



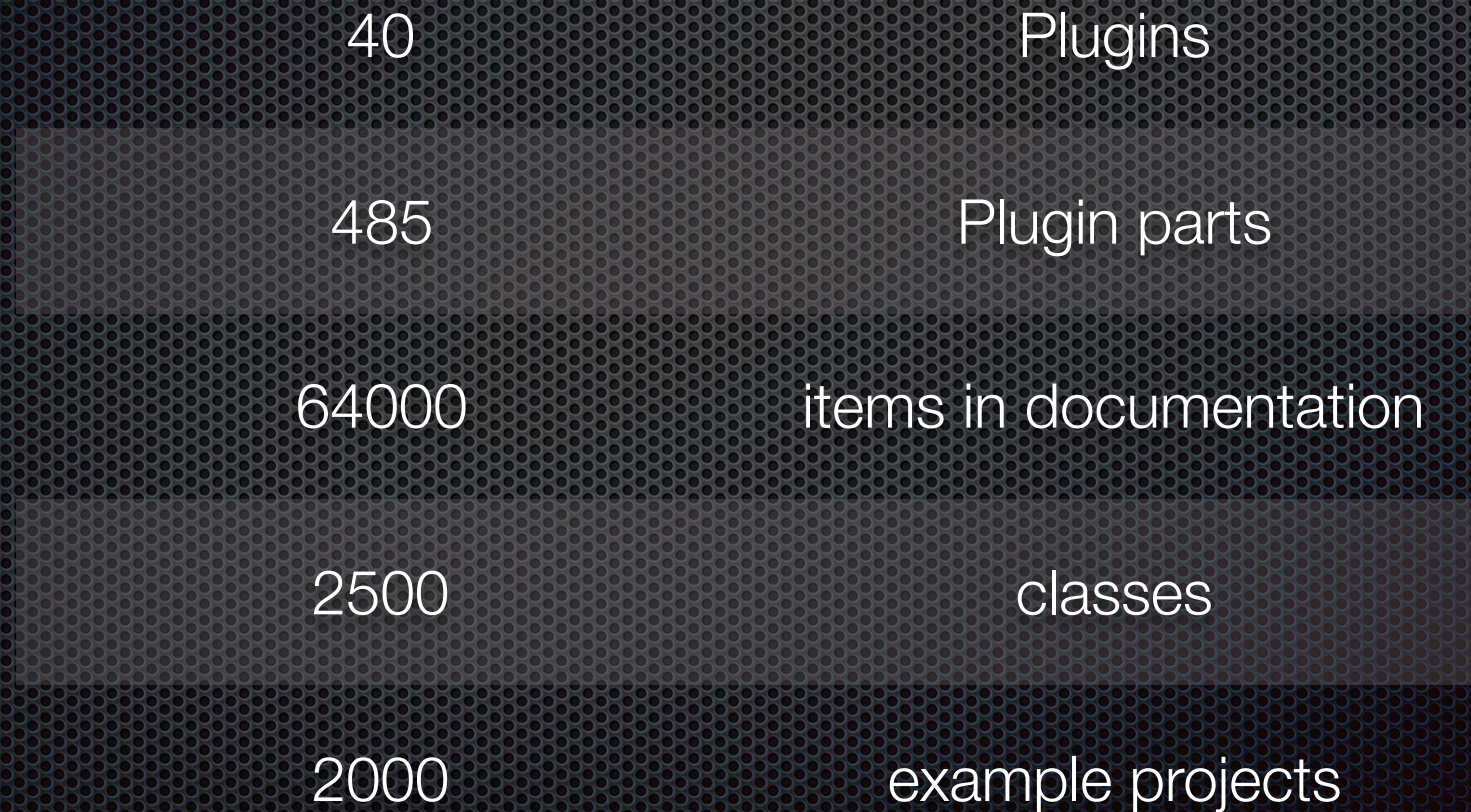
MBS Plugins

Christian Schmitz
CEO
Monkeybread Software

MBS Xojo Plugins

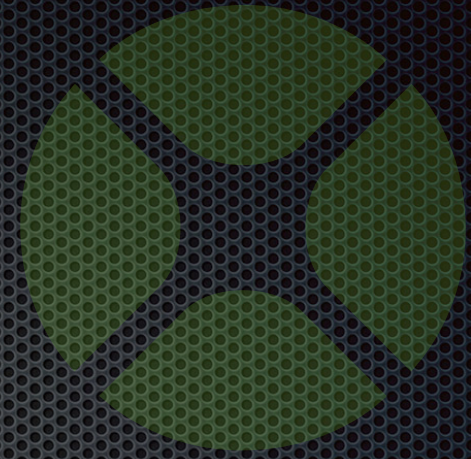


- Since 2001 we got

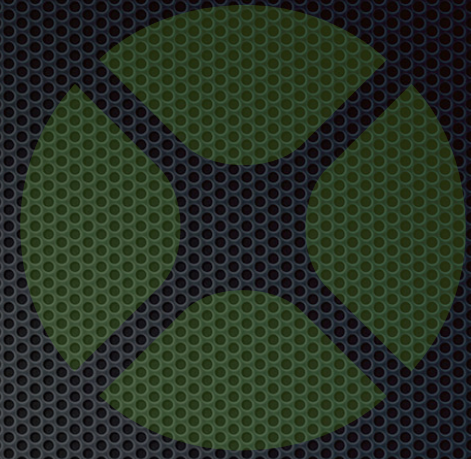


News & Changes

- What's new since last conference?

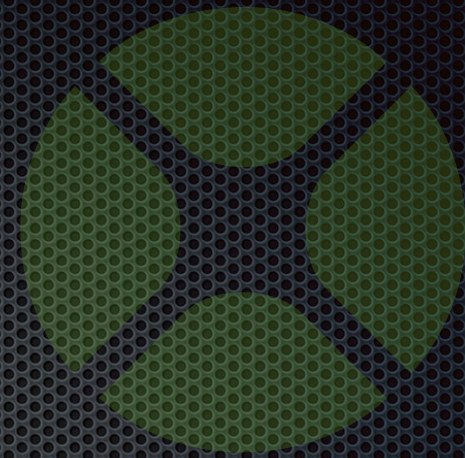


Large Numbers



- LargeNumberMBS class
 - Large integer with up to 4128 bit
 - Prime numbers
 - GCD
- BigNumberMBS class
 - 320 bit floating point

Continuity Camera



- For MacOS Mojave and newer
- For iOS 12 and newer
- Take pictures with iPad or iPhone
- Both devices with same iCloud account



Take a photo with "My iPhone"

Use your iPhone's camera to take a photo.

