

OPEN POSSIBILITIES.

Open Aggregation Routers for a Converged Mobile Network



OCP
GLOBAL
SUMMIT

NOVEMBER 9-10, 2021

Open Aggregation Routers for a Converged Mobile Network

Kei Lee, AVP Technical Sales, **Ufi**Space

OPEN POSSIBILITIES.



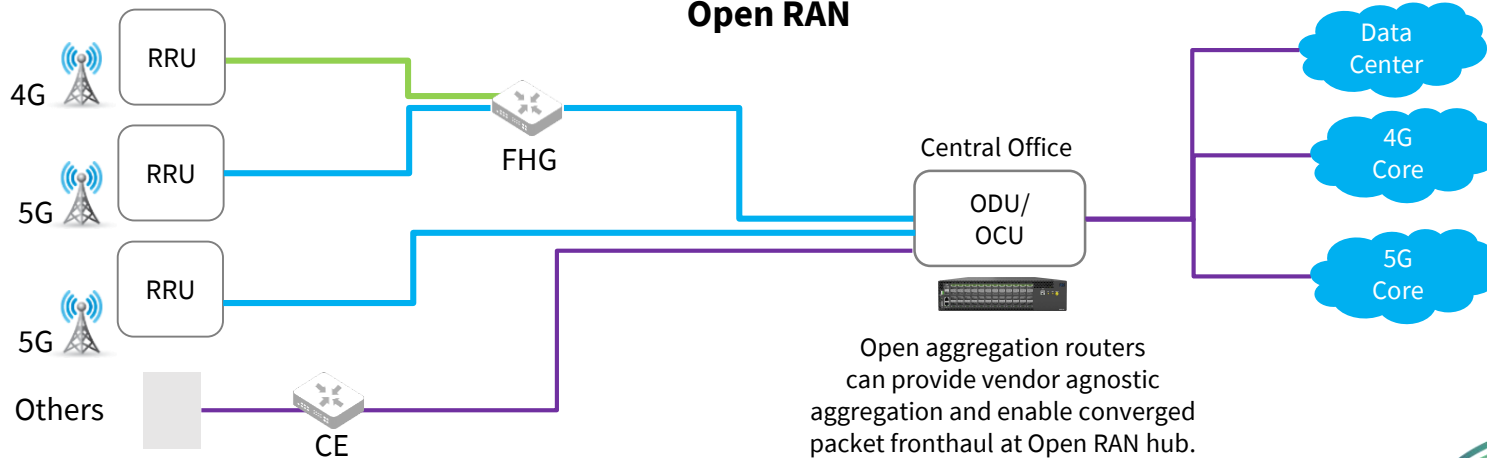
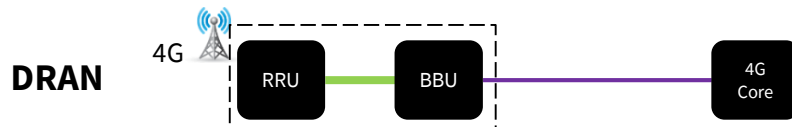
OPEN
COMMUNITY®



Moving Towards a Converged Network



TELCO



OPEN POSSIBILITIES.



CPRI



eCPRI



Ethernet



Challenges for Service Providers



TELCO

- The coexistence of 4G and 5G will bring another layer of complexity to the fronthaul network for service providers
- A scalable deployment model is needed as service providers begin transitioning from DRAN to Open RAN or CRAN
- Additional costs associated with deploying 5G network leads to a need to reduce costs whenever possible

OPEN POSSIBILITIES.



