

# SIP - STATE OF THE UNION

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INTERNETDAGARNA 2005



# AGENDA

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- SIP - A Crash Course
- SIP in the Real World
- Current Work in Standardization
- SIP and P2P
- Summary





# SIP

A CRASH COURSE



# FUNCTIONAL OVERVIEW

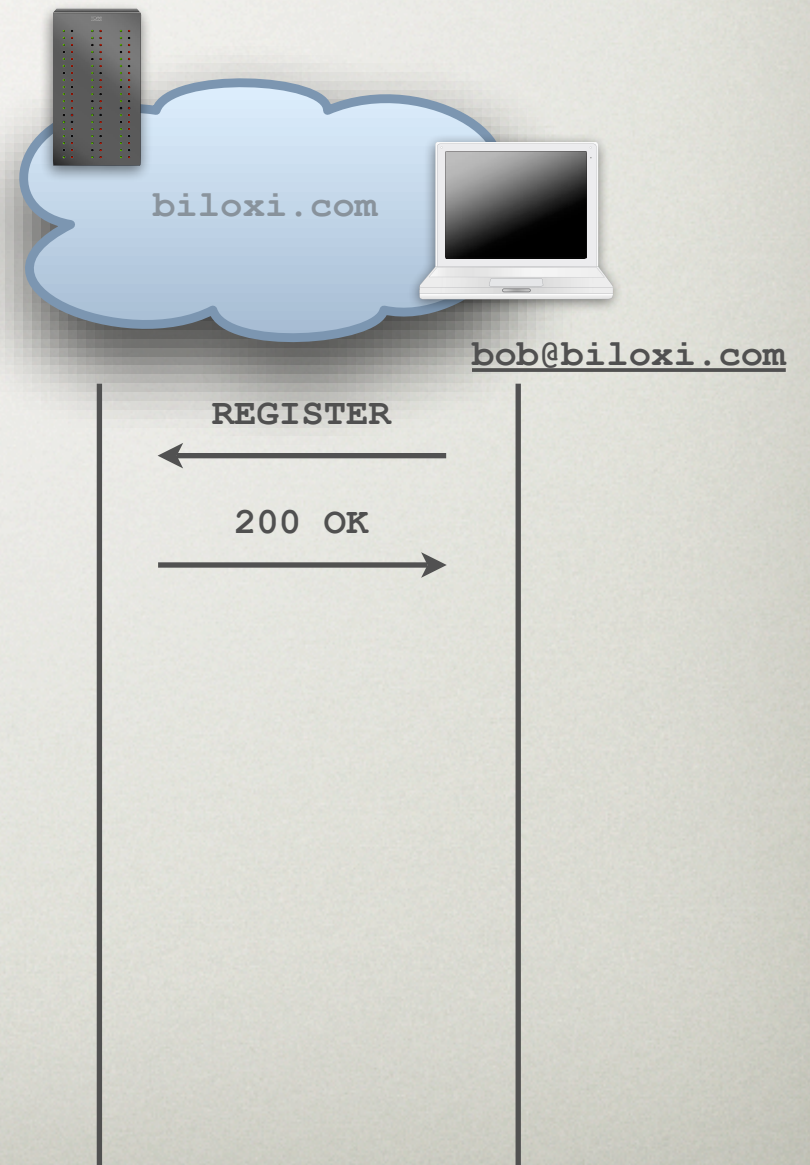
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- User Location
- User Availability
- User Capabilities
- Session Setup
- Session Management



