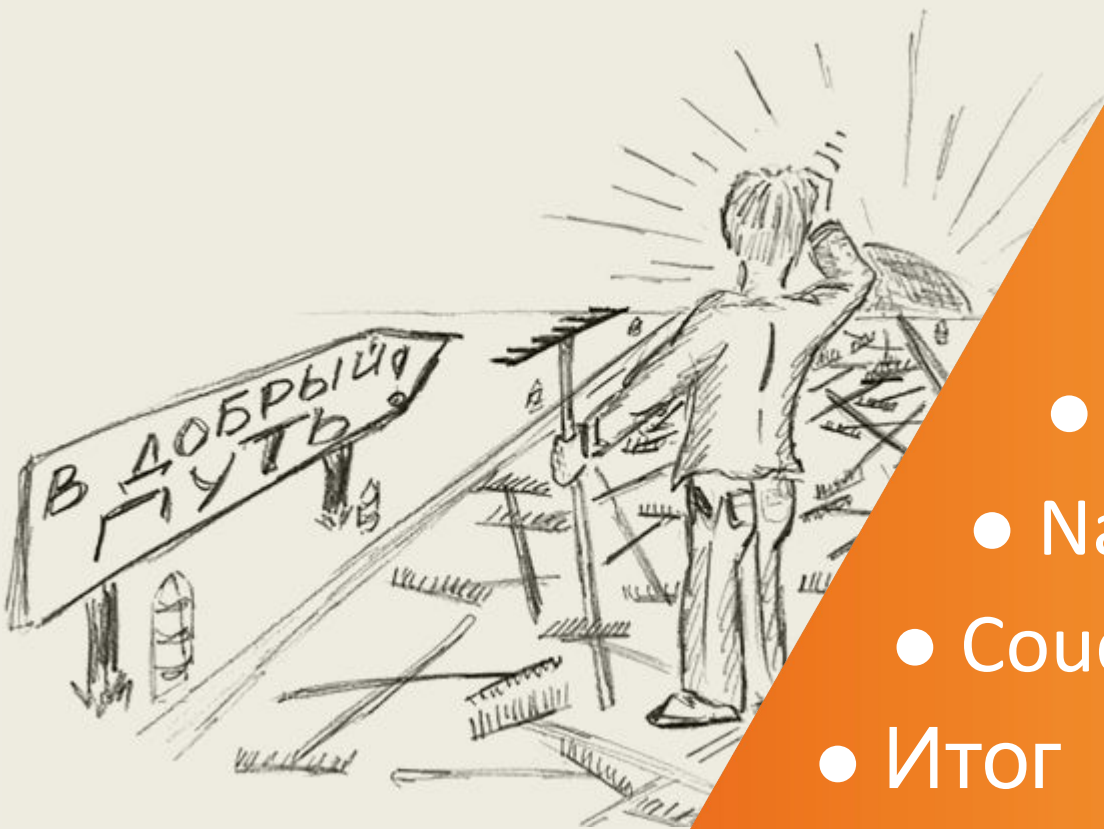




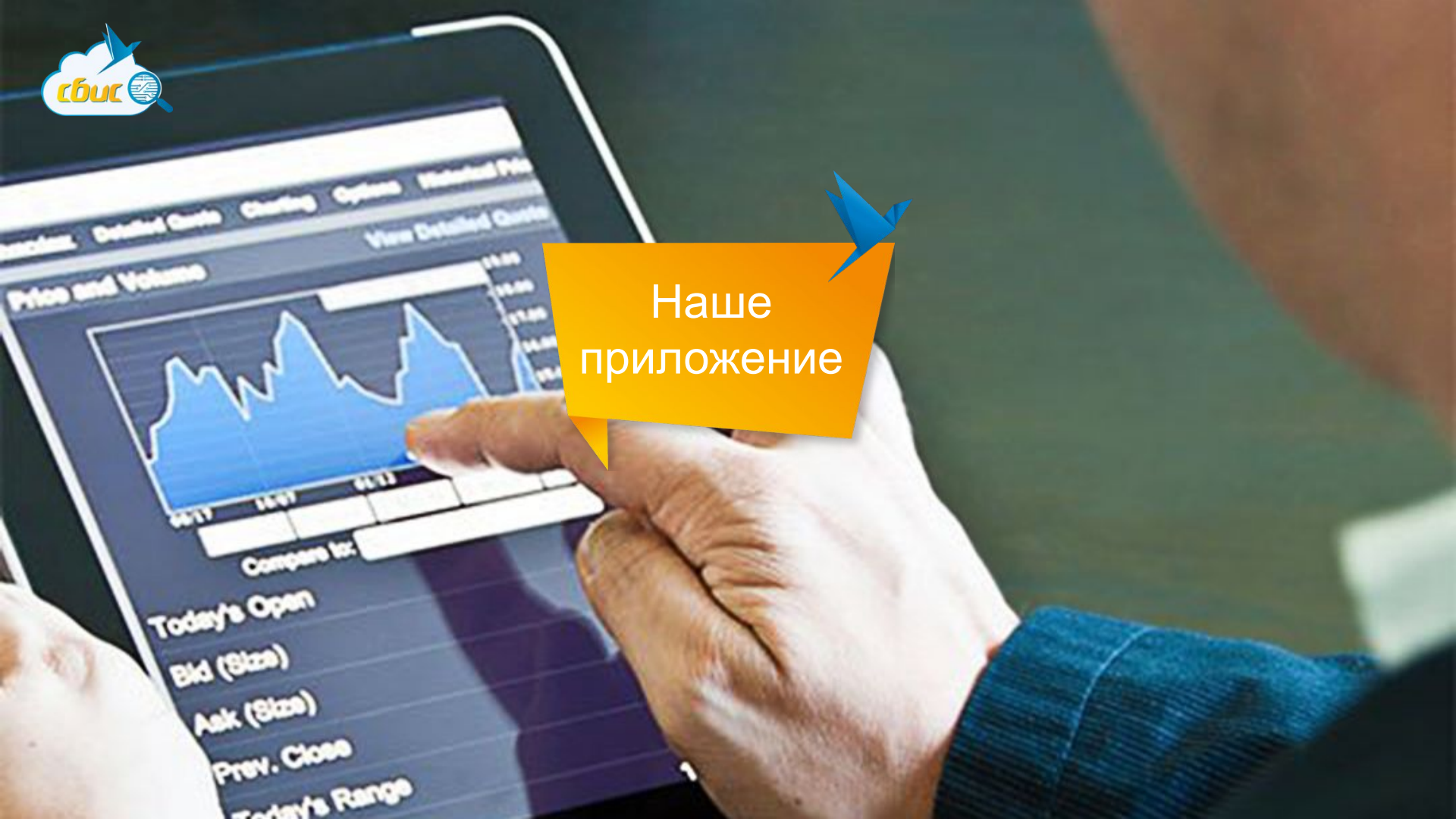
Один код, две платформы: Миф или реальность?

*Потяков Виталий / Руководитель мобильной
разработки*
Излев Александр / Ведущий программист

Разработка мобильного СБИС, 2017



- Введение
- Фреймворки
- Web-приложения
- Native UI, C++ Back
- CouchBase
- Итог



Наше
приложение

ХОТИМ



Before I die.

Before I die I want to

Ride the Gendelin Yeneroğlu

Before I die I want to

Be a teacher

Before I die I want to

LIVE

Before I die I want to

be blissfully in love

Before I die I want to

read a book

Before I die I want to

Нативный интерфейс

Before I die I want to

visit the Amazon rainforest

Before I die I want to

visit the Amazon rainforest

Before I die I want to

Offline режим

Before I die I want to

visit the Amazon rainforest

Before I die I want to

visit the Amazon rainforest

Before I die I want to

Удобство разработки

Before I die I want to

visit the Amazon rainforest

Before I die I want to

visit the Amazon rainforest

Before I die I want to

Before I die I want to

visit the Amazon rainforest

Before I die I want to

visit the Amazon rainforest

Before I die I want to

Before I die I want to

visit the Amazon rainforest

Before I die I want to

visit the Amazon rainforest

Before I die I want to

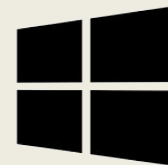
Мобильные платформы



73%



19%



>1%





React Native



APACHE
CORDOVA™



Phone**Gap**

Нативен

С# как язык

Единый код

3 платформы



А что не так?



