



COMVERSE
UNIVERSITY

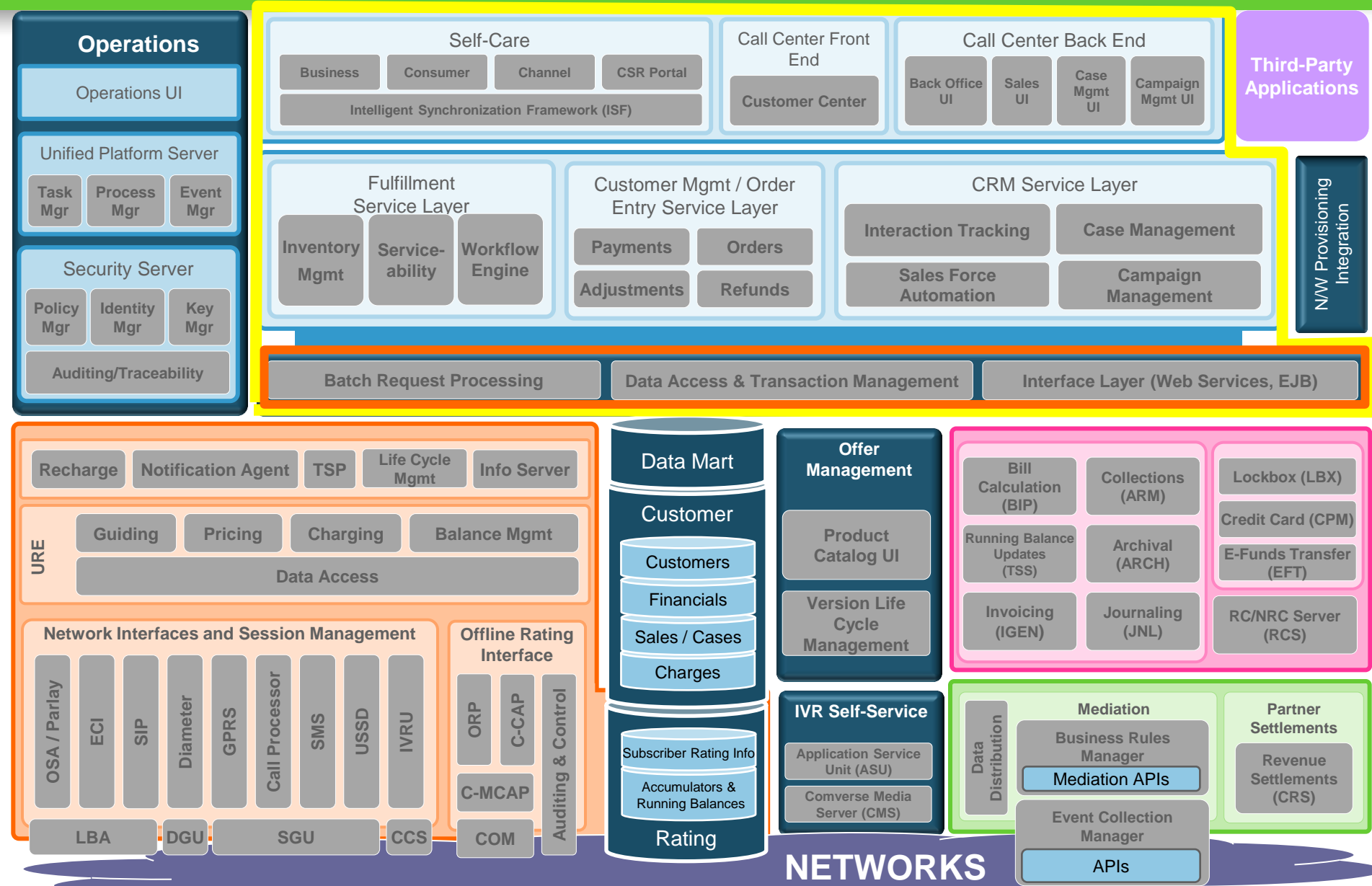
Unified API Overview

Overview of Unified API – Objectives

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

- State the role of the Unified API in the Comverse ONE platform
- Name the interfaces provided to client applications by the Unified API

Front End – Architecture



Question 1

What are the roles of the Unified API in the Comverse ONE platform?

