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Access Interfaces

# Lesson Objectives

By the end of this lesson, you will be able to describe:

- The Diameter access interface
- The ECI access interface
- The OSA/Parlay access interface

# Agenda

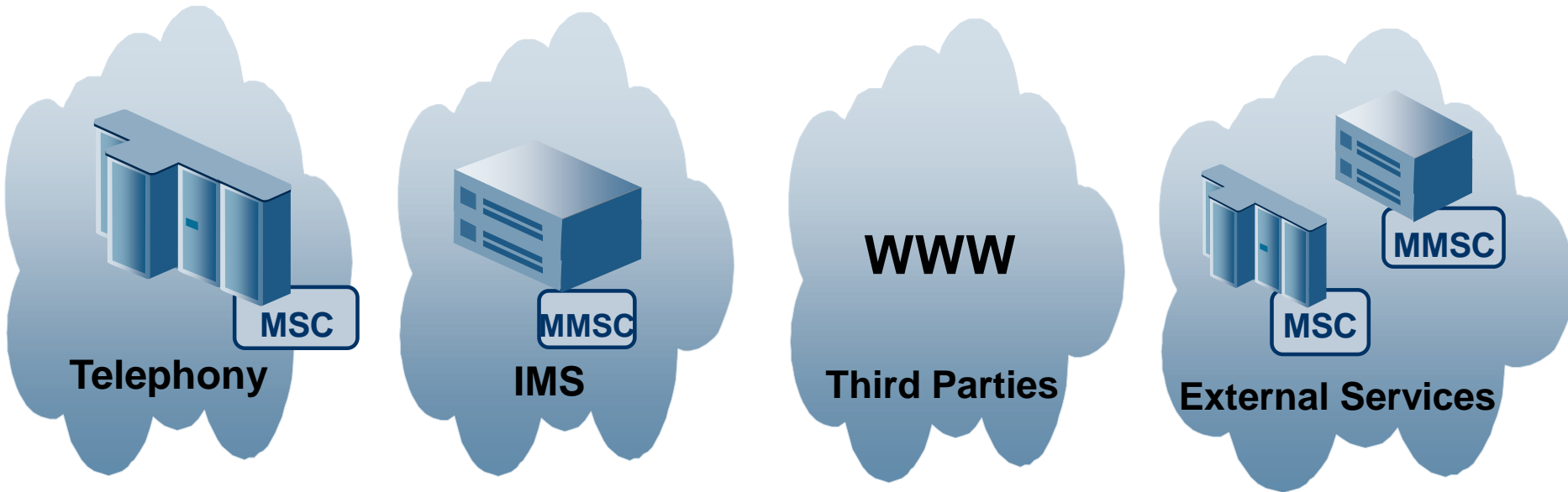
## Access Interfaces

Diameter Channel

ECI Channel

OSA/Parlay Channel

# Access Interfaces



# Agenda

**Access Interfaces**

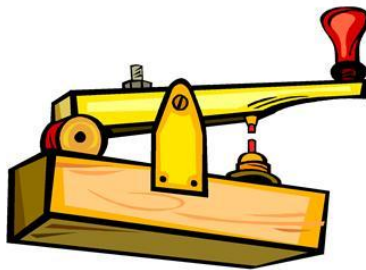
**Diameter Channel**

**ECI Channel**

**OSA/Parlay Channel**

# Overview – Diameter (1)

- Diameter is a successor to the RADIUS (Remote Authorization Dial In User Service) protocol for AAA
- A Diameter Application is not a software application, but a protocol based on the DIAMETER Base protocol (an Application Part)
- Diameter is a request/response protocol which contains a series of Attribute Value Pairs (AVP).