Cancel

My iPhone

Take Photo

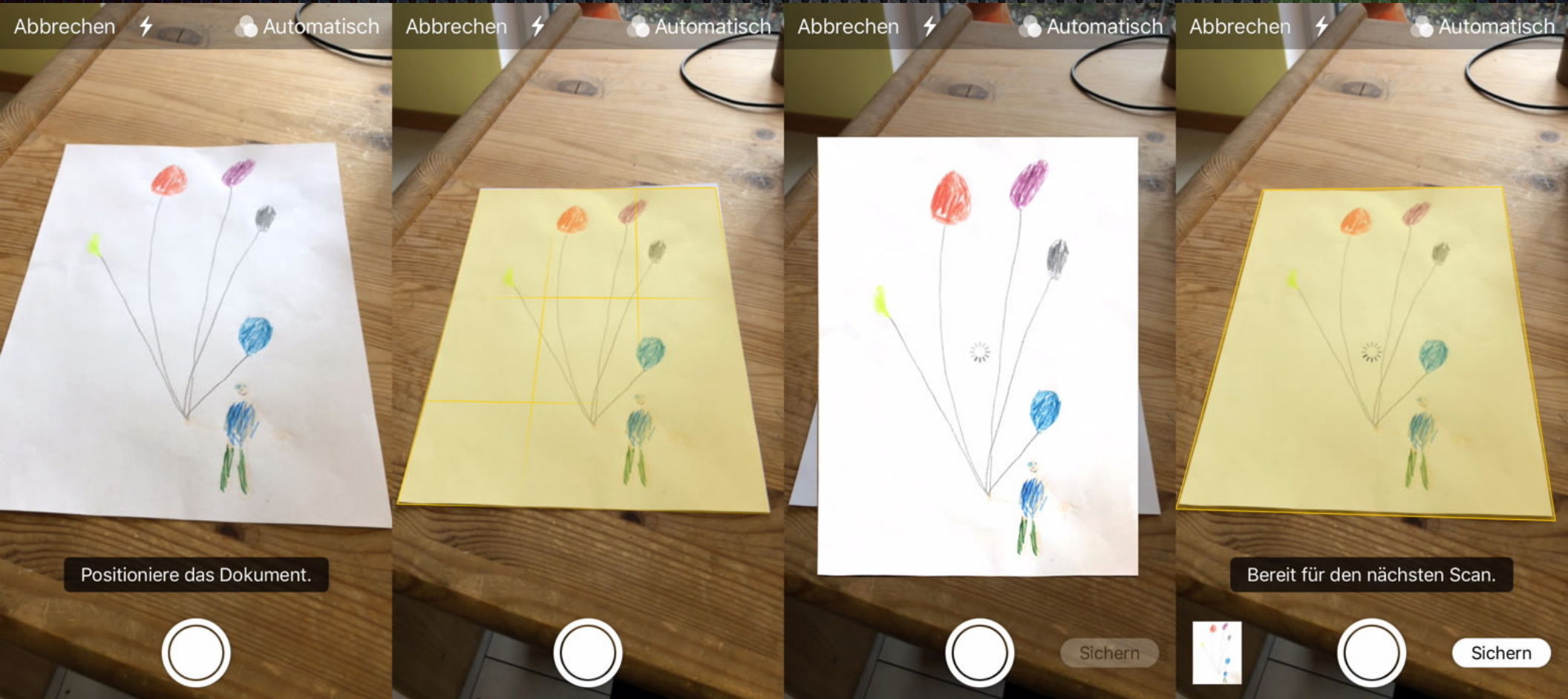
Scan Documents

iPad von Christian Schmitz

Take Photo

Scan Documents

Continuity Camera

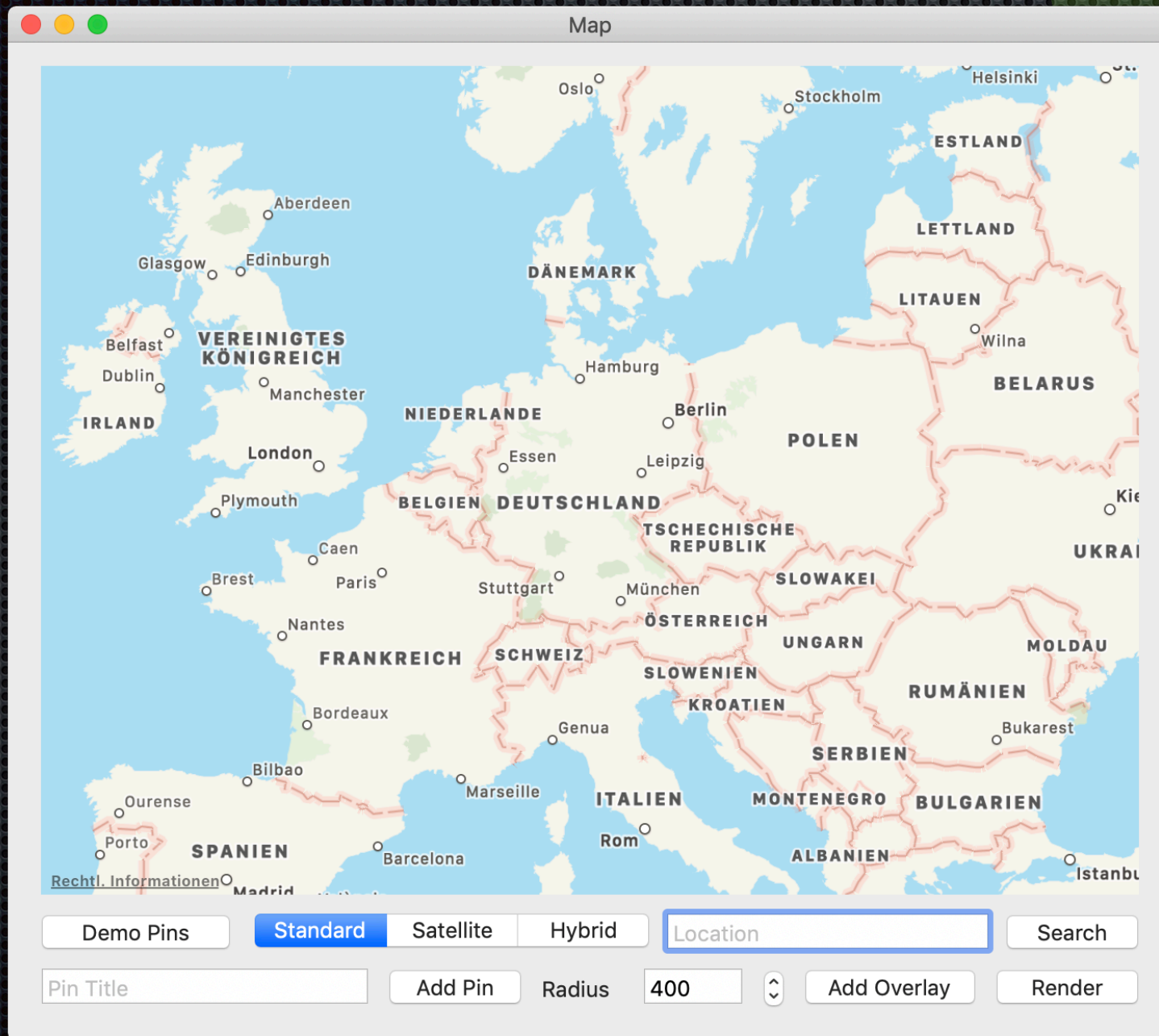


Map Kit

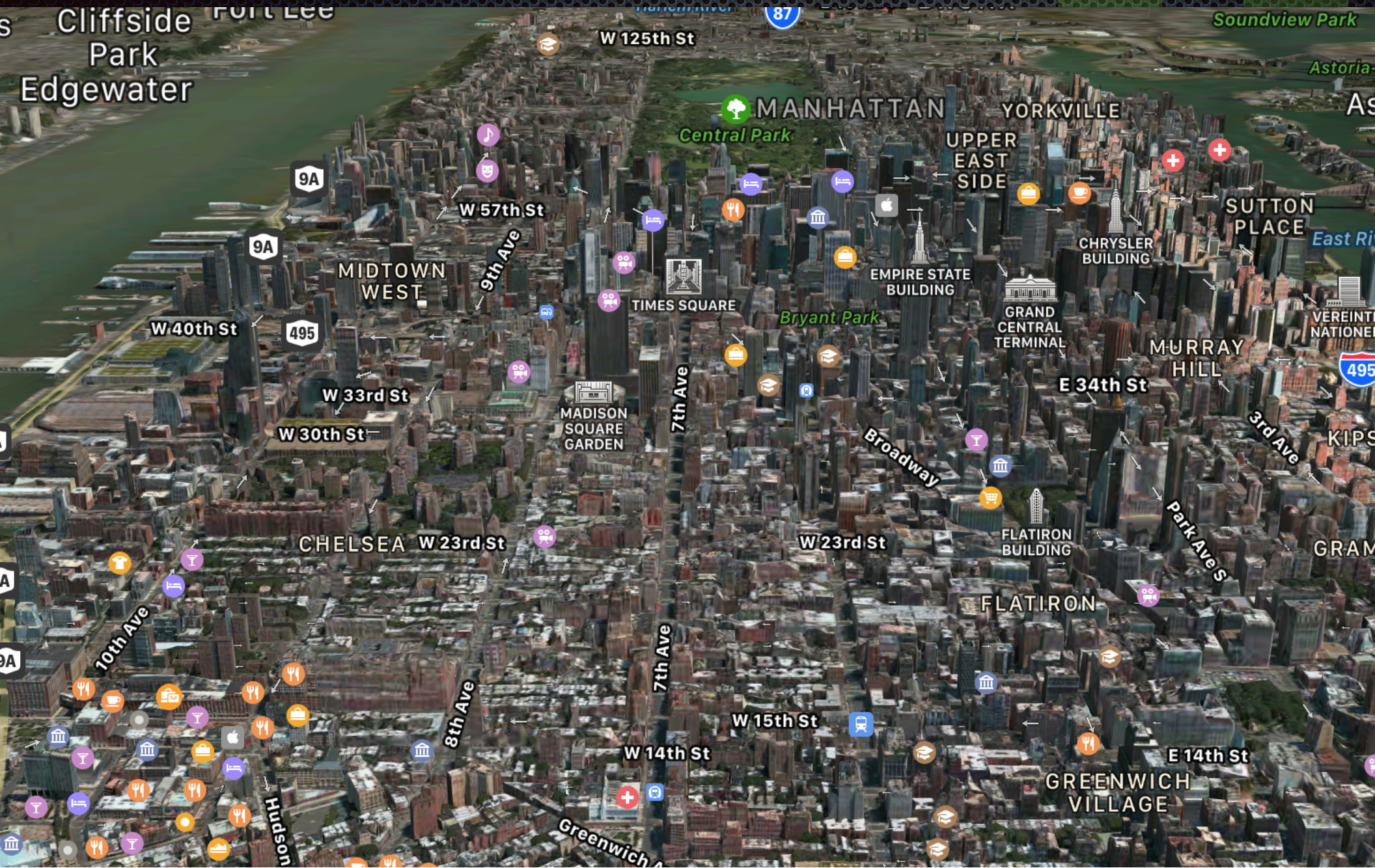


- For MacOS 64-bit
- Apple Maps data
- Show 2D or 3D maps with satellite images
- Render snapshots
- Plan routes and get directions
- Overlays and annotations for maps

Map Kit

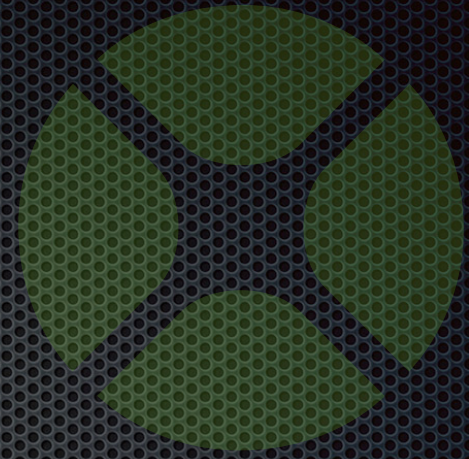


Map Kit

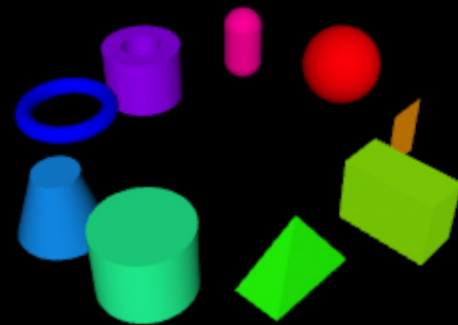
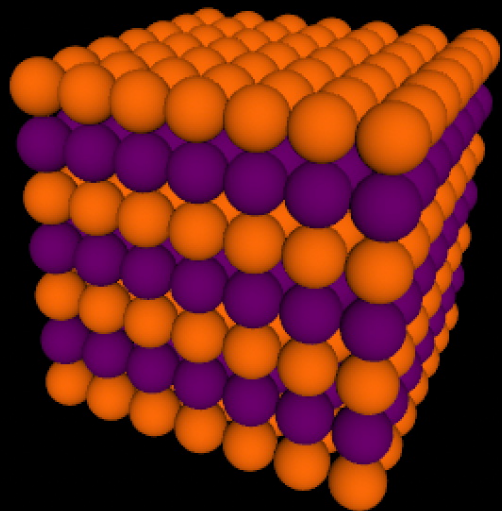
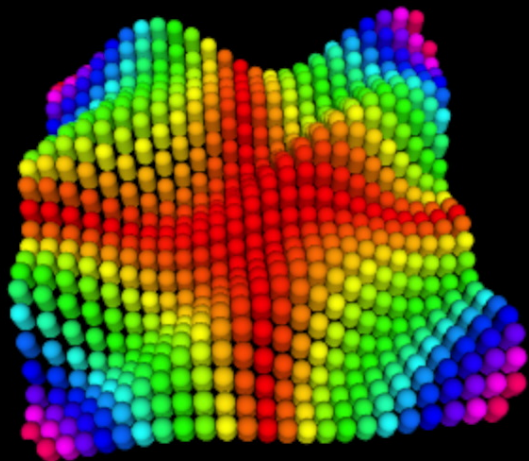
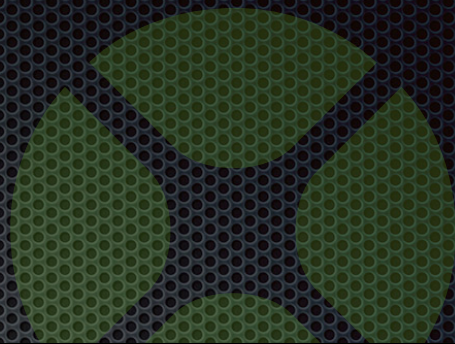


Scene Kit

- For MacOS 64-bit
- 3D graphics in a control
- Using Metal
- Primitive objects created at runtime