Benefits of Open Aggregation Routers



TELCO

- Aggregating fronthaul gateways will simplify hub site architectures and minimize resources using white box platforms
- Open aggregation routers will enable more flexible deployments by switching eCPRI and RoE to vDU/BBU or subtended fronthaul devices when needed
- Support the scalable deployment of a converged mobile network

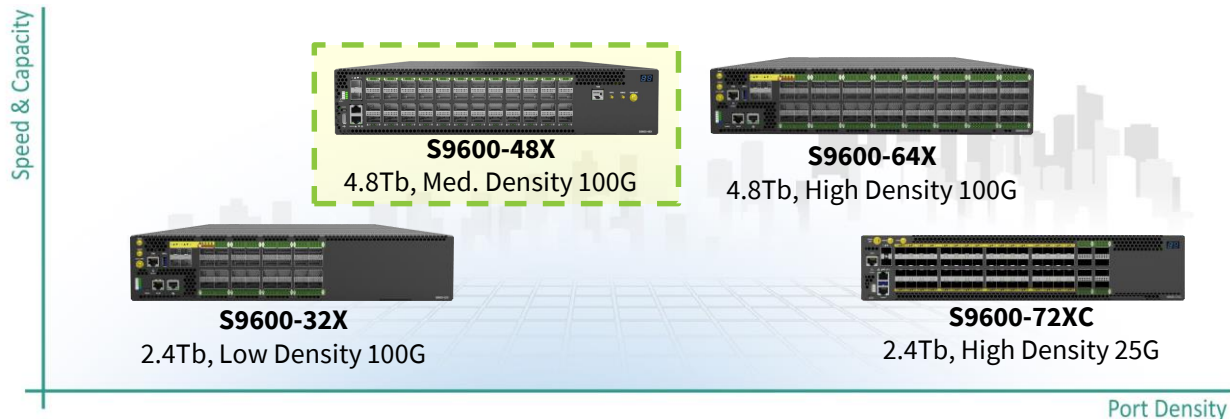
OPEN POSSIBILITIES.



UfiSpace Open Aggregation Routers



TELCO



OPEN
Compute Project
SOLUTION PROVIDER®

- Open Aggregation Routers allows flexible access network convergence, including aggregating fronthaul gateways
- Large capacity with TSN capability to aggregate multiple sites
- Enable an edge grand master at the hub site while operating with high accuracy fronthaul synchronization and timing requirements

OPEN POSSIBILITIES.



S9600-48X HW Specs



TELCO

- Class C timing accuracy
- High density 100G ports and multiple timing interfaces
- 1+1 Redundant, Hot-Swappable PSU (AC/DC)
- 3+1 Redundant, Hot-Swappable Fans

- Intel® Broadwell-DE 8-Core 2.0GHz
- Broadcom Jericho2 Silicon
- 8GB Deep buffer
- Deliver high performance 4.8Tbps switching capacity

- 2 x 10GE SFP+ Management Ports

- Micro USB for Console

- USB 3.0

- 48 x 100GE QSFP28 ports

- 1 x RJ45 Management Port
- Console OOB

- GNSS, ToD, 1PPS and 10MHz
- Supports SyncE, IEEE 1588v2, and TSN (T-GM, T-BC, T-TC, and T-TSC)

