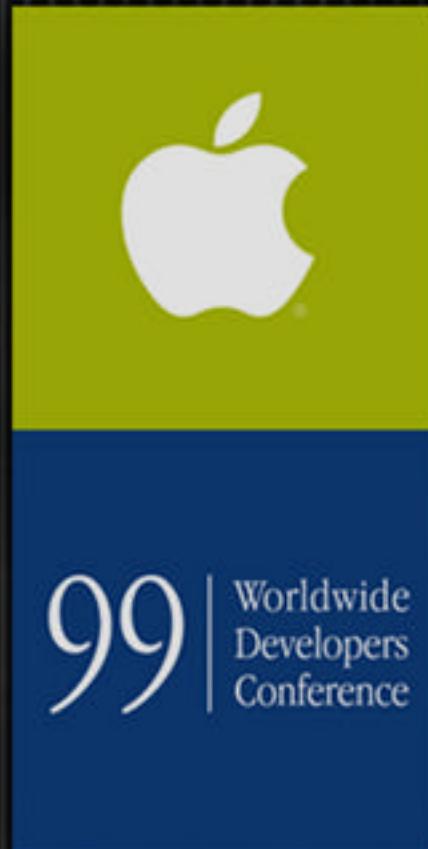


Welcome

To Advance through Presentation  
Use Page Up and Page Down Keys



# WebObjects



*"This year's Software Product of the Year is Apple Computer's WebObjects 4.0... Along with substantial power and flexibility, WebObjects brings an ease of development rarely seen in industrial-strength development environments."*





# Introduction to WebObjects Java Client

Rory Lydon  
Eric Noyau

WebObjects Engineering



# Introduction to WebObjects Java Client

Rory Lydon  
Eric Noyau

Java Client Development



# Introduction to WebObjects Java Client

Patrick Gates  
Ben Trumbull  
Andreas Wendker  
  
Java Client Development

# Session Agenda

- What Is WebObjects Java Client?
- Demo
- Questions and Answers



# What Is WebObjects Java Client?

- Apple's EOF on the Web
- A Contemporary Port of a Time-tested Design
- A New Testament to Its Excellence



# What Is EOF?

**EOInterface**

**EOControl**

**EOAccess**



# EOAccess

EOAccess



# EOAccess

**EOAccess**

Abstract Database Server  
(EOAdaptor)



# EOAccess

**EOAccess**

Object Retrieval and Storage  
(EODatabaseContext)



# EOAccess



Database



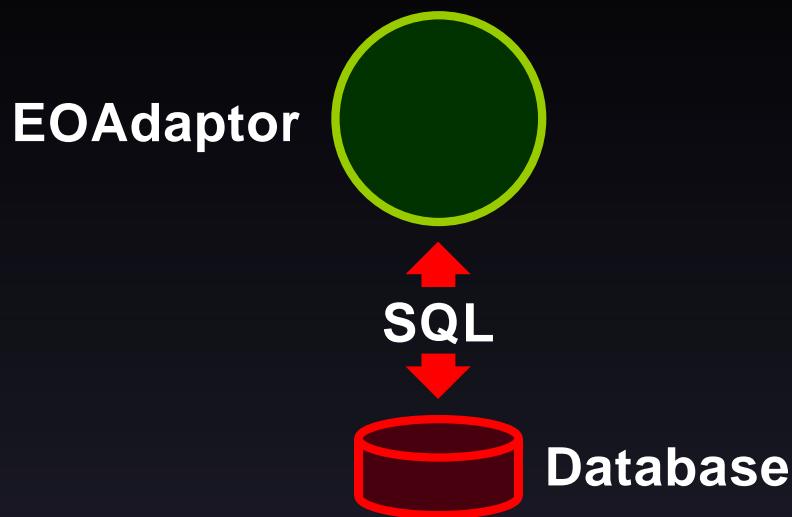
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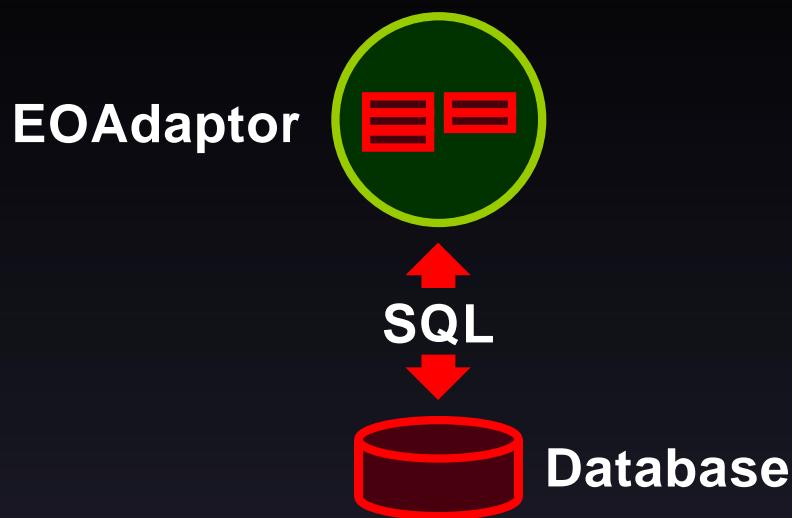
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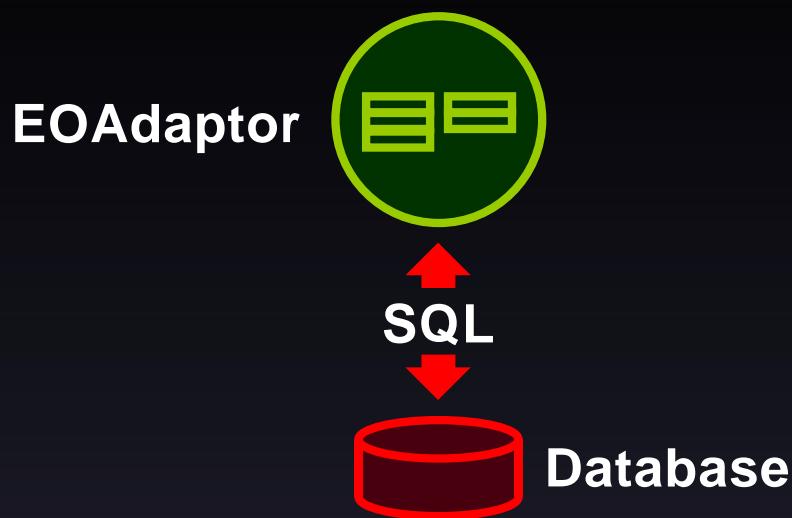
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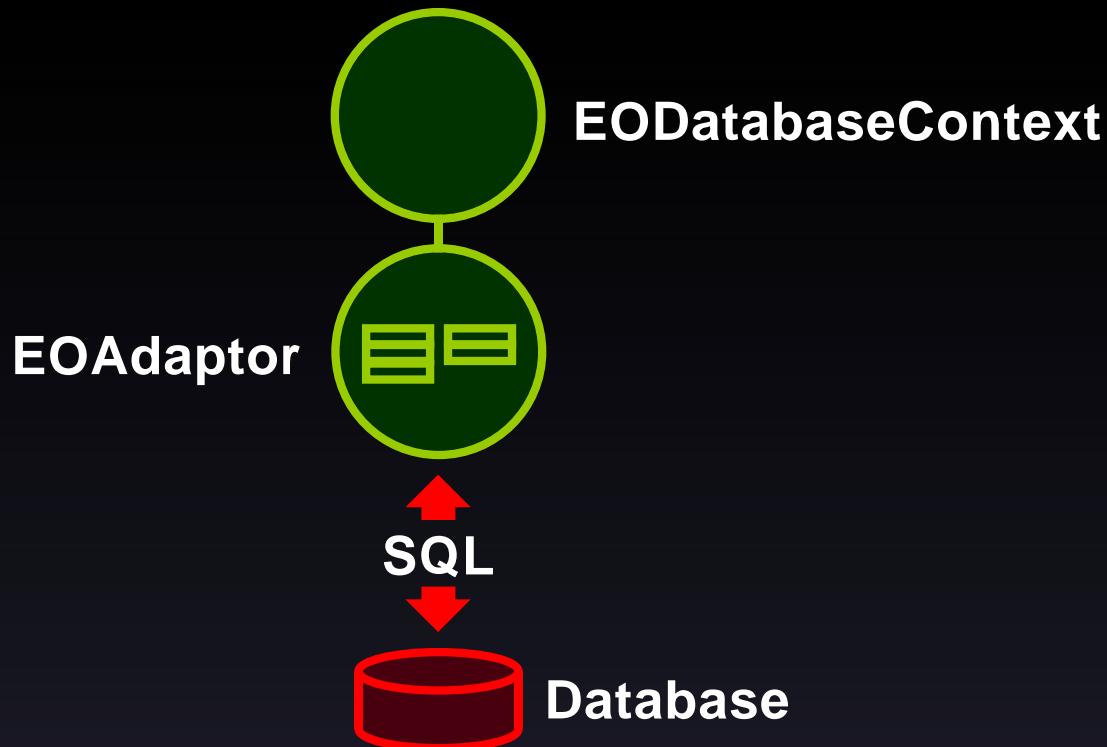
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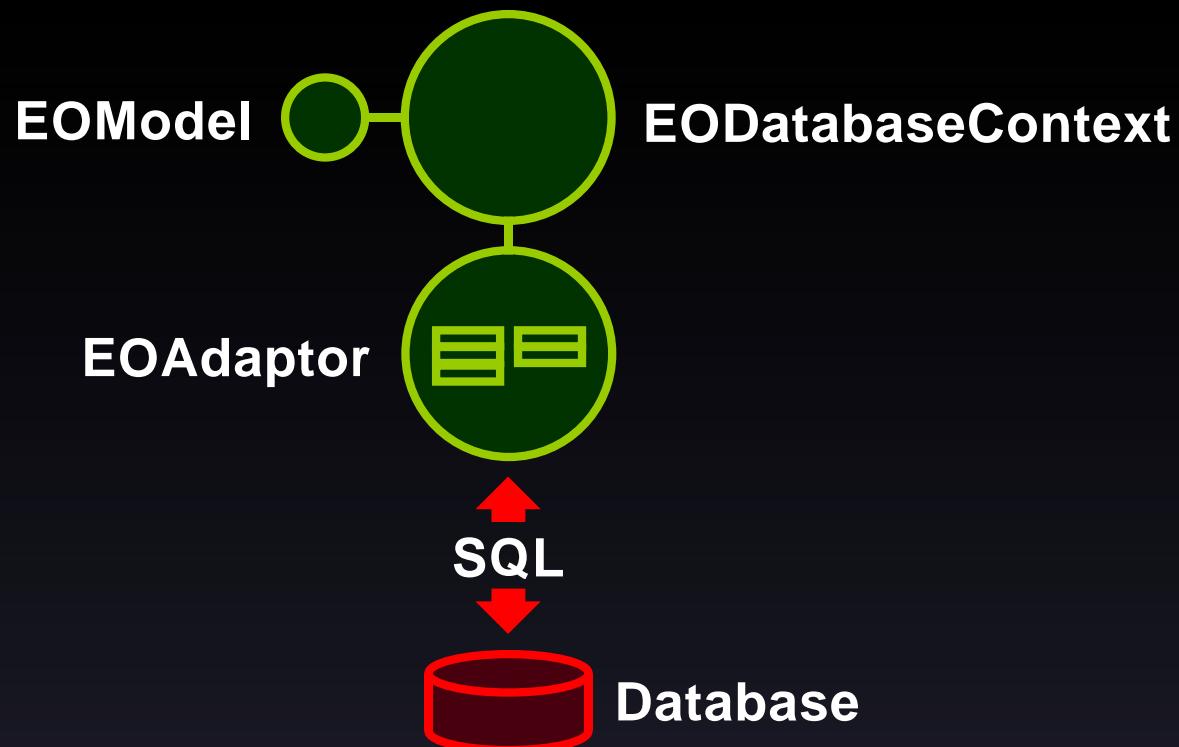
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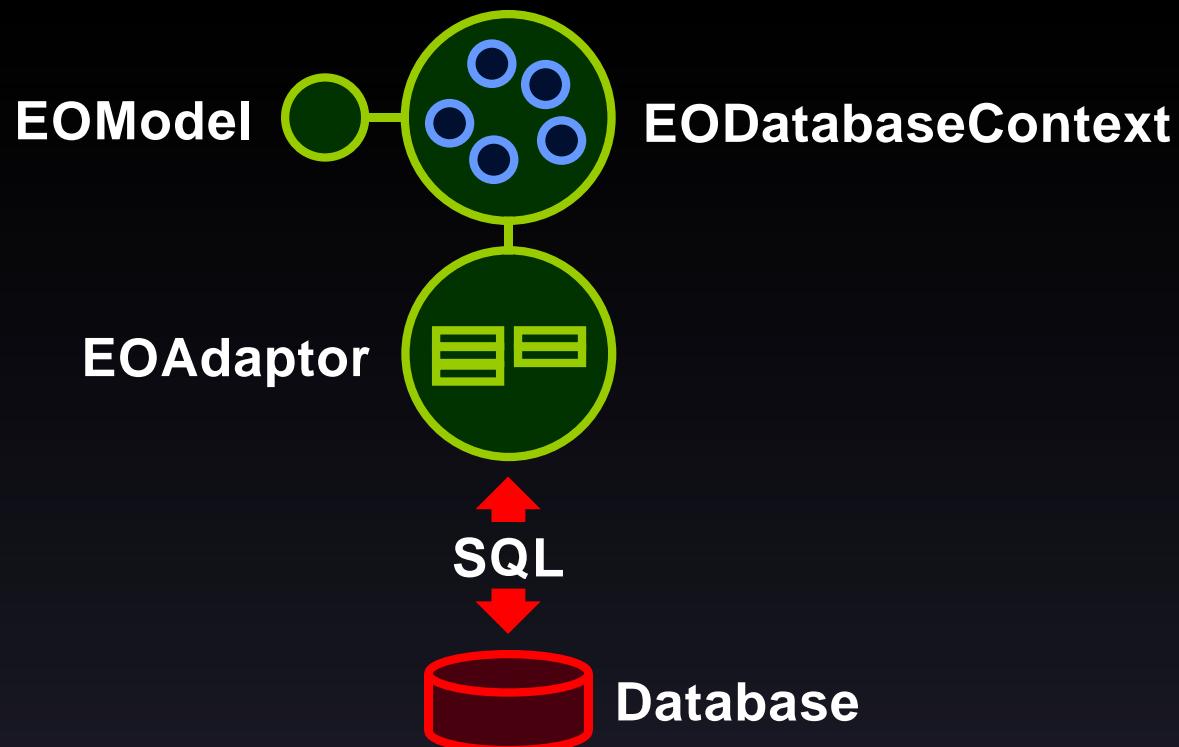
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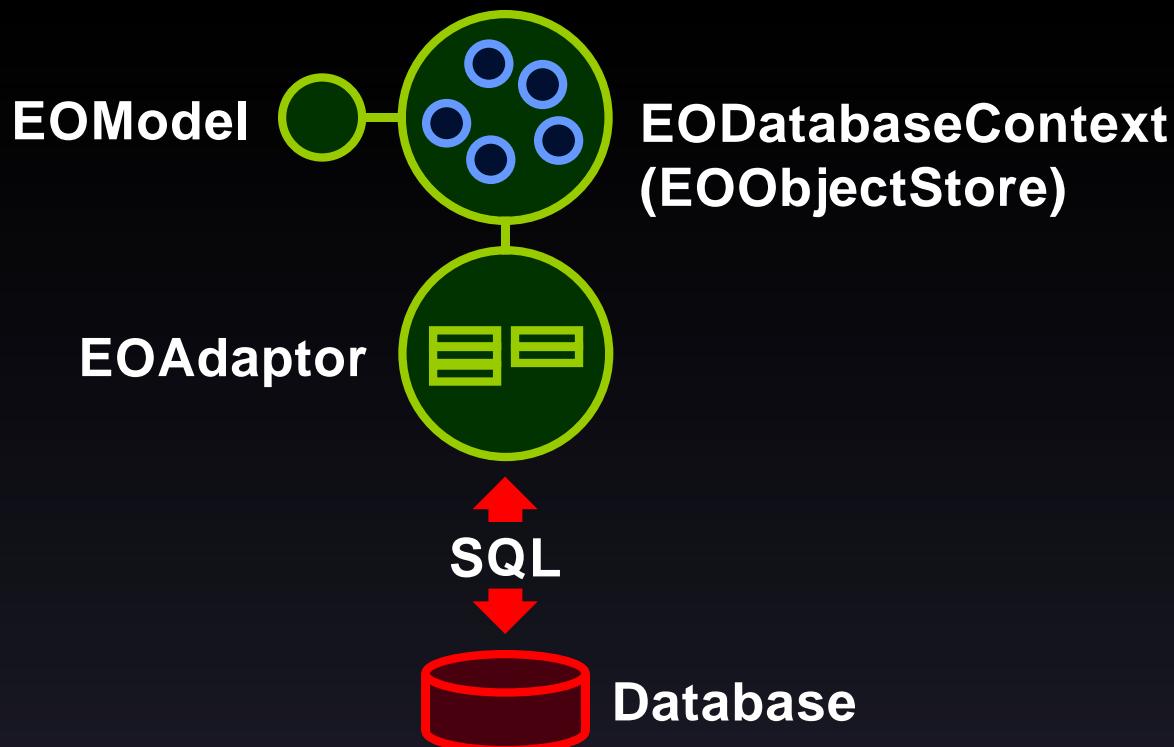
# EOAccess