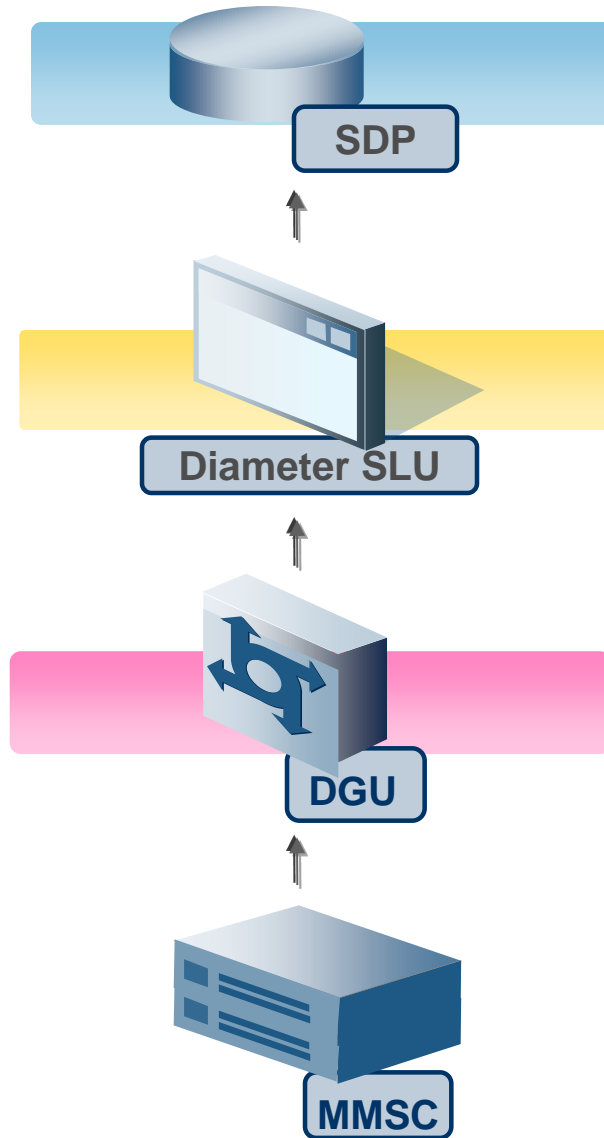


# Overview – Diameter (2)

Diameter Applications extend the base protocol, by adding new commands and/or attributes.

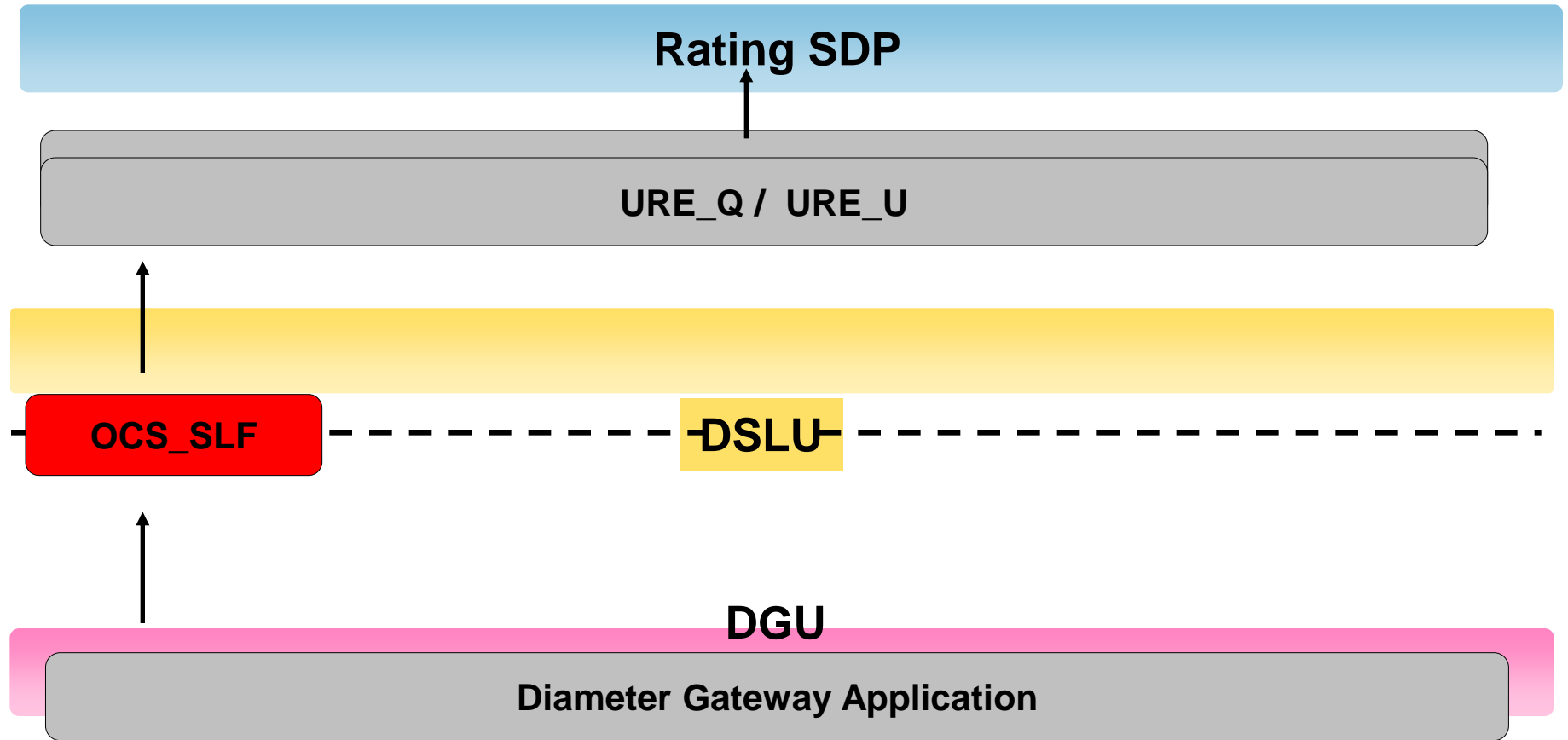
- Applications are independent of the Base
- Potentially large numbers of Applications and AVPs can be supported
- Users can define their own applications, commands and AVPs