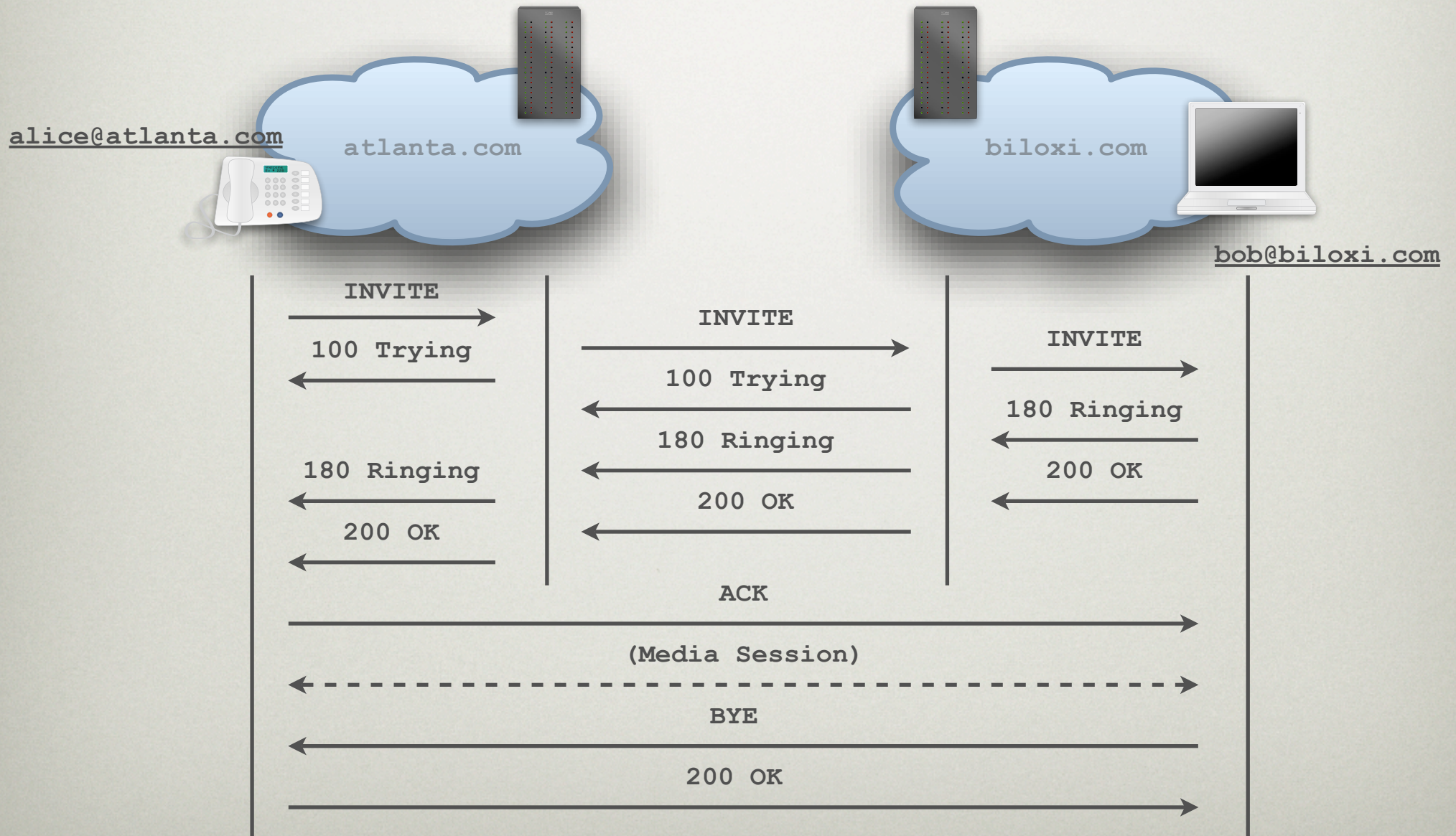
# REGISTRATION