# EOAccess



# EOAccess



# EOAccess

EOAccess



# Tiers

1

EOAccess

Database Client  
Database Server

SQL



Database

0



# EOControl

EOControl

EOAccess



# EOControl

**EOControl**

**EOAccess**

Object Graph Change Tracking  
(EOEditingContext)



# EOControl

**EOControl**

**EOAccess**

Transparent Reference Rehydration  
(EOFault)



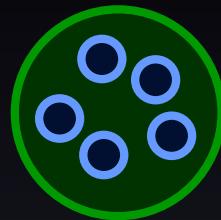
# EOControl



**EODatabaseContext**



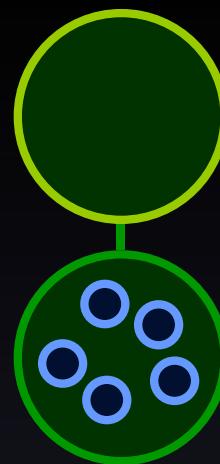
# EOControl



**EODatabaseContext  
(EOObjectStore)**



# EOControl

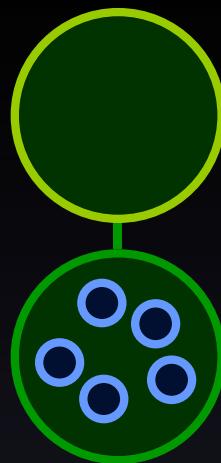


EOEditingContext

EOManagedObjectContext  
(EOObjectStore)



# EOControl

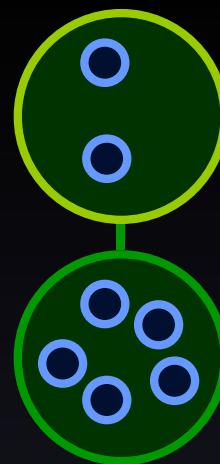


**EOEditingContext  
(EOObjectStore)**

**EOManagedObjectContext  
(EOObjectStore)**



# EOControl

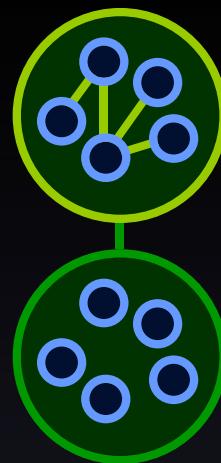


**EOEditingContext**

**EOManagedObjectContext  
(EOObjectStore)**



# EOControl



**EOEditingContext**

**EOManagedObjectContext  
(EOObjectStore)**



# EOControl

EOControl

EOAccess



# EOInterface

EOInterface

EOControl

EOAccess



# EOInterface

**EOInterface**

**EOControl**

**EOAccess**

Object Selection Tracking  
(EODisplayGroup)



# EOInterface

**EOInterface**

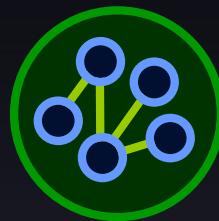
**EOControl**

**EOAccess**

Object-View Synchronization  
(EOAssociation)



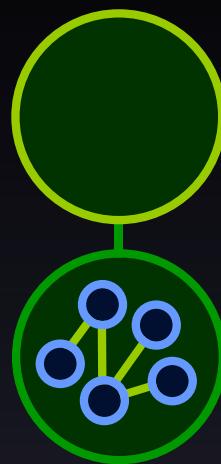
# EOInterface



EOEditingContext



# EOInterface

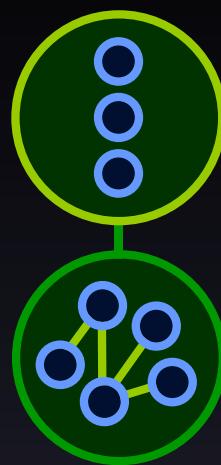


EODisplayGroup

EOEditingContex  
t



# EOInterface

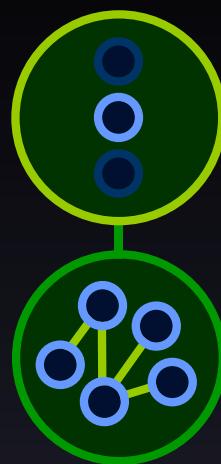


**EODisplayGroup**

**EOEditingContext**



# EOInterface

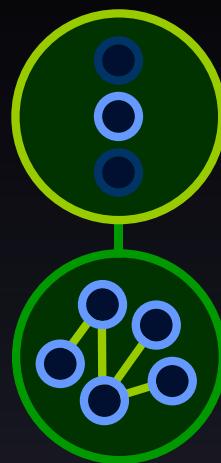
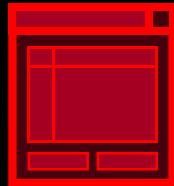