# The Diameter Pipe





# Diameter Processes



# Agenda

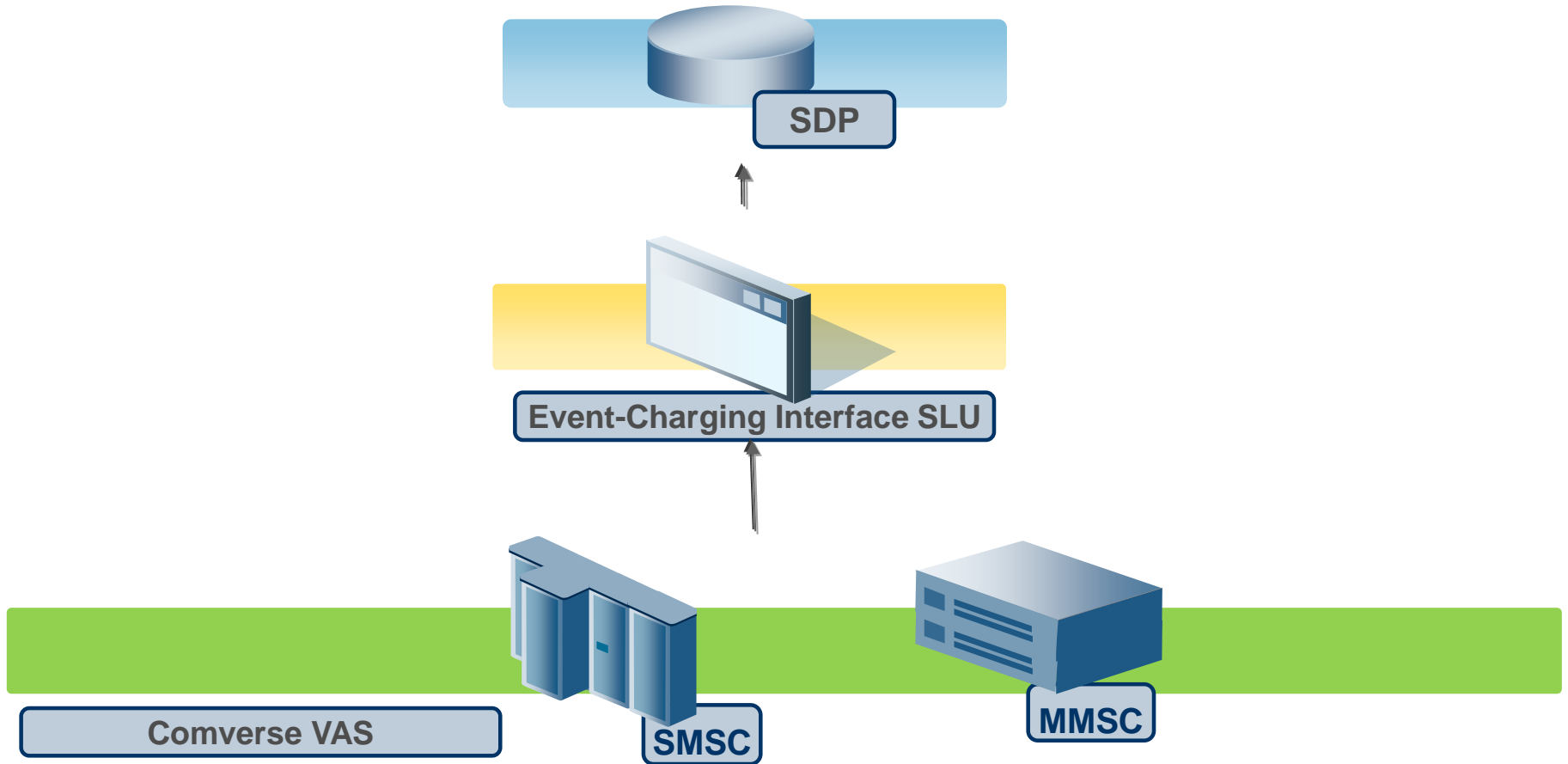
Access Interfaces

Diameter Channel

**ECI Channel**

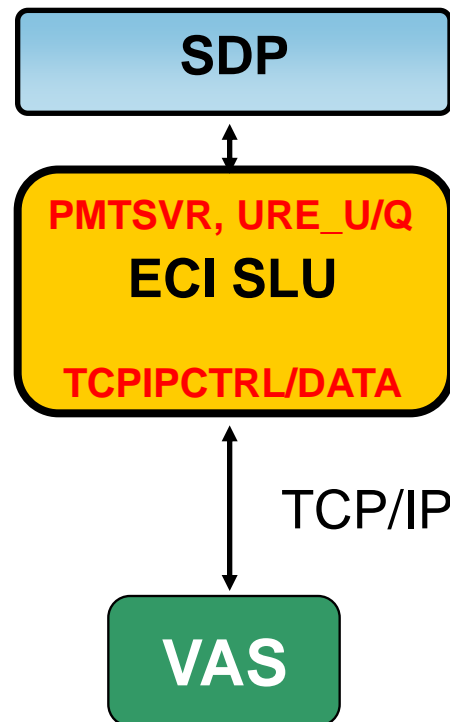
