



THALES

TELECOM
ParisTech

Using Service Function Chaining for In-Network Computation

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COINRG session Thursday 1:30 p.m.

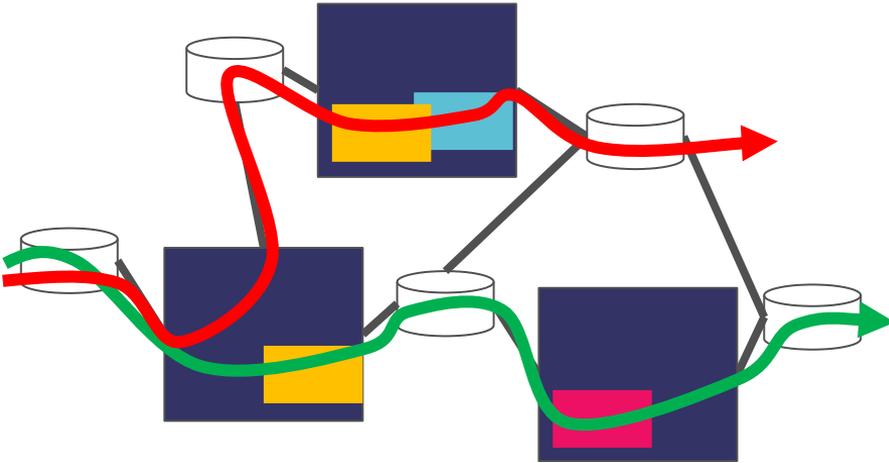
Service Function Chaining for In-Network Computation

Current practices: Centralized control infrastructure

Problems:

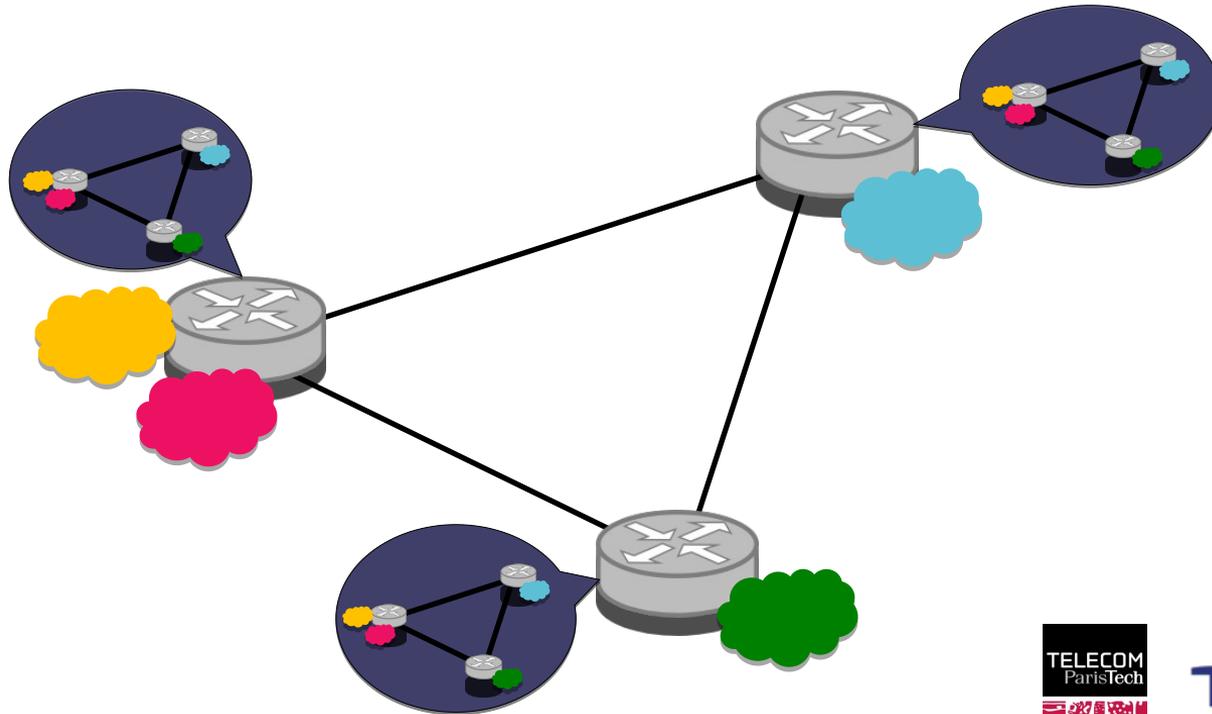
- Single Point of Failure
- Scalability
- Legacy Interoperability
- No Incremental Deployment
- Under exploitation of in-network resources