**EODisplayGroup**

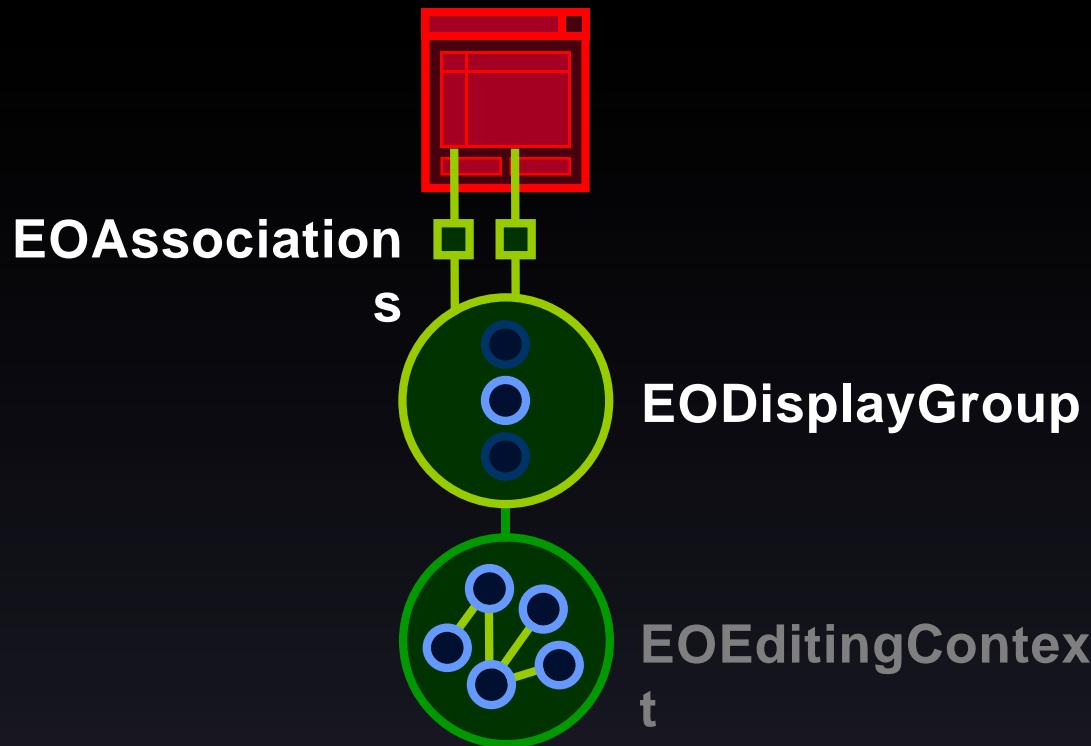
**EOEditingContext**



# EOInterface



# EOInterface



# EOInterface

EOInterface

EOControl

EOAccess



# EOF

**EOInterface**

**EOControl**

**EOAccess**



# Nice Shoulders

**EOInterface**

**EOControl**

**EOAccess**



# Nice Shoulders

UI Objects

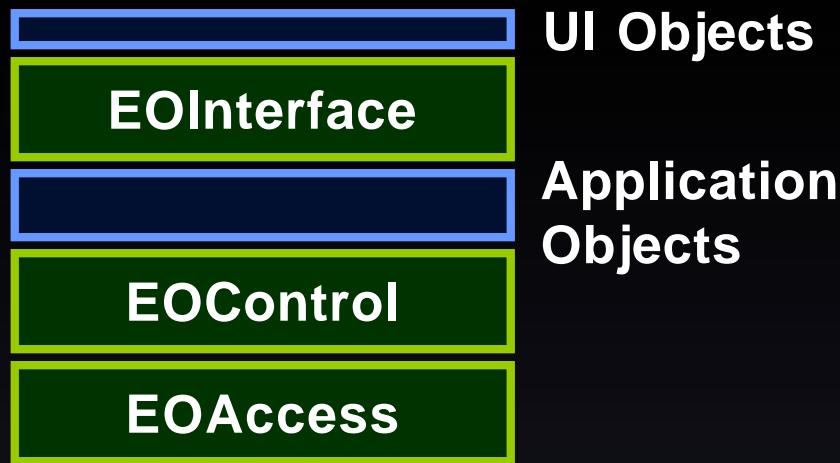
**EOInterface**

**EOControl**

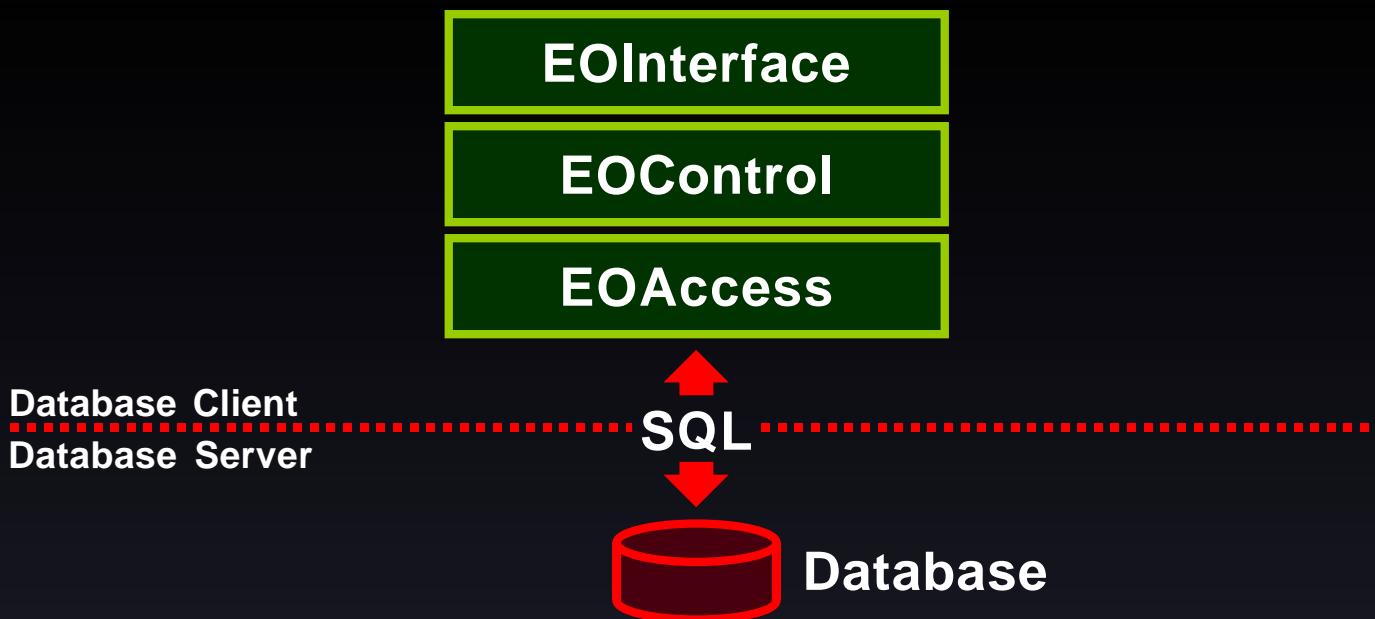
**EOAccess**



# Nice Shoulders



# EOF Client-Server



# EOF Client

EOInterface

EOControl

EOAccess

Operating  
System



# EOF Client

EOInterface

EOControl

EOAccess

Foundation

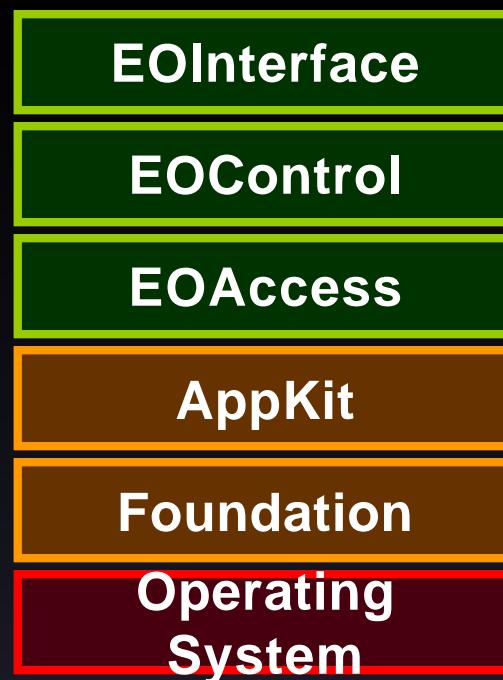
Operating  
System



# EOF Client



# Cocoa Client





# The Web

# What Is WebObjects?



# What Is WebObjects?

EOInterface

EOControl

EOAccess

AppKit

Foundation

Operating  
System



# WebObjects

EOInterface

EOControl

EOAccess

Foundation

Operating  
System



# WebObjects

EOControl

EOAccess

Foundation

Operating  
System



# WebObjects

EOControl

EOAccess

Foundation

Operating  
System



# WebObjects

WebObjects

EOControl

EOAccess

Foundation

Operating  
System



# WebObjects

**WebObjects**

HTML Server Process  
(WOApplication)



# WebObjects

**WebObjects**

Client State Management  
(WOSession)



