Content Delivery Network -- video transcript

Let's begin with the video content that we'd like to stream. Currently, one user is often able to view a video across the globe without any difficulty. But as more users try to access the same stream, poor network congestion might make the quality degrade.

So how do we handle this? We add servers at the edge.

We now send one stream across the globe to a server close to the viewer, so every mobile user can access crisp video content wherever he might be. Multiple viewers will be able access the same content without increasing core network congestion.

What if others want to access this same video with a device that has a different screen resolution or is connected at a lower bandwidth? We would need to convert the video for them at the source and send multiple streams across the globe. Once again, core network congestion begins to emerge, degrading our video quality.

How do we deal with this problem? We add a transcode service box to our network.

One video is sent across the globe. The video is transcoded into multiple streams built to meet the requirements of each device. Those streams are then split at the edge server, and everyone can receive the data in the right format.

With this technique, we can deliver multiple streams tailored to each viewer without the congestion problems we experience today.