OSA/Parlay Channel

# The Event-Charging Interface



# The Event-Charging Interface SLU

- Runs OMNI
- Network Connectivity: TCPIPCTRL and TCPIPDATA
- SLF: PMTSVR



# Agenda

**Access Interfaces**

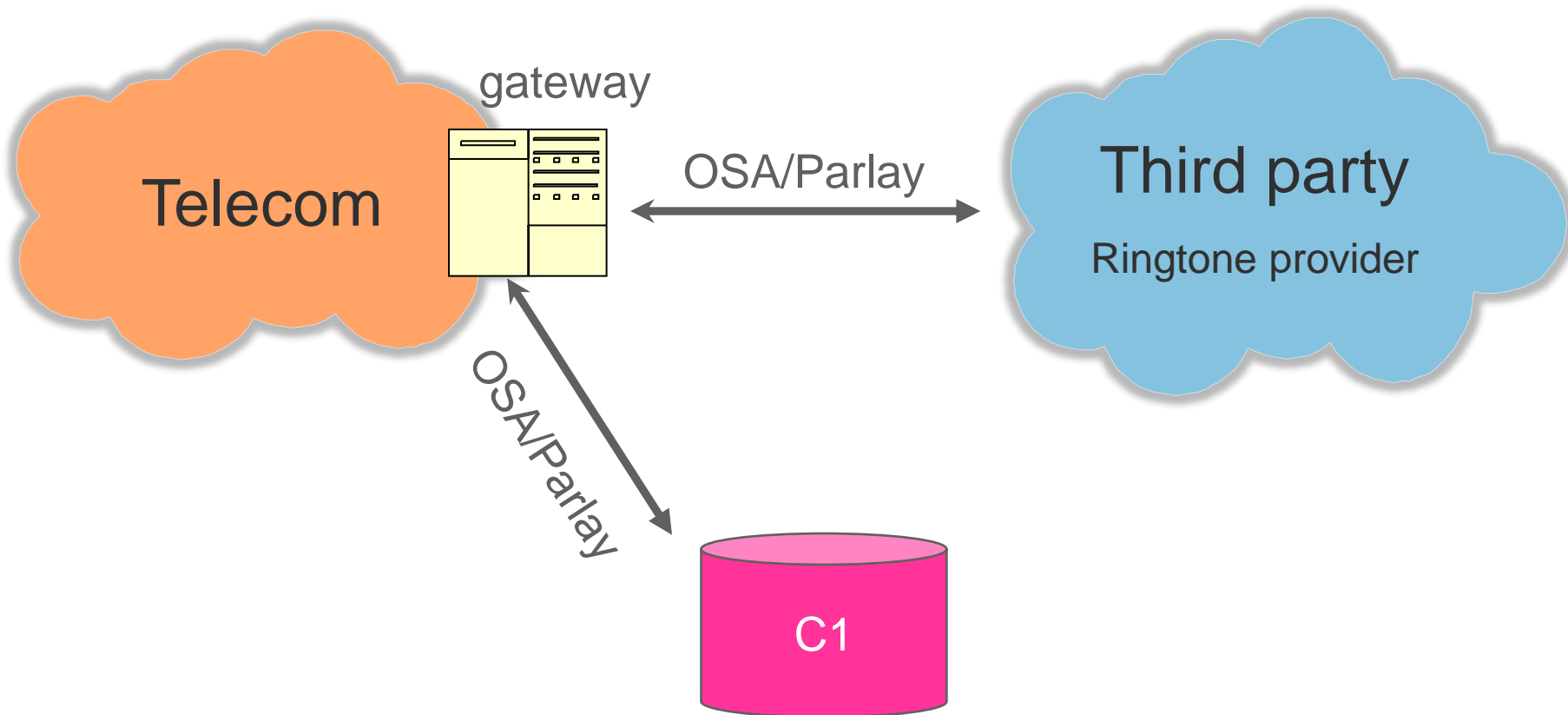
**Diameter Channel**

**ECI Channel**

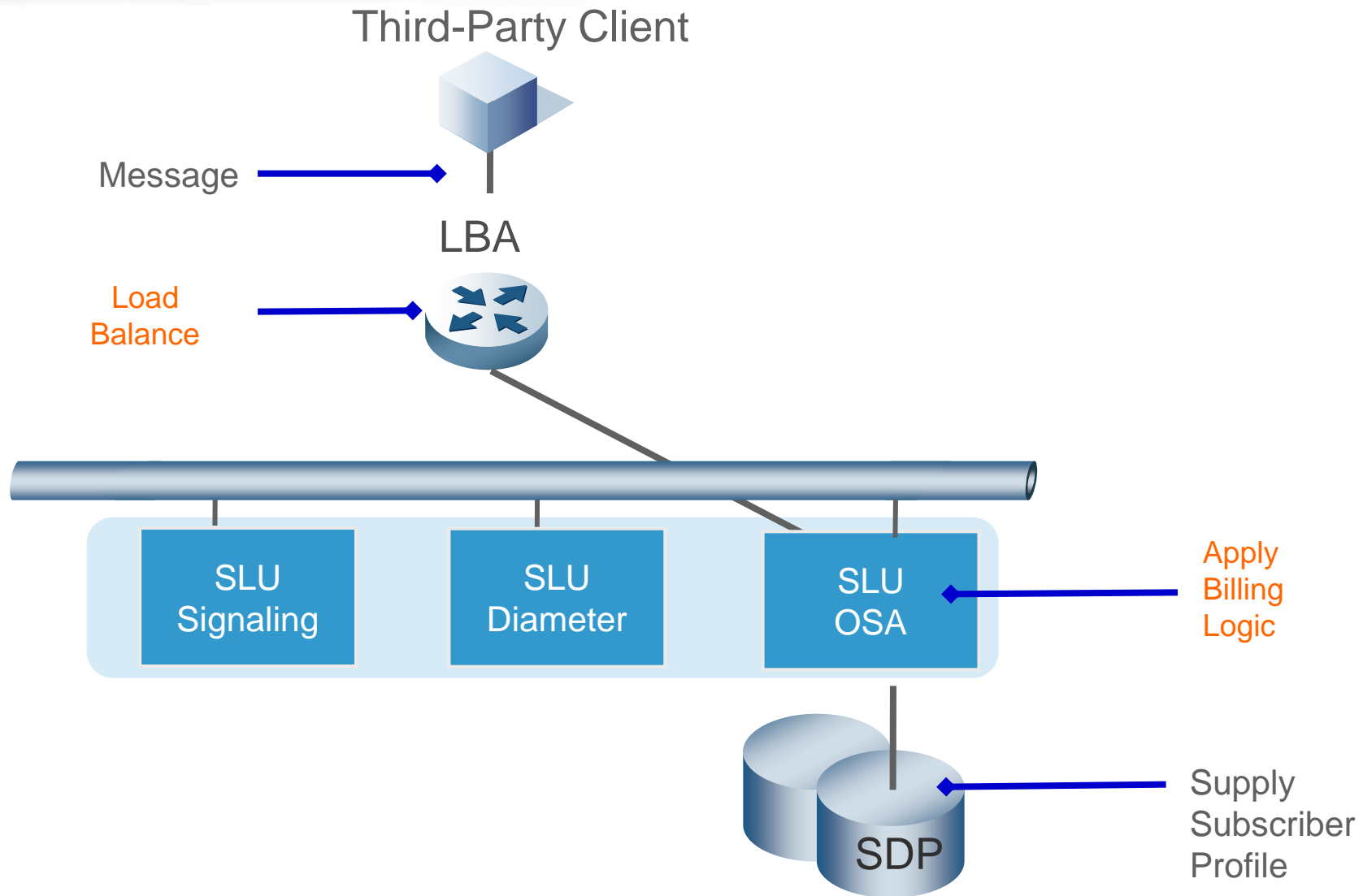