- Move camera around
- Render snapshots



Scene Kit





JSON Improvements



- JSON parsing / generating
 - JSONMBS.Convert methods
 - Using Xojo dictionary, array & variant
- Better 64-bit handling
- Equals, FindValueInArray and FindValueInObjectArray
- JSON to HTML

SQL Improvements



- Added CubeSQL client
 - InternalCubeSQLLibraryMBS module
- Better Int64 handling
- Rewrote caching
- Stream BLOB fields from/to folderItem
- InsertRecord and UpdateRecord
- Options dictionaries
- Latest SQLite and SQLAPI libraries

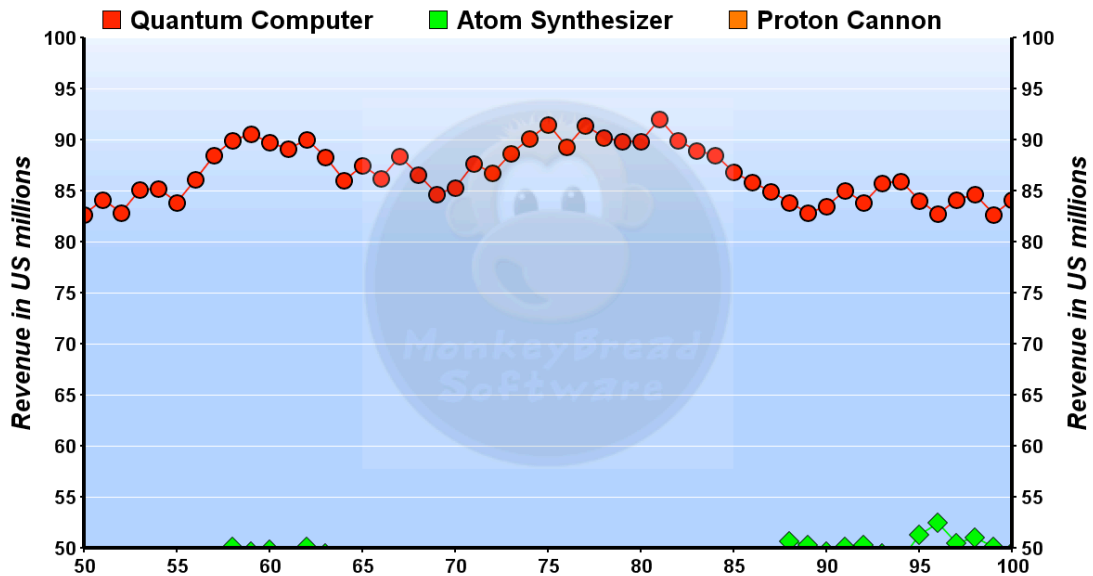
ChartDirector Improvements



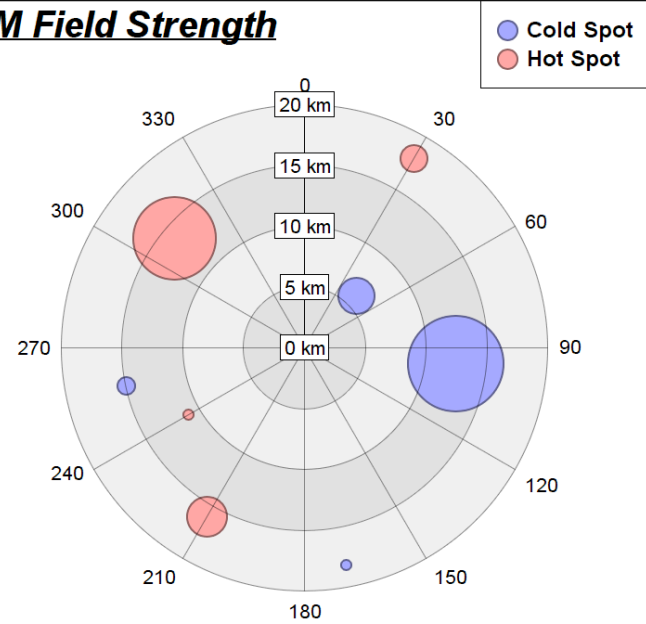
- ChartDirector 6.3
- More examples updated for HiDPI & Xojo
- Return pictures with resolution properties set

