

Telchemy



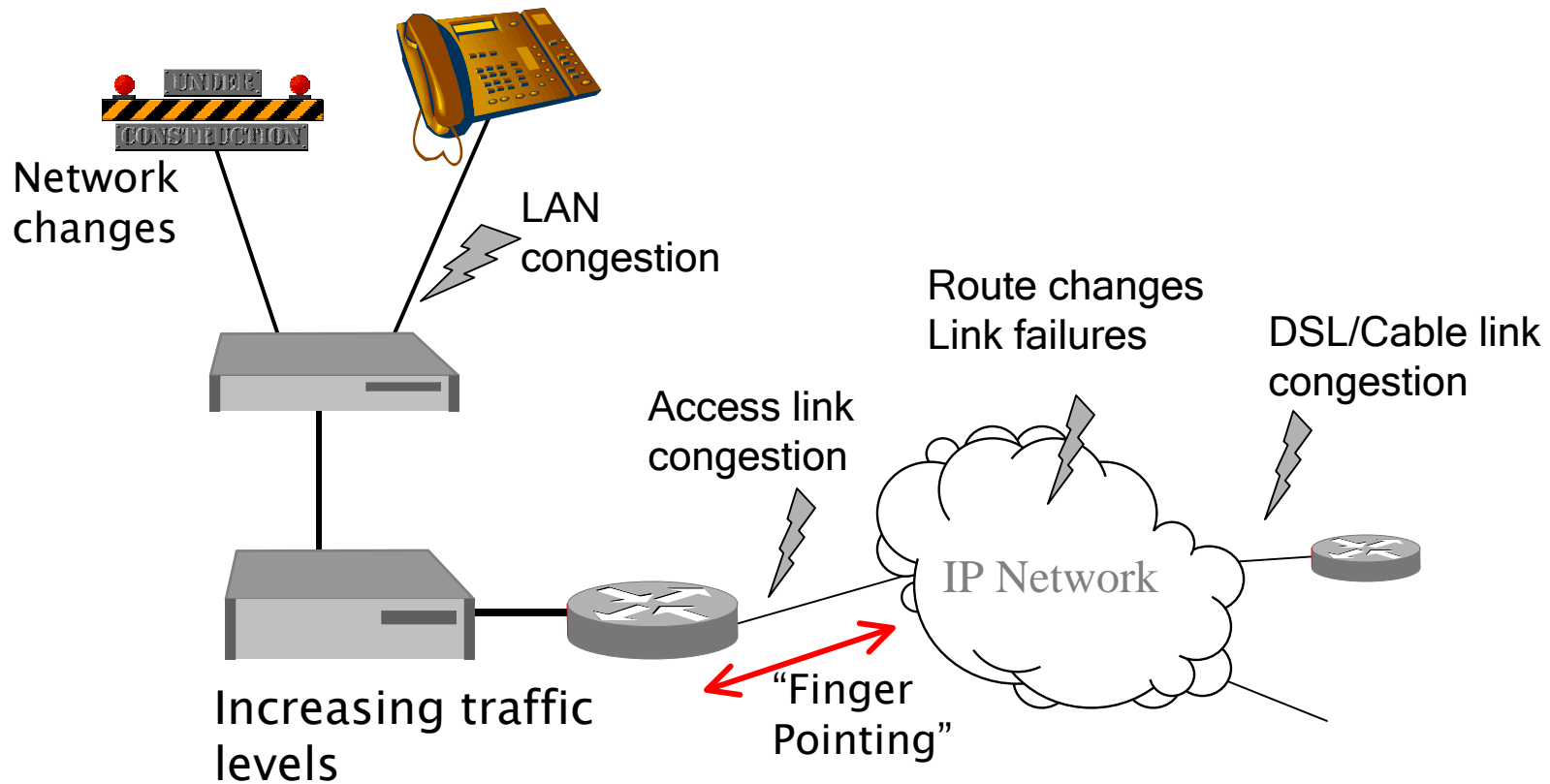
Actively Managing Multimedia

VoIP Operations and Support