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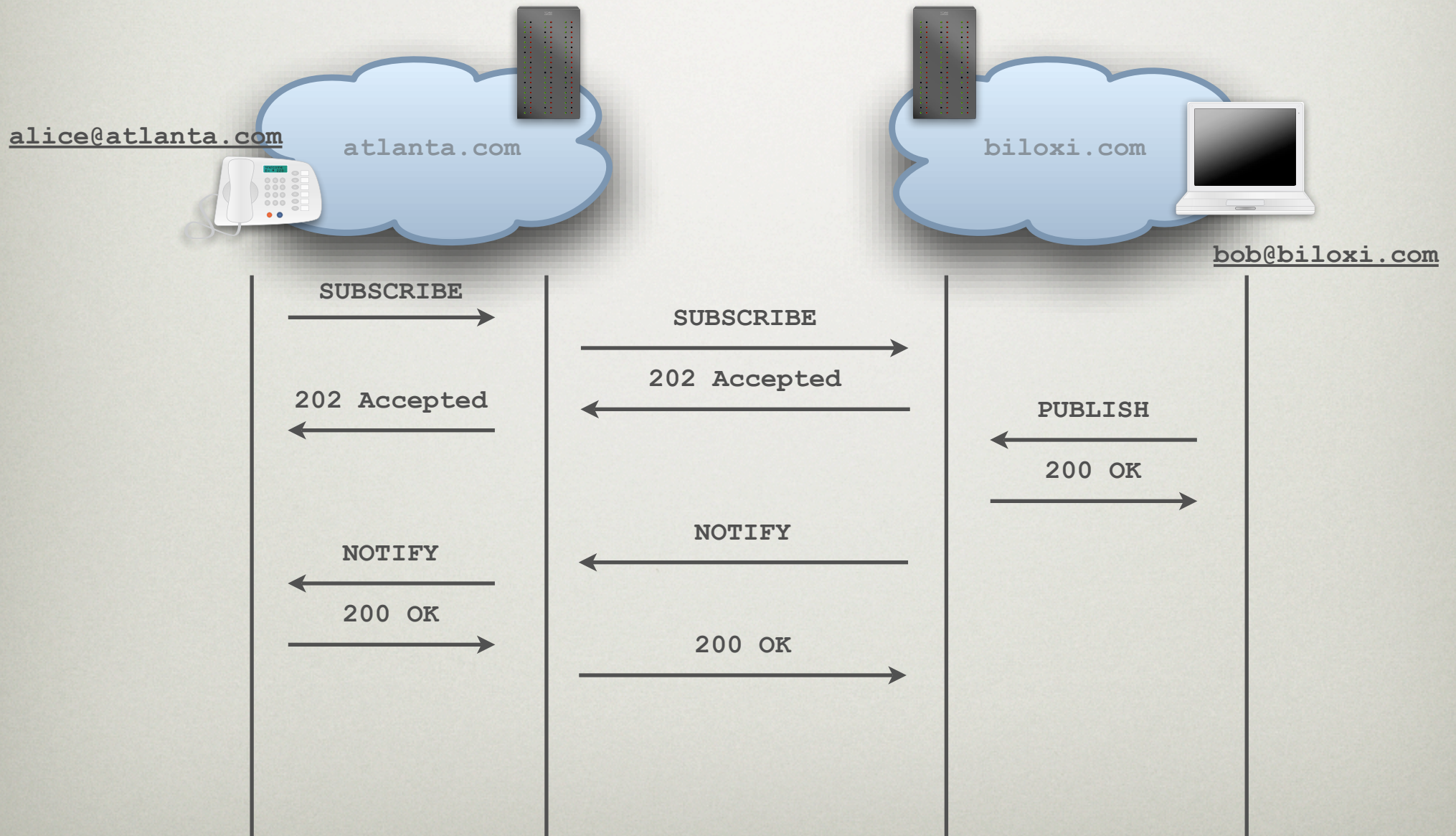