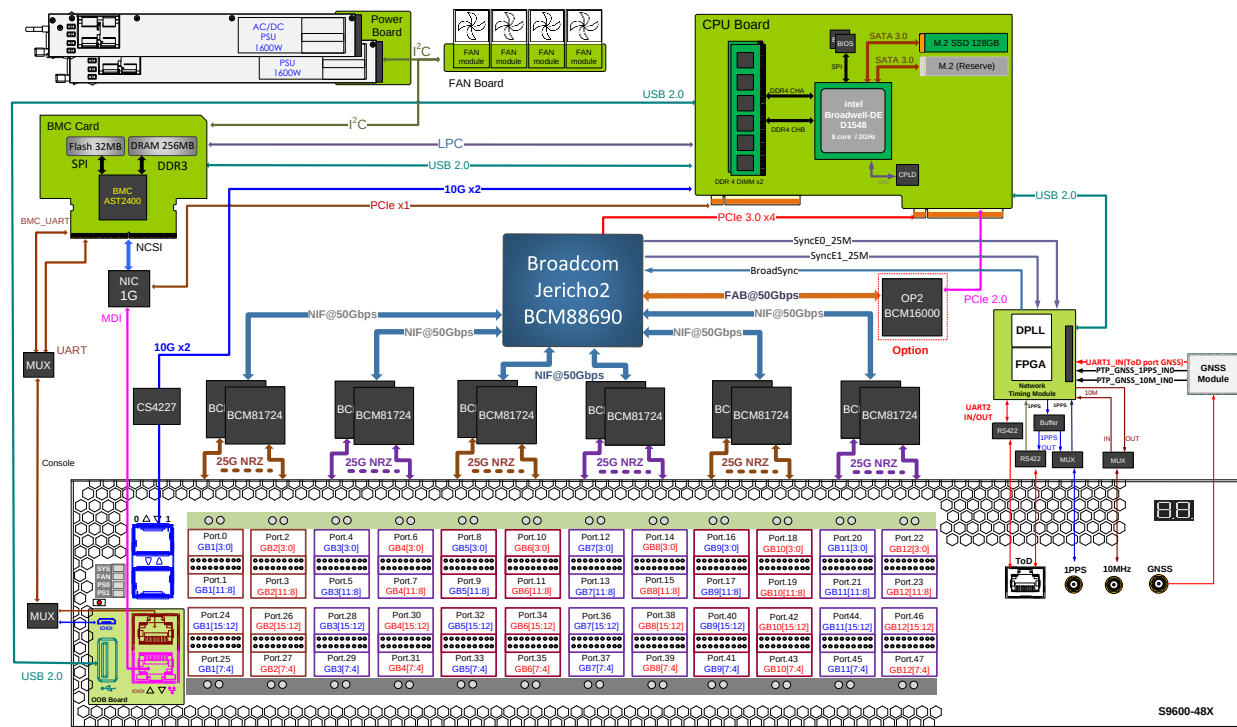


OPEN
Compute Project
SOLUTION PROVIDER®

OPEN POSSIBILITIES.



S9600-48X Block Diagram



TELCO



OPEN
Compute Project
SOLUTION PROVIDER®

OPEN POSSIBILITIES.

