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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.
IP Multicast

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- Some reserved IPv4 multicast addresses:

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<tr>
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</tr>
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<td>224.0.0.0</td>
<td>reserved base address</td>
</tr>
<tr>
<td>224.0.0.1</td>
<td>all hosts on the same network segment</td>
</tr>
<tr>
<td>224.0.0.2</td>
<td>all routers on the same network segment</td>
</tr>
<tr>
<td>224.0.0.251</td>
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</tr>
<tr>
<td>224.0.1.1</td>
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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