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The problem space

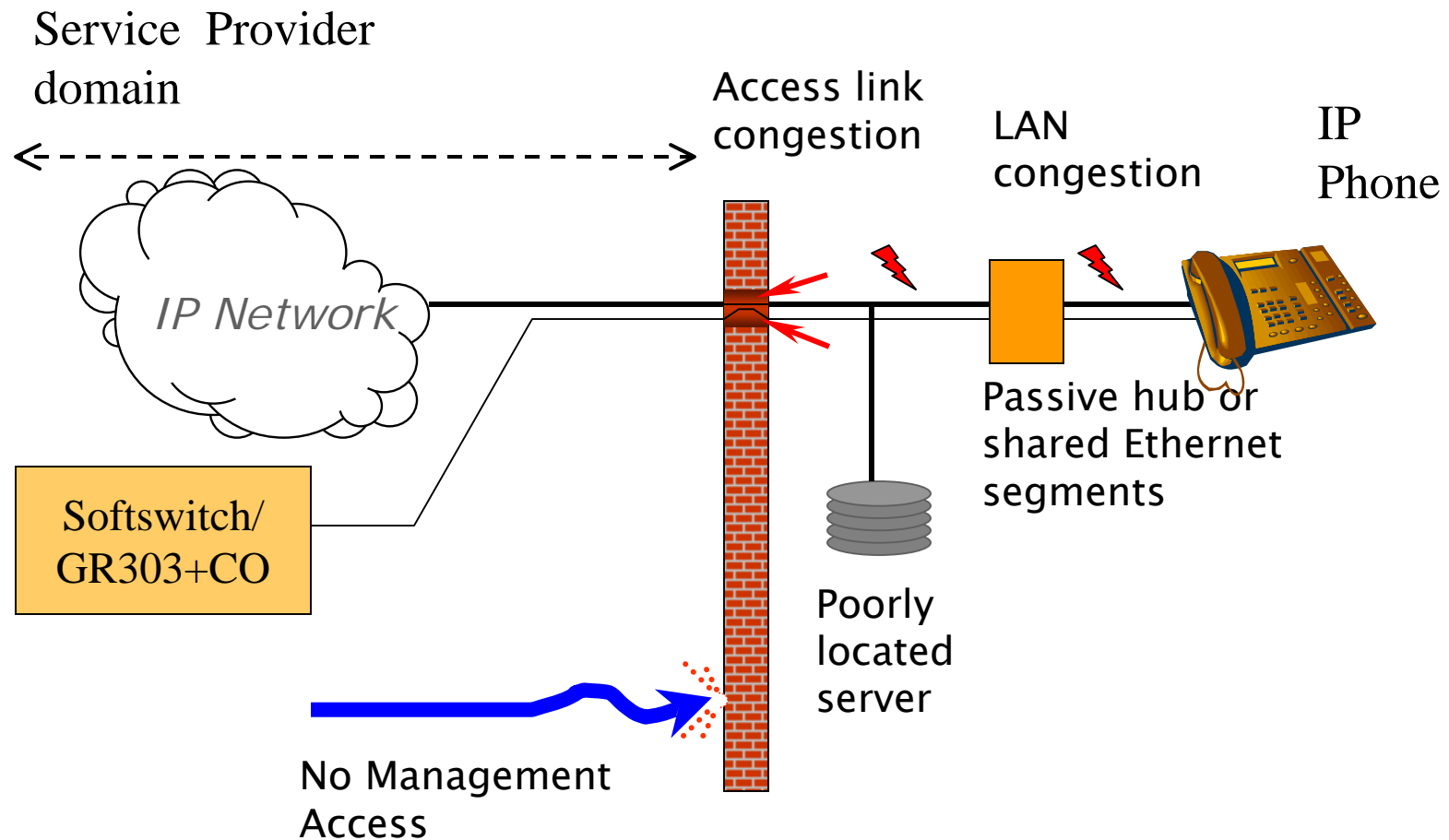


Transient problems

Telchemy