(Name 2 roles)



Question 1 – Answer

What are the roles of the Unified API in the Comverse ONE platform?

(Name 2 roles)

1. Supports client applications such as CCC, CSM
2. Provides a client-side software development kit (SDK) that facilitates integration by 3rd parties with Comverse ONE



Question 2

Single API is the main integration point for both internal and external applications.

☐ True

☐ False. Only internal applications

☐ False. Only external applications



Question 2 – Answer

Single API is the main integration point for both internal and external applications.

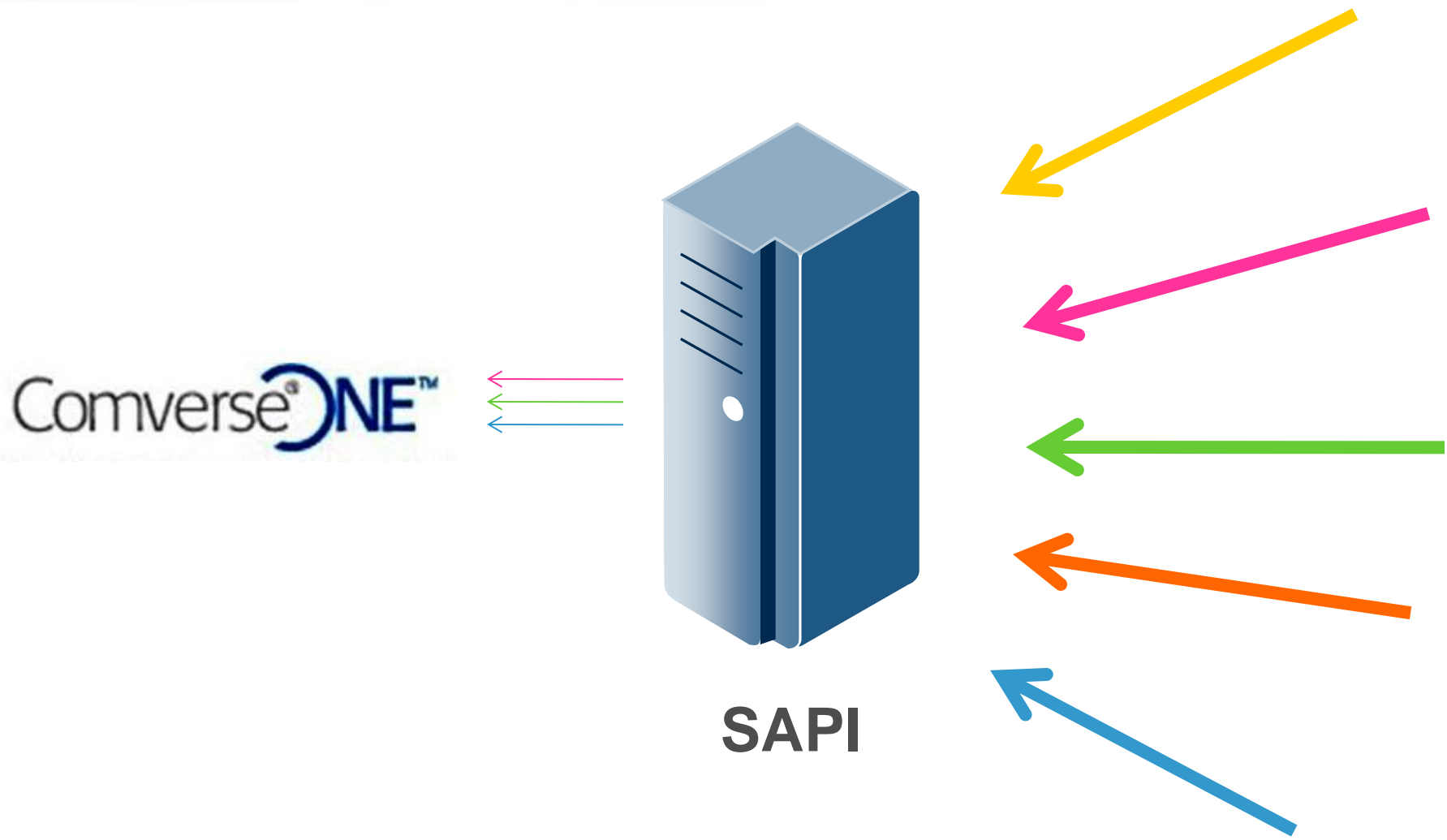


☐ False. Only internal applications

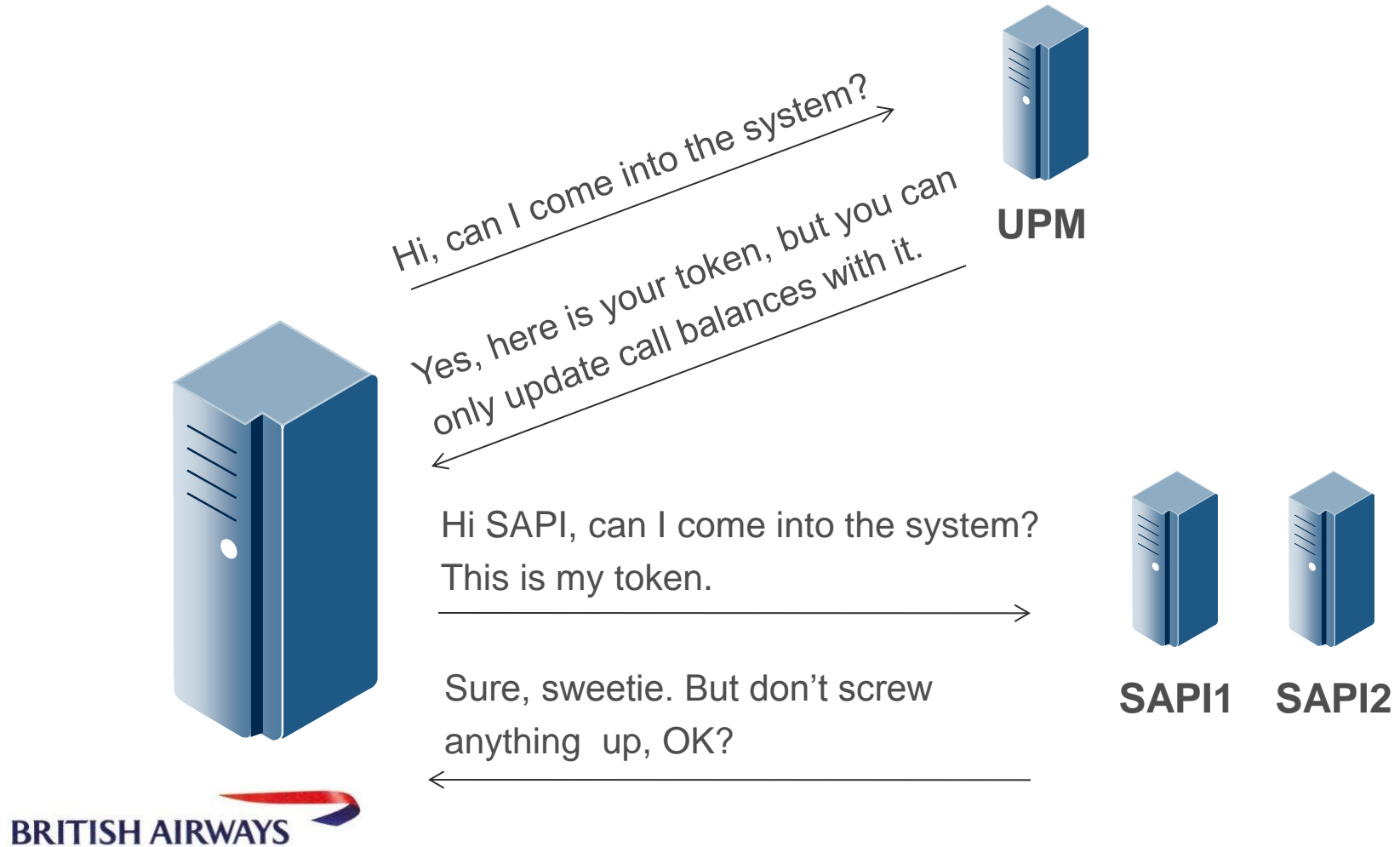
☐ False. Only external applications



Unified API



SAPI Overview



Unified API – Overview

Environment

- Runs in a JEE environment (Using WebLogic, for example)

Third-party integration with Comverse ONE

- Provides a client-side software development kit (SDK)
- 2 major interfaces are supported:
 - Client SDK – Java-based API that uses Enterprise Java Beans (EJB) for remote method invocation (RMI)
 - Web Services-based API

Supported Features:

- Authentication, Authorization and Accounting (AAA)
- User-defined transactions (UDTs) via scripting languages
- Sophisticated logging and error handling
- Horizontal scaling via clustering provided by WebLogic

Unified API – Business Domains

Comverse ONE: Real-Time and Converged

- Customer and Subscriber Management
- Financial Transactions

Comverse ONE: Converged Only

- Case Management and Customer Interactions
- Order Management
- Inventory Management
- Workflow
- Extended Data

Question 3

What are the 2 interfaces provided by the Unified API?
(Note: More than one answer could be correct)

☐ Client SDK – java based API

☐ Microsoft.Net API

☐ Web Services

☐ C# development platform



Question 3 – Answer

What are the 2 interfaces provided by the Unified API?
(Note: More than one answer could be correct)