**OSA/Parlay Channel**

# Open Service Access (OSA)

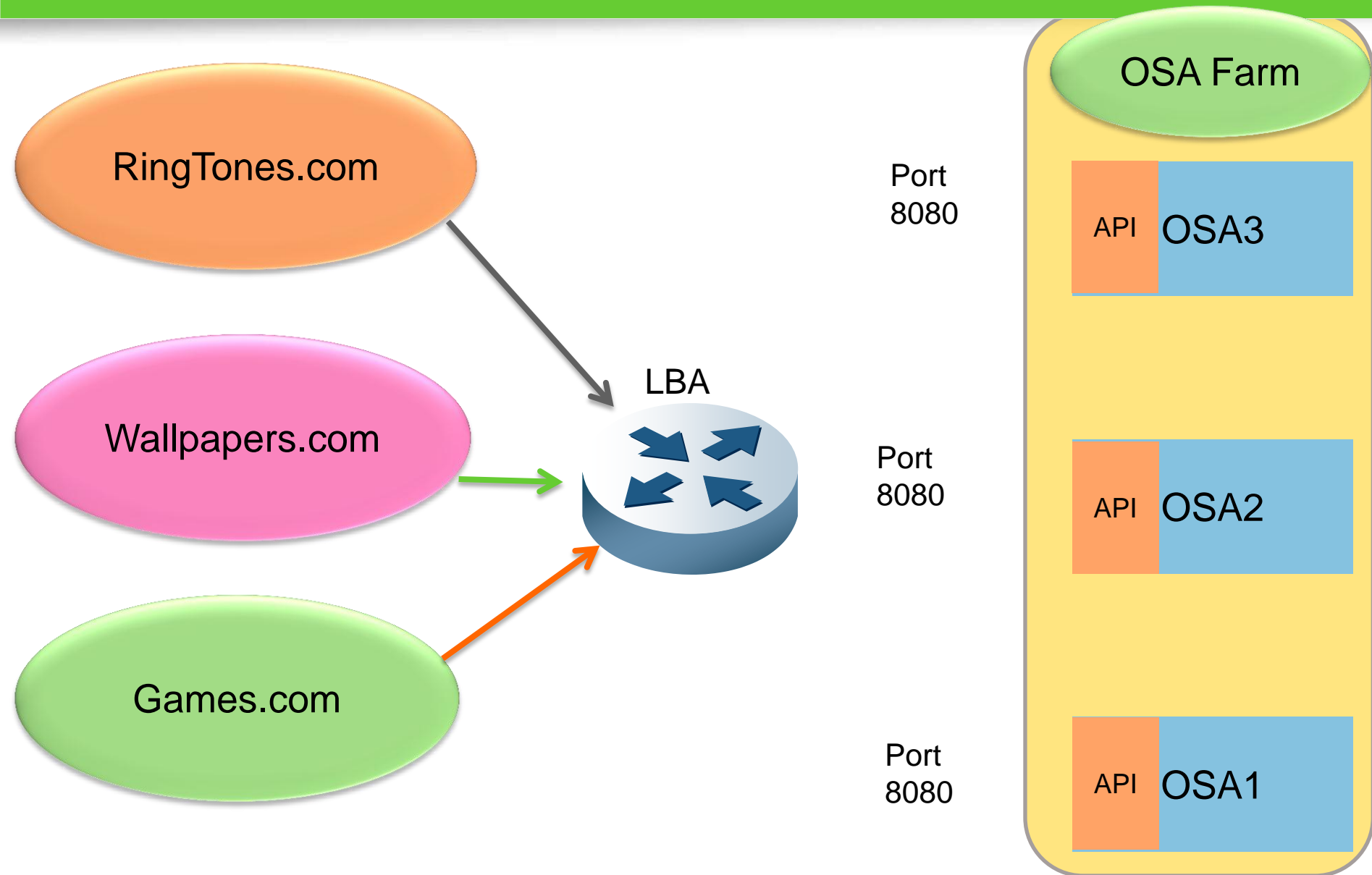
OSA is the open service Access standard in which telecom networks and third parties communicate.