Кривой интерфейс

Глючная среда


Баги

Где найти специалистов?

Гибриды

- PhoneGap
- Cordova
- Ionic
- Монаса, Тасо... ой



The background of the slide is a detailed illustration of a golden dragon in a dark, cavernous environment. The dragon is standing on its hind legs, with its wings partially spread and its mouth open as if roaring. In the foreground, two large, grey, scaly dragon heads are visible, one on the left and one on the right, both looking towards the center. The cave walls are dark and jagged, with some light filtering in from the right side.

Нативная
разработка

Swift / Obj-C

Kotlin / Java


C++ / C

djinni

Xcode / AppCode

Android Studio

VS / CLion / Console

A detailed illustration of a large, golden-brown dragon with purple wings, breathing fire. In the foreground, a treasure chest is open, spilling gold coins and gems. A blue arrow points from the text box towards the dragon's head.

А оно того
стоит?

Что хорошо?

- Единая Бизнес Логика
- Классные специалисты
- Идеальный интерфейс
- Параллельная разработка



А что плохо?

- Дорогая разработка
- Коммуникация команд
- Дублирование интерфейса
- Мосты между языками

Jinni для Java

C для Obj-c/Swift

djinni

Мост из ObjC в C++



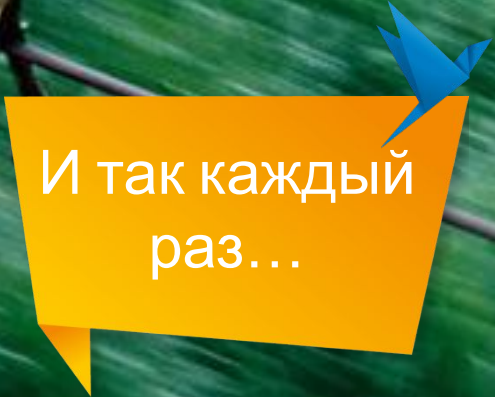
```
@interface Test : NSObject
+ (int32_t)func(NSString*)s;
@end

@implementation Test
+ (int32_t)func:(NSString*)s {
    return SomeCppClass::Func(std::string([s UTF8String],
        [s lengthOfBytesUsingEncoding:NSUTF8StringEncoding]));
}
@end
```

Мост из Java в C++



```
jint JNICALL Java_Test_func(JNIEnv* jniEnv, jobject, jstring js) {  
    const jsize len = env->GetStringLength(js);  
    const jchar* c = env->GetStringChars(js, nullptr);  
    std::string s = Utf16ToUtf8(std::string(c, len));  
    env->ReleaseStringChars(js, c);  
    return SomeCppClass::Func( s );  
}
```

A yellow speech bubble with a blue paper airplane icon pointing towards it from the top right. The bubble contains the text 'И так каждый раз...'.

И так каждый
раз...

```
user record
```

```
name string
```

```
birthday date
```

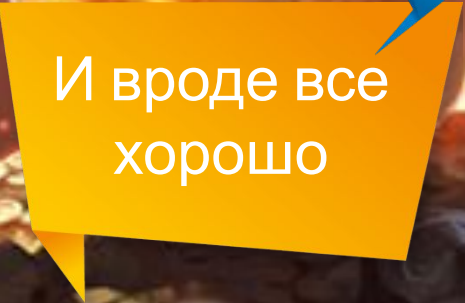
```
|
```

```
users_storage interface
```


```
static instance users_storage
```

```
find_user id optional
```

```
|
```



И вроде все
хорошо

The background of the slide is a photograph of an iceberg in the ocean. The top part of the iceberg is visible above the water surface, while the much larger, submerged part is visible below. The water is a deep blue, and the sky is light blue with some white clouds. The iceberg has a rough, jagged texture.