Click on values to change symbol color

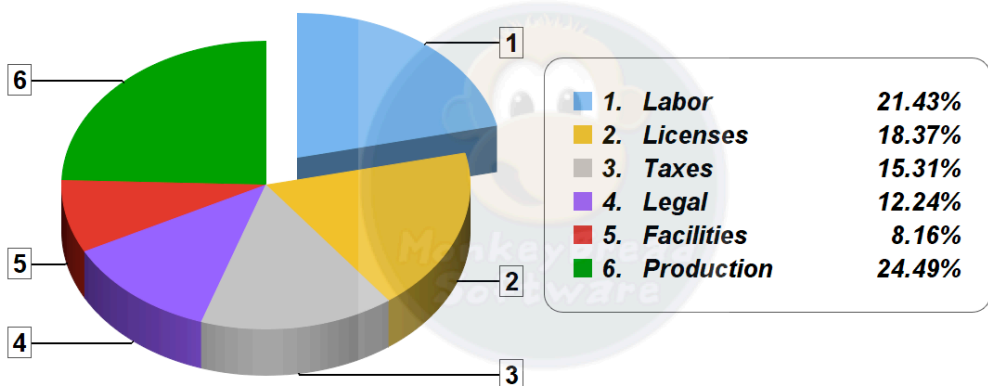
Product Line Global Revenue



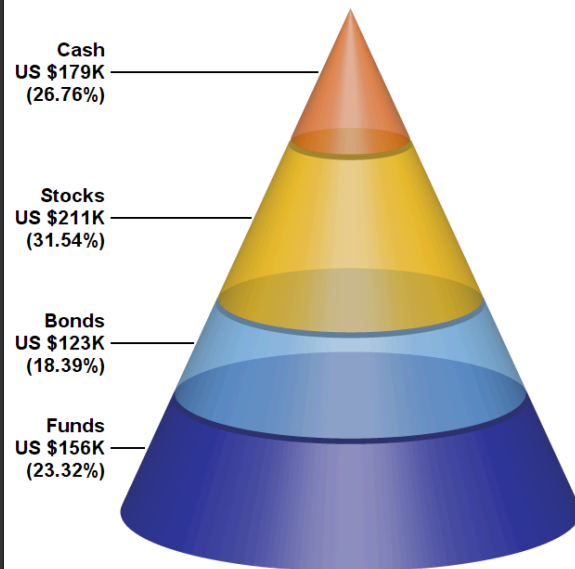
EM Field Strength



Pie Chart With Legend Demonstration



Click on sectors.



Text Conversion

- TextConverterMBS class
- One shot or continued stream
- 100+ encodings
 - UTF-7

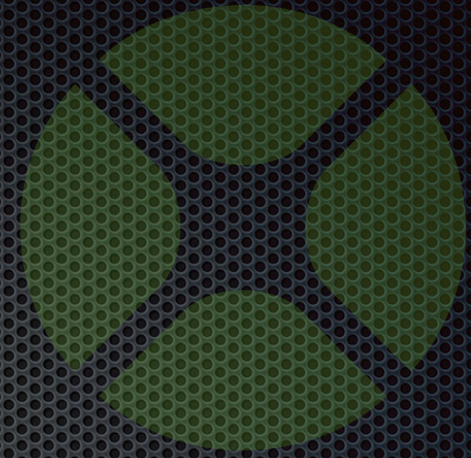


Lib USB



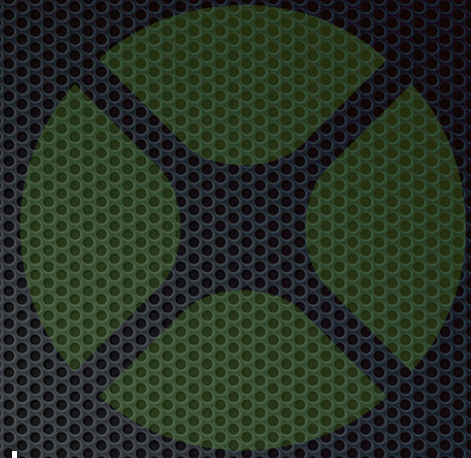
- Cross platform access to USB devices
- Mac, Windows & Linux
- Find devices
- Connect
- Send / Receive data

Bluetooth plugin



- Mac & Windows
- Classic Bluetooth
- Bluetooth LE
- Find devices, connect, send & receive data

SSH



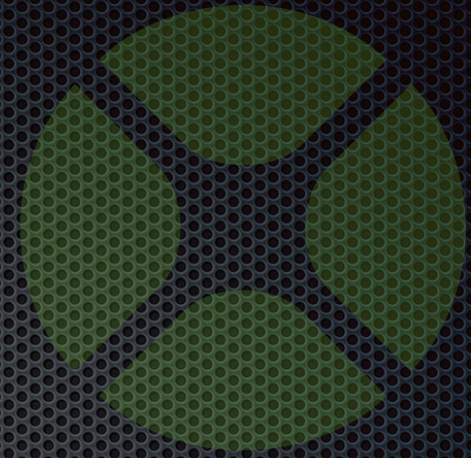
- SSH Session with OpenDirectTCPIPChannel
- SSH Tunnel
 - Tunnel MySQL through SSH
- IPv6 support

CURL

- SetupOAuth method
 - Example for Twitter
- SetupAWS
 - AWS S3 example
- CURLSFileInfoMBS class
- CURLSURLMBS class

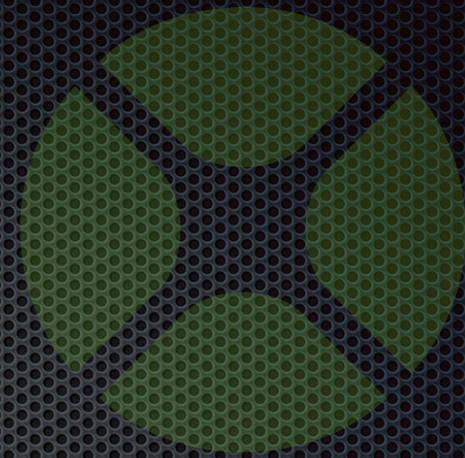


CURL



- AddMimePart and FinishMime
- CURLSMimePartMBS class
- CURLSSSLBackendMBS class.
- Follows redirects by default
- gzip decoding on by default

Archive



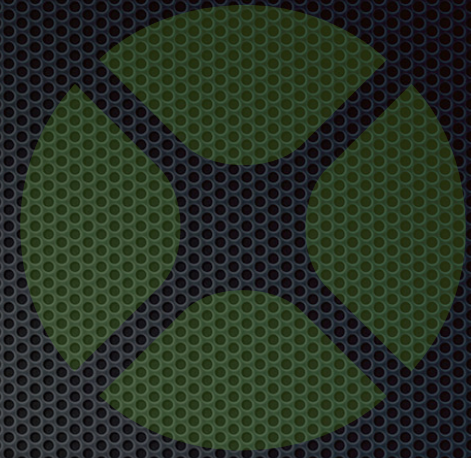
- Read/Write archives
- Zip, tar, xar, cpio, 7Zip and many more formats
- Archive folder with files
- Expand archive to folder
- Supports metadata, e.g. file permissions

Encryption

- S/MIME functions
- CryptoTokenKit classes
 - Modern API for card readers
 - SmartCardMBS for Mac, Win & Linux



