

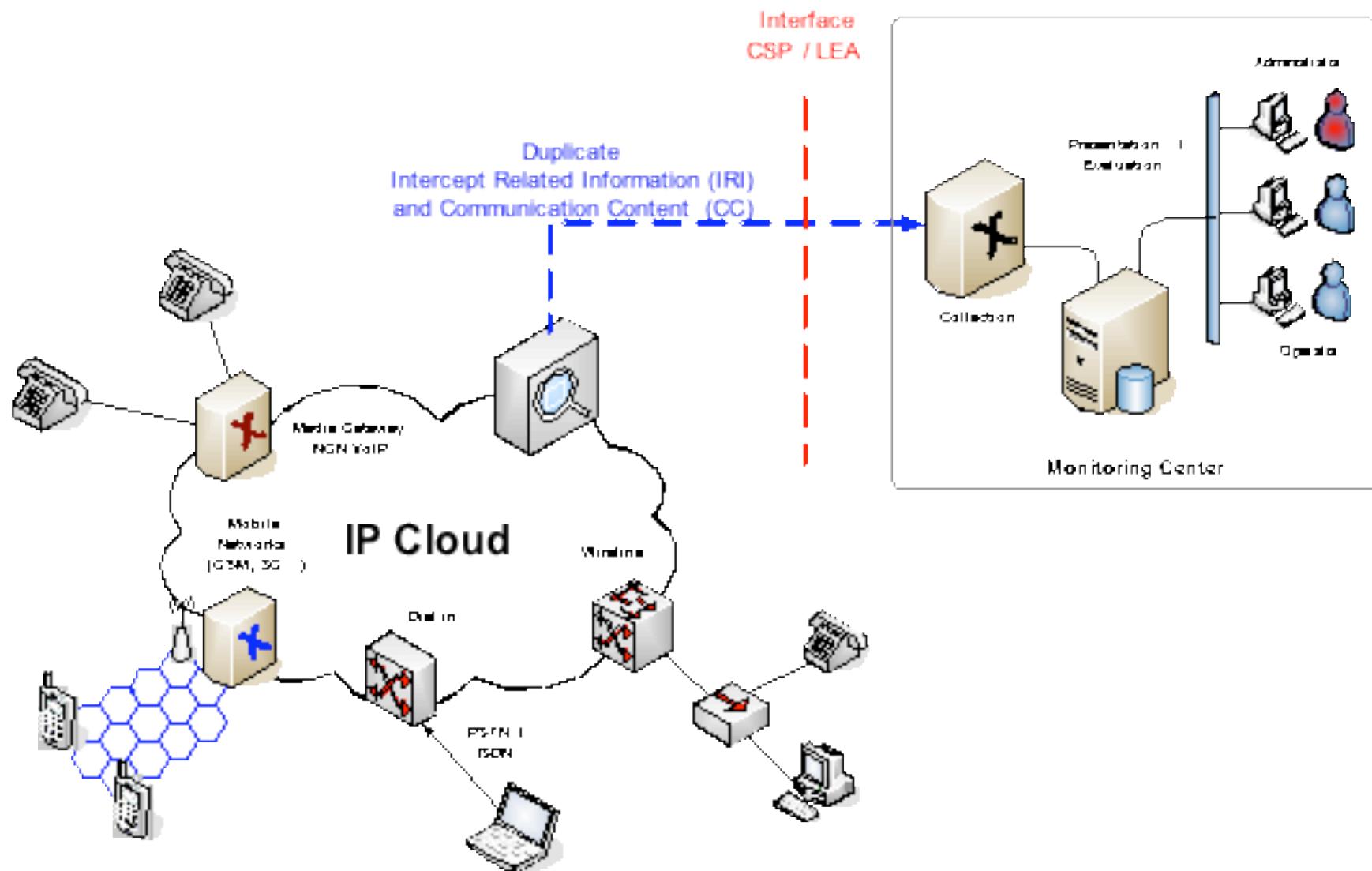
Target and Service Based Interception in an IP Environment

