#### **AWS Cloud Transcoding**

#### Live e On-Demand video transcoding

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### Cloud Transcoding: perchè?

**Transcoding** is the direct digital-to-digital data conversion of one encoding to another [...] This is usually done in cases where a target device (or workflow) does not support the format or has limited storage capacity that mandates a reduced file size [Fonte: Wikipedia]



Cloud computing is uniquely suited for the CPU-intensive and "bursty" nature of video encoding







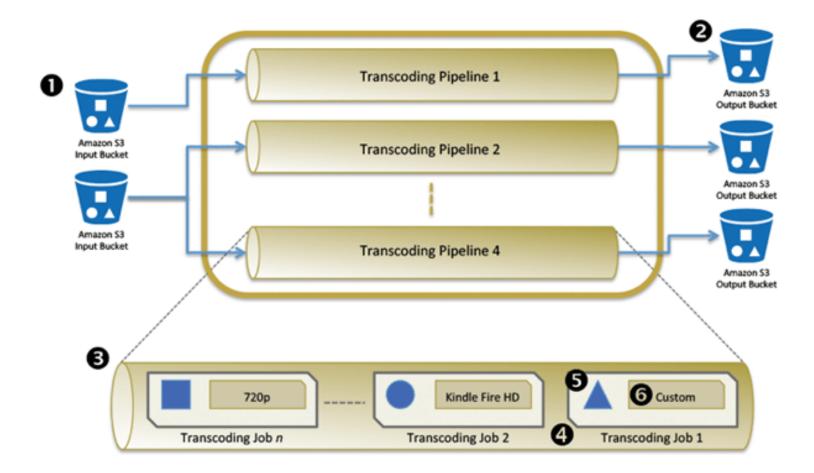
### Cloud Transcoding: Vod e Live

- Vod Transcoding: compressione di contenuti audio e video pre-registrati
  - Riduce i costi di encoding on-site
- Live Transcoding: compressione di stream live
  - Risolve il problema della banda in out
  - Streaming live adattivo (HDS, HLS, MPEG-DASH, Smooth streaming)
  - File vod immediatamente disponibili





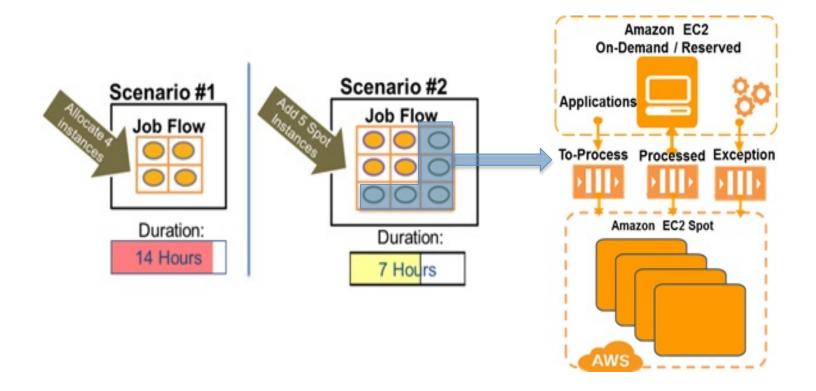
## **Vod Transcoding: Amazon Elastic Transcoder**







# Vod Transcoding: Amazon EC2 Spot Instances + FFmpeg







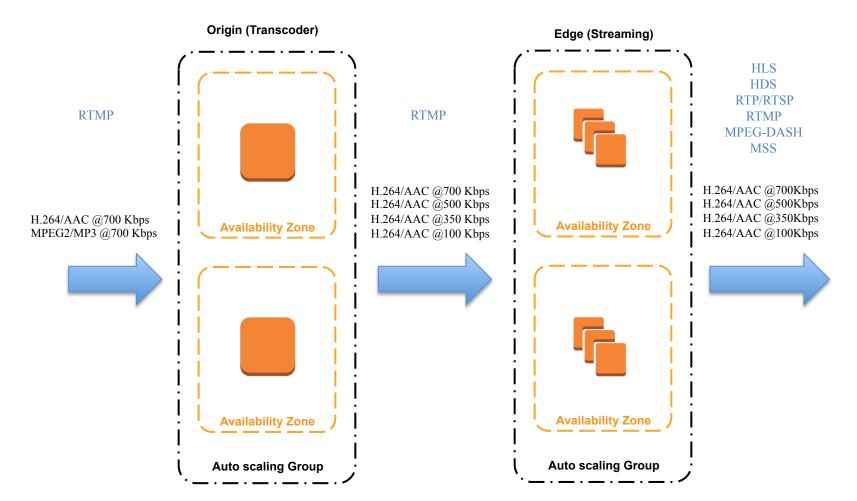
# Vod Transcoding: Amazon Elastic Transcoder VS EC2 Spot Instances

Amazon Elastic Transcoder	Spot Instance e FFmpeg
Costo (SD Video) = 0.017 \$/Minuto Costo (HD Video) = 0.034 \$/Minuto	Costo (c1.medium) = 0.044 \$/Ora (*) Costo (c1.xlarge) = 0.176 \$/Ora (*)
Video Codec = H.264, VP8 Audio Codec = AAC, Vorbis	Video Codec = ffmpeg supportati Audio Codec = ffmpeg supportati
Job di transcoding facili da gestire (web console o API)	Job di transcoding difficili da gestire (Amazon SNS + logica applicativa)
Background e Foreground transcoding	Background transcoding





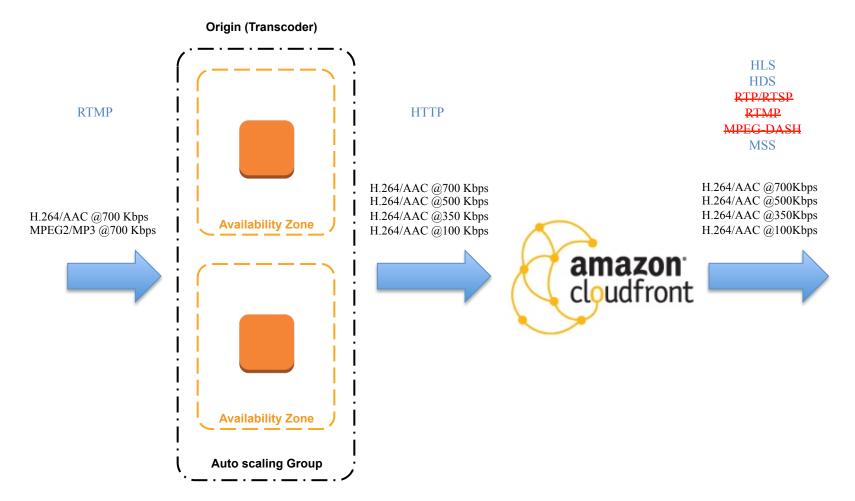
# Live Transcoding: streaming server su Amazon EC2







# Live Transcoding: streaming server su Amazon EC2 e CloudFront







#### **Grazie**

#### Contatti

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http://it.linkedin.com/in/paololatella/

http://www.meetup.com/AWSusergroupItaly/

#### Riferimenti

http://www.interact.it/20?platform=19

http://blog.interact.it/cloud-transcoding-il-modo-per-fare-encoding-video/

http://www.interact.it/InteractSpa/download?file=Interact-Cloud-Transcoding.pdf