# WebObjects



WOApplication



# WebObjects

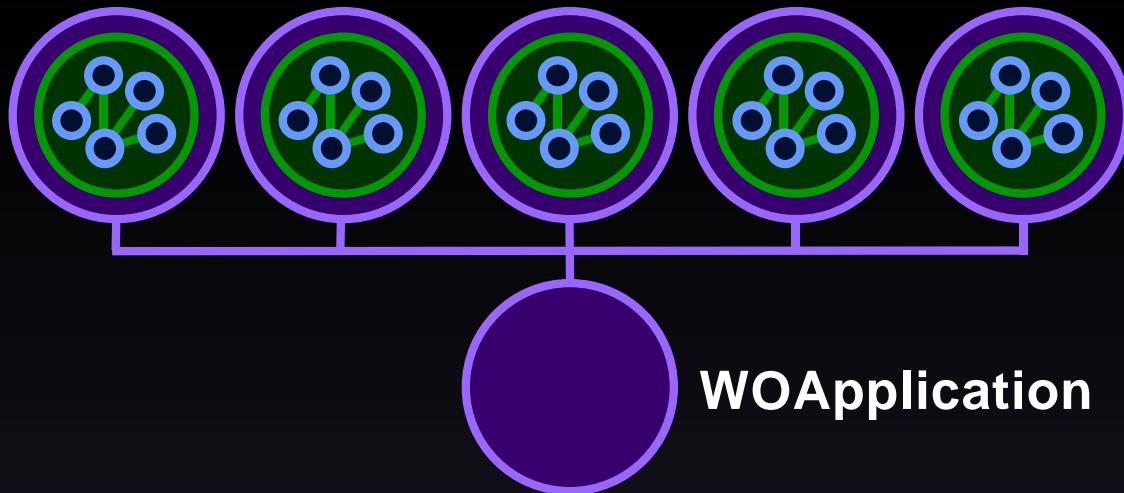


# WebObjects



# WebObjects

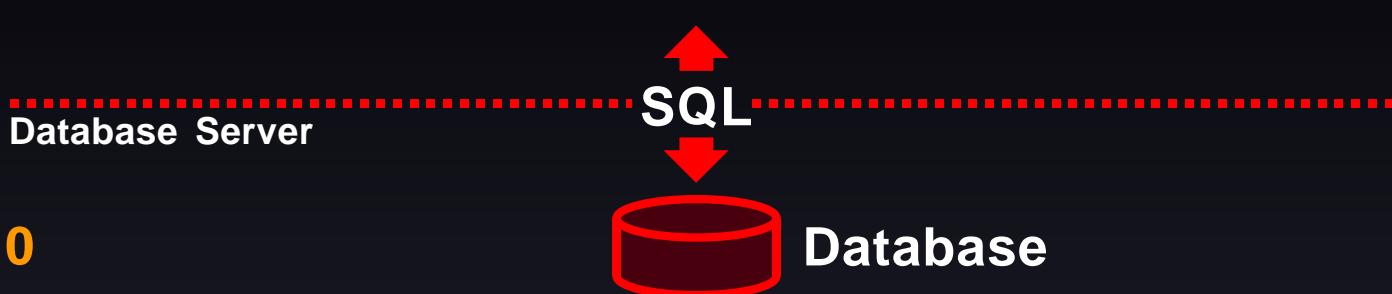
WO Sessions



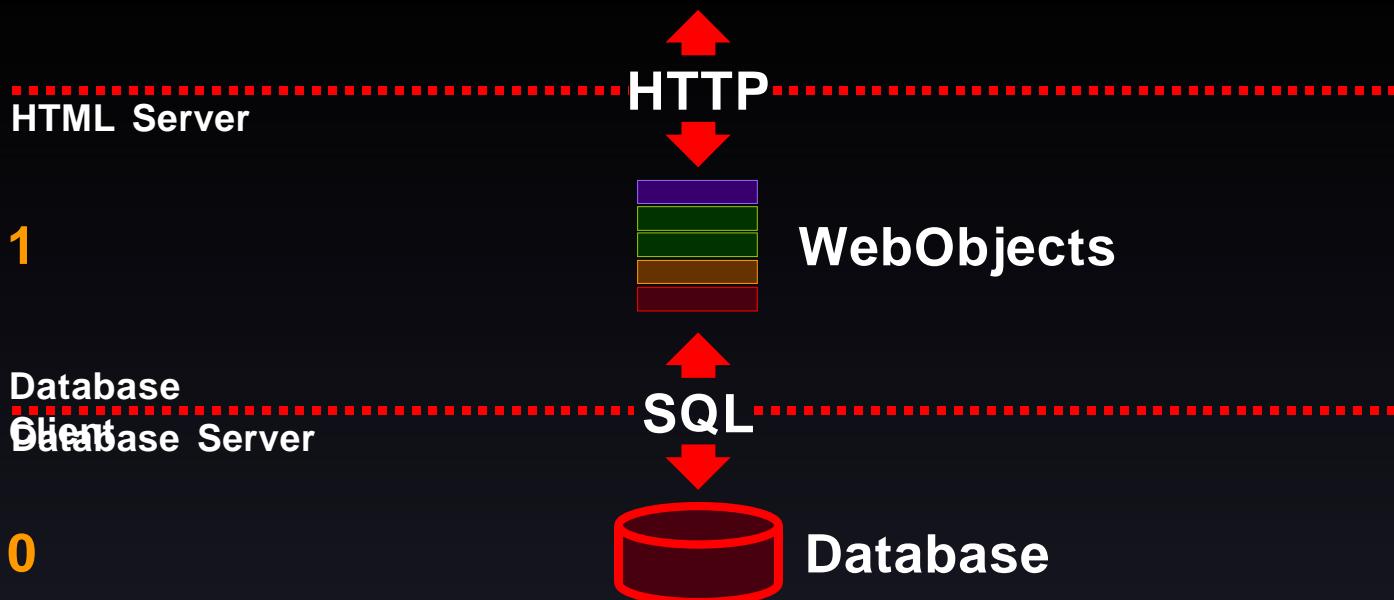
# Tiers



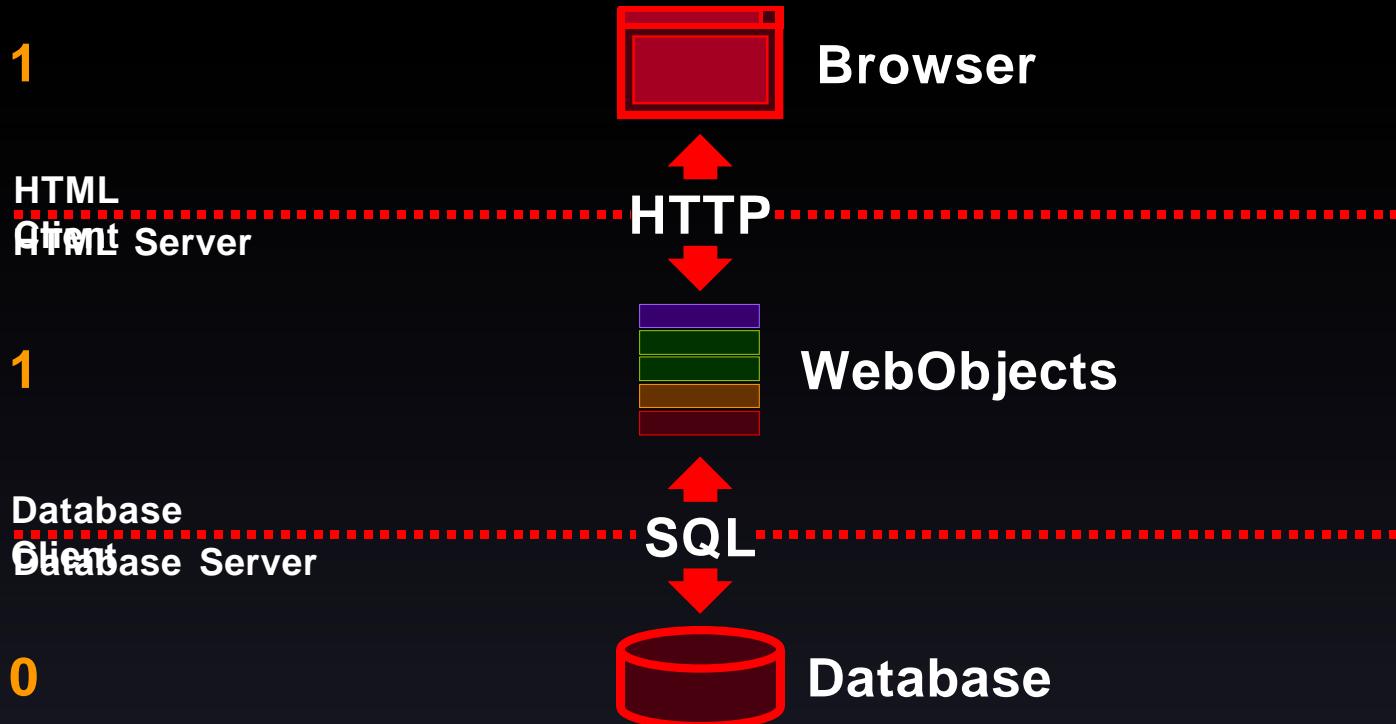
# Database Server



# HTML Server



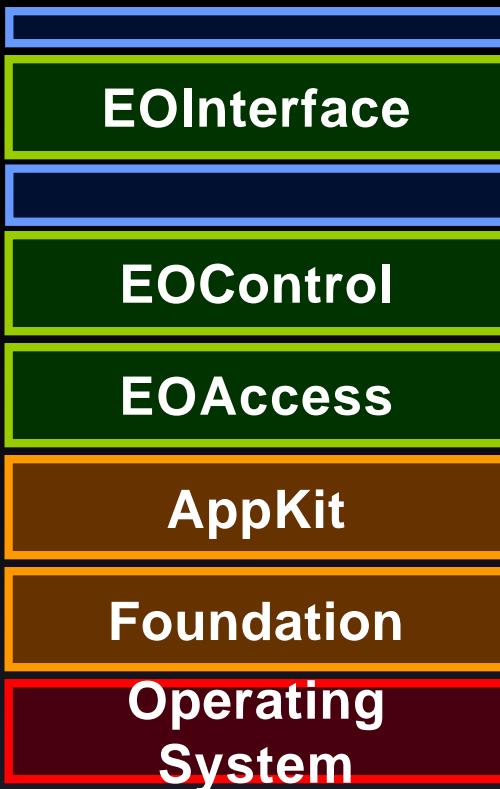
# Dumb Client



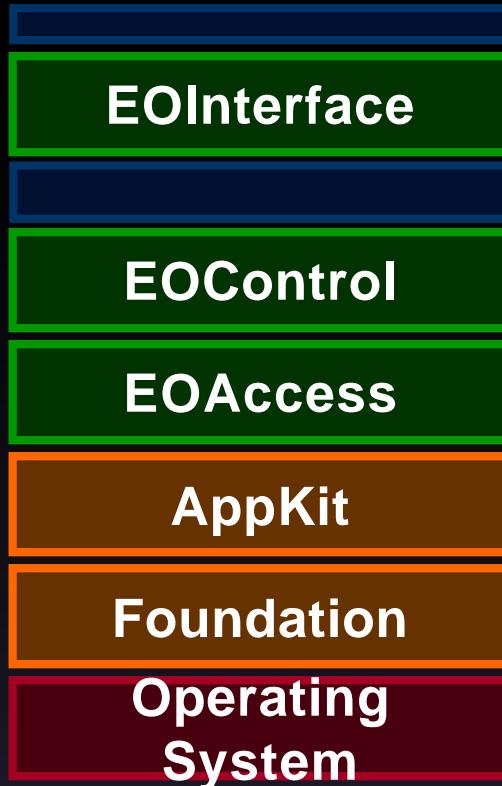


# Java

# Cocoa Client



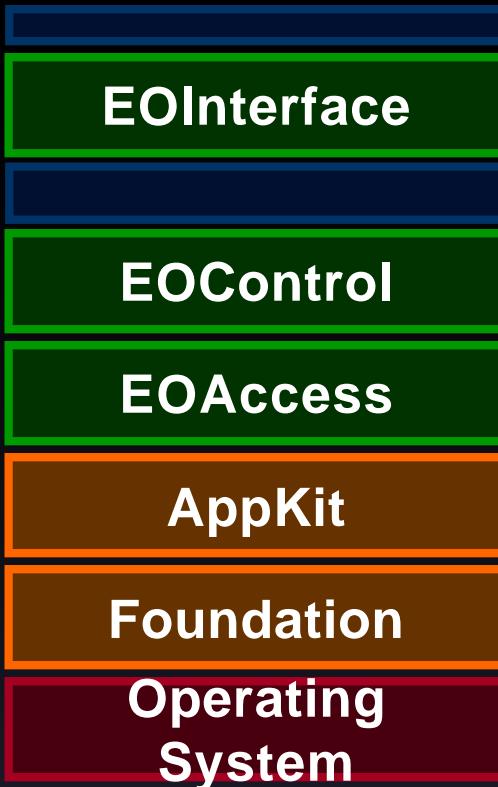
# Cocoa Client



# Java Client



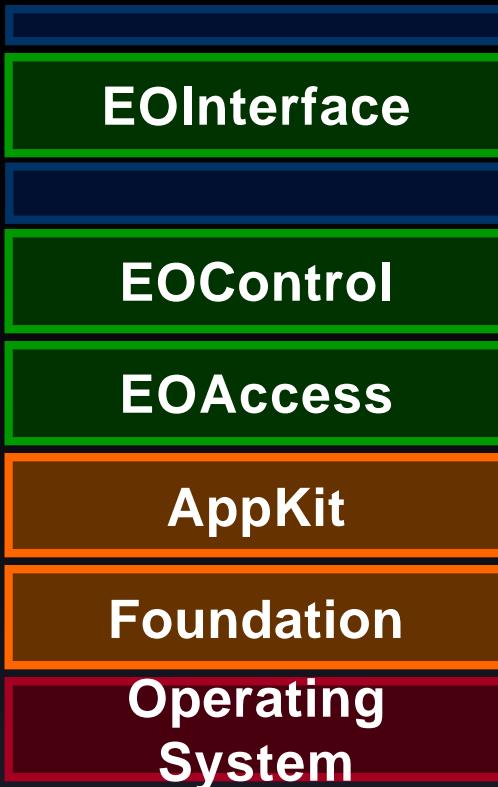
# Cocoa Client



# Java Client



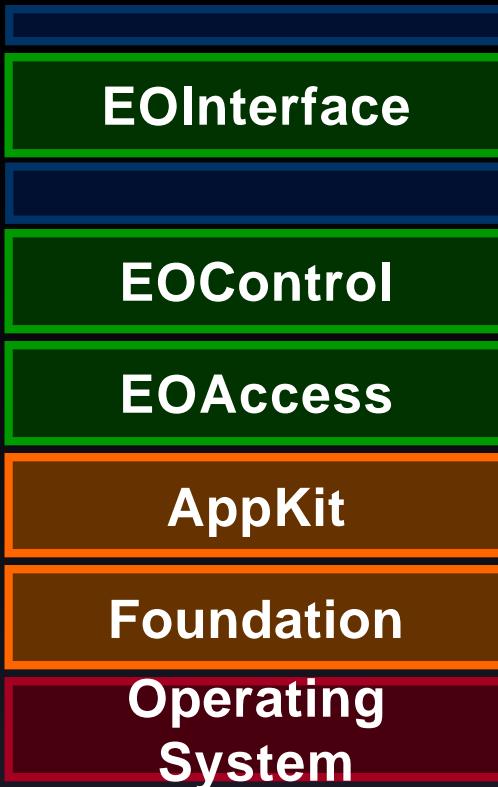
# Cocoa Client



# Java Client



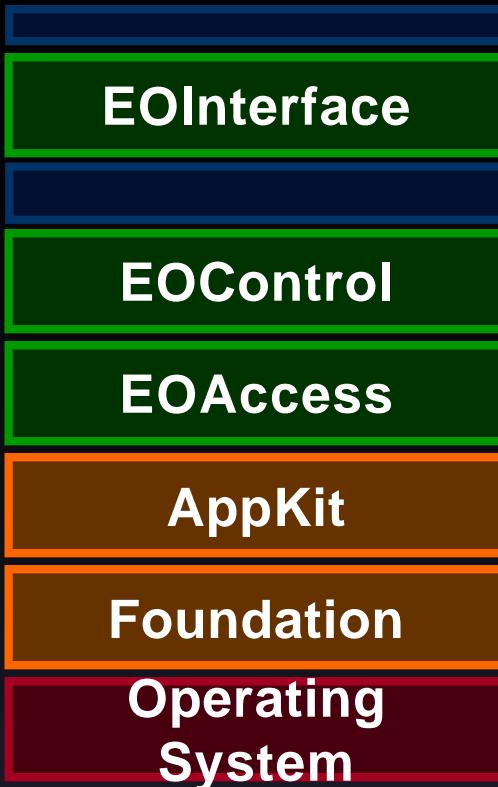
# Cocoa Client



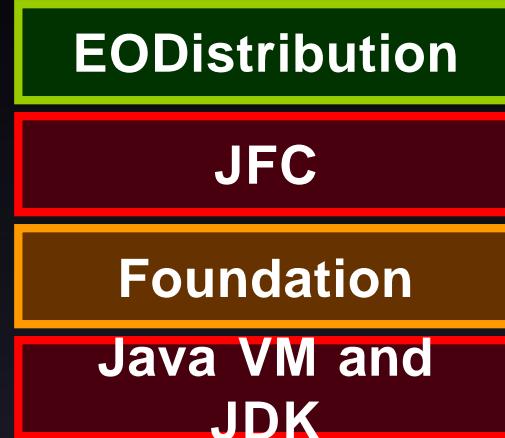
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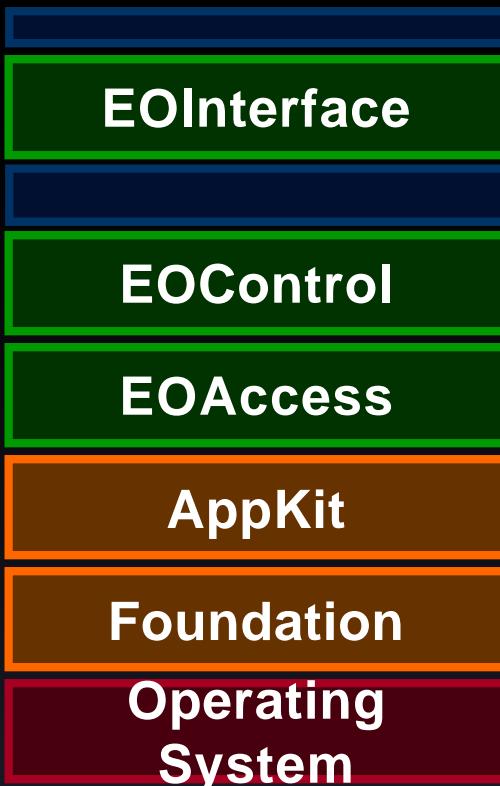
# Cocoa Client