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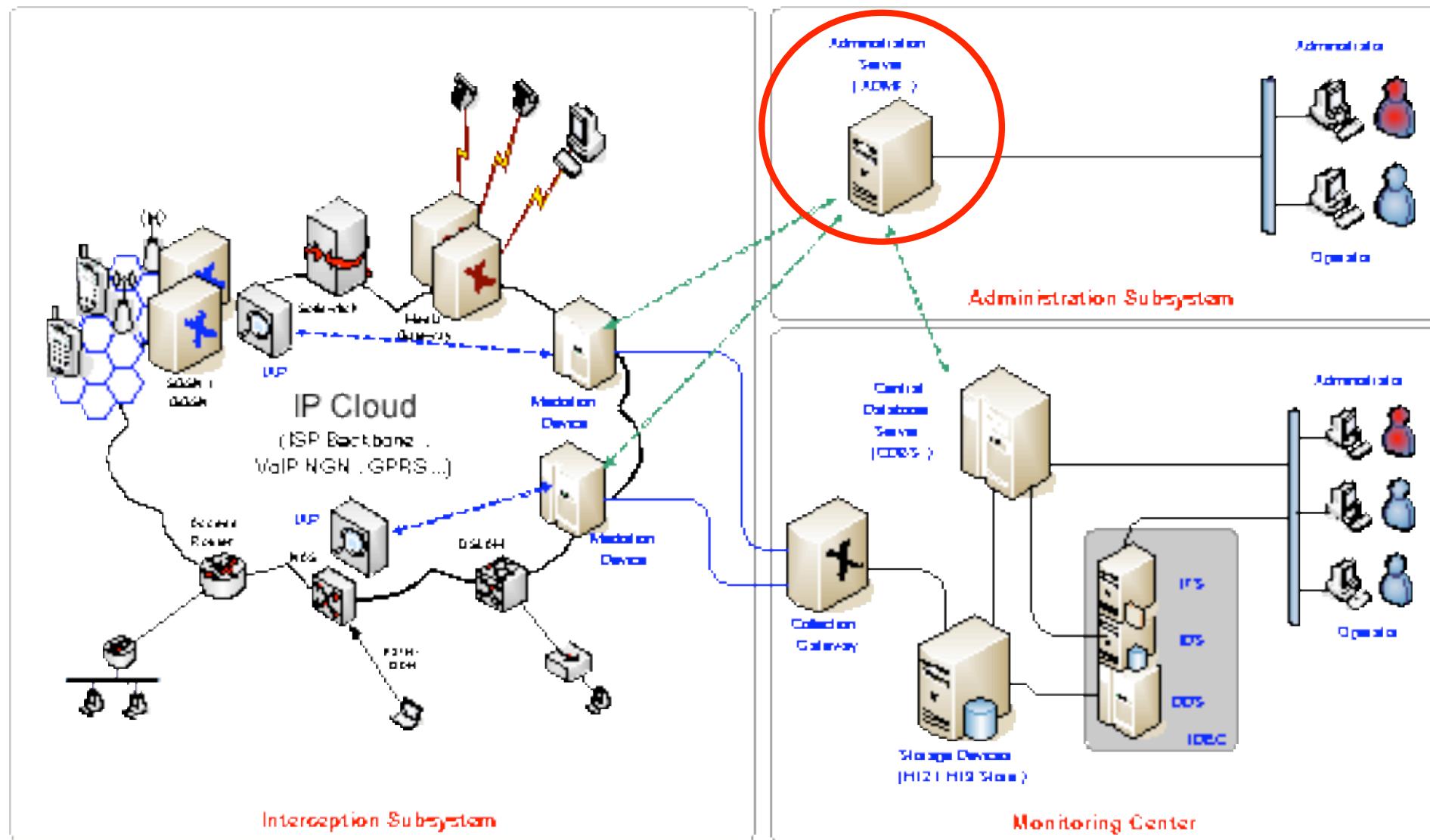
What are my messages?

- IP interception and monitoring
 - End-to-end is better
- But it can be difficult...
 - Cost for network operators
 - Content usability for LEA
- Klarios® makes it easier...
 - A solution for day-to-day challenges

IP Interception and Monitoring



IP Interception and Monitoring – End-to-End is Better... (1)



KLARIO/S® AIMS-PS

Administration Function

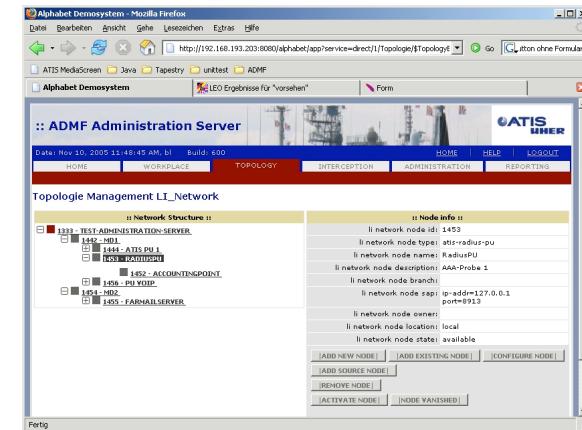
- Administration of users and roles

- Reporting and logging

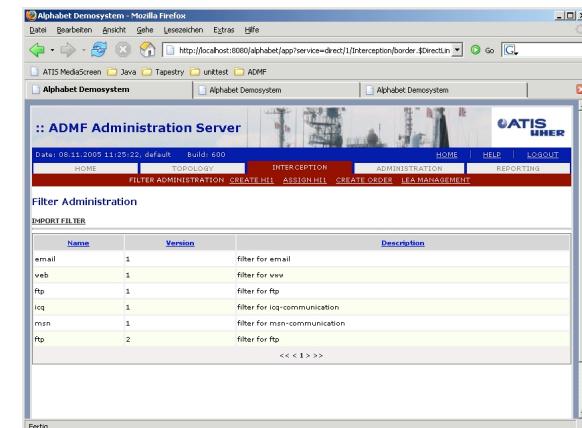
- Topology management

- Interception management
 - Warrant administration
 - Filter administration
 - Interception provisioning