Client SDK – java based API

☐ Microsoft.Net API

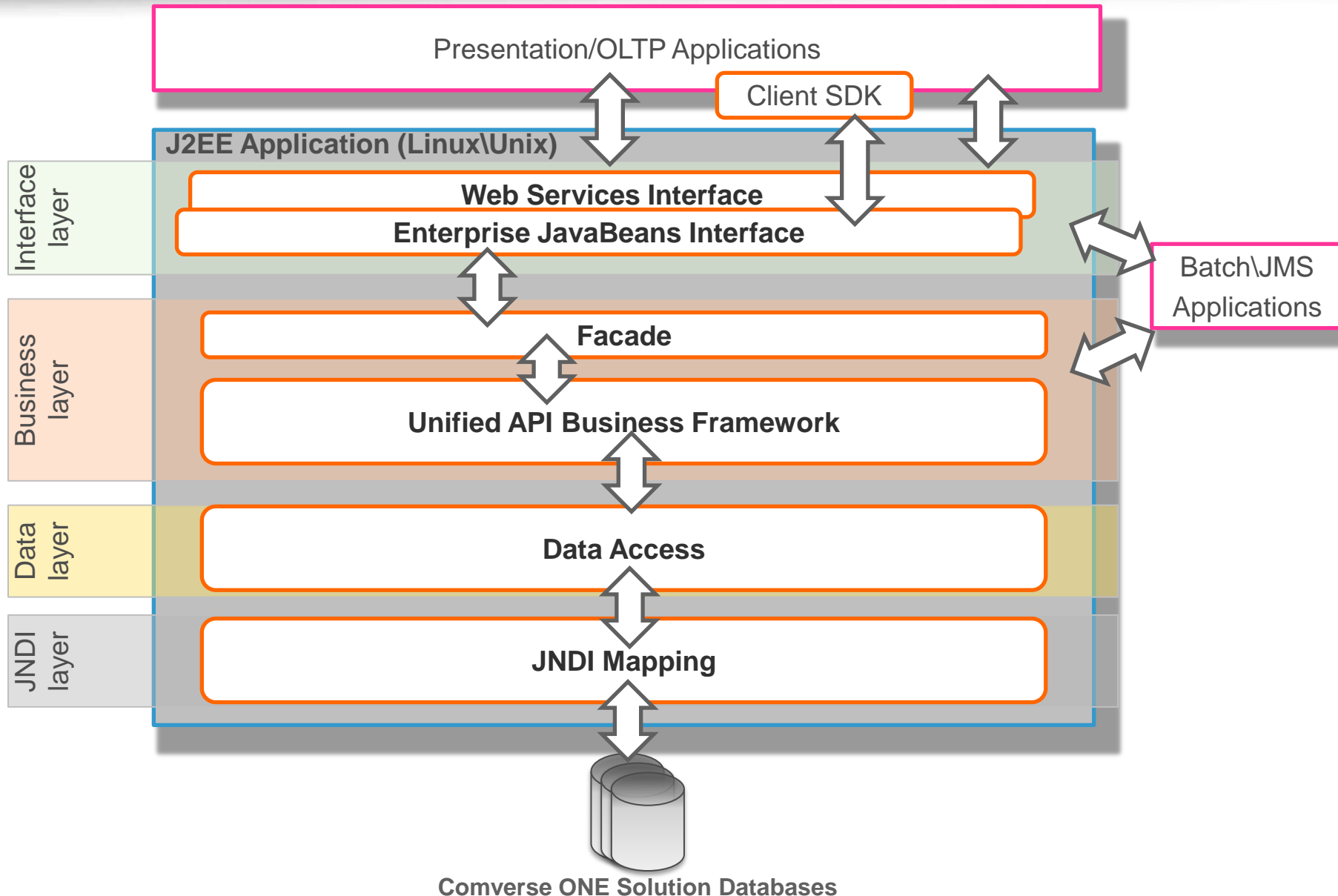


Web Services

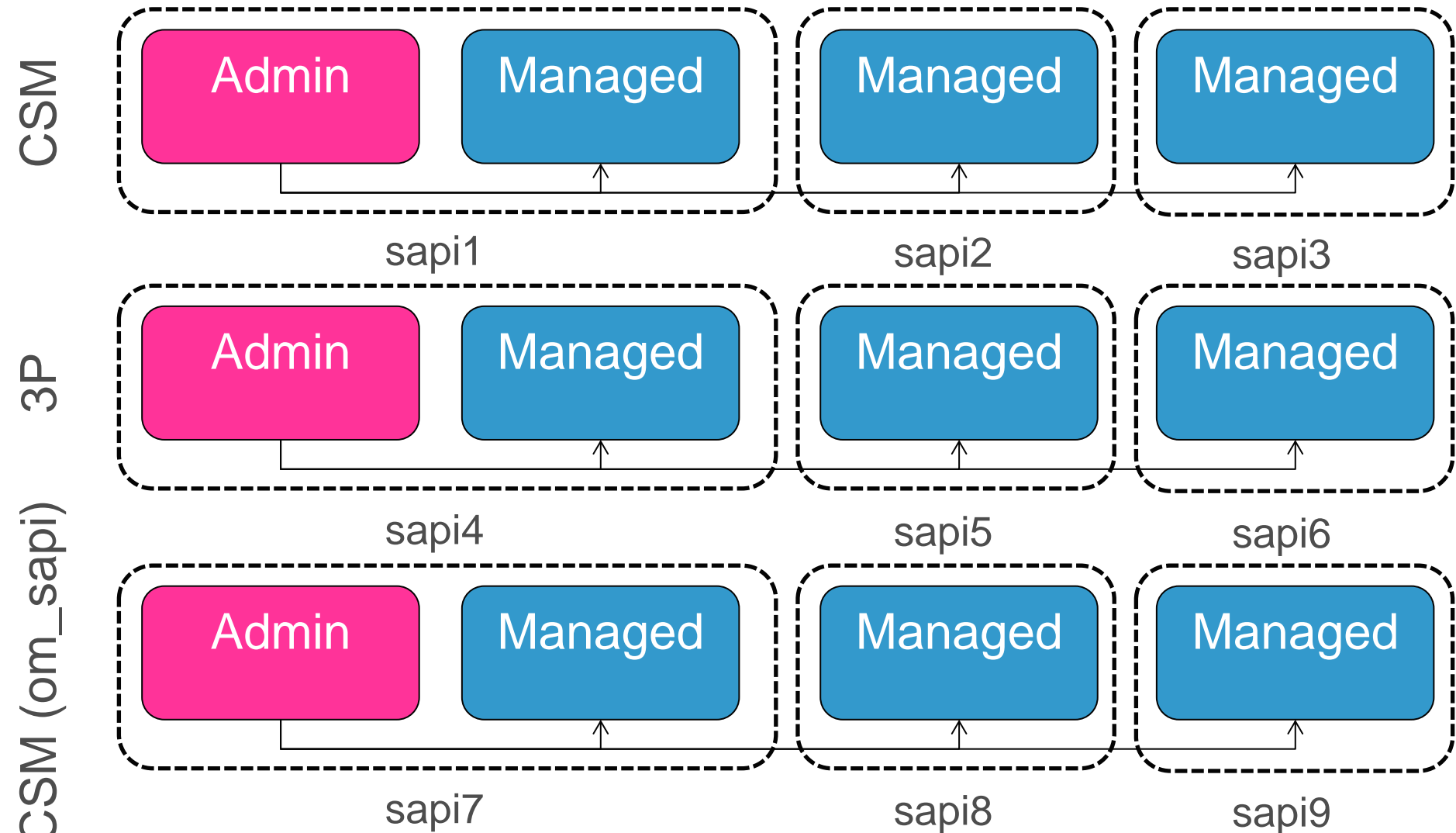
☐ C# development platform



Unified API – Software Architecture



Unified API – Deployment Architecture (1)



Unified API – Deployment Architecture (2)