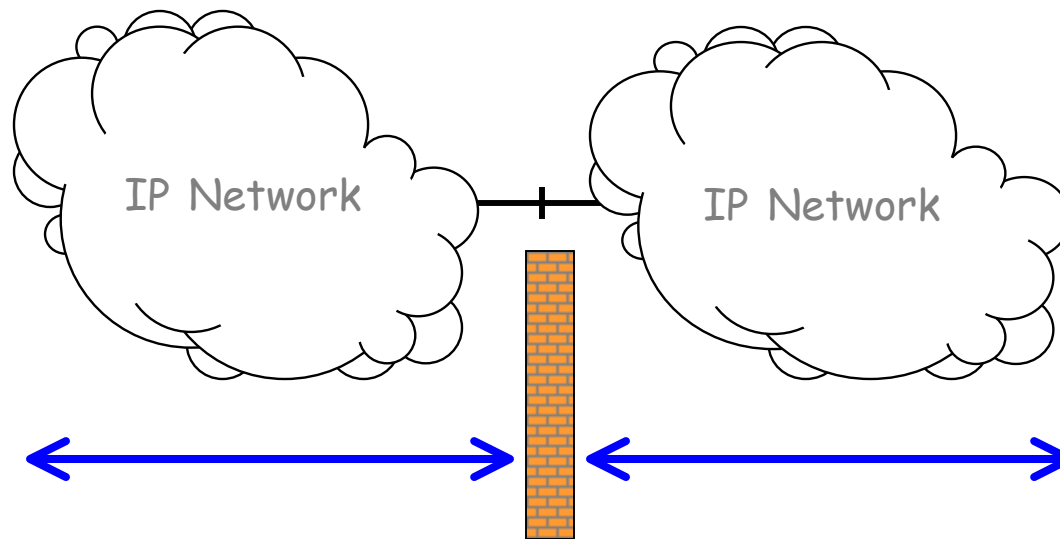
Actively Managing Multimedia

IP Centrex/ Managed IP Services



Multiple Service Providers?