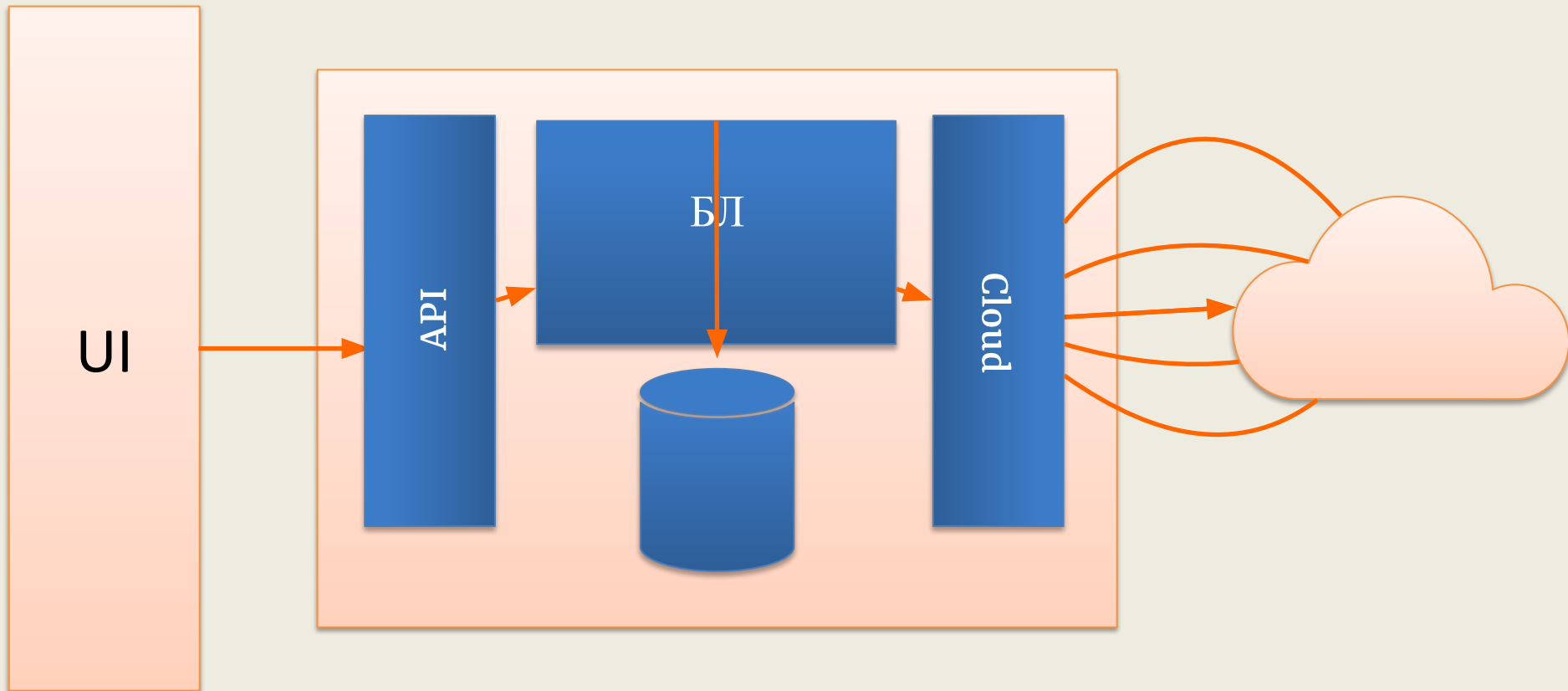
Что делает
backend?

Взаимодействие с API

Кэширование

Актуализация кэша

Типичный модуль



Идея!



