OTIC East (OTIC/E) Candidate
Status Update
O-RAN/ONAP/OSC PoC
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COSMOS Team: Rutgers, Columbia, and NYU in partnership with New York City, IBM, Silicon Harlem, City College of New York, U. Arizona



Platforms for Advanced Wireless Research

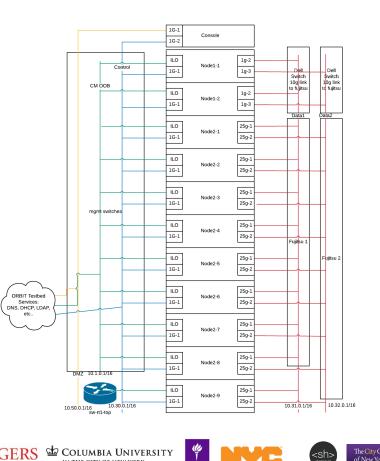


RUTGERS COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK



Current Dedicated Resources

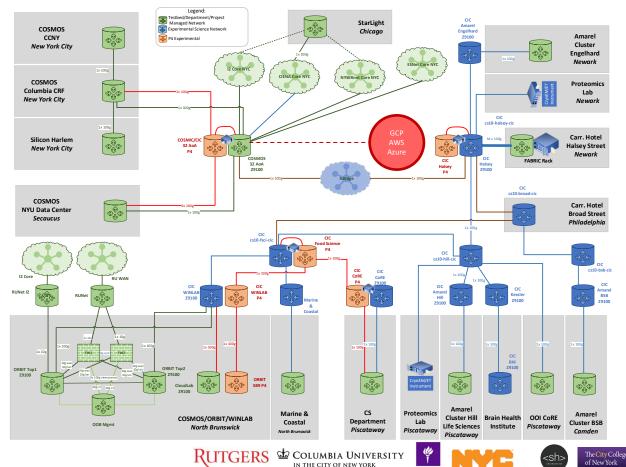
- Used for ONAP PoCs since 2018
- Environment
 - Entry point at console located at console.sb10.orbit-lab.org
 - 11 Ubuntu servers, all managed by OpenStack
 - Control Node and Compute Nodes
- Access Methods
 - Organizations can gain access by requesting an account – details at: <u>https://wiki.onap.org/pages/viewpag</u> <u>e.action?pageId=45298557</u>
 - Tunnels to other labs around the world





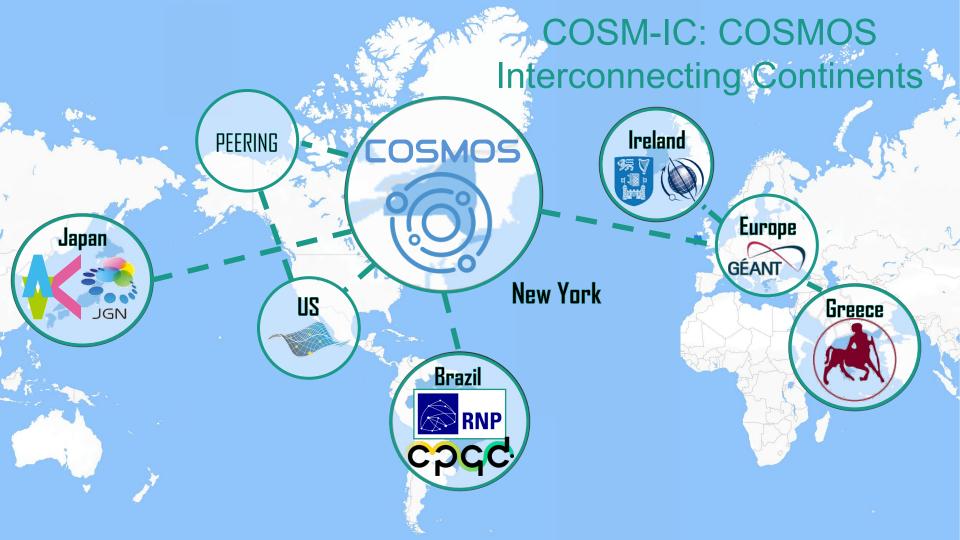
Wide Area Connectivity

- Fully programmable (P4/SDN) wide(-er) area transport
- Low-latency high speed (100 Gbps/400 Gbps) connectivity to several (public/private) clouds
- Experimentation with reservation BW to various locations around the world



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COSMOS (PAWR) Experimental Licenses

FCC Innovation Zone: "The New York City Innovation Zone will encompass area bounded by W 123rd Street on the south, Amsterdam Avenue to the east, W 134th Street to the north and Broadway to the west"

west"

Frequency Band	Type of operation	Allocation	Maximum EIRP (dBm)
2500-2690 MHz	Fixed	Non-federal	20*
3700-4200 MHz	Mobile	Non-federal	20*
5850-5925 MHz	Mobile	Shared	20*
5925-7125 MHz	Fixed & Mobile	Non-federal	20*
27.5-28.35 GHz	Fixed	Non-federal	20*
38.6-40.0 GHz	Fixed	Non-federal	20*

Program Experimental License: at Rutgers, Columbia and CCNY campuses





COSMOS Summary

- Focus on ultra-high bandwidth, ultra-low latency, and edge cloud
- Open platform integrating SDRs, mmWave, and optical x-haul
- 1 sq. mile densely populated area in West Harlem with FCC Innovation Zone designation
- Industry and local community outreach

COSMOS website: <u>https://cosmos-lab.org</u> Tutorials: <u>https://wiki.cosmos-lab.org/wiki/tutorials</u> Twitter: #pawrcosmos

Related links:

- PAWR: <u>https://advancedwireless.org/</u>
- ORBIT: <u>https://www.orbit-lab.org/</u>



