











Slicing in 5G Networks: Friends or Foe?

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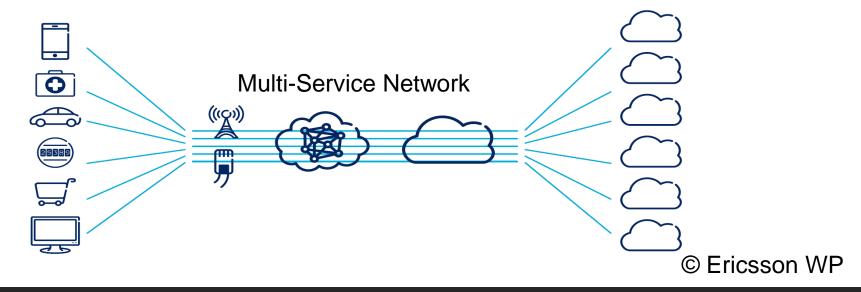
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- 1. What is network slicing?
- 2. How is slicing different from QoS management? Are we re-inventing DiffServ/IntServ?
- 3. Which are the challenges for management and orchestration of slices?
 - 4. How is the industry embracing network slicing?
 - 5. Are over the top providers a threat or an opportunity for operators?
 - 6. How many slices can we create? One per user? One per vertical?
- 7. Is slicing the right answer for resource constrained networks, e.g. cellular?
- 8. Which are the gaps in NFV and SDN open source frameworks for network slicing?

Friends and Foe: Questions

Turn physical infrastructure into multiple logical networks, one per service instance

NOT a one-size fits all architecture NOT a Dedicated Network



What is network slicing?



- 1. Spatio-temporal network leasing
- 2. New players, e.g. Amazon/Google
- 3. Increase revenue via diversity

- 1. E2E Virtual Network for each tenant encompass multi-type resources
- 2. Yield control to slice owners / OTTs
- 3. Isolation tenant resources while increasing multiplexing gain

Slicing & QoS management?

Threats



Opportunities

- 1. Increase in cost
- 2. Integration of APIs
- 3. Share information

- 1. Better control over users and network
- 2. Consistent / Better user experience
- 3. Personalized Service

Slicing and OTT

Different aspects of network slicing have been already prototyped both Opensource and commercials platforms

Industry is currently providing network slicing by means of (a) Local/dedicated services enabled by MEC platform (b) Dedicated core networks and RAN sharing

Next steps: SO-CN and SO-RAN

From R&D to Reality



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