

# Service Component Composition

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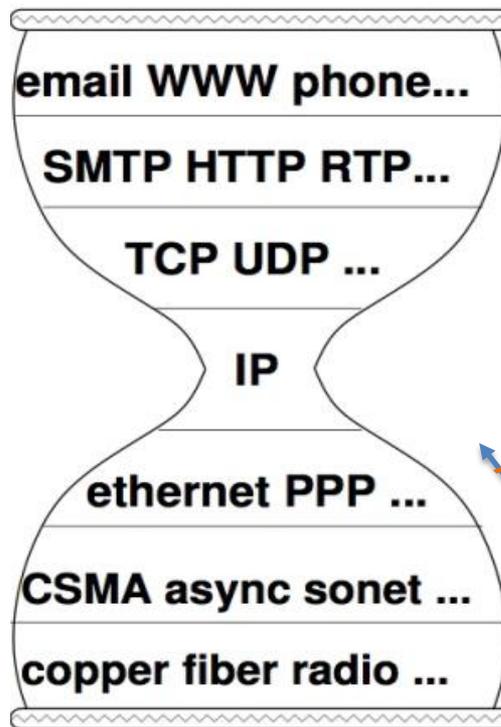
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# Network Service Modeling

- Many orchestrator efforts from operators requires the network service modeling
- Ref: draft-ietf-netmod-yang-model-classification-01
- Monolithic service model (e.g. L3SM)
  - captures the entire service in a single model
  - Hard to reuse
  - Hard to extend with new features
- Service component model
  - Break services into multiple reusable components
  - Operators can flexibly compose various services for different requirements.
  - Customized services for **network slicing**.

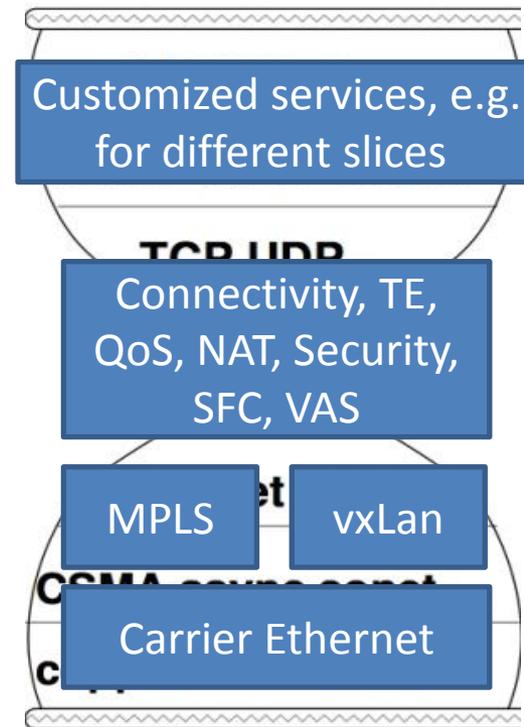
# Narrow Waist for Network Service Customization

Transport and Application protocols



Transmission medias.

Various network services



Diverse devices and networking technologies

Composition

Abstraction

# Fast Adaption for New Services

## Monolithic approach

Monolithic  
Service model

- Not fixed
- Change with new requirements

Adaption Code

Rewrite code when north-bound model changes

Device Model

## Component based approach

Customized Service  
Model based on  
composition

Service Component  
Model

- Clear functions
- Standard model

Adaption Code

- No need to modify

Device Model

# Potential Work in IETF

- A set of service component models
- Approach/framework on service composition