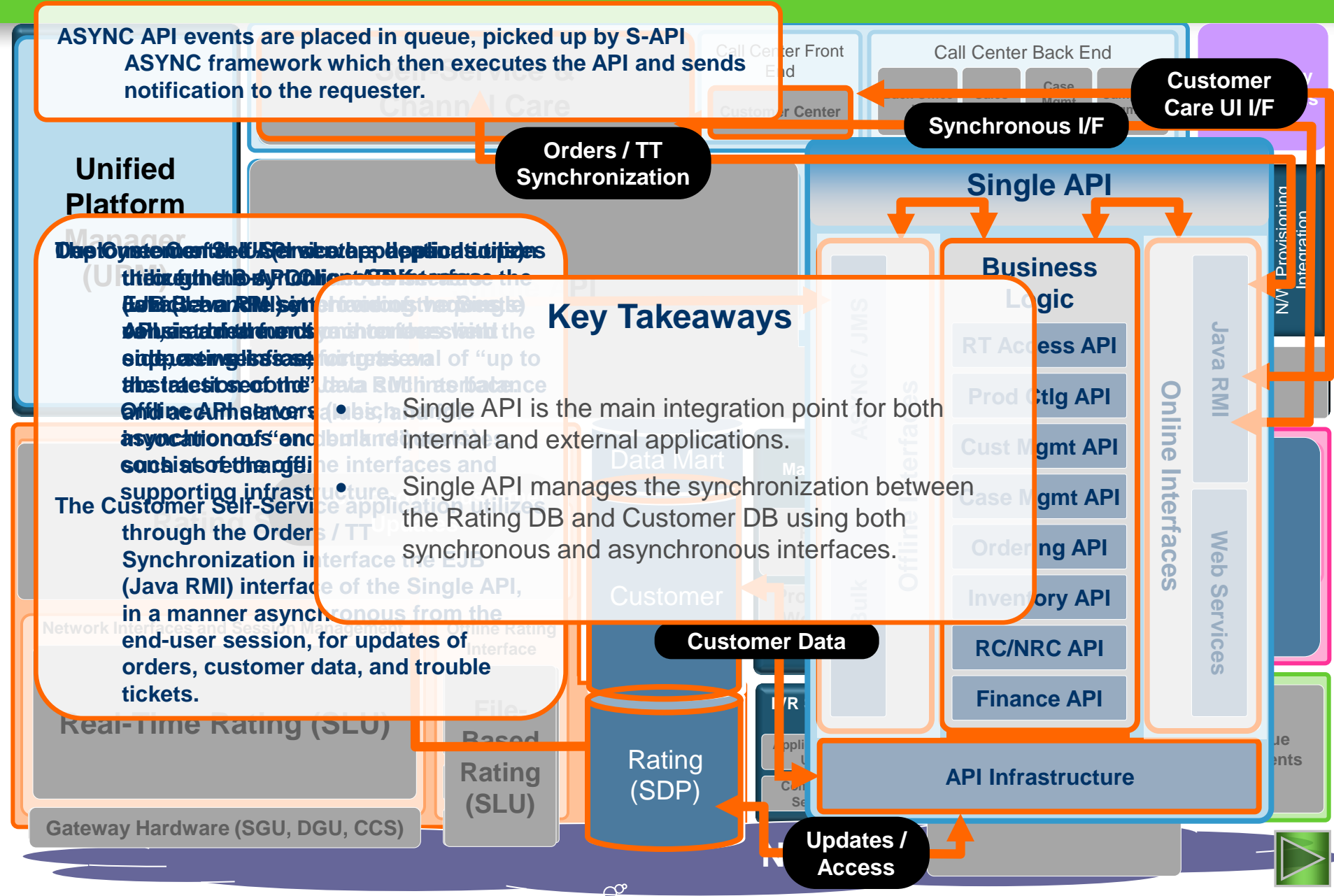
/etc/hosts on the UPM

- Contains MODE parameter that can be MASTER or SLAVE
- MASTER means both an administration server and a managed server will run on the configured host
- SLAVE means only a managed server will run on the configured host

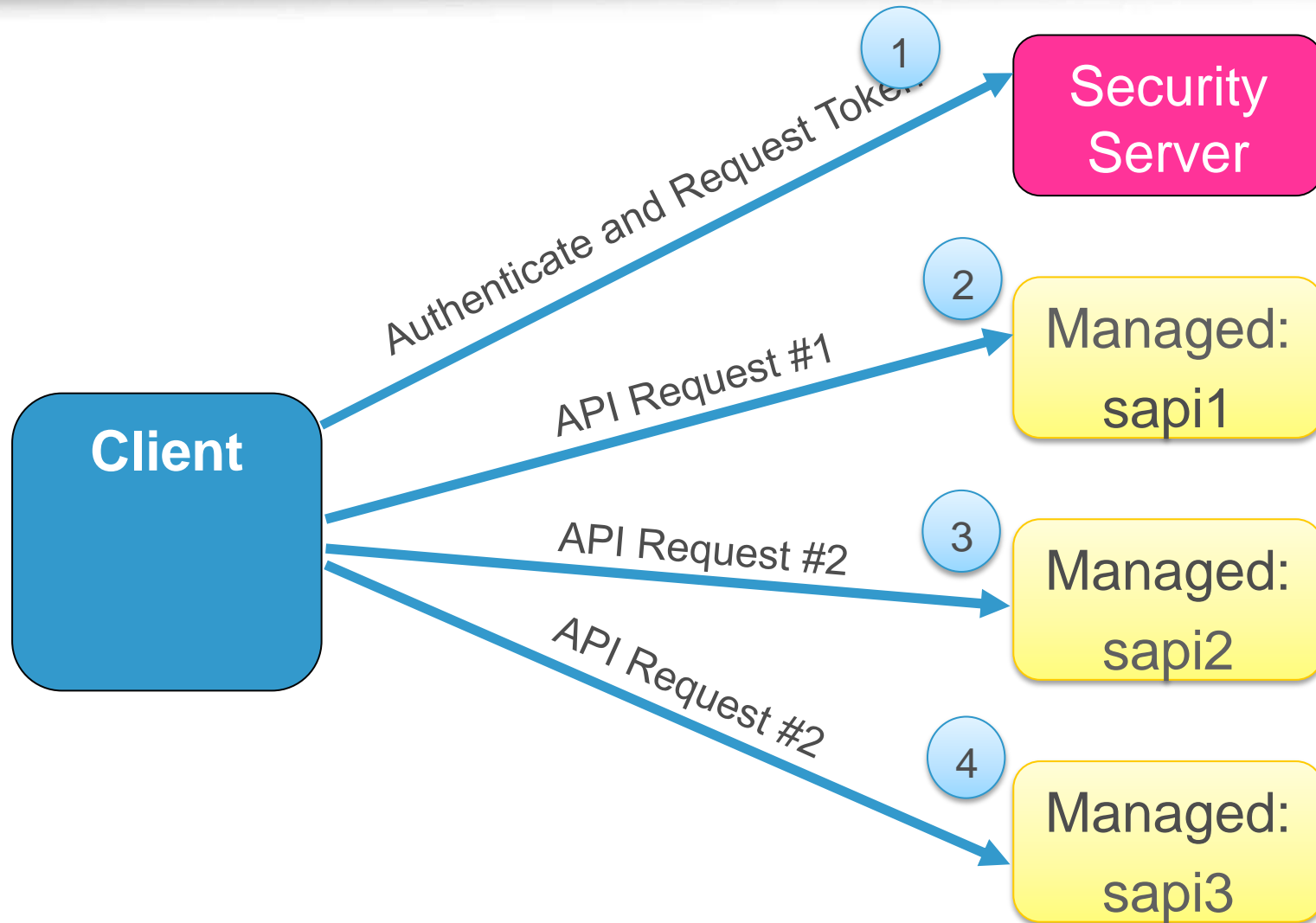
The /etc/hosts file for the previous diagram looks like this:

```
10.10.10.1 sapi1 #mach=sapi mode=master stream=CSM om_sapi=n
10.10.10.2 sapi2 #mach=sapi mode=slave stream=CSM om_sapi=n
10.10.10.3 sapi3 #mach=sapi mode=slave stream=CSM om_sapi=n
10.10.10.4 sapi4 #mach=sapi mode=master stream=3P om_sapi=n
10.10.10.5 sapi5 #mach=sapi mode=slave stream=3P om_sapi=n
10.10.10.6 sapi6 #mach=sapi mode=slave stream=3P om_sapi=n
10.10.10.7 sapi7 #mach=sapi mode=master stream=CSM om_sapi=y
10.10.10.8 sapi8 #mach=sapi mode=slave stream=CSM om_sapi=y
10.10.10.9 sapi9 #mach=sapi mode=slave stream=CSM om_sapi=y
```