На сервер реплику БД

Не взаимодействуем с API

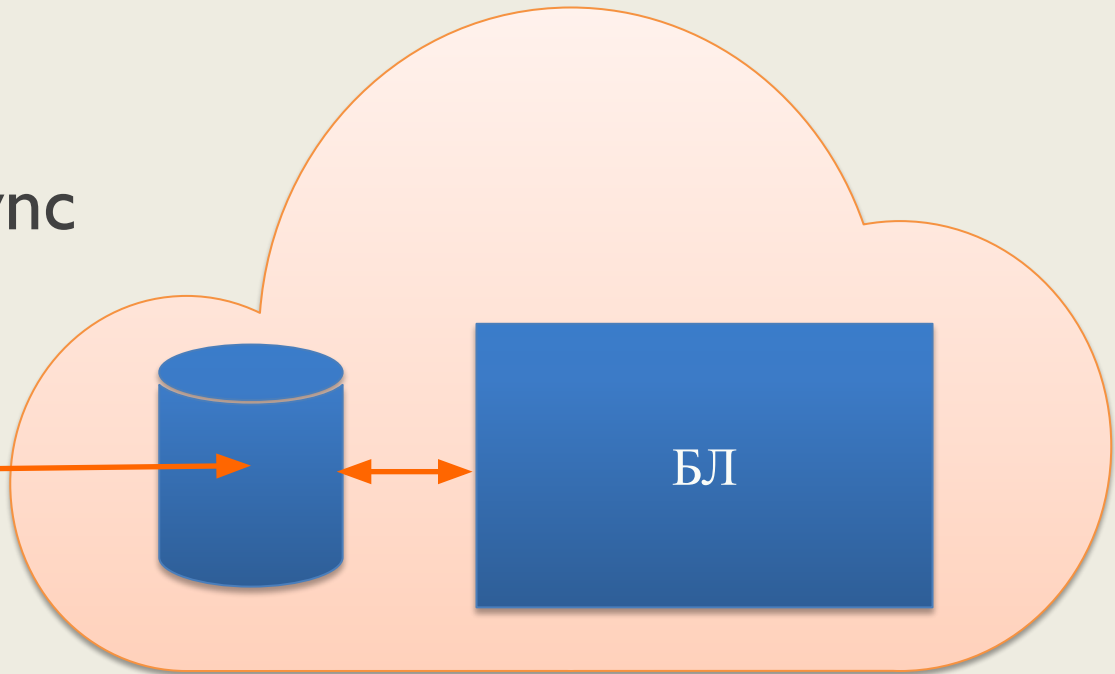
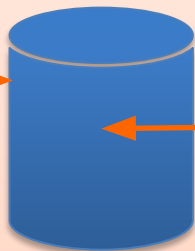
Наполняем всегда реплику

Реплика на сервере



Sync

API + БЛ



БЛ

Есть решения

A male scientist with a beard and safety glasses is smiling broadly while holding a round-bottom flask containing a vibrant green liquid. He is wearing a white lab coat over a blue shirt. In the background, several test tubes in a rack are visible, some containing colored liquids.

