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- Multicasting requires support from networking hardware such as routers.
- ► The most common implementation is IP Multicast, used for streaming media. No prior knowledge of who or how many receivers there are is required. Widely used in enterprises, stock exchanges and multimedia content delivery networks.

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- Some reserved IPv4 multicast addresses:

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| 224.0.0.1 | all hosts on the same network segment |
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► The most common implementation is using UDP (User DataGram Protocol), which isn't reliable — messages may be lost or delivered out of order.

Java Examples

The main class we will use is java.net.MulticastSocket. See examples in lab/multicasting

- setup-examples: Shows how to find out information about network interfaces and if they support multicasting.
- ex1-mcast-hello: Streaming hello world using multicasting!
- ▶ ex2-mcast-time: Multicast time server
- ex3-mcast-group: Multicast group membership example

References

- Multicast Address
- ► IP Multicast