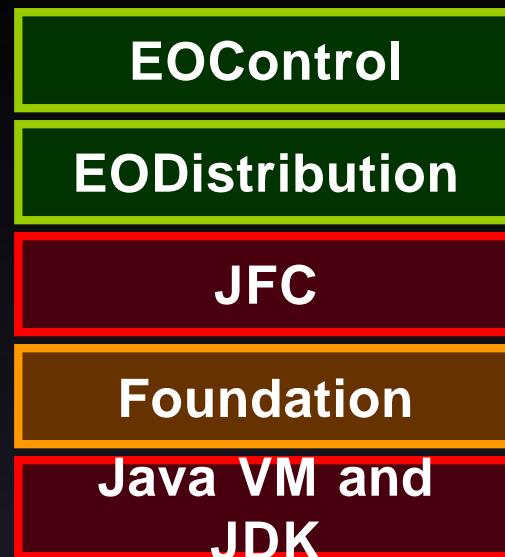
# Java Client



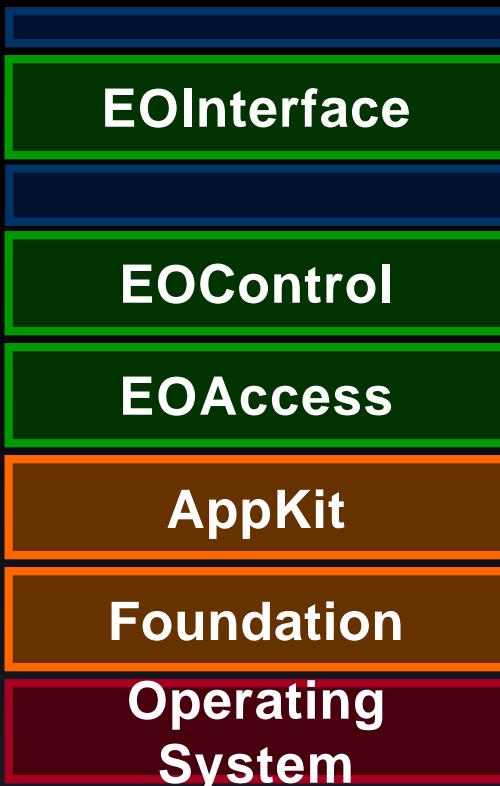
# Cocoa Client



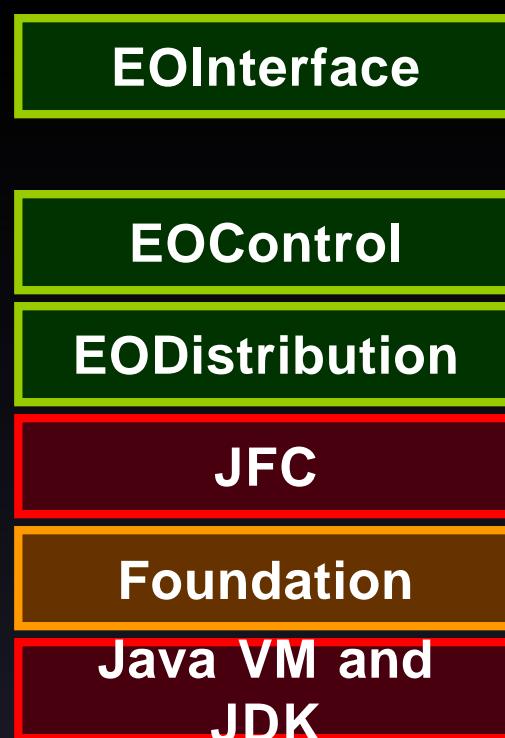
# Java Client



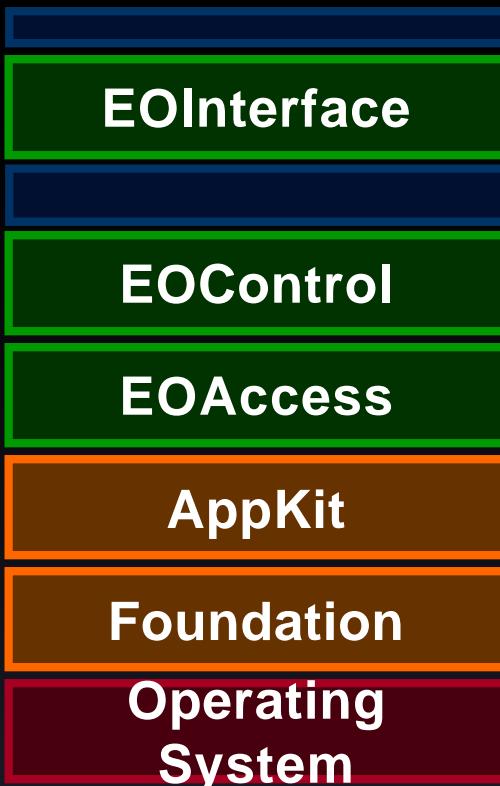
# Cocoa Client



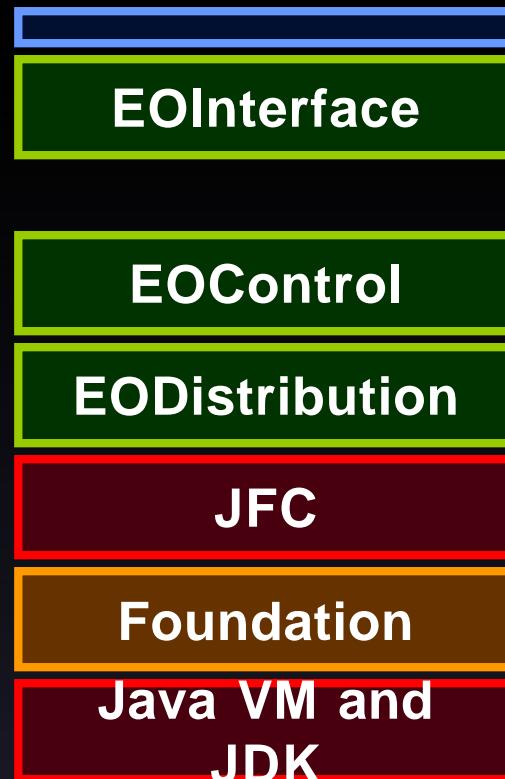
# Java Client



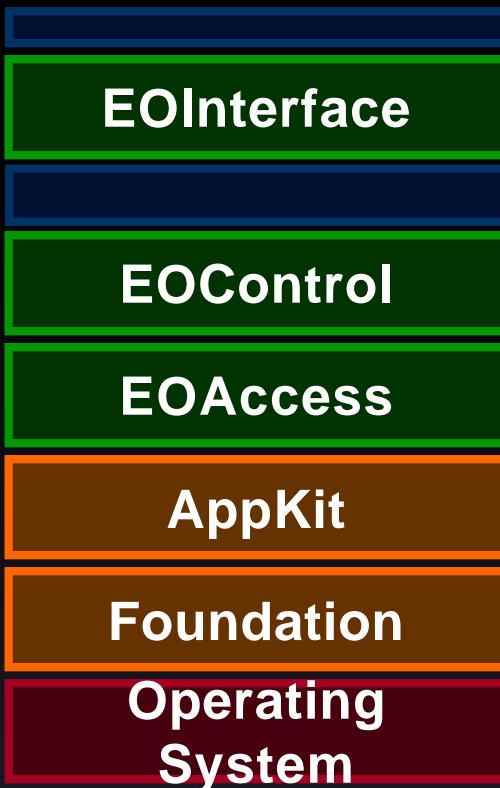
# Cocoa Client



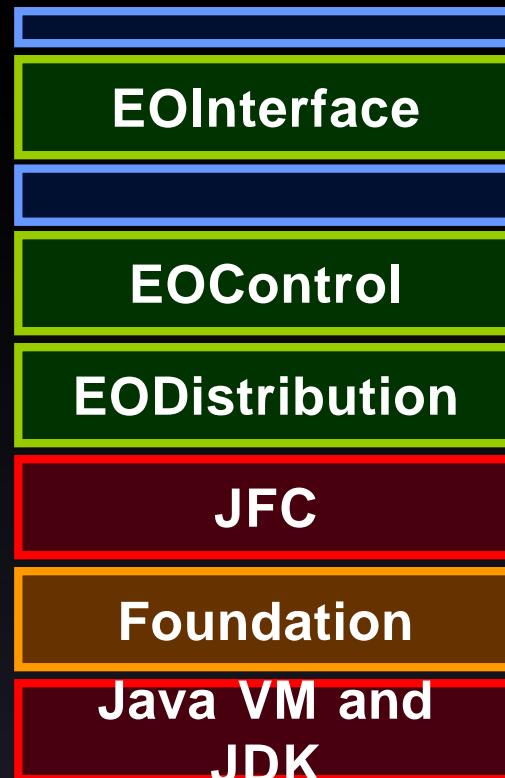
# Java Client



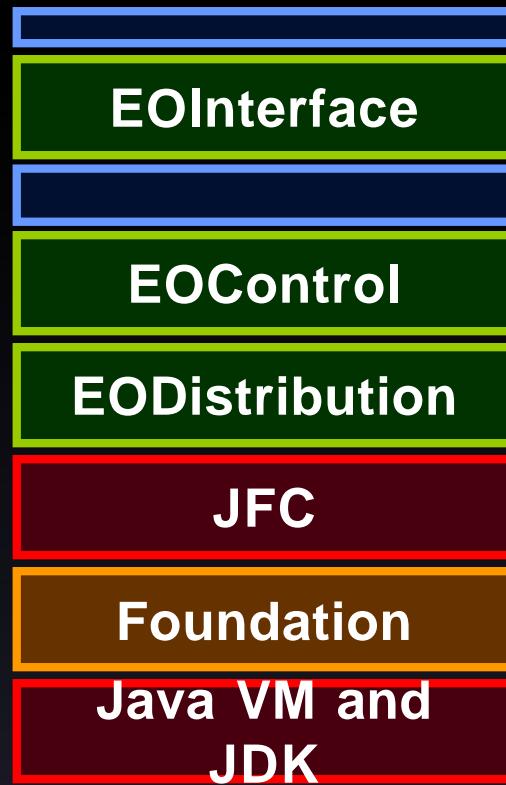
# Cocoa Client



# Java Client



# Java Client



# EODistribution

EODistribution



# EODistribution

**EODistribution**

Abstract Message and Object Transport  
(EODistributionChannel)



# EODistribution

**EODistribution**

Abstract Distributed Object Server  
(EODistributedObjectStore)



# EODistribution

**EODistribution**

Object Client State Management  
(EODistributionContext)