# OSA Flow

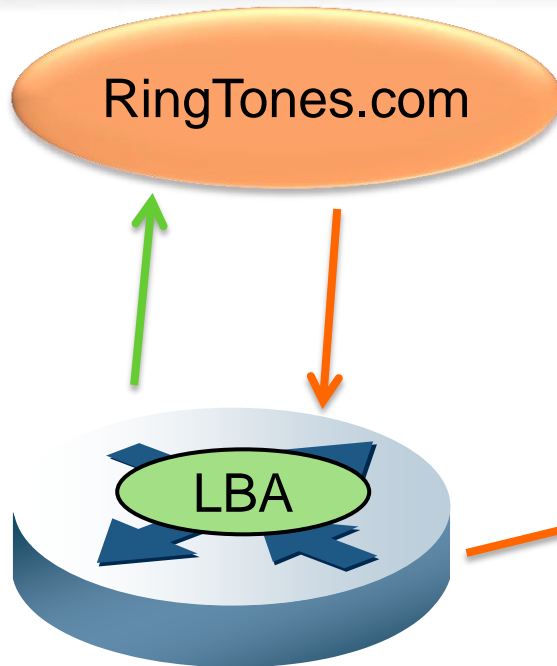


# OSA Load Balancing





# LBA Introduction (1)



1. Client sends message to the OSA  
Farm address – **172.50.102.135**

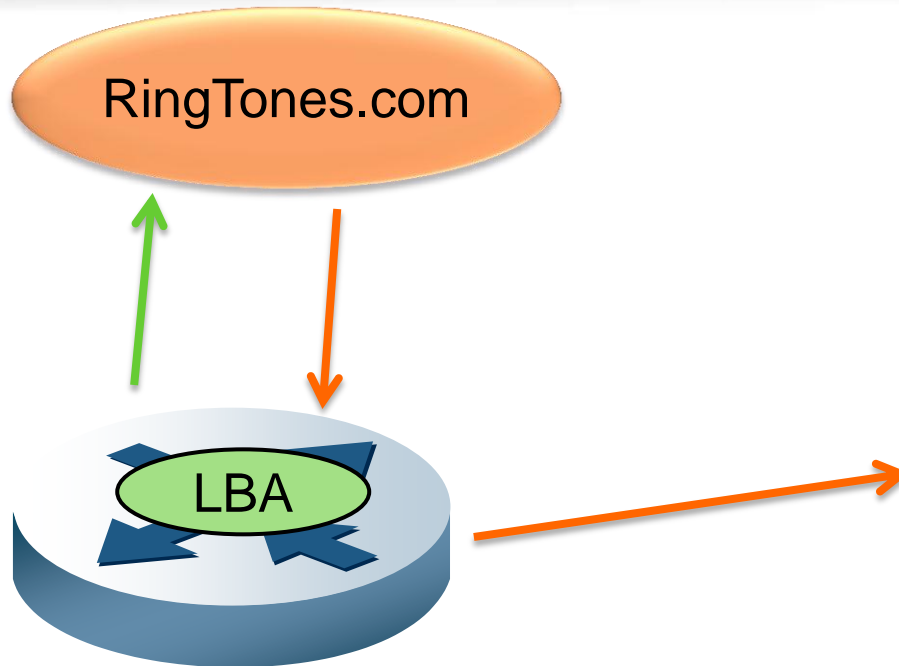
Farm Table - 172.50.102.132

	IP Address	Farm Name	Admin Status	Dispatch Method
1	172.50.102.135	OSA	Enabled	Cyclic
2	172.50.102.136	CCWS	Enabled	Cyclic