Realm

Firestore

Couchbase

Couchbase
Lite



Sync
Gateway



Couchbase
Server

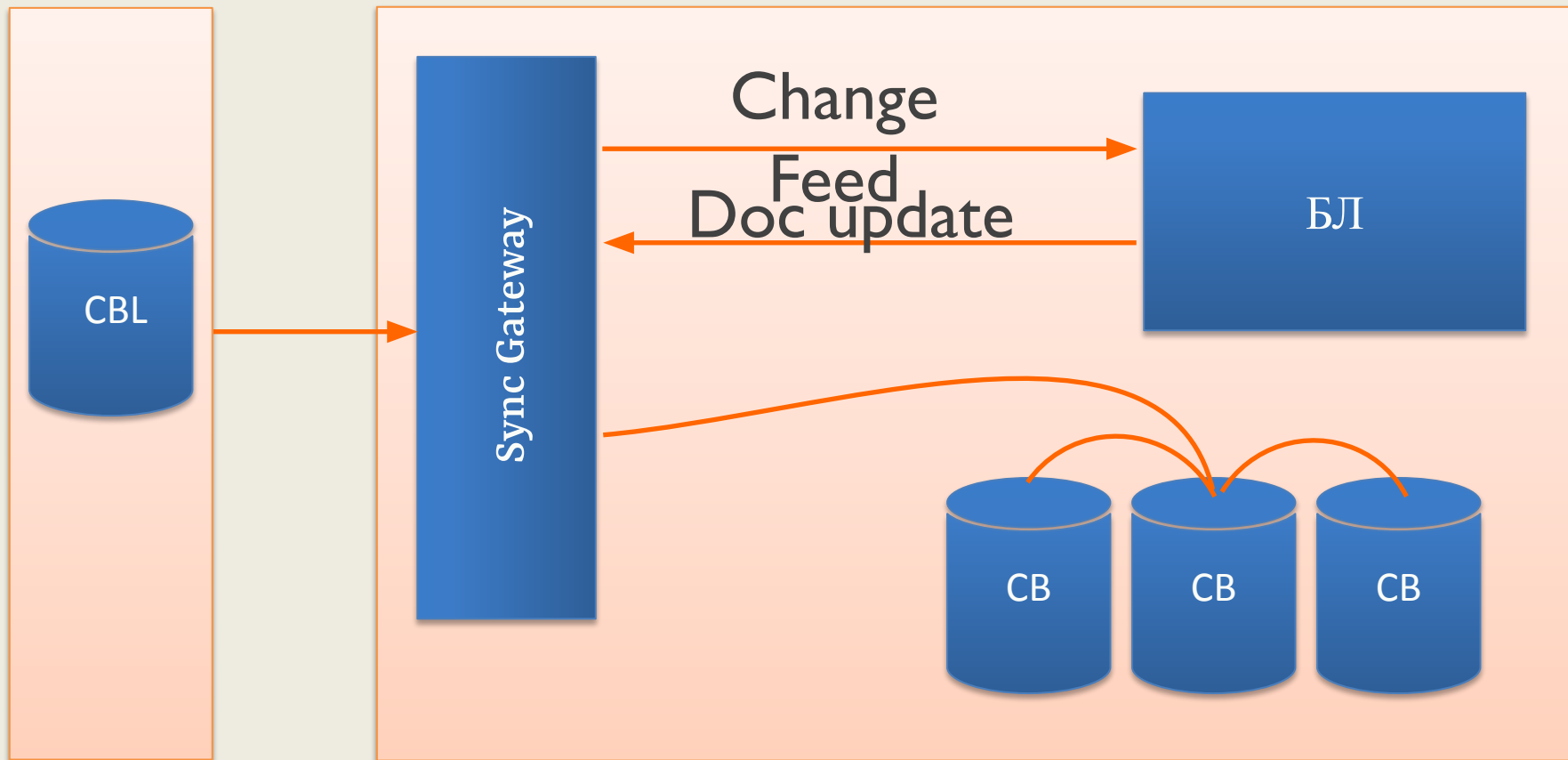




CouchBase

- NO SQL
- View (Indexes)
- Live Query
- Репликация

Sync Gateway

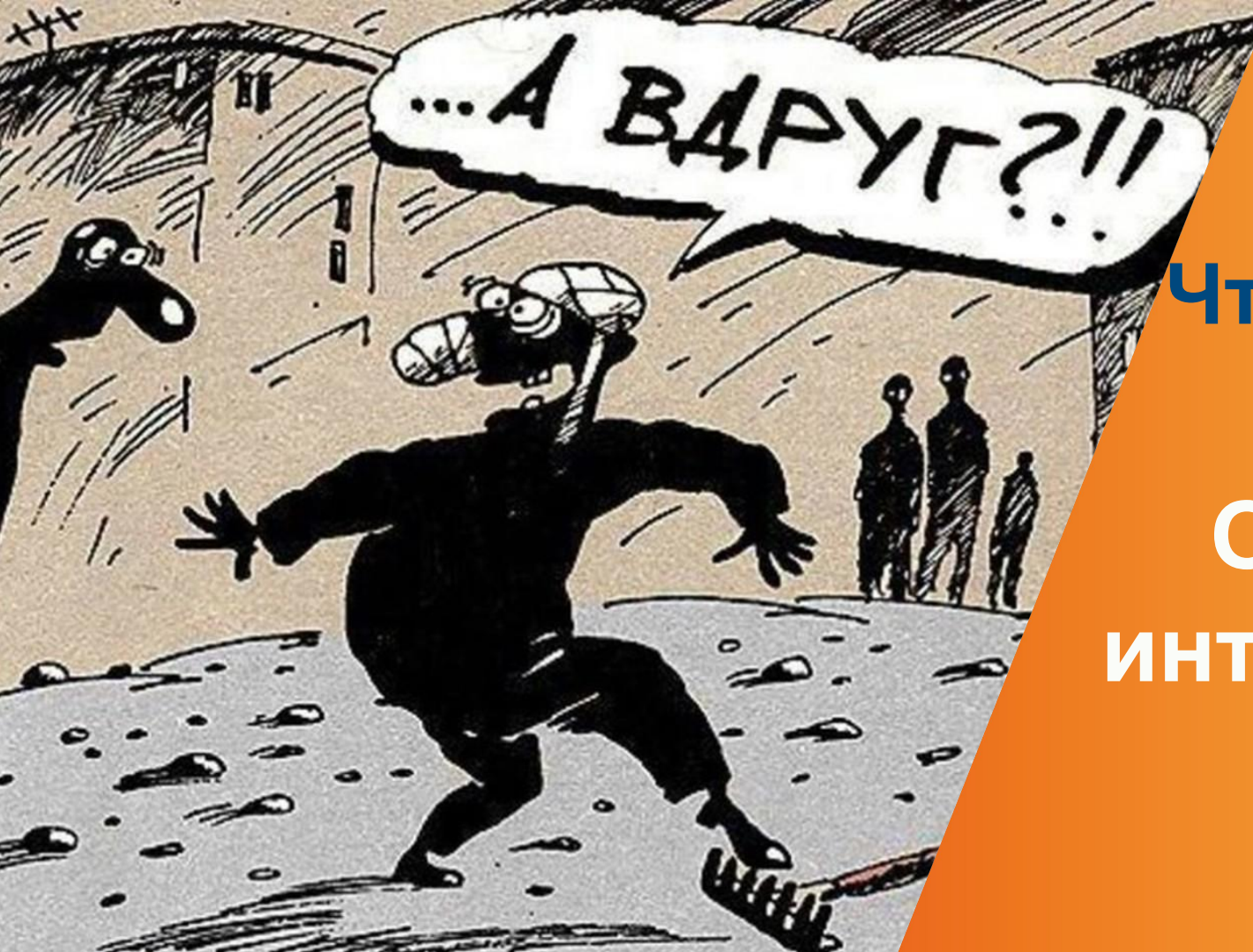




Couchbase Server

Хранит реплики

Не используем на прямую

A black and white cartoon illustration. A man in a dark suit is running towards the viewer with a look of panic. He has a speech bubble above him that says "...А ВДРУГ?!!". In the background, there are other figures, some appearing to be running away, and a building with a window. The scene is filled with motion lines, suggesting a chaotic or emergency situation.

...А ВДРУГ?!!

Что дальше?

Общий
интерфейс!



AD Manager

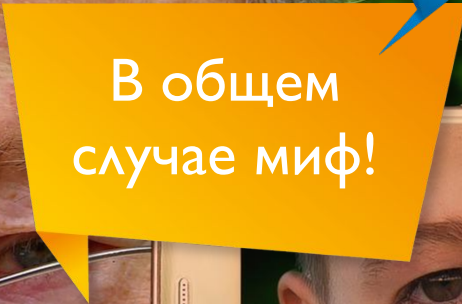
80-85% общего кода

9 месяцев iOS

5 месяцев Android

Так вот оно!



A yellow speech bubble with a blue paper airplane icon at its top right corner. The text inside the bubble is white and reads 'В общем случае миф!'.

В общем
случае миф!



C++


C++

- Сложная БЛ
- Мосты
- Есть программисты
- Дублирование интерфейсов



CouchBase

- Большие проекты
- Сложность вхождения
- Серверная инфраструктура



Ищите свой
путь!





Вопросы?



EXIT