Current SLA measurements are not enough for VoIP

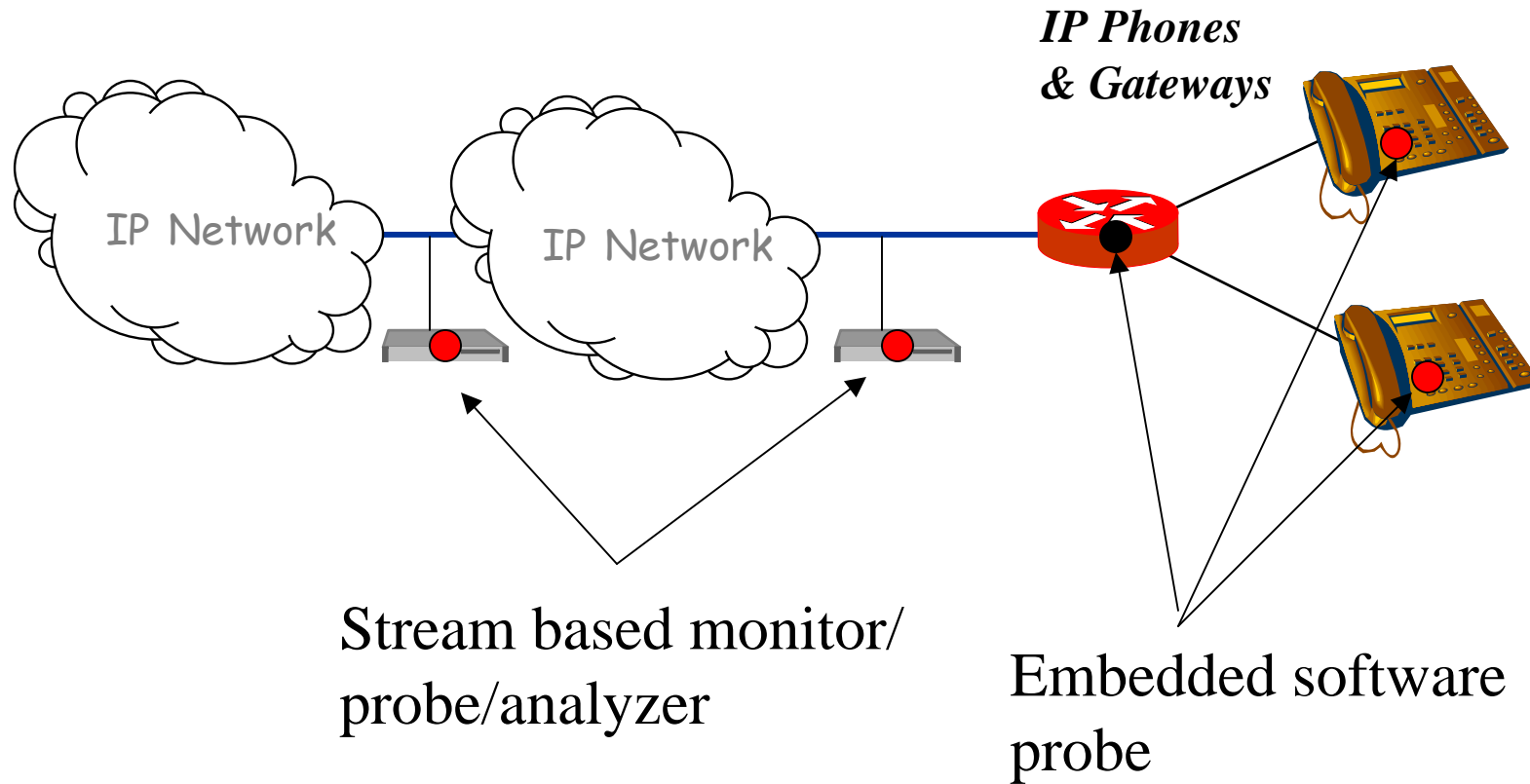


No sharing of management data

The problem space

- How to manage a Voice over IP service or network and ensure consistent quality?
- How to quickly locate, diagnose and resolve problems?
- How to manage/ troubleshoot VoIP services transported over different management domains?
- IP problems tend to be transient in nature – how to recognize and diagnose?
- How to provide network-wide performance monitoring at minimum cost?
- How to do the above in a multi-vendor network?