# EODistribution



WOSessio  
n



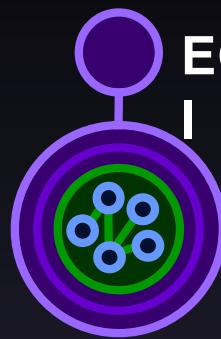
# EODistribution

EODistributionContext



# EODistribution

EODistributionContext

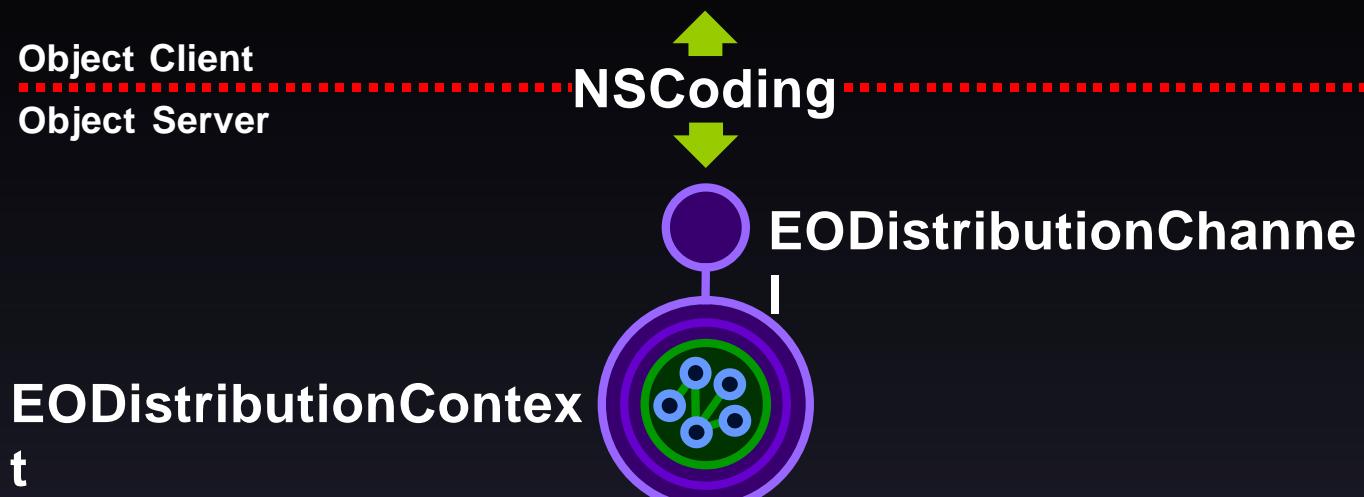


EODistributionChanne

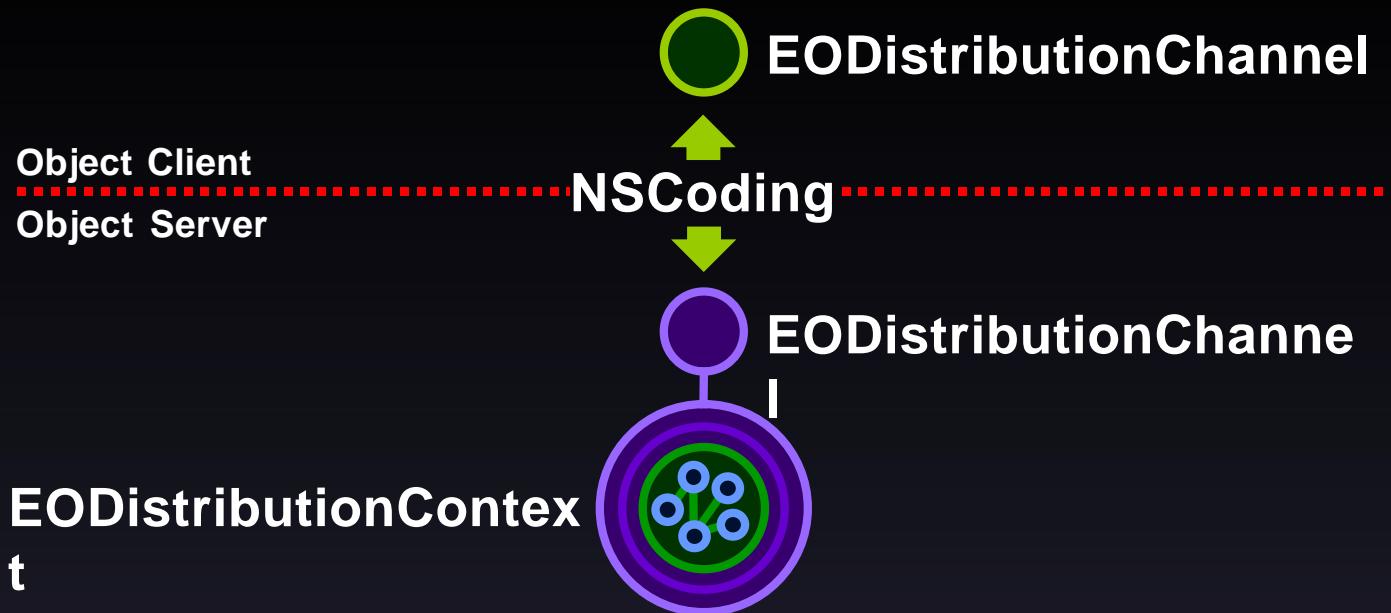
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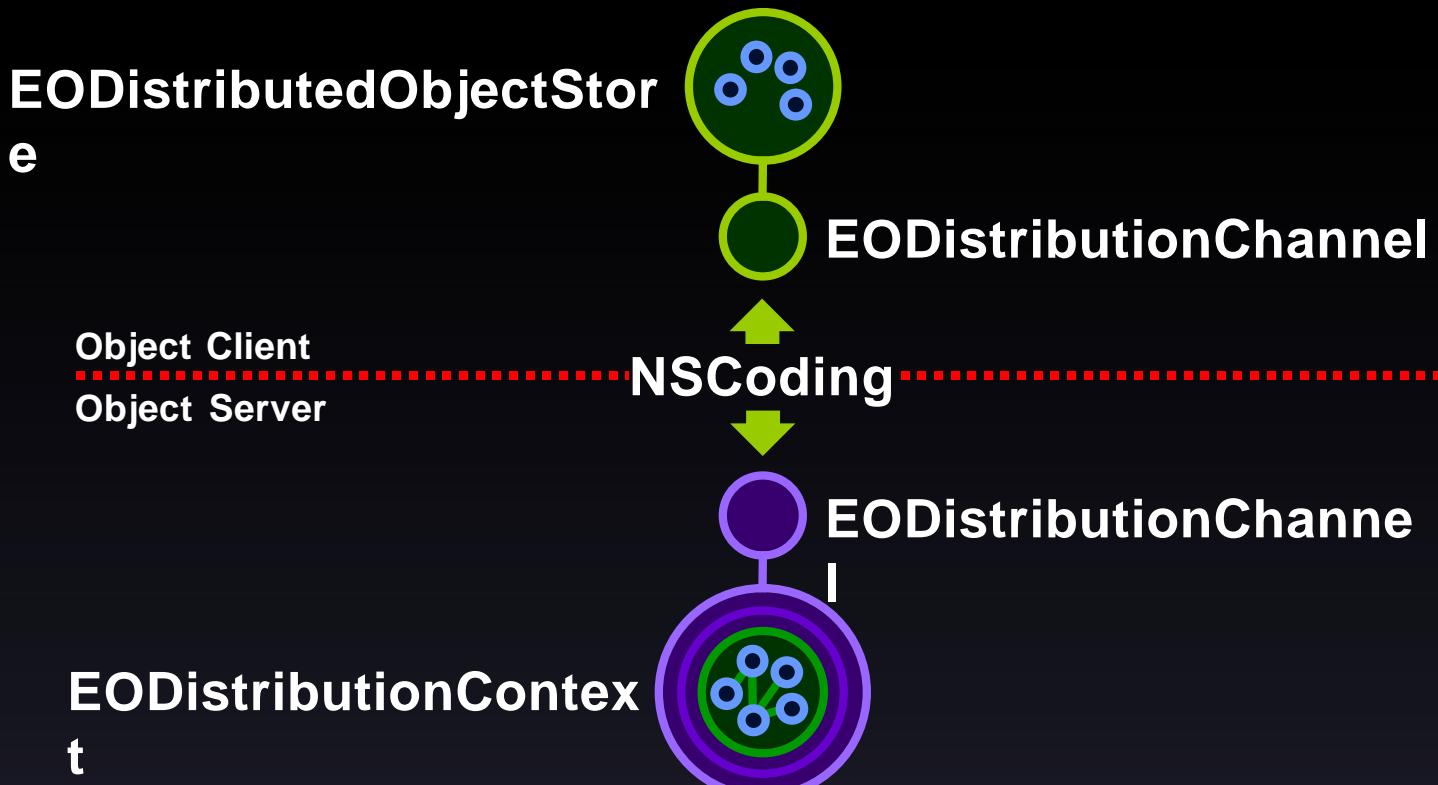