Mount disks



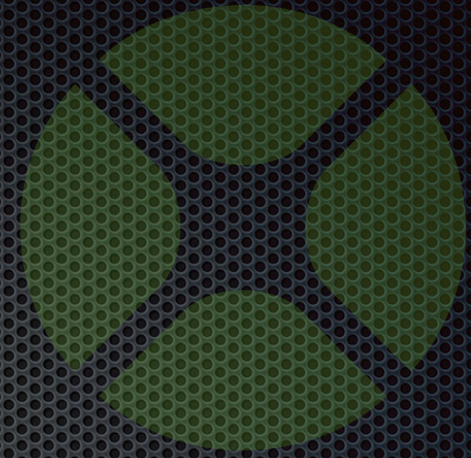
- MountMBS & UnmountMBS for Mac/Win/Linux.
- MountPathMBS function.
- NetFSMountMBS class for Mac
 - Asynchronous

MediaLibrary



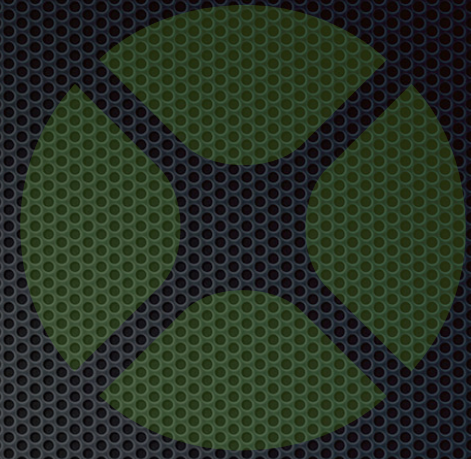
- MediaLibrary framework for MacOS
- Access
 - Music from iTunes, Logic
 - Images from Photos, Aperture
 - Movies from iMovie, FinalCut

Memory Storage



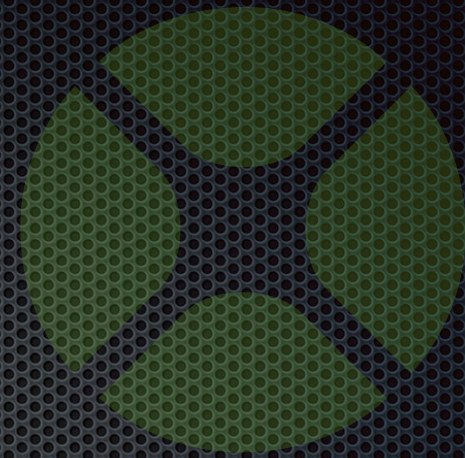
- MemoryStorageMBS class
- Store data outside your apps main memory
- Great for 32-bit applications

GraphicsMagick

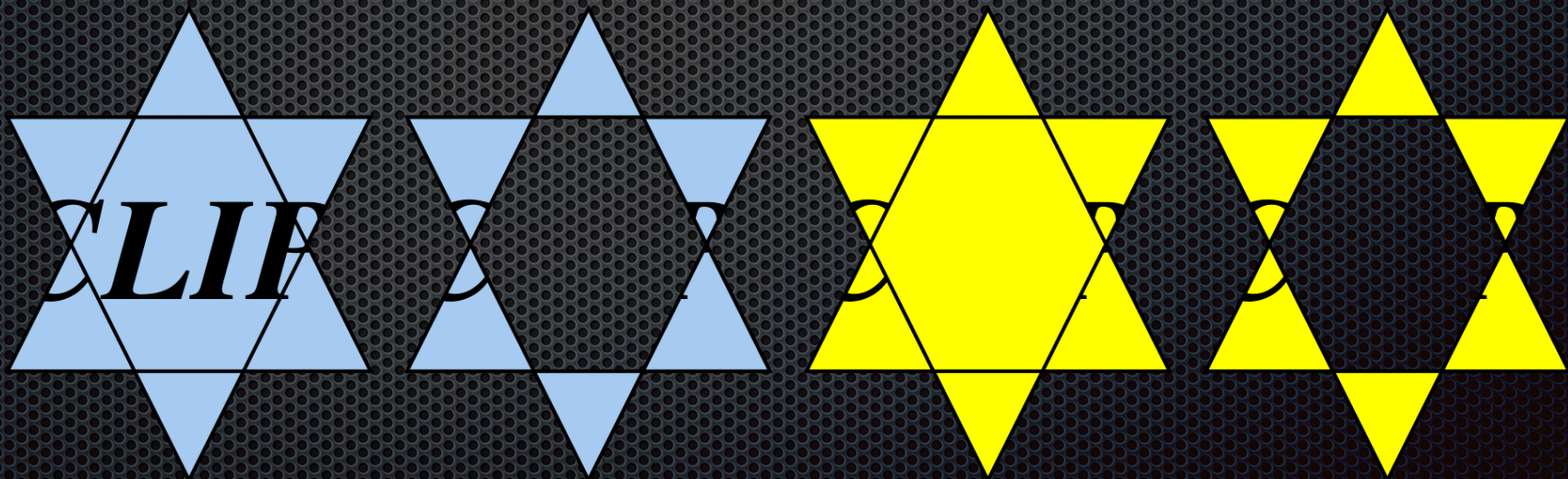


- GMConvertMBS class
 - Convert images threaded
 - With some effects, rotation, format changes
- GMImageMBS methods:
 - autoOrient
 - Extend

DynaPDF



- DynaPDFRasterizerMBS class:
 - DirectDraw support
 - Render with alpha channel



DynaPDF 5.0



- Coming later this year
- Full unicode support
- Automatic Font Substitution
- ZUGFeRD 2.0 (standard for invoices as PDF)
- Verify digital signatures

but this is not of interest.

The text was output with the font Arial but this font does not support all these different scripts. What we see here in action is called Automatic Font Substitution. Automatic font substitution makes our life much easier if we must deal with different scripts and if we don't care whether the current font supports it.

DynaPDF 5.0

of the text below was output with the font Arial but this font does not support all these different scripts. What we see here in action is called Automatic Font Substitution. Automatic font substitution makes our life much easier if we must deal with different scripts and if we don't care whether the current font supports it. Some special Unicode algorithms are required for correct output. If you use a font that does not support a certain script then you would get just garbage or lots of missing characters.

German

Es war einmal ein großer Krieg, und als der Krieg zu Ende war, bekamen viele Soldaten ihren Abschied. Nun bekam der Bruder Lustig auch seinen Abschied und sonst nichts als ein kleines Laibchen Kommißbrot und vier Kreuzer an Geld; damit zog er fort. Der heilige Petrus aber hatte sich als ein armer Bettler an den Weg gesetzt, und wie der Bruder Lustig daherkam, bat er ihn um ein Almosen. Er antwortete: "Lieber Bettelmann, was soll ich dir geben? Ich bin Soldat gewesen und habe meinen Abschied bekommen, und habe sonst nichts als das kleine Kommißbrot und vier Kreuzer Geld, wenn das all ist, muß ich betteln, so gut wie du. Doch geben will ich dir was." Darauf teilte er den Laib in vier Teile und gab davon dem Apostel einen und auch einen Kreuzer.

English

Once upon a time there was a big war, and when the war was over many soldiers said goodbye. Now his brother Lustig also got his farewell and nothing but a little loaf of commisson bread and four kreuzers of money; he moved away. But St. Peter had set himself up as a poor beggar, and as Brother Lustig came along, he asked for alms. He replied, "Dear Bettelmann, what shall I give you? I have been a soldier and have received my farewell, and have nothing else but the little bread and four kreuzer money, if that is all, I must beg, as well as you. But I want to give you something. " He then divided the loaf into four parts and gave one to the apostle and one cruiser.

