

Copenhagen March 11, 2020

## Zoom

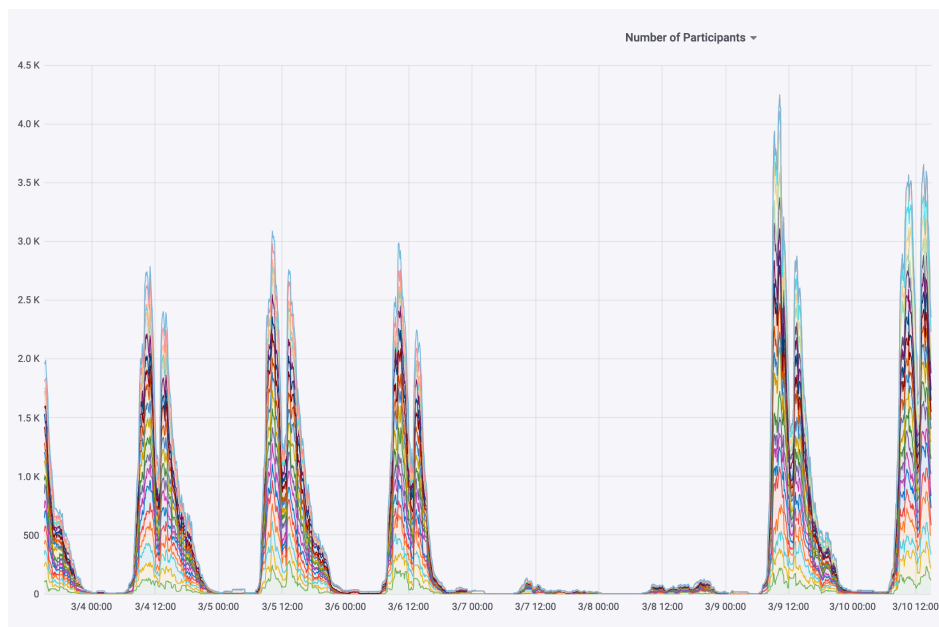
We have signed up several Universities for Zoom this week. If this influx of new organisations continues at current rate we might have to limit the number of new sign-up's, until sufficient resources are in place, to ensure that existing services will continue to work. Together with the Nordic NREN's we might have to prioritise resources.

The service usage has increased with 25-35% starting this week (#11). Peak usage is now around 4.300 concurrent participants. Current total capacity is expected to be approximately 8.000 concurrent participants.

By downgrading the meeting video quality from 1080p to 720p, the meeting capacity is expected to increase by 25-30% allowing for a total of around 11.000 concurrent participants. This will be enforced should we get close to system capacity limits.

Indications from requests indicate that the service utilisation may increase as much as 300-400% over current baseline (Week #8) during the coming weeks and months.

We have ordered equipment with planned delivered in approximately 4 weeks, that will allow us to increase the current max. capacity with at least 200%.



Please note that as a consequence of above, the planned launch of Zoom on-premise cloud recording has been postponed until further notice.

## Kaltura

We have already seen an increase in the number of uploads, transcoding's and views.

Information and requests indicate that there will be a dramatic increase in the utilisation of the service as more universities will move to unattended lectures being recorded and viewed on-demand, as universities go in to "lock-down". This will especially put additional strain on the transcoding capacity. It is impossible to predict the increase as we have never seen these types of workflows in massive scale

We have installed a few stand-a-lone physical servers as temporary transcoders that already has increased the capacity.

As per below it can be seen that there is a 4-hour gap in the transcoder activity over a 24-hour period on weekdays. This gap has increased after the addition of the additional transcoding servers to approximately 12 hours which indicate that there is 100% additional transcoding capacity in the system as is.



Additional transcoding capacity can be derived from the system by limiting transcoding profiles to only transcode to a limited set of quality flavours. This will be enforced should we get close to system transcoding capacity limit.

We have ordered additional transcoding servers with planned delivered in approximately 3 weeks that will allow us to increase the transcoding capacity with several 100%.

### **Storage**

Regarding storage, we have already had a new storage system delivered and installed. The storage system is planned to go live during week 12, and will increase the storage capacity to 2 Peta Byte, and will allow for an 80% increase in Kaltura storage capacity over current levels.