UCG
University of Montenegro

Implementation of IPv6 protocol at the Academic network of University of Montenegro

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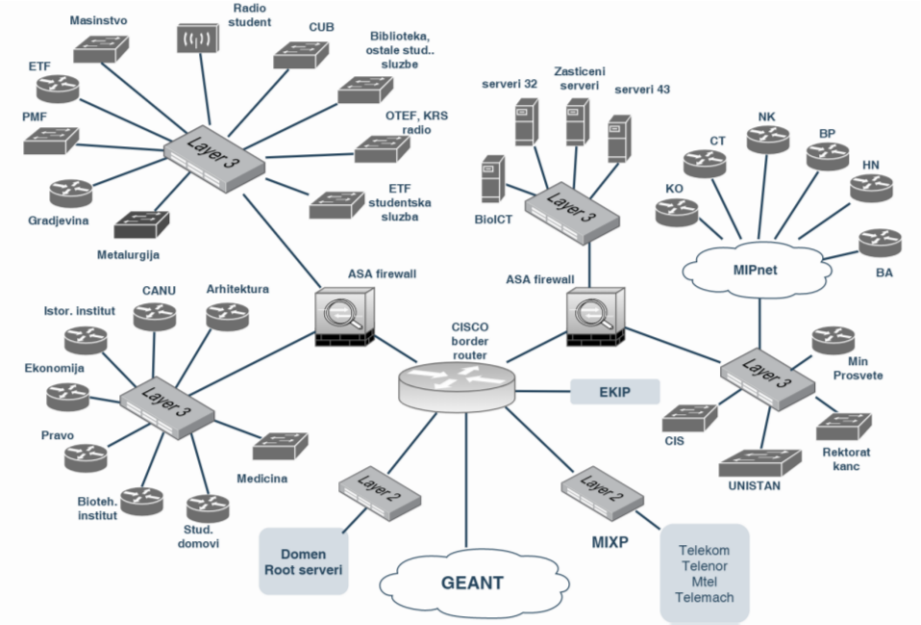
Starting point

- **2013 allocation of IPv6 address space**
- AS40981 UNIVCG (visible since 14.02.2013. ,16:00:00 UTC)
- 2a02:4280::/32
- **Existing network limits for implementation of IPv6**
- Already old equipment that do not support IPv6
- Core network not able to support IPv6 transition mechanism
- **What were the starting steps**
- Strategy for segmentation of the address space
- Establishing WAN connection on IPv6

Academic Network topology IPv6 compatability



	University Unit	number	IPv6 compatability
1	CIS (CORE)	9	yes
2	Faculty of Architecture	1	no
3	Faculty of Civil engineering	1	no
4	Faculty of Metalurgy and Technology	1	no
5	Faculty of Law	1	no
6	CANU (Montenegrin Academy of Science and Art)	1	no
7	Faculty of Medicine	1	no
8	Faculty of Philosophy	1	no
9	Faculty of Maritime Studies	1	no
10	Biotechnical Faculty	1	no
11	Physiotherapy studies	1	no
12	Historical Institute	1	no
13	Faculty for Sport and Physical Education	1	no
14	Faculty of Tourism and Hospitality	1	no
15	Faculty of Electrical Engineering	1	yes
16	Faculty of Science and Mathematics	1	no
17	Faculty of Mechanical Engineering	1	no
18	Faculty of Economics	1	no
19	Student campus	1	no
20	Faculty of Economics – Bijelo Polje	1	no
21	Institute of Marine Biology	1	no
22	Faculty of Fine Arts	1	yes

2020 steps

- **Implementation of IPv6 protocol at IXP**
- Second route server only for IPv6
- Testing IPv6 connectivity with University of Montenegro
- **Analyzing transition mechanism best suited for Academic network**
- IPv4 availability
- Future needs

2020 - 2021 steps academic network

- **Implementation of IPv6 protocol in core network**
- Aggregation points
- Center of Information System
- **Implementation of IPv6 protocol on servers**
- DNS
- Mail
- Web
- **Implementation of IPv6 at Faculty of Electrical Engineering**
- **Implementation of IPv6 at EKIP collocation segment**
- Service nettest

Future steps

- Full implementation of IPv6 on server segment
- Upgrade of equipment that don’t support IPv6
- Dual stack implementation in all Academic network

Thank you
Questions?
Discussion!