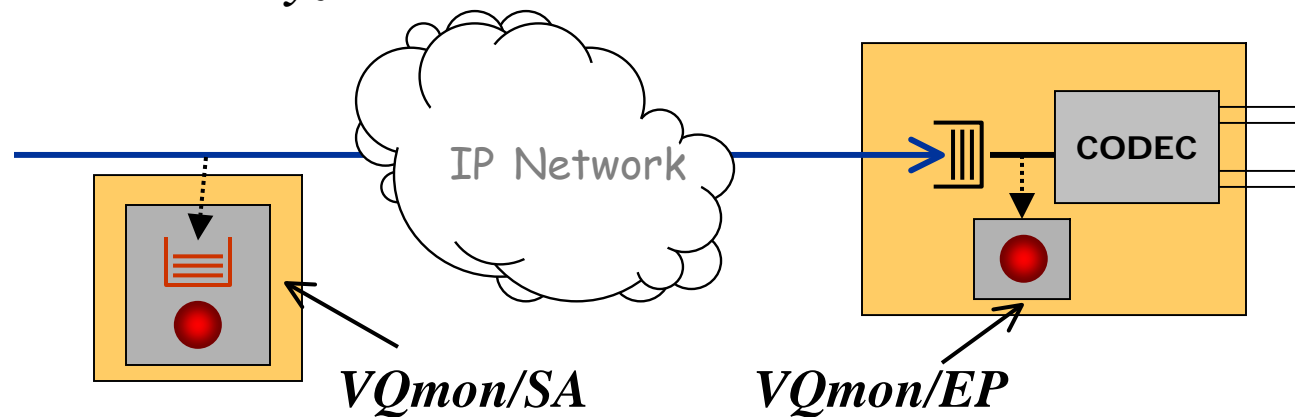
Solution - distributed monitoring



Stream vs Endpoint monitoring

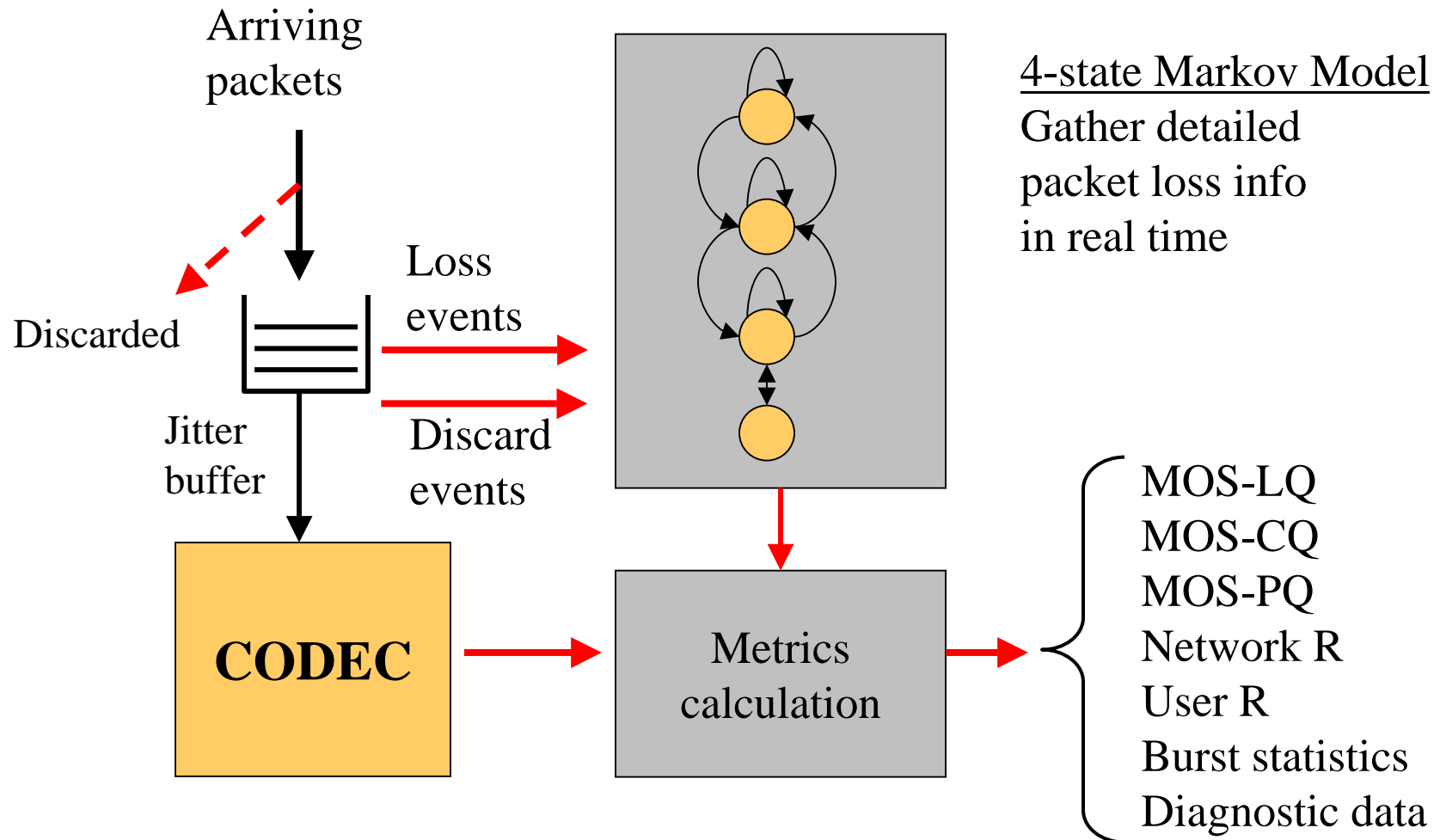
*SLA Monitor
Protocol Analyzer*

IP Phone