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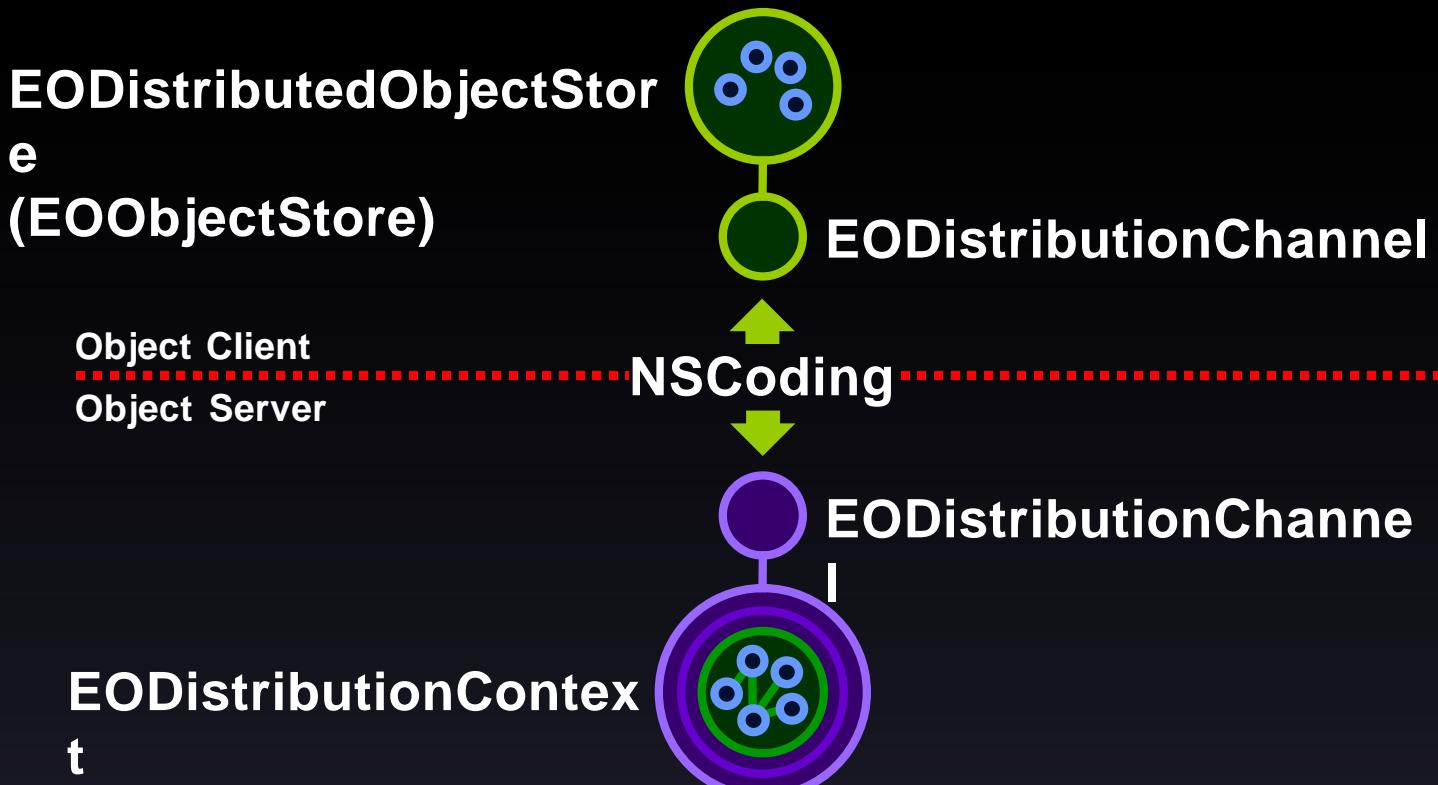
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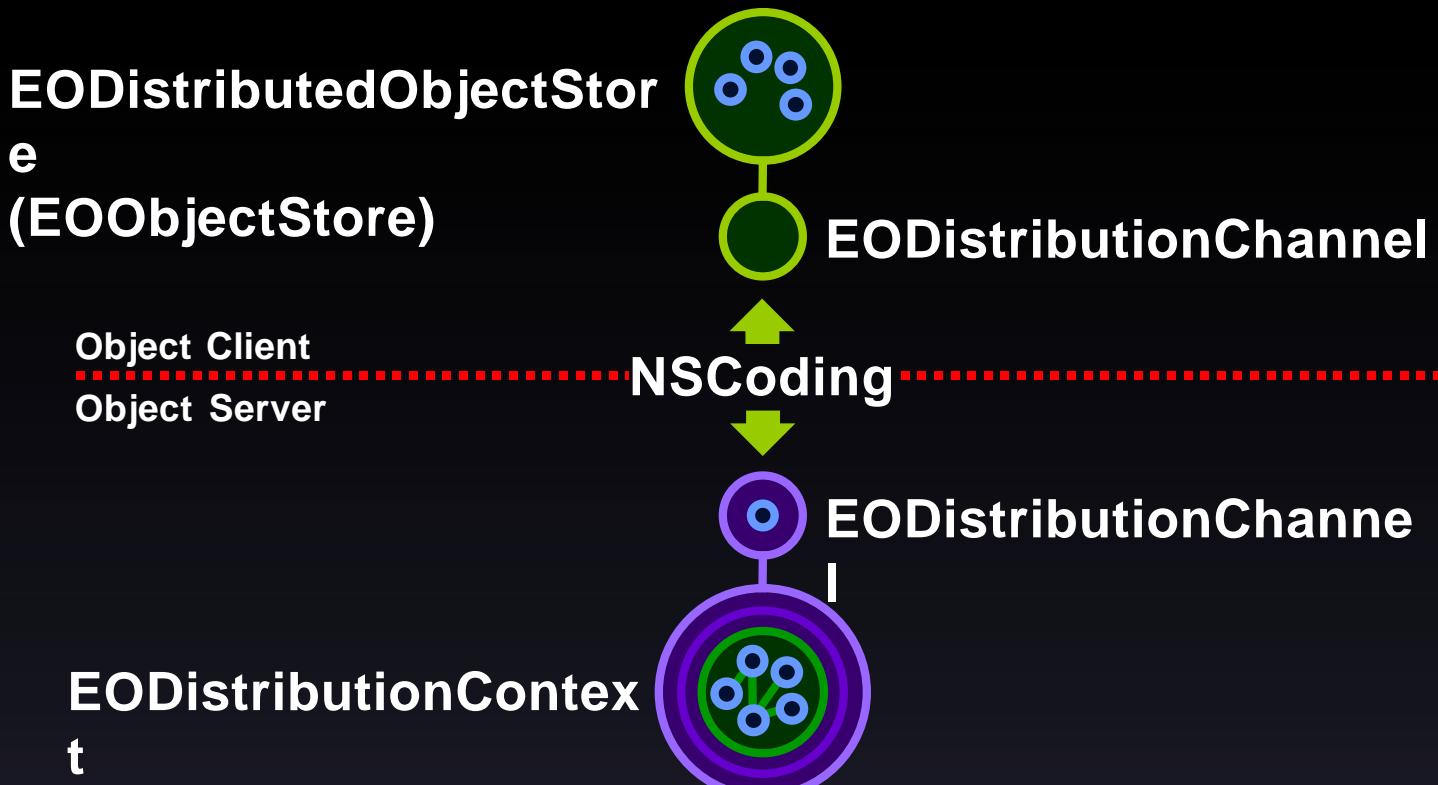
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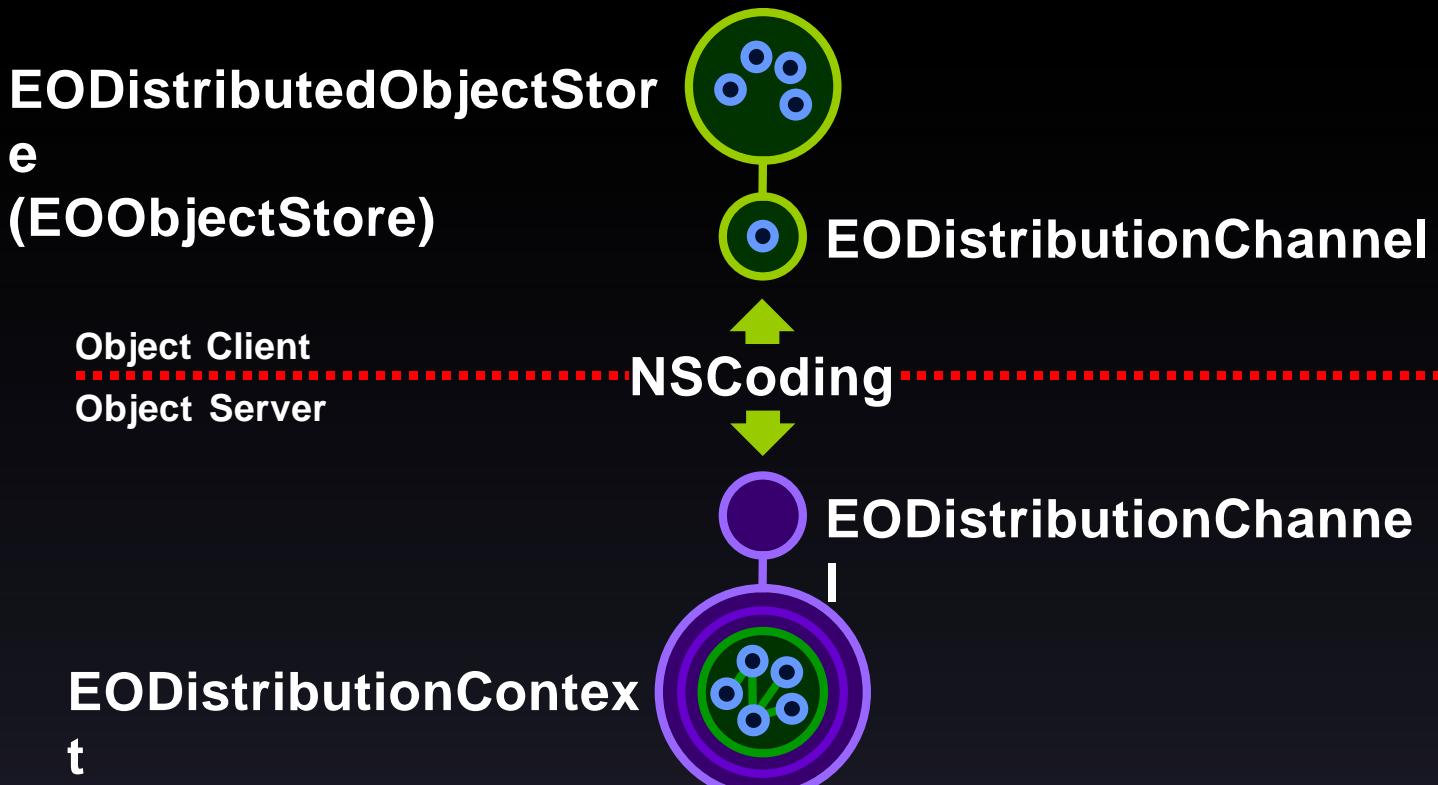
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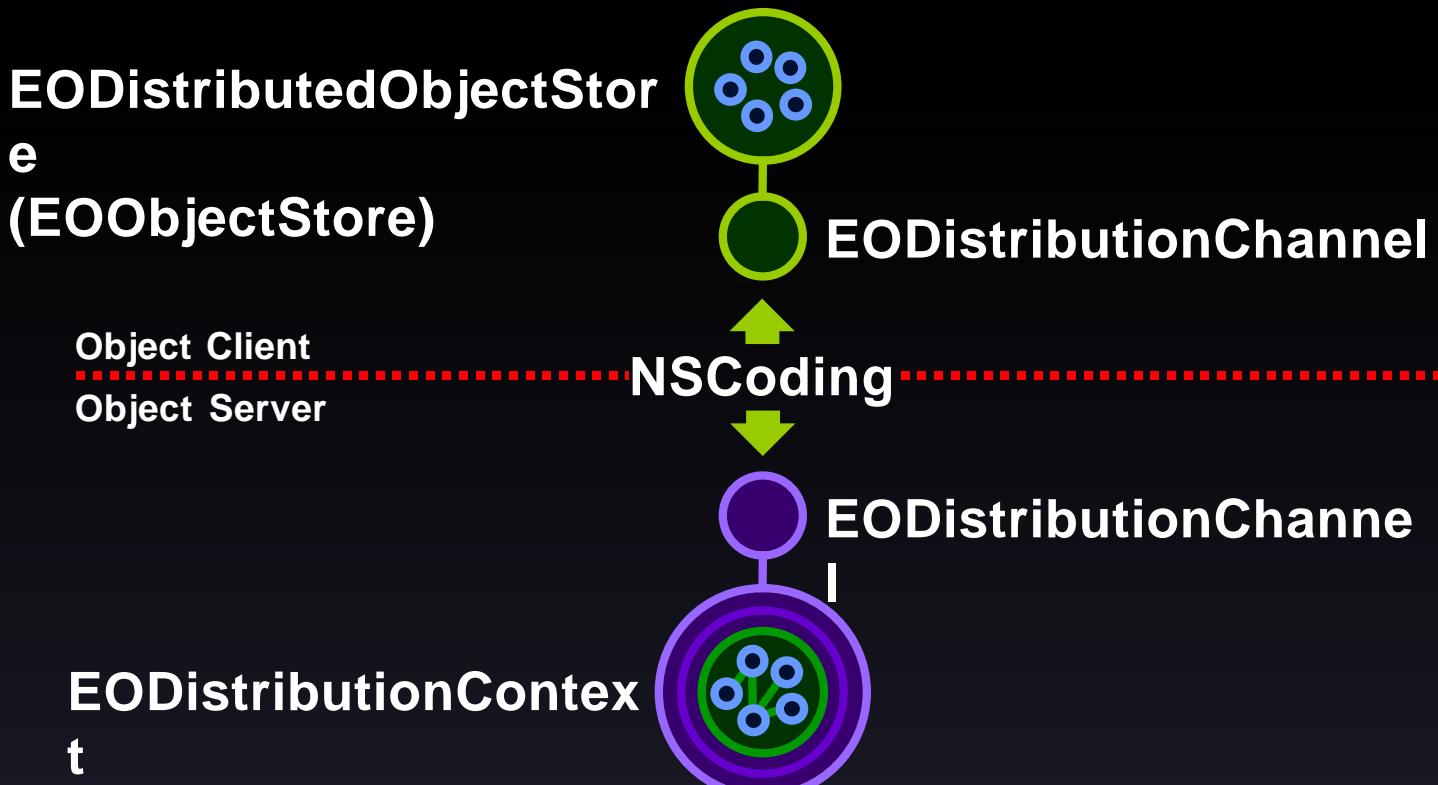
# EODistribution



