

Macoun

IOSurfaces mit Syphon

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Ablauf

- IOSurface? Syphon?
- Code
- Demo

Motivation

- QTKitServer / VTDecoderXPService
- Datenaustausch
- Schnittstelle zu Fremdsoftware

Syphon

- Bild-Datenaustausch
- keine Prozessgrenze
- Server
- Client

Einsatzbereiche

- VJs
- Projection Mapping
- Pipeline zur Videobearbeitung

Demo

Selber machen!

- Discovery

- Client

- Server

SyphonServerDirectory

```
@interface SyphonServerDirectory : NSObject  
  
+ (SyphonServerDirectory *)sharedDirectory;  
  
@property (readonly) NSArray *servers;  
  
- (NSArray *)serversMatchingName:(NSString *) name  
                             appName:(NSString *) appname;  
  
@end
```

SyphonClient

```
@interface SyphonClient : NSObject
- (id)initWithServerDescription:(NSDictionary *)description
    options:(NSDictionary *)options
    newFrameHandler:(void (^)(SyphonClient *client))handler;

@property (readonly) BOOL isValid
@property (readonly) NSDictionary *serverDescription;
@property (readonly) BOOL hasNewFrame;

- (SyphonImage *)newFrameImageForContext:(CGLContextObj)cgl_ctx;
- (void)stop;

@end
```

SyphonImage

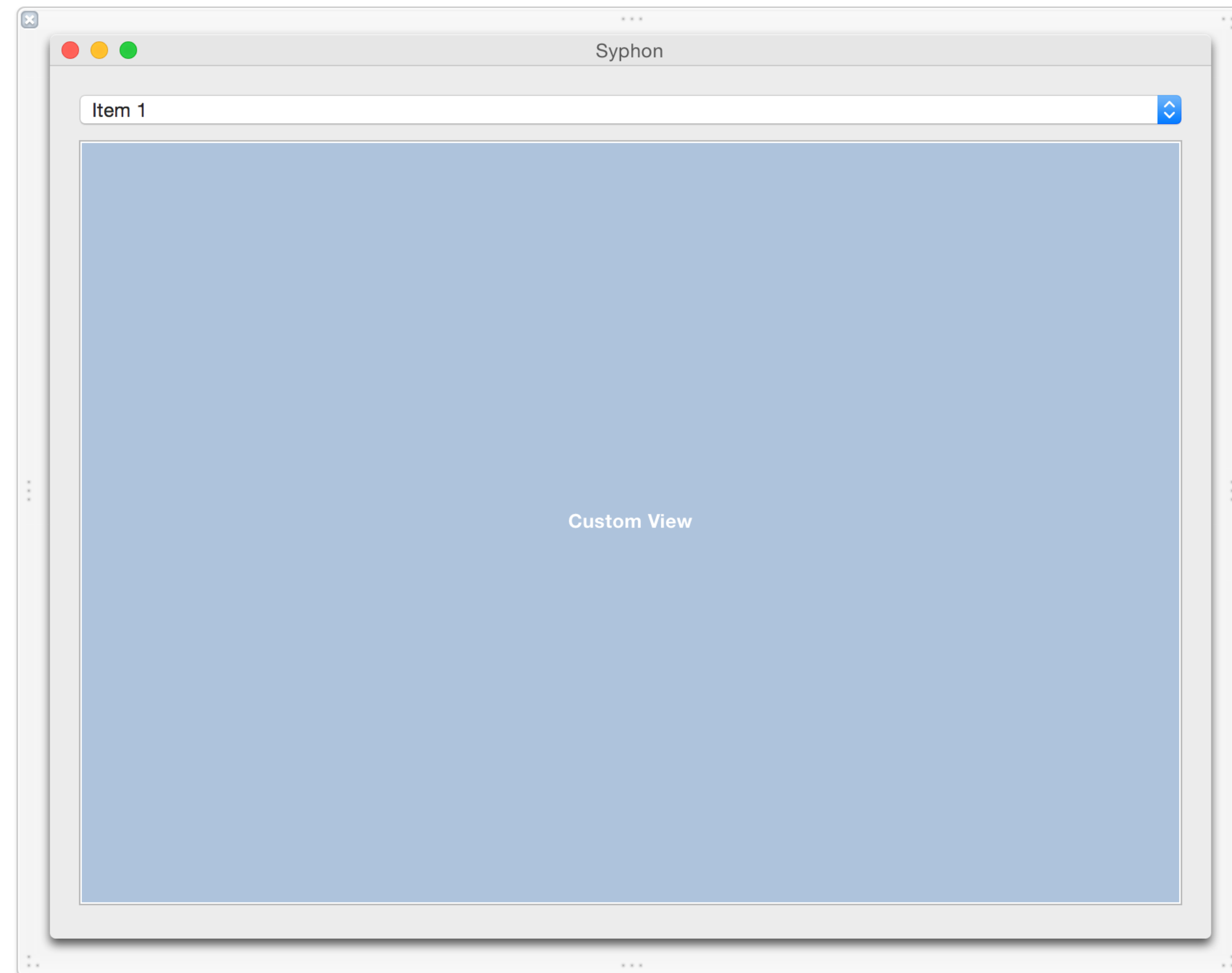
```
@interface SyphonImage : NSObject

@property (readonly) GLuint textureName;

@property (readonly) NSSize textureSize;

@end
```