OSA2

OSA1

# LBA Introduction (2)



2. The LBA performs Load Balancing According to chosen method

Farm Table Edit - 172.50.102.132

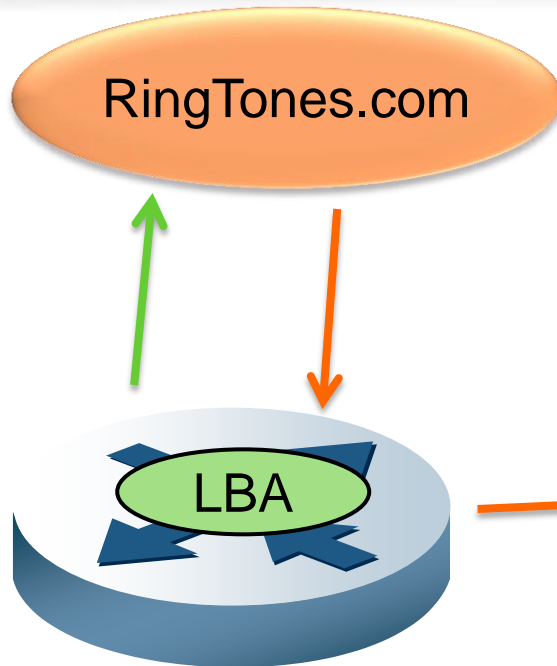
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Farm	Connectivity Check
IP Address	172.50.102.135
Farm Name	OSA
Admin Status	Enabled
Client aging time	60
Dispatch Method	Fewest number of users

OSA2

OSA1

# LBA Introduction (3)



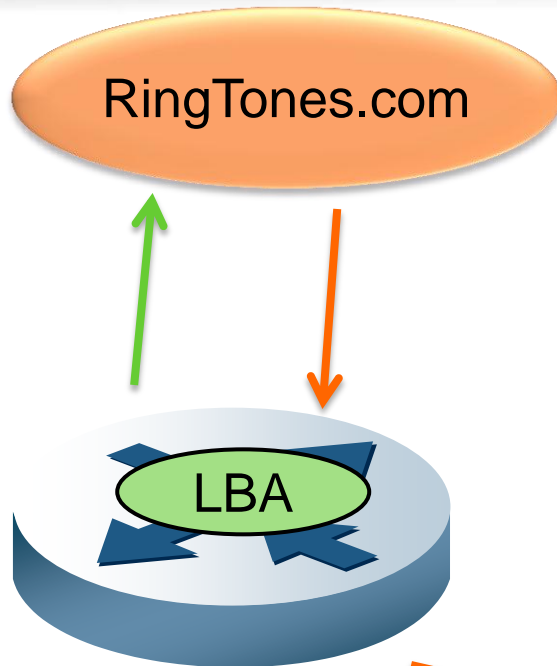
3. The LBA forwards the message to  
OSA1 server – **172.50.100.16**

Server Table for Farm 172.50.102.135 - 172.50.102.132					
	Server Address	Server Name	Admin Status	Operational Status	Weight
1	172.50.100.16	OSA1	Enabled	Active	1
2	172.50.100.17	OSA2	Enabled	NotInService	1

OSA2

OSA1

# LBA Introduction (4)



4. OSA1 responds with a specific URL for the rest of the session.

## OSA System Parameters

Parameter Filename	= OsaSystemParameters.dat
Logical Name	= SLF_OSA
SESSION_TIMEOUT	= 120
RESERVATION_TIMEOUT	= 120
SDSINTERACTION_TIMEOUT	= 15
MAX_CONCURRENT_SESSIONS	= 10000
WEBSERVICE_LISTEN_PORT	= 50012
SLU_ID	= 1
SLU_ID Numeric	= 1
HOST ID	= osa1

CHARGING SESSION URL = [http://172.50.100.16/osa/1/\\$SESSION\\_ID\\$](http://172.50.100.16/osa/1/$SESSION_ID$)

OSA2

OSA1

# Summary

This lesson has covered:

- Diameter access channel
- ECI access channel
- OSA/Parlay access channel

Thank  
You!



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