Proposal: Augment the IGP and make it function aware



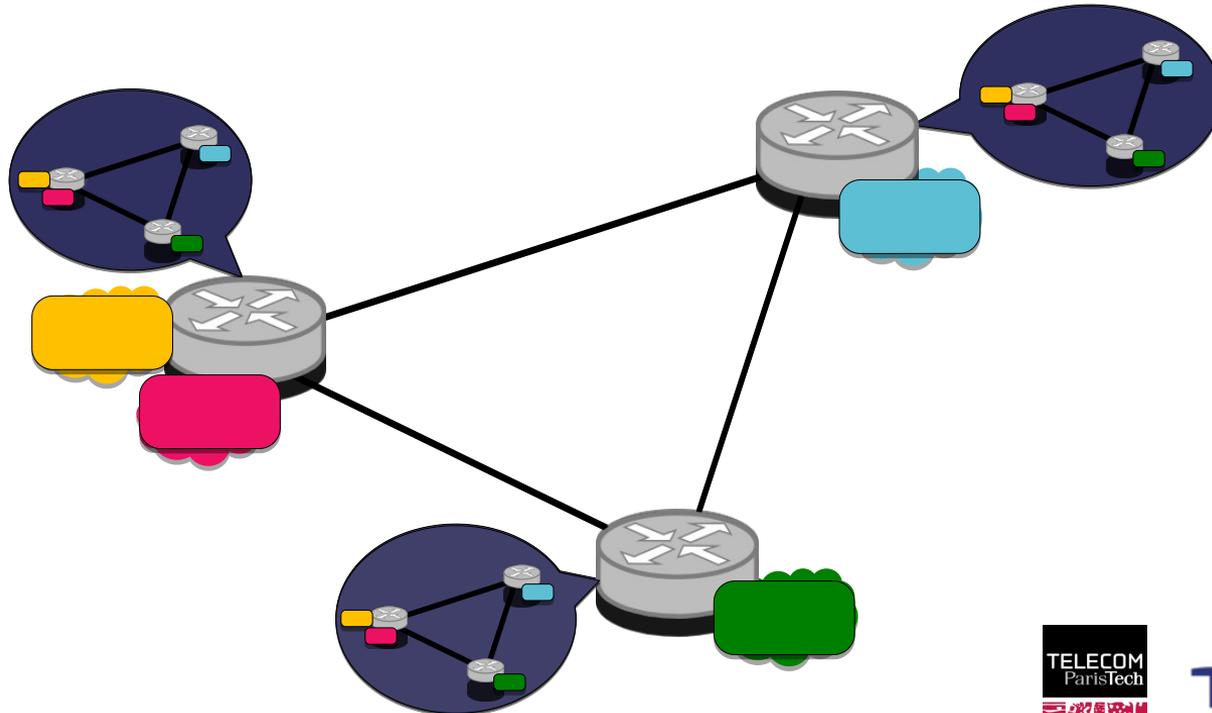
Exploiting the existing in-network resources

If you have a large network you have an IGP (Interior Gateway Protocol)



Announced address are actually VNF

Idea(s): Binding a prefix to a specific function

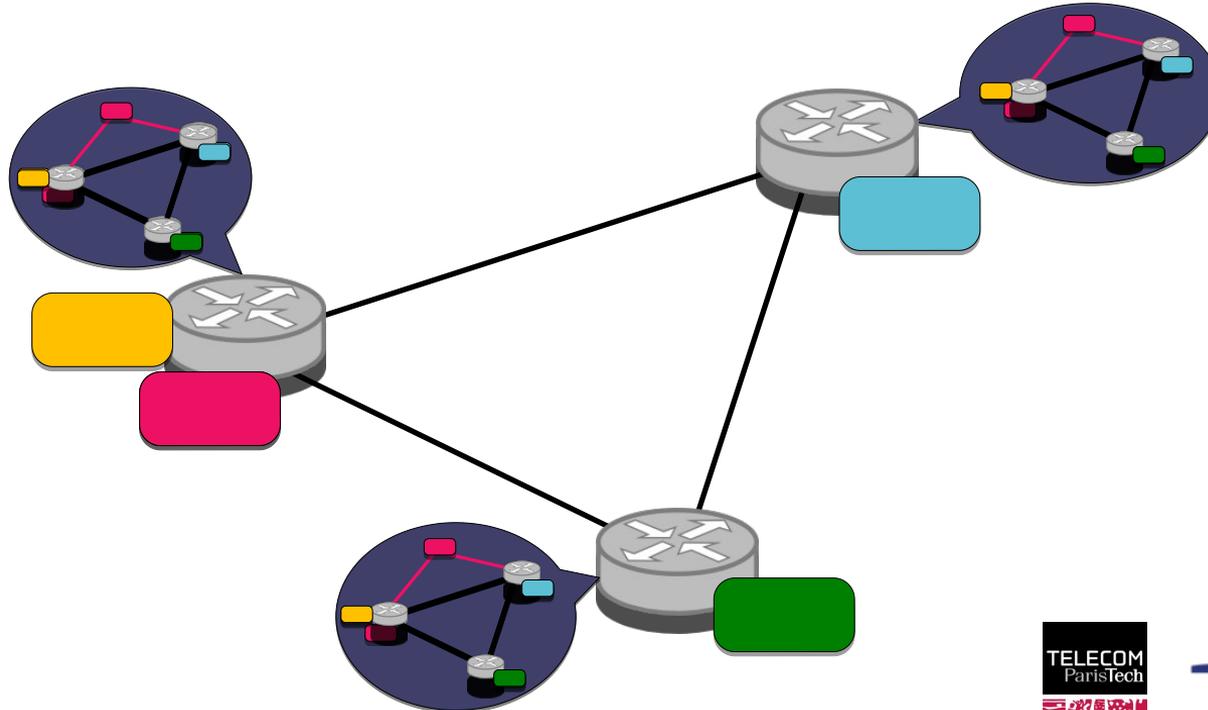


Leveraging on anycast addressing

Idea(s): Binding a prefix to a specific function + Anycast Addressing

Advantages

- Prefix to select the function
- IGP metric to select the function instance



To be continued ...

**Details on COINRG session
Thursday 1:30p.m.**

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References:

<https://hal.archives-ouvertes.fr/hal-01889856v1>

<https://hal.archives-ouvertes.fr/hal-02165785v1>

