

Preparation for Lab Exercise Sheet 2

IPv6 Topology

The following questions must be prepared for the laboratory and presented to the examiners before the start of the exercises.

Group No.:

Name:

Matr. No.:

General questions on IPv6

Get familiar with the IP Version 6 address format! Answer the following questions and tasks:

- a) Explain the format that is used for IPv6 addresses and give the maximum number of devices that can be addressed!

- b) Explain the difference between Unicast, Multicast, and Broadcast in IPv6!
(Prepare a diagram)

c) Explain the structure of IPv6 addresses and the terms Network Identifier, Interface Identifier, and Prefix Length! (**Prepare a diagram**)

d) What is an IPv6 address scope? Name and explain the different scopes of IPv6!
(**Prepare a table and diagram**)

Preparation

You should be able to explain the following things:

- IPv6 addresses and their characteristics!
- The difference between Unicast, Multicast, and Broadcast in IPv6 and their purpose!
Where is Broadcast used in IPv6?
- The structure of IPv6 addresses and the difference to IPv4 addresses! What about subnet masks and broadcast addresses in IPv6?
- The different scopes of IPv6 addresses and their purpose!