Client



Demo

SyphonServer

```
@interface SyphonServer : NSObject

- (id)initWithName:(NSString*)serverName
               context:(CGLContextObj)context
               options:(NSDictionary *)options;

@property (readonly) BOOL hasClients;

- (BOOL)bindToDrawFrameOfSize:(NSSize)size;
- (void)unbindAndPublish;
- (SyphonImage *)newFrameImage;

@end
```

CARenderer

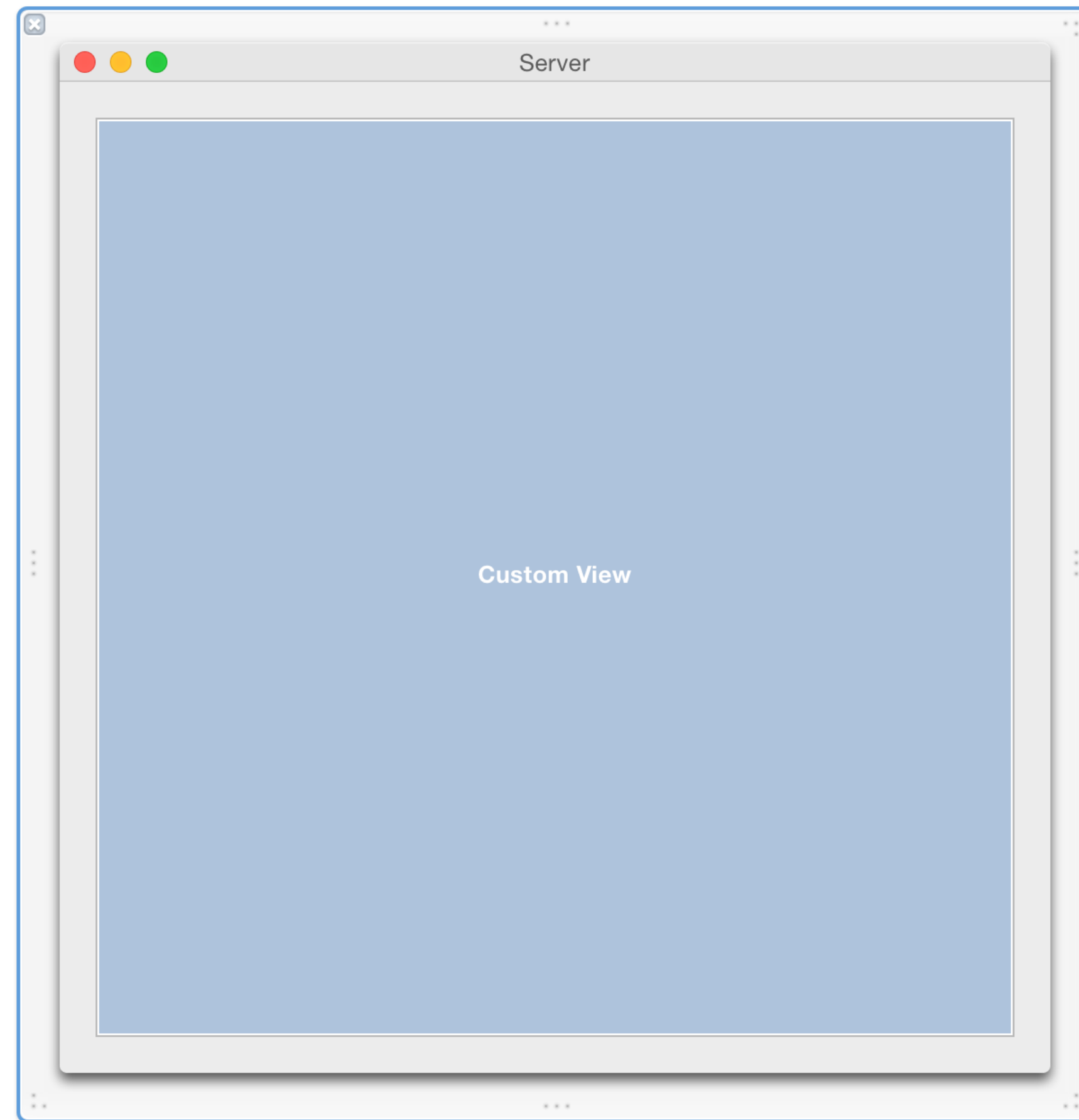
```
@interface CARenderer : NSObject
+ (CARenderer *)rendererWithCGLContext:(void *)ctx
                                options:(NSDictionary *)dict;

@property(strong) CALayer *layer;
@property CGRect bounds;

- (void)beginFrameAtTime:(CFTimeInterval)t timeStamp:(CVTimeStamp *)ts;
- (void)addUpdateRect:(CGRect)r;
- (void)render;
- (void)endFrame;

@end
```

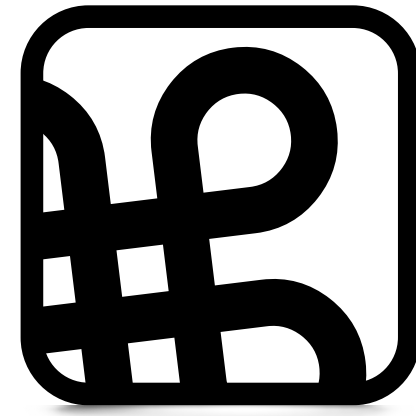

Server



Demo

Fragen?

Vielen Dank



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