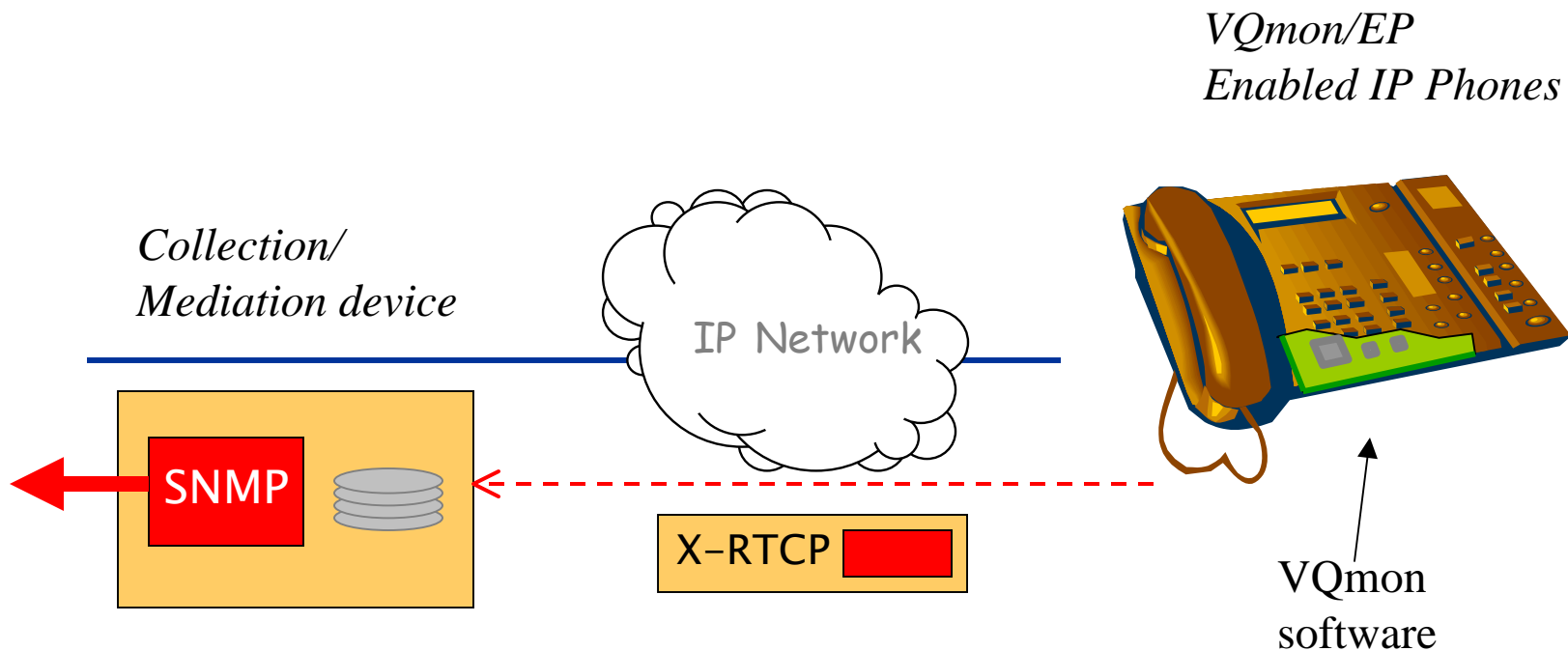


VQmon provides *real time monitoring* of large numbers of VoIP calls, measures *time varying* and *transient* impairments and provides a *perceptual quality score*.