# SESSION MANAGEMENT





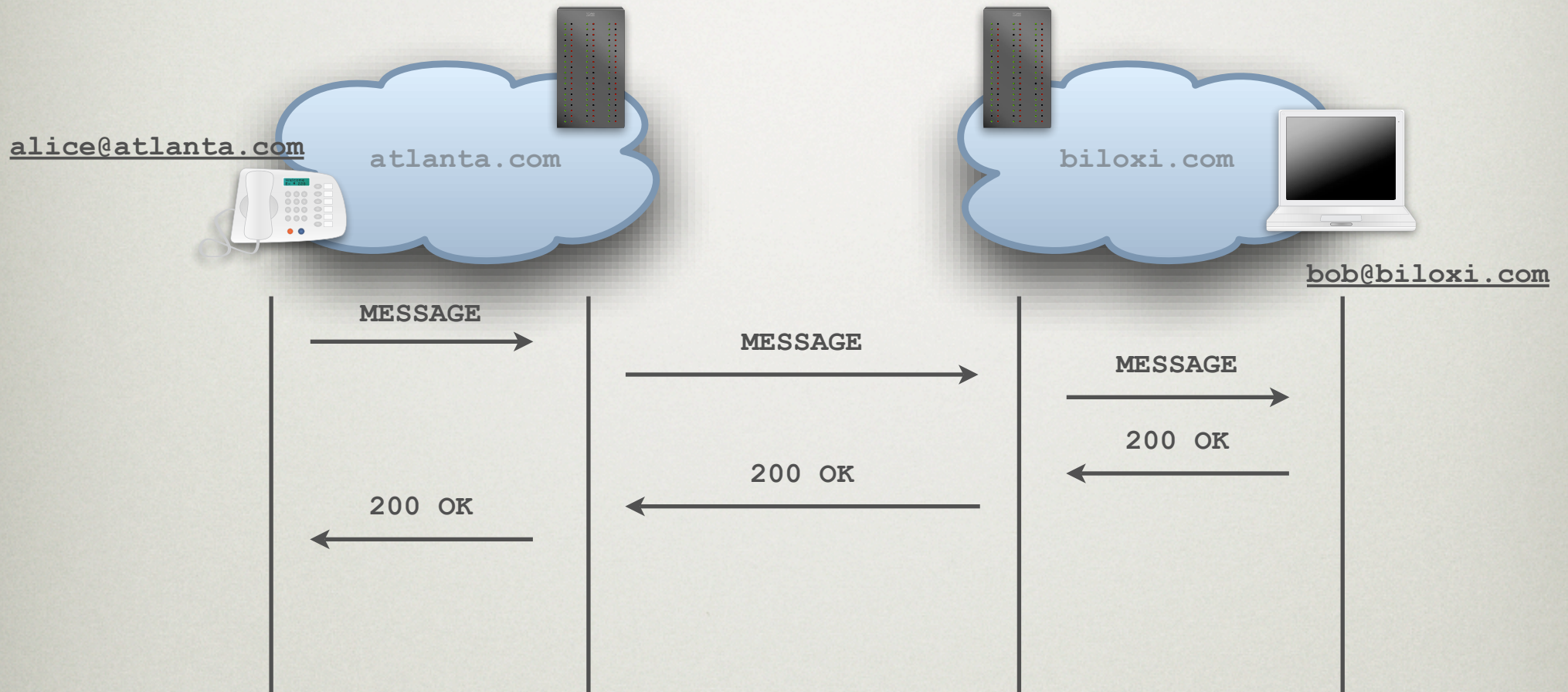
# PRESENCE





# INSTANT MESSAGING

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## Application Layer

*Hotsip Applications  
3rd Party Applications  
Open SCE new Applications*

**Hotsip M2CE  
Application Server**

*ISC (SIP) XCAP DIAMETER*

## Session Layer

**Core SIP Servers**  
(Registrar, Proxy, Softswitch,  
CSCF, etc)

Subscriber  
Data / HSS

## Transport Layer

DSL, 802.11, CATV, GPRS,...