# EODistribution



# EODistribution



# Tiers

1



Browser

HTML  
Client Server



WebObjects

1



Database  
Client Server



Database

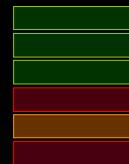
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# Tiers

2

Object Client  
Object Server



Java Client

NSCoding



WebObjects

1

Database  
Client  
Database Server

SQL



Database

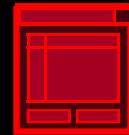
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# Tiers

2

Object Client  
Object Server



Java Client



NSCoding



WebObjects



SQL



Database

1

Database  
Client  
Database Server

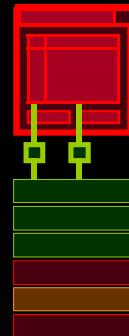
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# Tiers

2

Object Client  
Object Server



Java Client

NSCoding

1



WebObjects

SQL

Database Client  
Database Server



Database

0



# Strengths

- Pure Java
- JFC
- Tight Integration with Existing Tools
- Dial-in Distribution
- Mature Design



# Weaknesses

- Pure Java
- JFC
- Startup Bandwidth
- Memory Footprint
- Version 1.0





# Demo



rory@apple.com



# Questions and Answers

# WebObjects Sessions

---

**Learning EOModeler**

Hall B  
Wed., 9:00am

---

**Deploying  
WebObjects**

Hall B  
Wed., 10:15am

---

**Generating Reports in  
WebObjects Apps**

Hall B  
Wed., 1:00pm

---



# WebObjects Sessions

---

**Debugging Techniques  
in WebObjects**

Hall B  
**Wed., 2:30pm**

---

**Fine-Tuning the  
Performance of  
WebObjects**

---

Hall B  
**Wed., 4:00pm**



# WebObjects Sessions

---

**Complex WebObjects  
Application Design**

---

Hall B  
Thur., 9:00am

**WebObjects:  
Tips from the Experts**

---

Hall B  
Thur., 10:15am

**Advanced HTML/DHTML/  
JavaScript Tips and Tricks**

---

Hall B  
Thur., 4:00pm





Think different.<sup>TM</sup>



Welcome

To Advance through Presentation  
Use Page Up and Page Down Keys