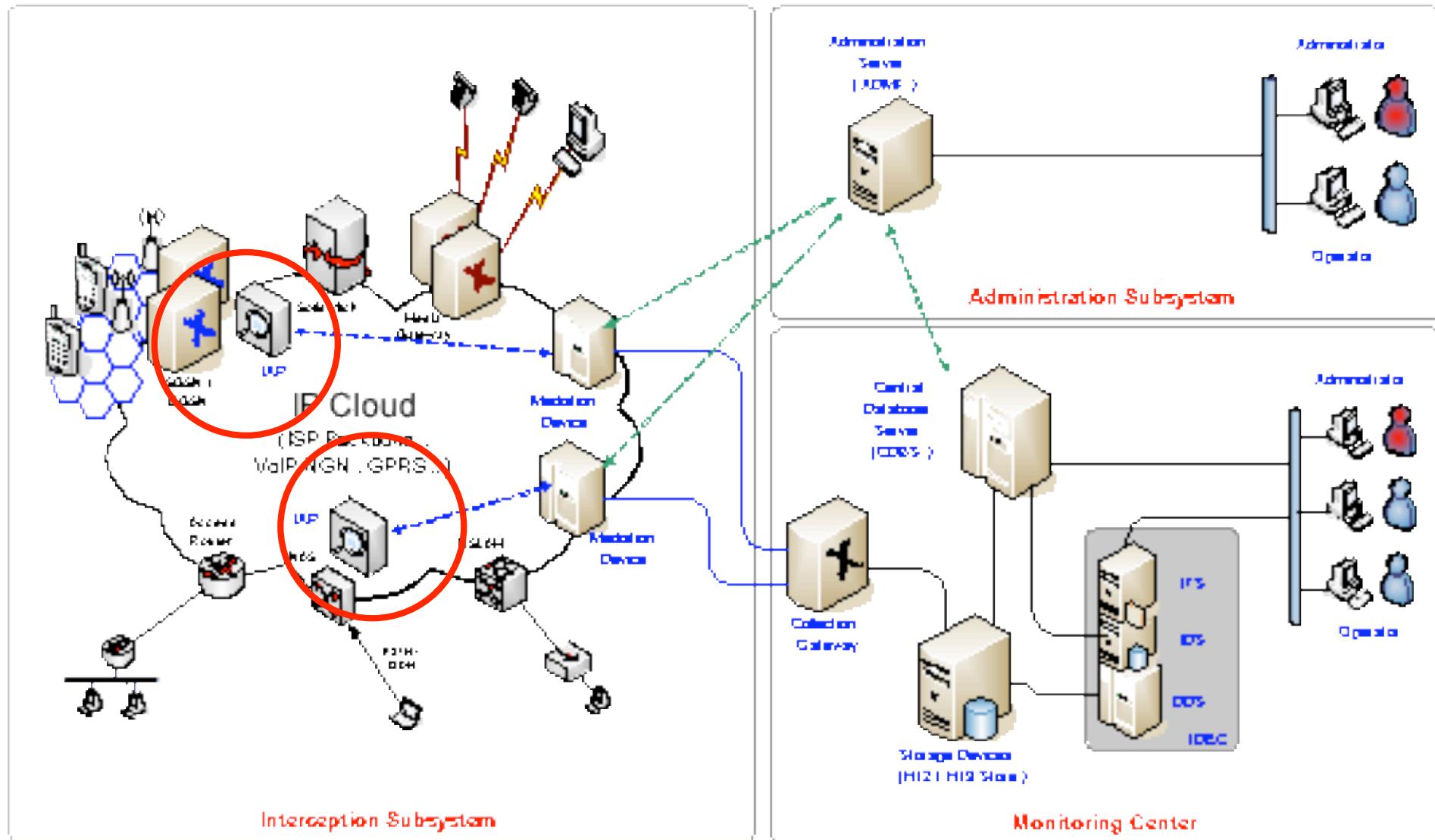
Topology Administration



Filter Administration



IP Interception and Monitoring – End-to-End is Better... (2)



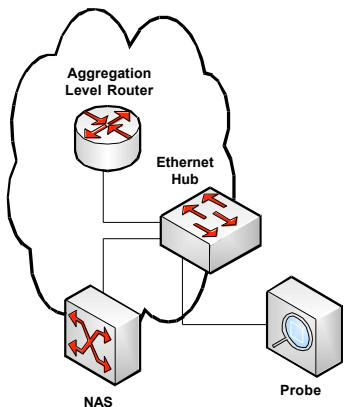
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Interception Access Points

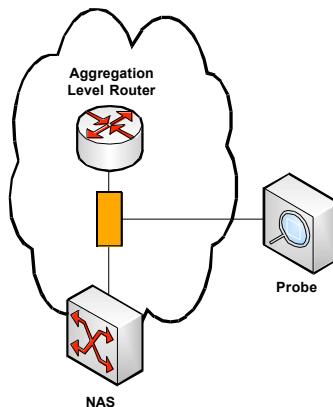
LI Dedicated	ISP Equipment
IP Layer	
Protocol Analyser Sniffer	Routers Switches
Email Proxy Radius/ DHCP Proxy	Radius Server Mail Server