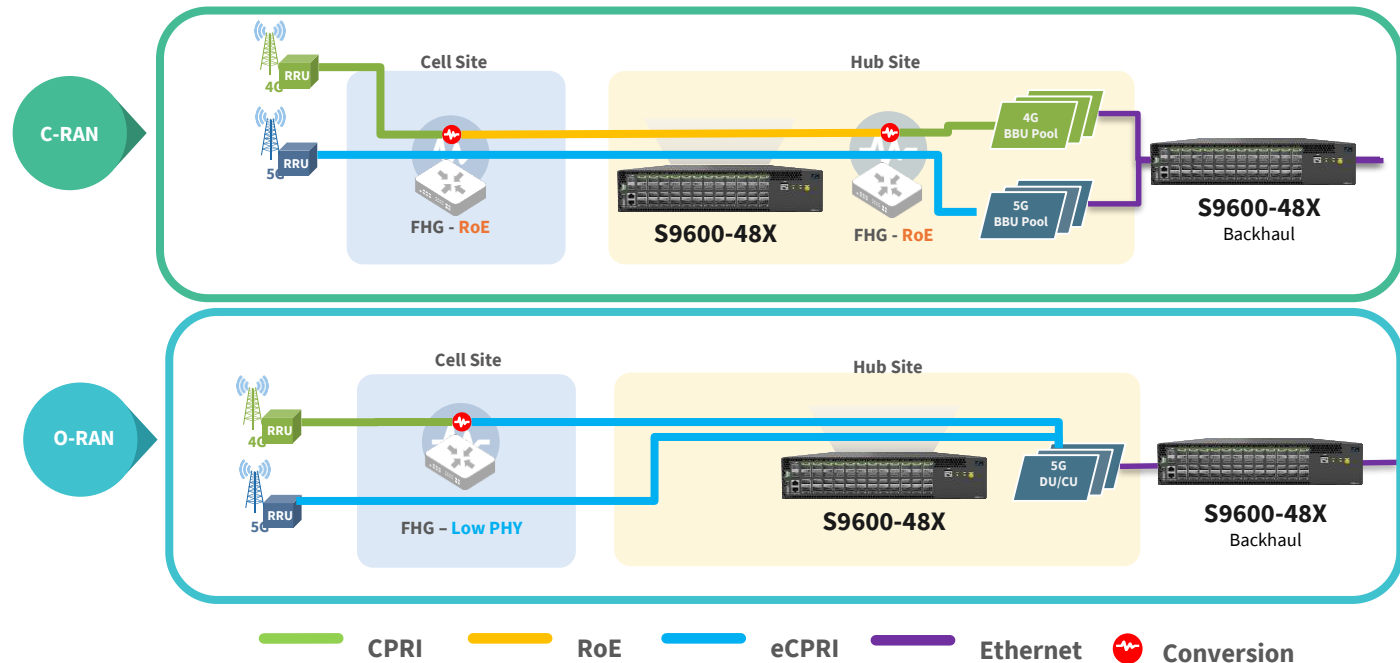


NOVEMBER 9-10, 2021

S9600-48X in Fronthaul Aggregation



TELCO

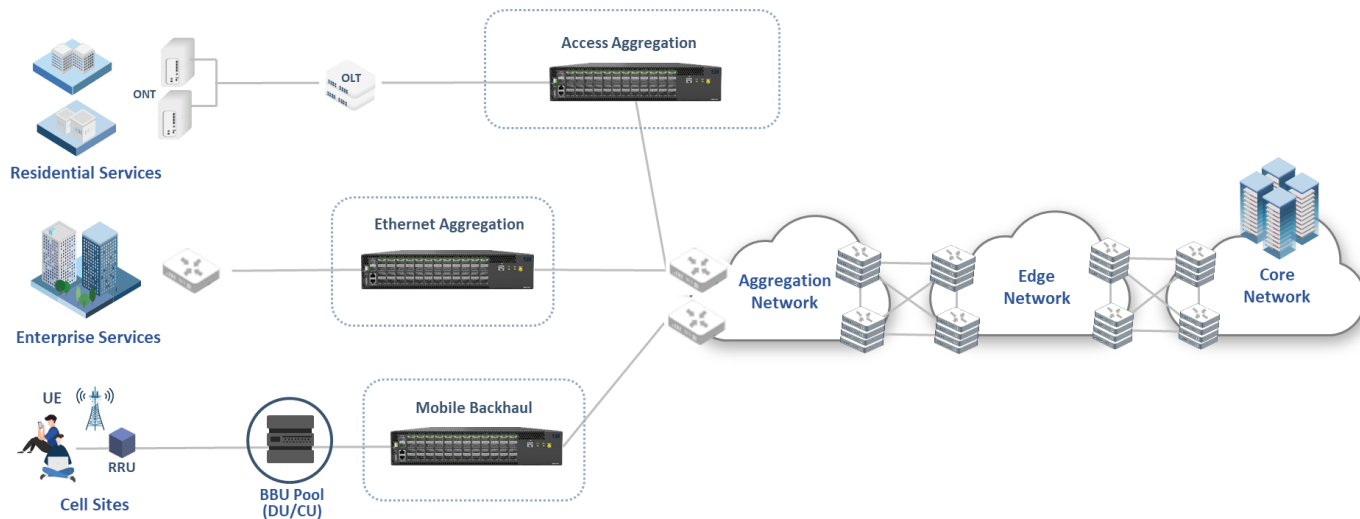


OPEN
Compute Project
SOLUTION PROVIDER®

OPEN POSSIBILITIES.



Other Use Cases for S9600-48X



TELCO



OPEN
Compute Project
SOLUTION PROVIDER®

OPEN POSSIBILITIES.



Join UfiSpace at the Telco Project!

- Join the Telco Project for the latest open networking innovations for telecoms
- Attend our project calls to share your experiences and knowledge
- S9600-48X Specifications – Contributed!
- S9600-48X Design Package – In Progress!

Connect with Kei: kei.lee@ufispace.com

S9600-48X Specifications: <https://www.opencompute.org/documents/ufispace-s9600-48x-open-aggregation-router-specifications-pdf>

More info and solutions at Telco Project Wiki: <https://www.opencompute.org/wiki/Telcos>

Join our Telco Project mailing list: <https://ocp-all.groups.io/g/OCP-Telco>

OPEN POSSIBILITIES.



Thank you!



OCP
GLOBAL
SUMMIT

NOVEMBER 9-10, 2021