



The Challenges of Traffic Monitoring at High-Speeds

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Networks and Monitoring

- ② **Networks grow and evolve in terms of**
 - ② **speed**
 - ② **size**
 - ② **complexity**
 - ② **users**

- ② **Need for detailed observation of networks (passive and/or active)**



Why do we need traffic monitoring



- ④ **Accounting**
- ④ **DoS Attack detection**
- ④ **Intrusion detection**
- ④ **Traffic Engineering**
- ④ **QoS Parameters Measurements**
- ④ **Traffic Capture**
- ④ **The market asks for it!**

Who needs traffic monitoring

- @ **ISPs**
- @ **ASPs**
- @ **Research/Academic Community**
- @ **Corporations**
- @ **Organizations**
- @ **Public Sector**
- @ **End Users**

- @ **Accuracy**
- @ **Flexibility**
- @ **Delay / Bottleneck**
- @ **Manageability**
- @ **Aggregation**
- @ **Multilayer Networks**
- @ **Early Attack Detection**
- @ **Privacy**

- ④ **Better view of Traffic, Topology and Status of the network**
- ④ **Usage / statistics of applications and network**
- ④ **Security of networks**
- ④ **Traffic management**
- ④ **SLAs**
- ④ **Understand NGN**

Conclusions

- ② **Provision of new and better services**
- ① **Improvement of end-user experience**
- ③ **Enhancement of computer systems security**