- Issues to keep in mind:
 - Supported applications
 - Filter functions
 - Throughput
 - Delivery formats
 - Security
 - Connection to network

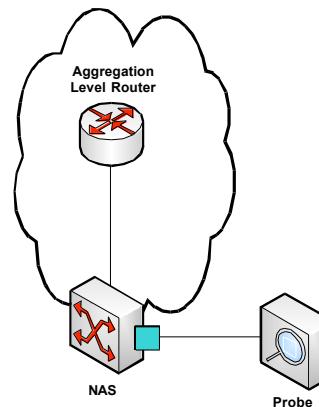
HUB Mode



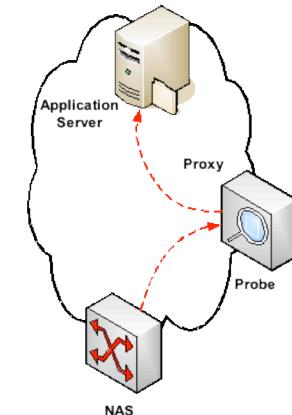
Network Tap



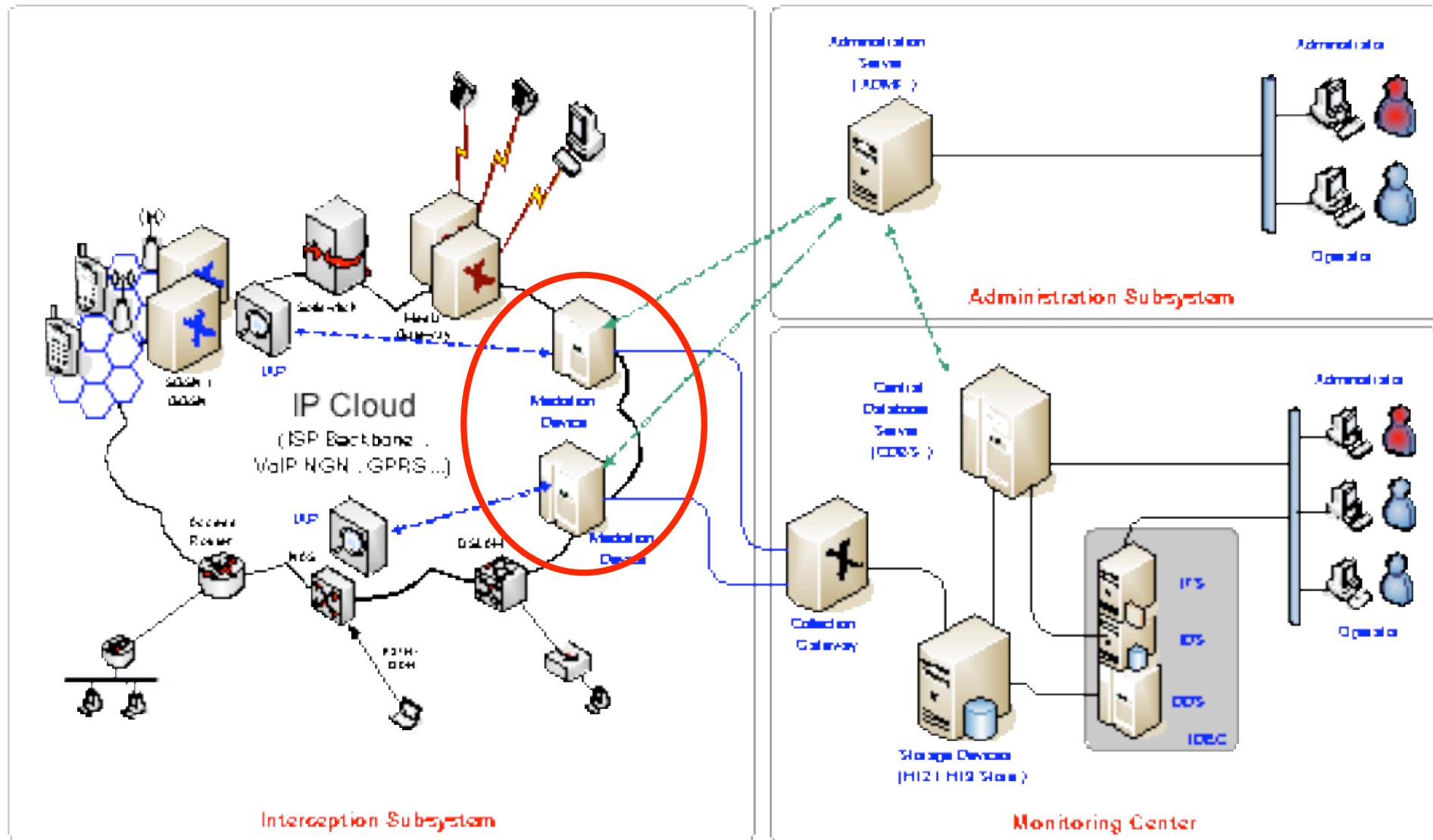
Mirroring Port



Proxy Mode



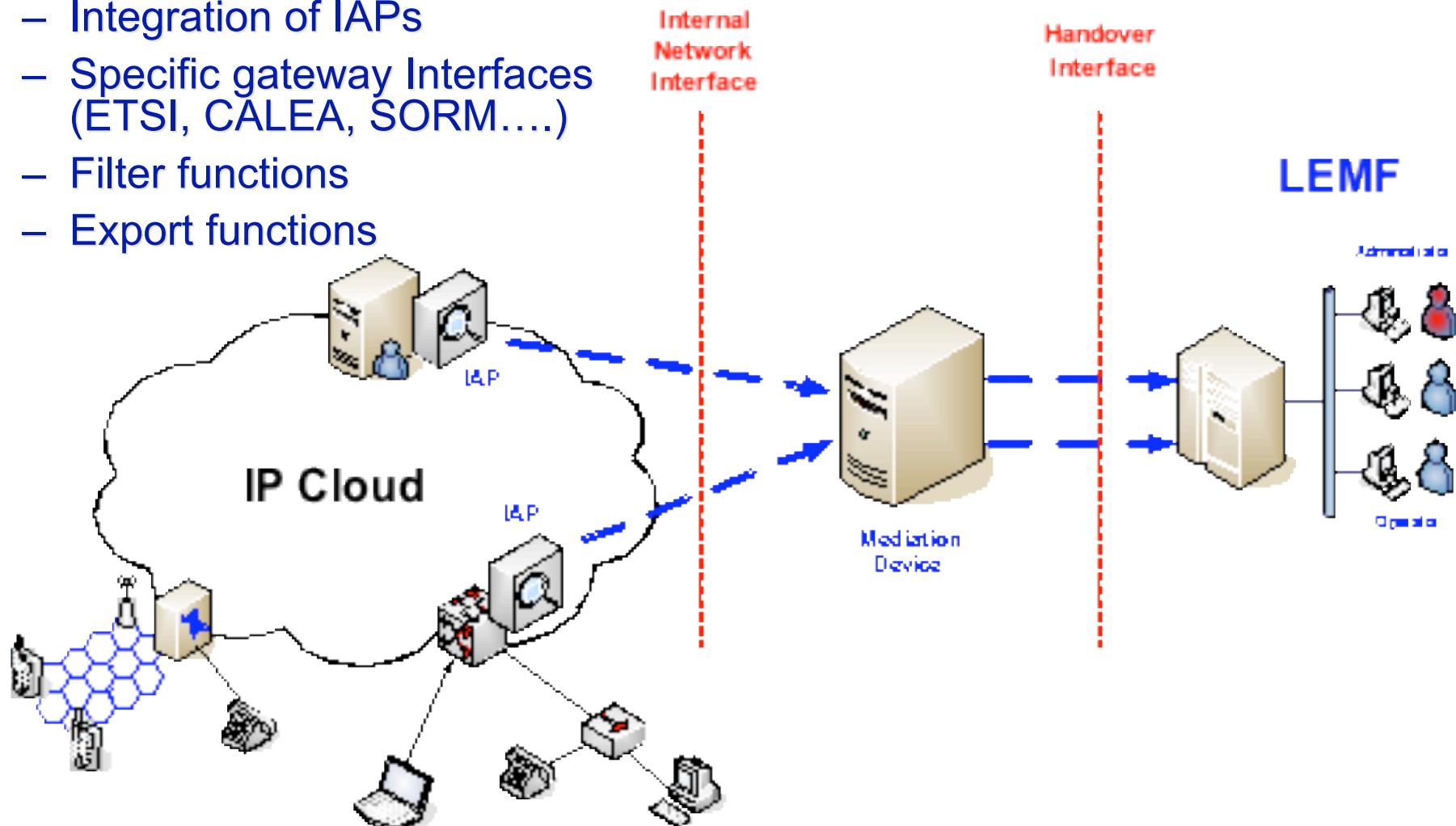
IP Interception and Monitoring – End-to-End is Better... (3)