Amharic

በአንድ ወቅት ታላቅ ጦርነት ነበር እናም ጦርነቱ በብዙ ወታደሮች ላይ ሲወርድ ተካሂዷል። ወንድሙ ለወሽም ለመሰናበቻው አንድ ትንሽ ዳቦ ዳቦና አራት ድድቆች ብቻ ነበር። አሻፈረኝ አለ። ቅዱስ ጴጥሮስ ግን እንደ ድሆች ለማኝ ራሱን አዘጋጀና, ወንድም ሎስትስ እንደመጣም, ስለ ምጽዋት ጠየቀ። እርሱም እንዲህ መለሰ: - "ወድ ተወላጅን, የትኛው ምን እስጥሻለሁ? እኔ ወታደር ሆኜ, እኔ ስደሬን ተቀብያለሁ, እንዲሁም ትንሽ ደንሬ እና አራት አራት ድሬ ገንዘቦች ብቻ ነው። ነገር ግን አንድ ነገር ልሰጥህ እፈልጋለሁ። " ከዚያም ዱቄቱን በአራት ክፍሎች በመከፋፈል አንዱን ለሐዋርያውና አንድ አንድ ሾፐተር ሰጠ።

Bengali

একবার এক সময় একটা বড় যুদ্ধ ছিল, এবং যুদ্ধ শেষে হলে অনেকে সৈন্যে বদায় জানান। এখন তার ভাই লাস্‌টগিও বদায় নলিনে এবং কমশিন রুটরি অল্প রুটা ছাড়া আর কিছুই নশ্‌ট করলনে না; তিনি দুরে সরানো। কনিত সনেট পঁটার নজিকে একজন দরদির ভকিষক হিসাবে পরতষ্টিত করছেলিনে, এবং ভাই লাস্‌তগি এসছেলিনে, তিনি ভকিষা চয়েছেলিনে। তিনি উততর দলিনে, "পরযি বটেলেমযান, আমা আপনাকে কাঁ দতি পারা? আমা একজন সনৈকি হয়ছে এবং আমার বদায় পয়েছে, আর আমার কাছ আর কিছু নহে, ছে:টিট রুটা এবং চারটা ক্রেইজারে টাকা, যদি সব কিছু হয় তবে আমারও আপনাকে অনুরোধ করত হবো। কনিতু আমা তে:মাকে কিছু দতি চাই। " তারপর তিনি রুটাটি চার ভাগে বিভক্ত করলনে এবং একজনকে পরেরিত ও একজন ক্রুজারকে দলিনে।

Gurjarati

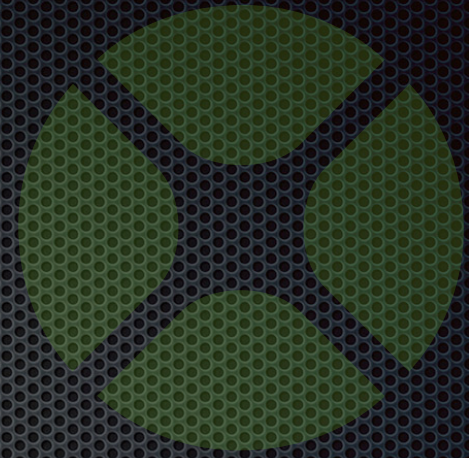
એકવાર એક સમયે એક મોટો યુદ્ધ થયો, અને જયારે યુદ્ધ સમાપ્ત થયું ત્યારે ઘણા સૈનિકોએ ગુડબાય કહ્યું. હવે તેના ભાઈ લુસ્ટિગને પણ તેના વદિાય અને કમશિન બરેડની થોડી રોટલી અને પૈસાના ચાર ક્રુસર મળ્યાં હતાં; તમાણે દુર ખસેડવામા. પરંતુ સેન્ટ પીટર પાતે ગરીબ ભખિારી તરીકે ઊભો થયો હતો, અને ભાઈ લુસ્ટિગ સાથે આવીને તેણે ભક્ષતની માંગ કરી. તેણે જવાબ આપ્યો, "પરયિ બેટેલેમેન, હું તમને શું આપીશ? હું એક સૈનિક રહ્યો છું અને મારા વદિાય મેળવ્યા છું, અને બીજું કંઈ નથી સવિાય કે બરેડ અને ચાર ક્રુસર પૈસા, જો તે બધું જ છે, તો તમારે પણ માગી લેવું જોઈએ. પણ હું તમને કંઈક આપવા માંગુ છું. " પછી તેણે બરેડને ચાર ભાગમાં વહેંચી નાખ્યાં અને એકને પરેરિત અને એક ક્રુસરને આપ્યાં.

Hindi

एक बार एक बड़ा युद्ध हुआ, और जब युद्ध खत्म हुआ तो कई सैनिकों ने अलवदिा कहा। अब उनके भाई लसूटगि को भी वदिाई मलि गई और कुछ नहीं बलकल कमसनि रोट्टी और चार पैसे का एक छोट्टा-सा ढाला; वह चला गया। लेकिन सेंट पीटर ने खुद को एक गरीब भखिारी के रुप में स्थापति कयिा था, और जैसे ही भाई लसूटगि आए, उन्होंने भकषिा मांगी। उसने उत्तर दयिा, "परयि बेटेलमेन, मैं आपको क्या दूंगा? मैं एक सैनकि हूं और मेरी वदिाई हुई है, और थोड़ी सी

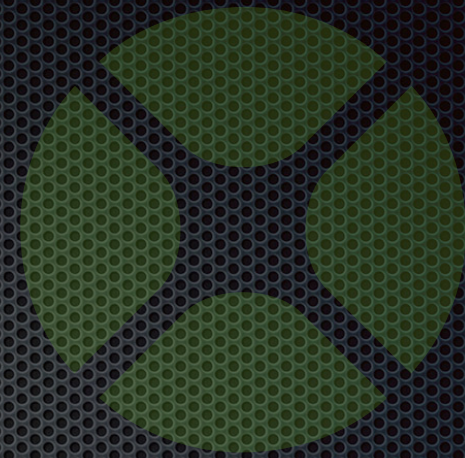
Image files

- EXIF support for PNG classes
- TIFF scaled scan lines
- ProgressiveMode for JPEGImporterMBS



Files

- ReadFileMBS and WriteFileMBS functions for FolderItem class
- Avoids old APIs for APFS



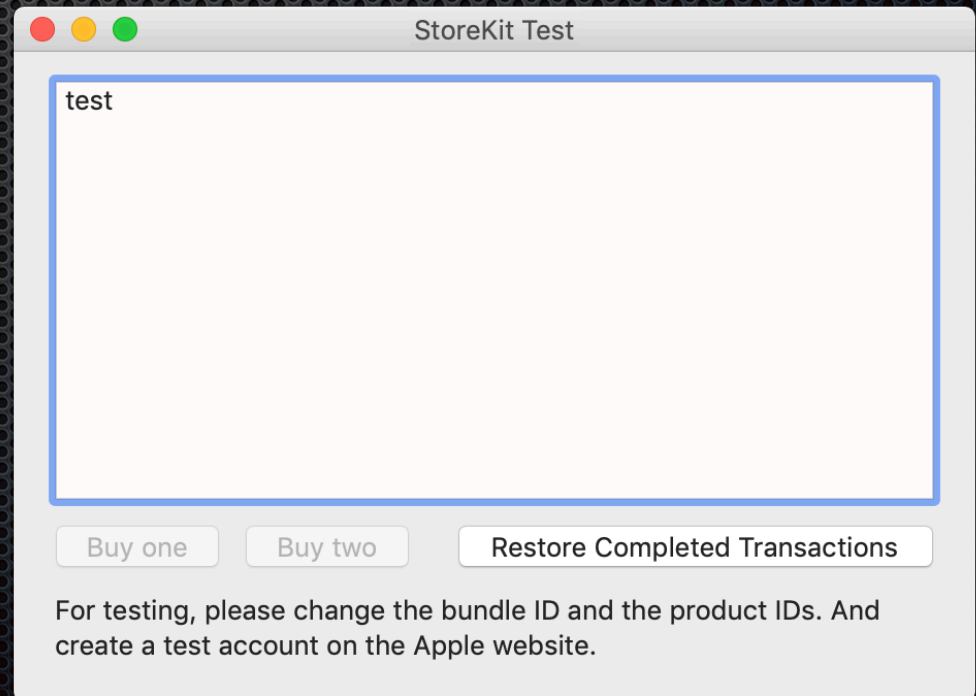
MacOS improvements



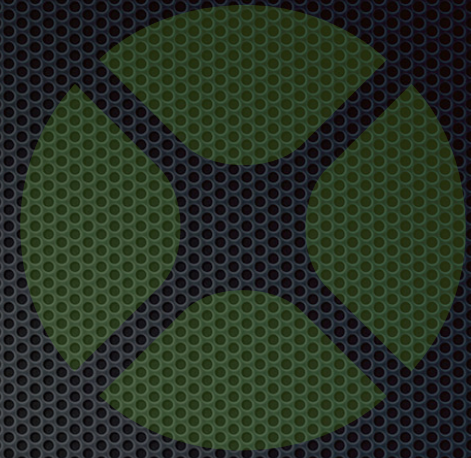
- NSColorMBS methods for dark mode
- CanvasGesturesMBS class
- CWWiFiClientMBS class
- Rewrote FileListMBS for APFS
- UNNotificationMBS classes
- DeterminePermissionToAutomateTarget for AppleScript

StoreKit improvements

- Mac App Store integration
- Request review
- `appStoreReceiptURL`
- Subscriptions
- Downloadable content



Web viewer



- ProgressChanged & TitleChanged events for WKWebViewControlMBS
- WebUIDelegateMBS.ContextMenuItemsForElement
- More print methods
- NSURLCacheMBS class.