VQmon core algorithm

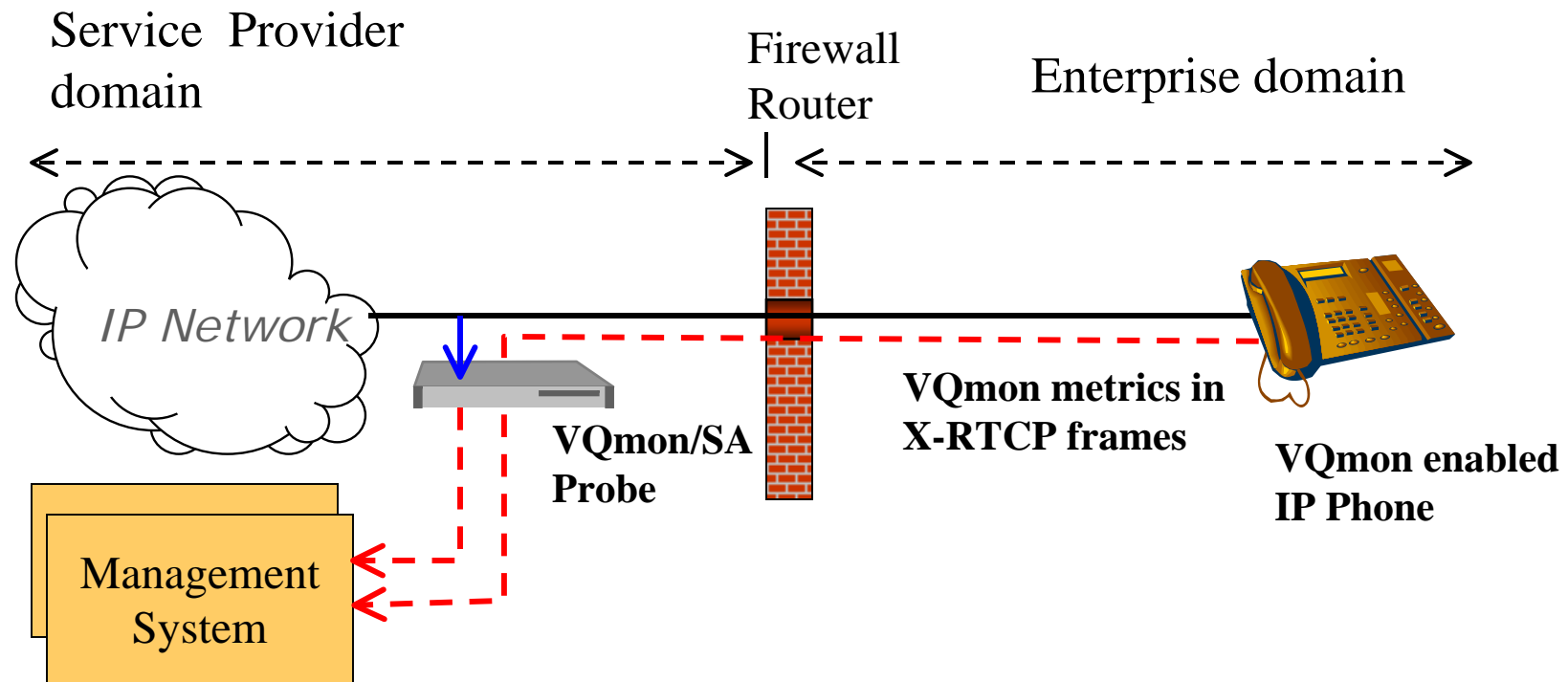


Extended RTCP



The new RTCP Reporting Extensions draft provides an ideal way to get metrics from an IP phone, through a Firewall and to a management system

Solution to IP Centrex problem



NMS is provided with
Data from endpoint and
Local analysis of packet
stream

How does this help solve the problem?

- Same algorithm is used in SLA Monitors, Analyzers, IP Gateways, IP Phones....
- “Multi-vendor” algorithm, already widely used
- Detects and incorporates the effects of transient network impairments
- Provides detailed diagnostics to help resolve the problem quickly
- Inexpensive to deploy - attractive to network managers

About Telchemy

- Provides software technology for non-intrusive and active Voice over IP service quality monitoring and problem diagnosis.
- Pioneered an embedded software approach - provides a lowest cost - network wide real-time monitoring
- VQmon technology licensed by Artiza, Brix Networks, Brooktrout, Finisar, Nortel Networks, Visual Networks
- Key partnerships with leading DSP software vendors to incorporate key software components directly into Vocoder - makes integration easy
- VQmon has been deployed in the field for over 12 months and is used by many service providers and key Enterprise networks