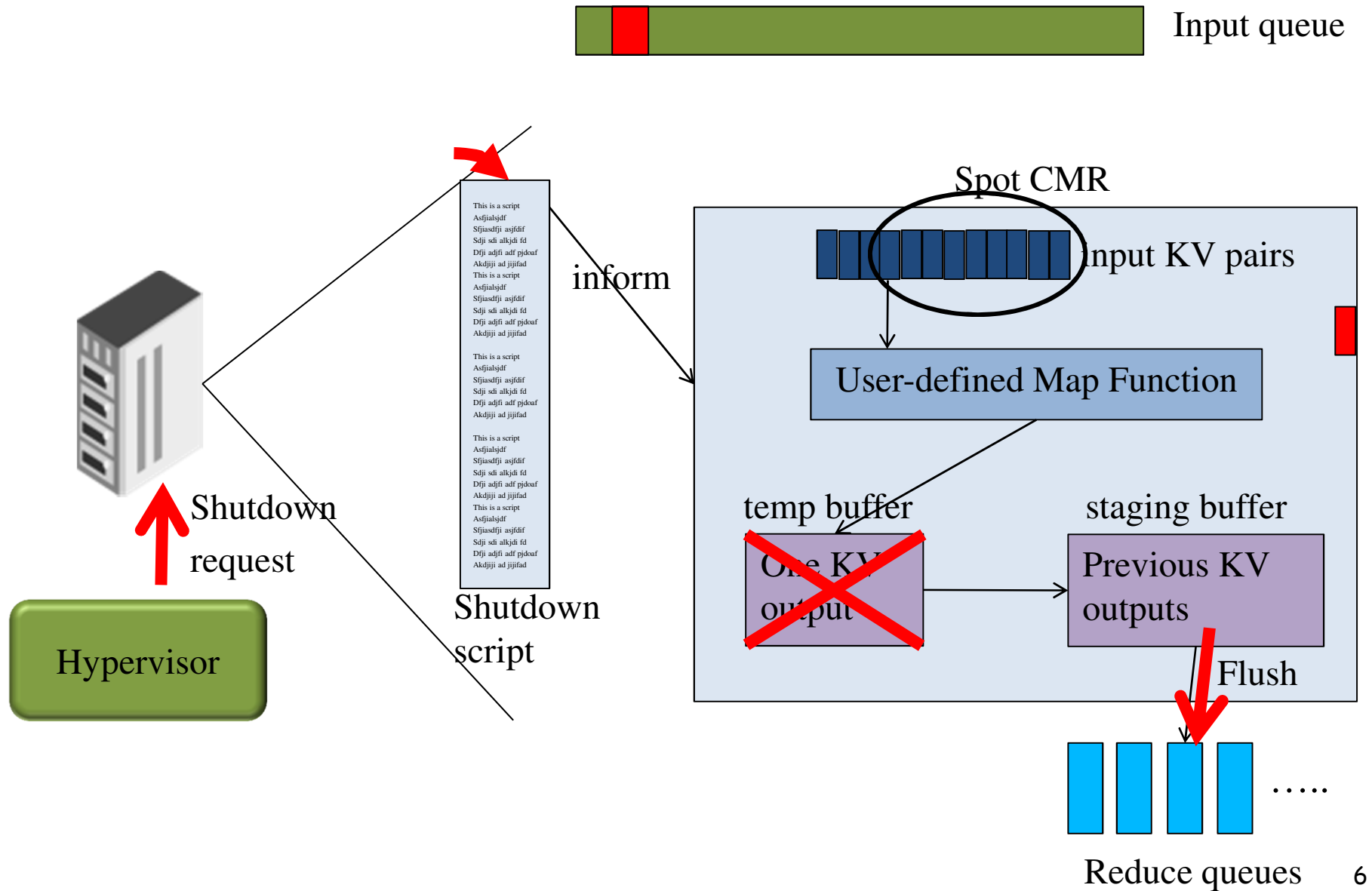
Cloud OS



Cloud MapReduce architecture



A map node in Spot CMR



Summary

- First-ever MapReduce implementation that works in a spot market environment
 - ❖ Uses on-demand checkpointing

- Dramatic cost savings