



SNS COLLEGE OF TECHNOLOGY

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An Autonomous Institution

COURSE NAME : Internet of Things

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UNIT – IV IPv6 TECHNOLOGIES FOR THE IoT
Topic: *QUALITY OF SERVICE IN IPv6*

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QUALITY OF SERVICE IN IPv6

QoS is supported in IPv6.

IPv6 header has two QoS-related fields:

There are **no signalling protocol for resource allocation** (admission control) and QoS mechanisms control. The following priority levels are typical, but variances are possible:

- Level 0—No specify priority
- Level 1—Background traffic (news)
- Level 2—Unattended data transfer (email)
- Level 3—Reserved
- Level 4—Attended bulk transfer (FTP)
- Level 5—Reserved
- Level 6—Interactive traffic (Telnet, Windowing)
- Level 7—Control traffic (routing, network management)

20-bit flow label, usable in IntServ-based environments. In IntServ environments, performance guarantees to traffic and resource reservations are provided on per-flow basis. A guaranteed and controlled load service capability is supported. IntServ approaches have scalability issues;

8-bit traffic class indicator usable in DiffServ-based environments. DiffServ environments are more common. The traffic class field may be used to set specific precedence or differentiated services code point (DSCP) values. These values are used in the exact same way as in IPv4. Performance guarantees are provided to traffic aggregates rather than to flows. DiffServ classifies all the network traffic into classes. Two distinct types (per hop behaviors) are supported:

Expedited forwarding (EF): aims at providing QoS for the class by minimizing jitter and is generally focused on providing stricter guarantees;
Assured forwarding (AF): inserts at most four classes with at most three levels of packets dropping categories