PSTN

GW

# SIP NETWORK ARCHITECTURE







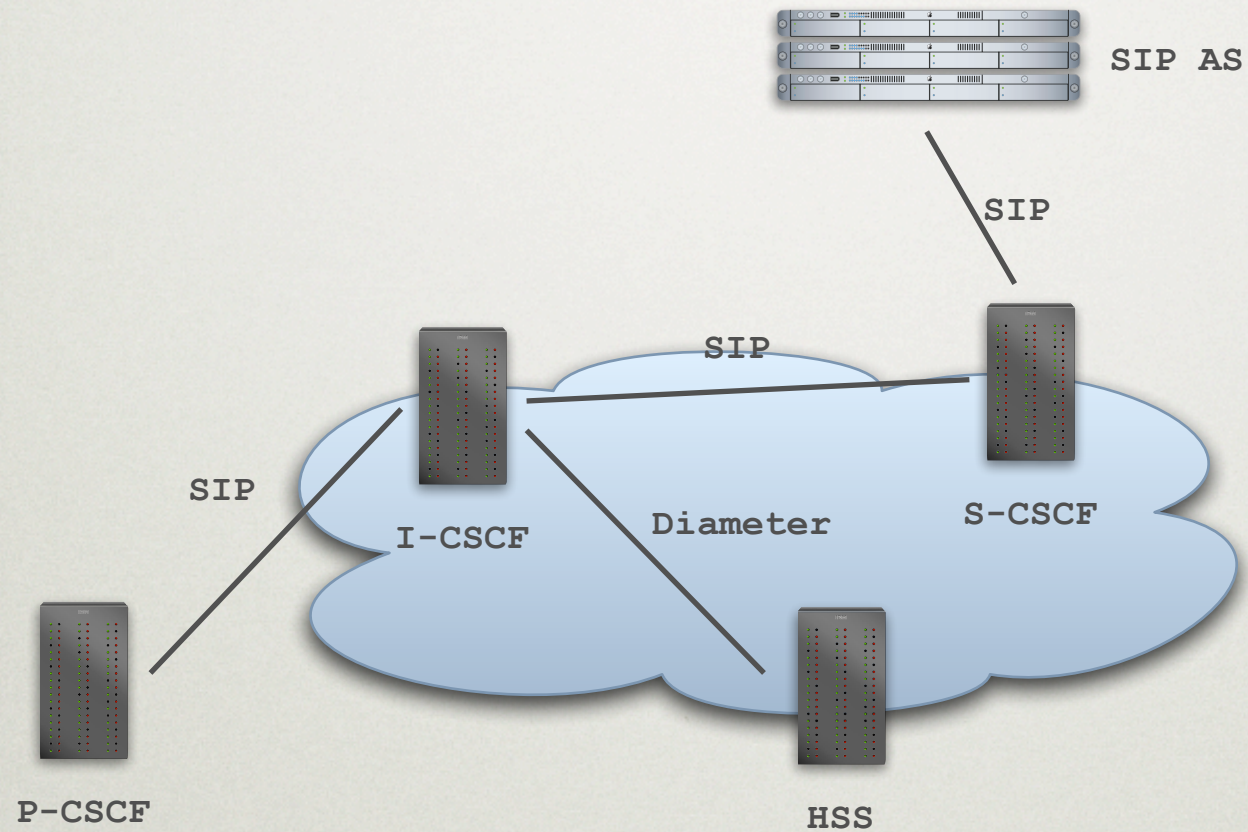
# STANDARDIZATION

IETF  
3GPP/3GPP2  
ETSI



# 3G/IMS OVERVIEW

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# CURRENT WORK IN STANDARDIZATION

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- Emergency Services
- Identity
- Conferencing
- Session Based IM
- NAT/FW Traversal
- Usage Scenarios
- SPAM Prevention
- Extended Presence





# SIP AND P2P

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- Early work within the IETF
- A lot of interest
- SIP on top of P2P or P2P on top of SIP?
- Less need for server infrastructure
- What about services?



# SUMMARY





# **SIP ADVANTAGES**

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- Simple, text based protocol
- Open and widely accepted
- Flexible and extendible
- Builds on previous work, such as DNS
- Standard security model based on TLS and S/MIME
- Supports voice, video, IM, presence, etc



# CURRENT STATE

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- SIP is already being deployed
  - End-user services (VoIP)
  - Backbone
- VoIP services work (and have for a long time)
- Now working on advanced services, e.g. conferencing





**THANK YOU**

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