Component Integration Architecture (Single API)



Unified API – Common Usage



Unified API – Role of Security Server

- **Authentication** services are provided by the Security Server to users of the Unified API by providing a token when the user successfully authenticates.
- **Authorization** policies are provided to the Unified API by the Security Server, which controls which methods and associated timeouts can be called by the user associated with the Unified API context.
- **Auditing** is provided by the Security Server to the Unified API by allowing user initiated actions, such as method calls, to be logged to a database.



Question 4 – The Security Server Provides the Following Roles to the Unified API

Match the role to its correct actions.

1. Authentication services
2. Authorization policy
3. Auditing services

- ☐ A. Controls which methods and associated timeouts can be called by the user associated with the Unified API context.
- ☐ B. Provide a token when the user successfully authenticates
- ☐ C. Allowing user initiated actions to be logged to a database.



Unified API – Resources

COMONE_<version>_Unified_API_Guide.pdf

- Covers the most common components of the Client SDK
- Contains an API reference for each business domain
- Best resource to use to come up to speed with Unified API architecture and programming conventions



Billing Documentation Portal

<http://us-dnv-sp01/sites/billingdocs>

Javadocs

This is the best resource to use if you are actively writing programs to integrate with Comverse ONE



http://release-serv.comverse.com/CBS/DIT/CBS3.5.50/TC10/packages/SAPI_JAVADOCS-3.5.50.0-0.0.0_10.0.0_1.zip

Summary

This section has covered:

- The role of the Unified API in the Comverse ONE platform
- The Client SDK and Web services interfaces provided to client applications by the Unified API
- Where to find further information about the Unified API and the API methods that it exposes

Thank
You!



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