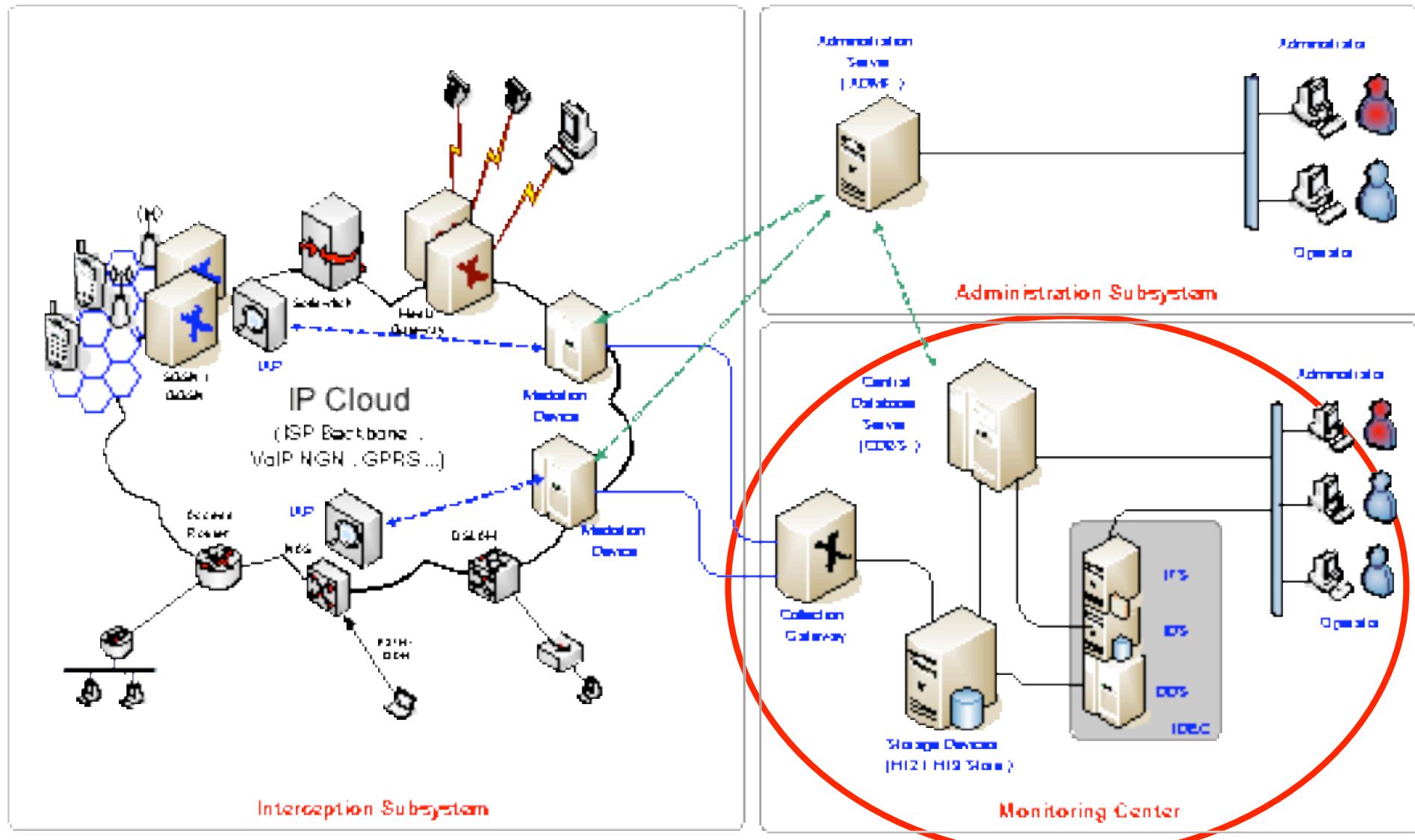
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Mediation Device

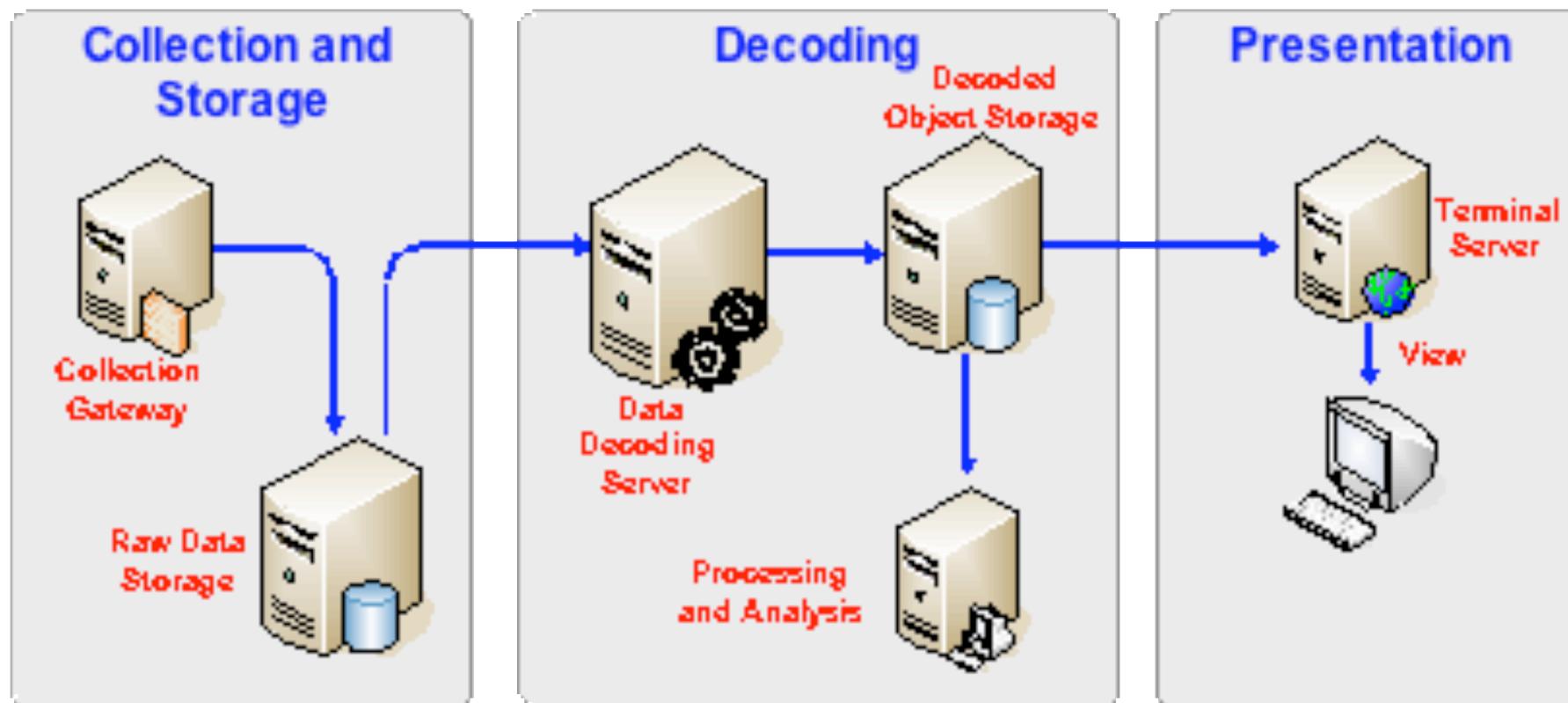
- Mediation functions
 - Integration of IAPs
 - Specific gateway Interfaces (ETSI, CALEA, SORM....)
 - Filter functions
 - Export functions