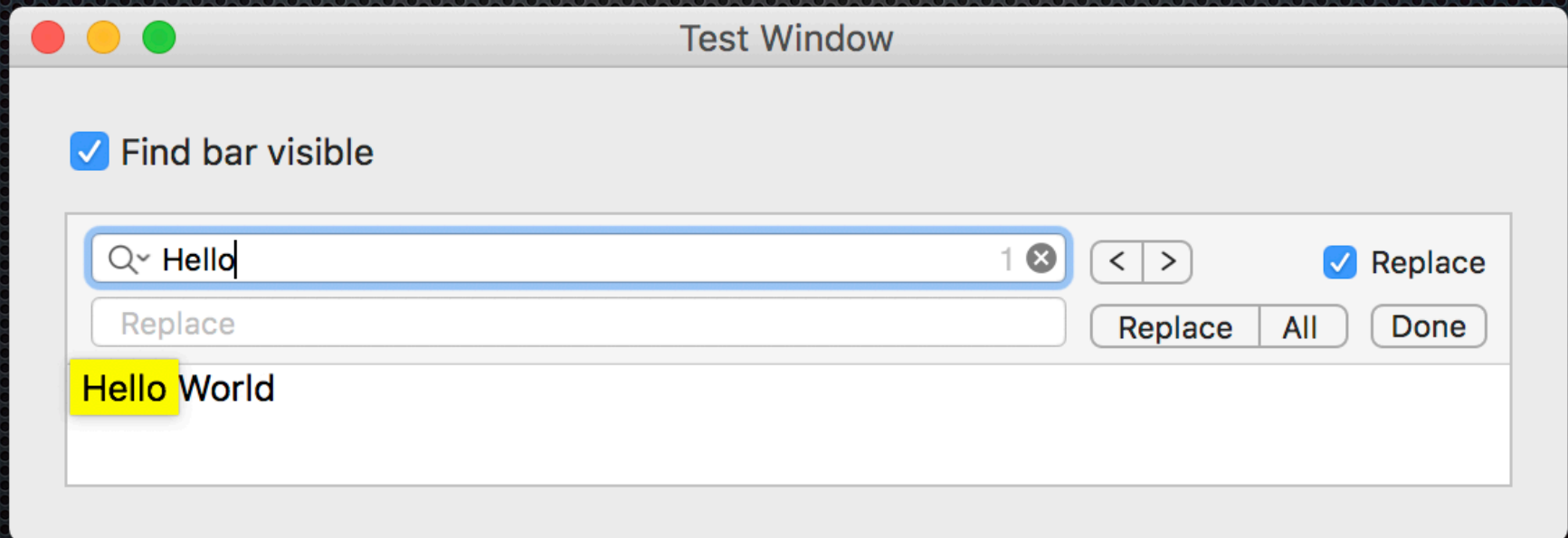
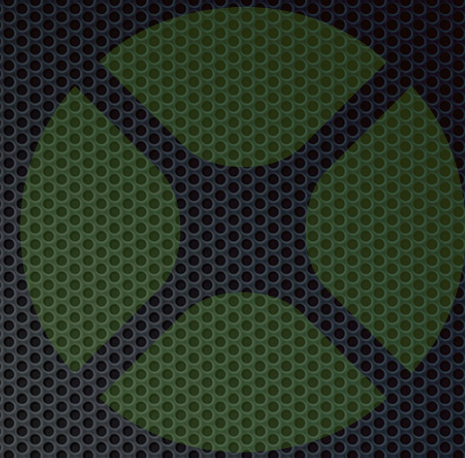
AVFoundation



- Authentication for `AVCaptureDevice`
- New codec constants, e.g. HEVC
- `CIDetectorMBS` support for `AVCaptureVideoDataOutputMBS` to detect barcodes, faces or text.
- `AVCaptureViewControllerMBS` and `AVPlayerViewControllerMBS` controls
- `exportMT`

Find bar

- For NSTextViewMBS and TextArea



Windows improvements



- `Application.FrontmostMBS` for Windows
- `window.ActivateWindowMBS`
- `HardLinksForFile` function
- `WindowsSerialPortsMBS.QueryComDevices`
- `Graphics.DrawRotatedTextMBS` for HiDPI

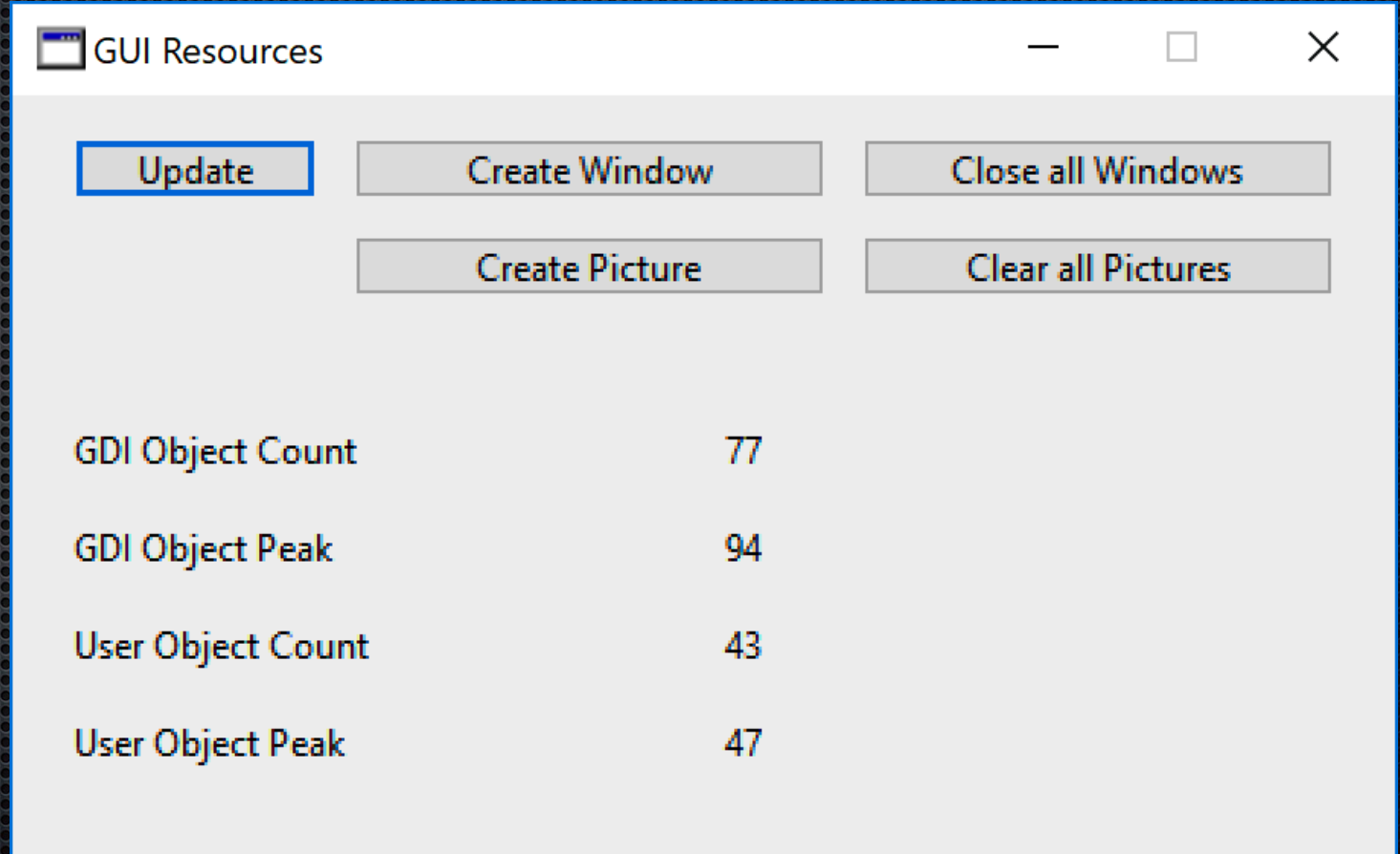
Windows improvements



- WindowsDisplayMBS class.
- WindowsFileInfoMBS class with dates
- IEClearBrowserSessionMBS

