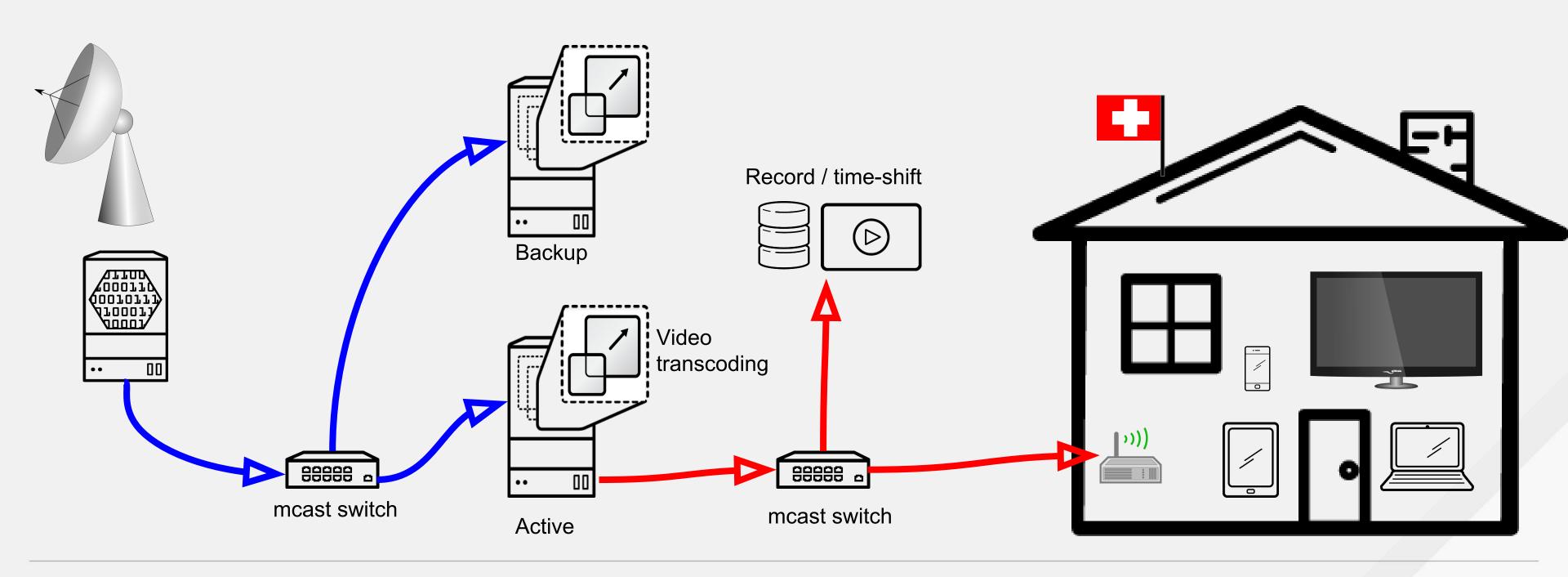




IP TV architecture at swisscom

Simplified, per TV channel

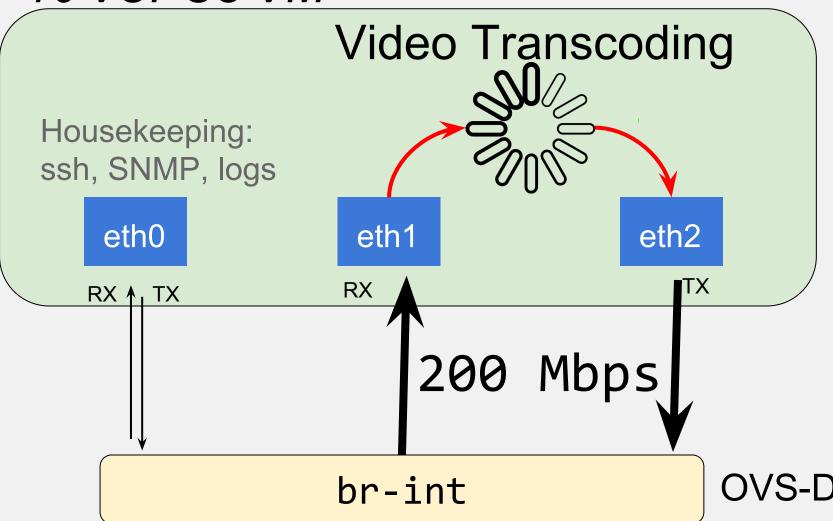




Zoom on one (active VM)

One VM == one TV channel == one input mcast stream + one output mcast stream

10 vCPUs VM



OVS-DPDK bridge, NORMAL action with IGMP SNOOPING

ovs-vsctl set Bridge br-int mcast_snooping_enable=true
ovs-vsctl set Bridge br-int other_config:mcast-snooping-disable-flood-unregistered=true



OVS-DPDK

Why?

- Kernel OVS performances were fine but...
- ...Kernel OVS came with spurious packet loss that were not identified

How many cores?

1 core (so 2 PMDs, two hyperthreads) only!

How many queues?

• Just one per vNIC, as we have only one flow in and only one flow out



Key Takeaways



SWISSCOM Customers are watching TV thanks to OVS-DPDK and its multicast support

OVS-DPDK usage make sense even with moderate traffic workload when zero packet loss matters

Thanks to the OVS community for keeping multicast working fine (and possibly better) in the future :-)





Thank you!

fbaudin@redhat.com



plus.google.com/+RedHat



facebook.com/redhatinc



linkedin.com/company/red-hat



twitter.com/RedHatNews



youtube.com/user/RedHatVideos