IP Interception and Monitoring – End-to-End is Better... (4)

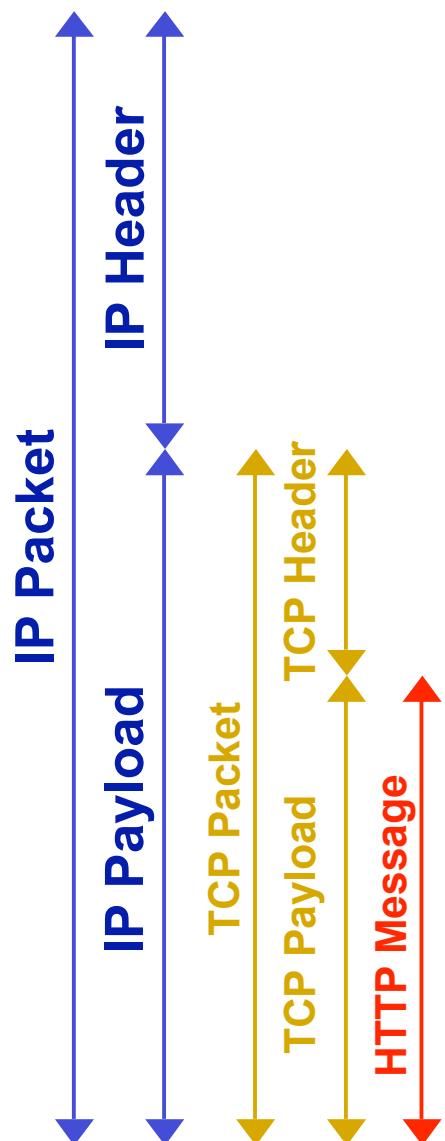


KLARIO/S® IP Monitoring Centre



KLARIOSE® IP Monitoring Centre

Content Decoding

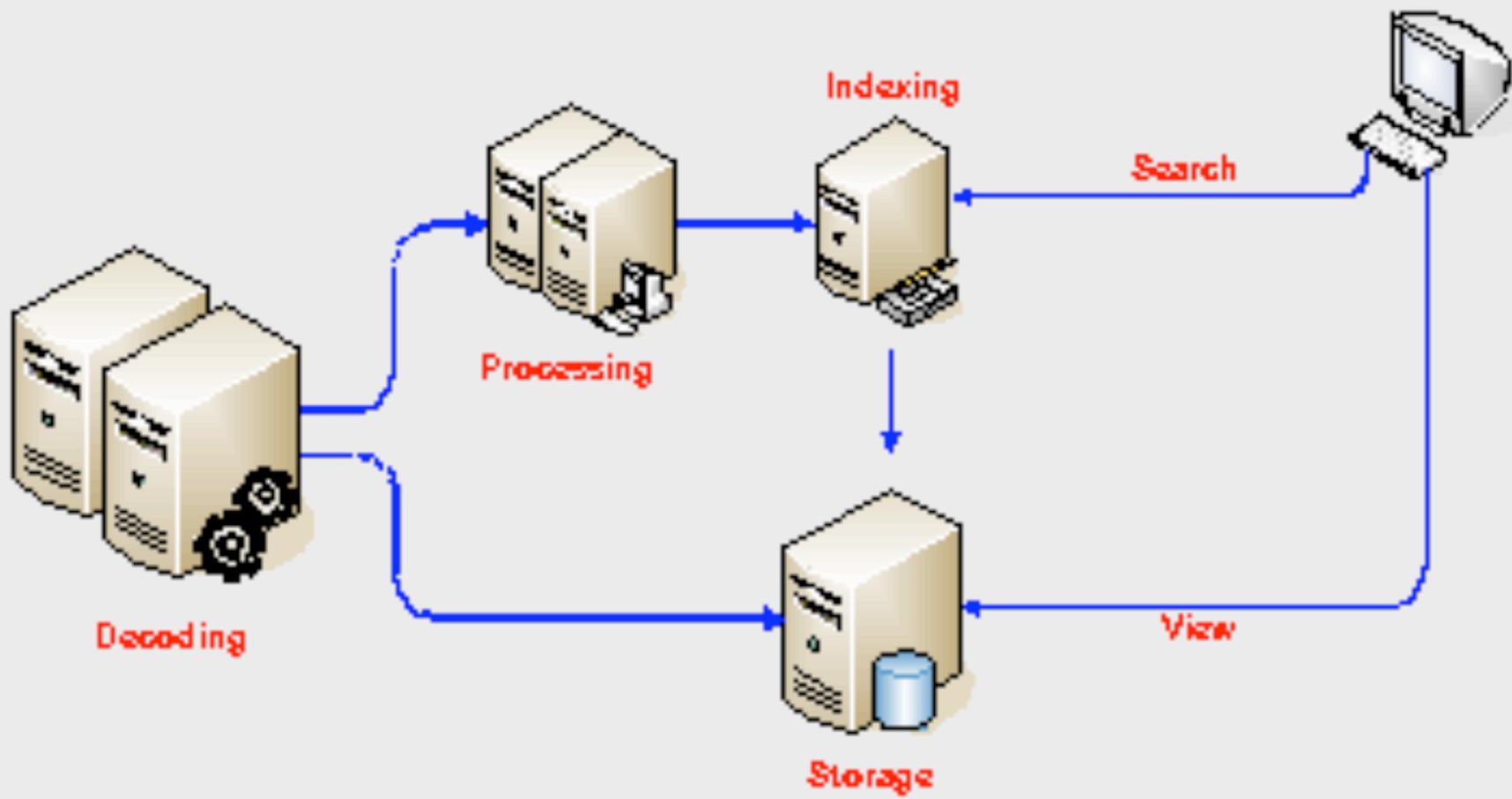


Version	IHL	TOS	Total Length				
Identification			Flags	Fragment Offset			
TTL	Protocol	Header Checksum					
Source Address							
Destination Address							
Option + Padding							
Source Port		Destination Port					
Sequence Number							
Acknowledgement Number							
HTTP Start Line							
Generic Headers Method Headers Entity Headers							
Message Body							
Message Trailer							

KLARIO/S® IP Monitoring Centre

Content Processing and Analysis

Processing and Analysis

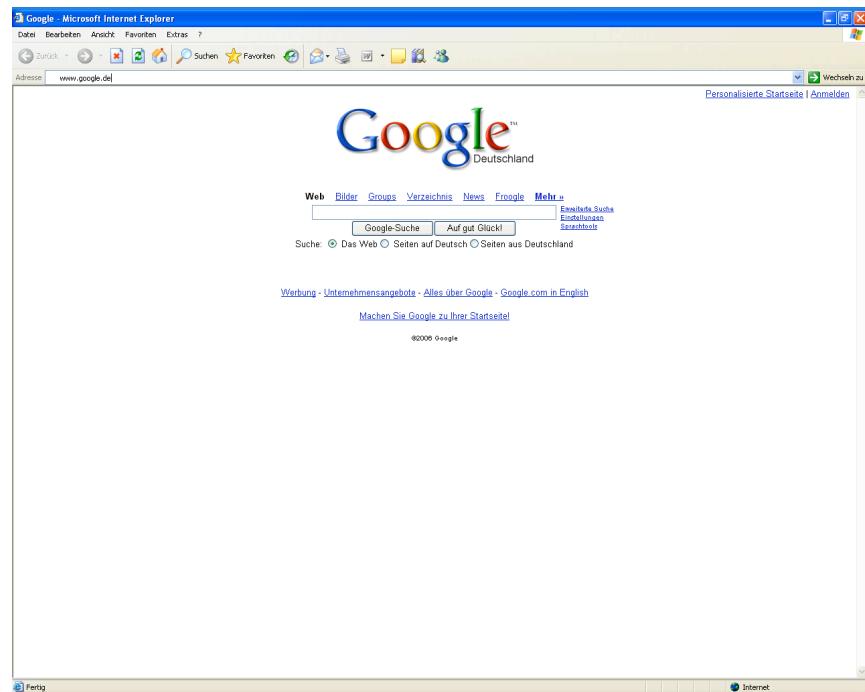


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Content Presentation

```
HTTP/1.1 200 OK
...
Content-Type: text/html

<HTML><HEAD><TITLE>Google</TITLE>
...
<TABLE cellSpacing=0 cellPadding=0 width="100%" border=0>
...
alt=Google src="Google-Dateien/logo.gif"
...
```



```
HTTP/1.1 200 OK
...
Content-Type: image/gif

logo.gif

```



KLARIOSS® IP Monitoring Centre

The Internet Viewer

- Search/
Navigate
- Display
- Secure
- Classify
- Order



Why ATIS systems

Reasons to work with ATIS systems

- State of the art technology
- In-depth understanding of LEA requirements
- In-depth understanding of IP networks
- Reliable partner for planning, design and implementation
- Consultancy service over the entire project lifecycle

Questions?