



DPI SOLUTIONS FOR SERVICE PROVIDERS

Deep packet inspection solutions are designed for carrier grade stateful application inspection and session based classification of per subscriber IP traffic. The DPI functionality allows service providers to develop new differentiated services and increase their subscriber base by providing a portfolio of customer tailored services.

DEEP PACKET INSPECTION

The DPI functionality may be implemented on several already existing network elements in form of a **software module** or can be implemented as a **standalone network element offering a higher grade of performance and reliability**. The DPI device also referred to as **PCEF** (Policy and Charging Enforcement Function) will transparently **inspect subscriber originated flow and classify the traffic accordingly** from L3 up to L7 enabling the operator to selectively target each protocol and enforce control and charging functionalities on a per subscriber basis.

The DPI device is commonly implemented at the service provider (SP) edge as close to the subscriber as possible. This enables the SP to enforce subscriber policies in an early stage and thus optimize the transport of traffic through the SP core. Depending on the access technology used the DPI solution is commonly implemented immediately after data is de-encapsulated into a pure IP network. Since the DPI network element is placed inline in transparent mode

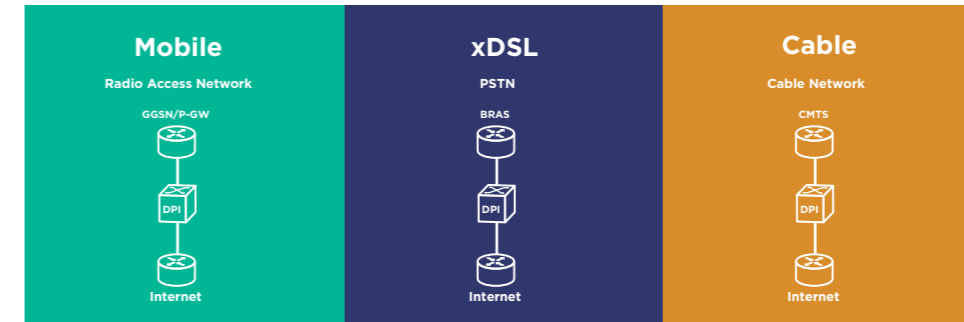
DPI BENEFITS:

Deployment of differentiated services

Per Subscriber control

Network optimization

Real-time charging
Data mining and analytics



the solution requires a design offering a highly available and resilient solution in case of failures and still offering full service availability. Additionally it is required to integrate the DPI solution with the backend systems enabling the DPI network element to have full subscriber awareness. Depending on the access technology the DPI device can receive subscriber information via AAA, DHCP, SOAP or PCRF.

NIL VALUE PROPOSITION

Through extensive number of projects NIL engineers have implemented DPI technology (Cisco SCE, ASR 5000) in various access technologies (xDSL, Cable, Mobile) and offer vast experience of integration with backend systems and creation of services based on customer requirements.

DPI SOLUTION:

Highly available

Transparent

Line rate classification

Stateful application analysis

For more information, please contact us via sales@nil.com or find our local office.