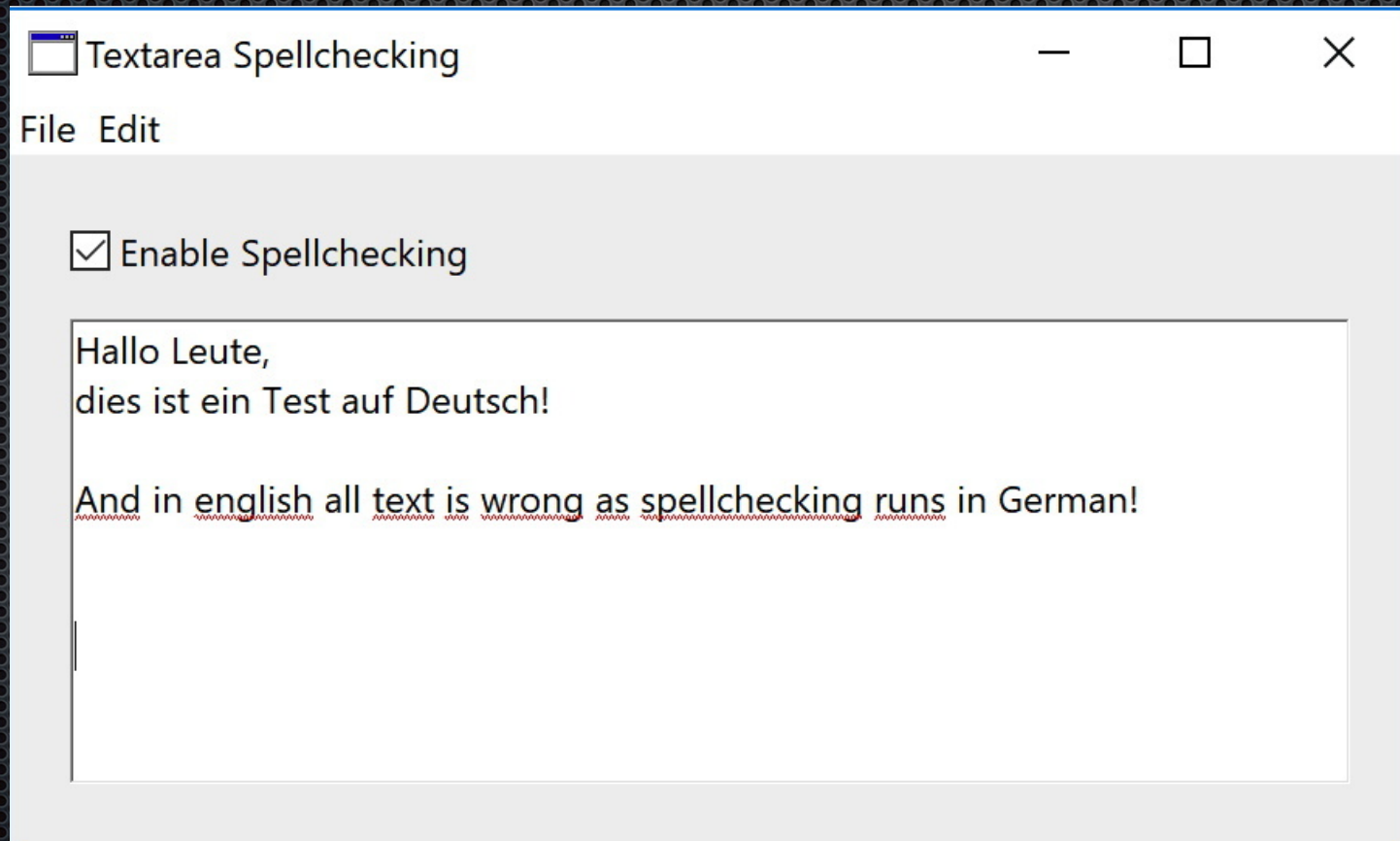
Windows improvements

- WindowsGUIResourcesMBS class



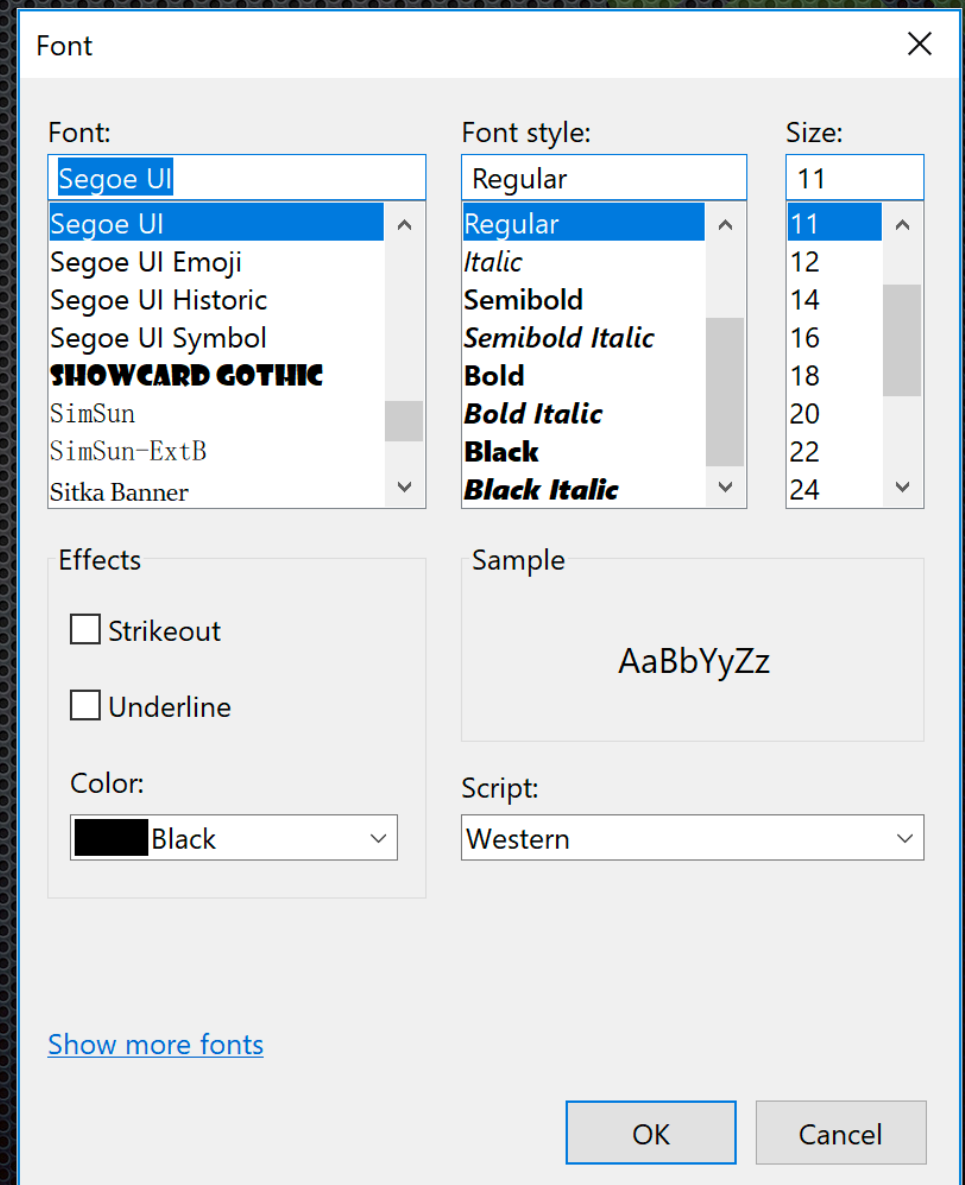
Windows improvements

- TextArea WinSpellcheckingMBS & WinAutoCorrectionMBS

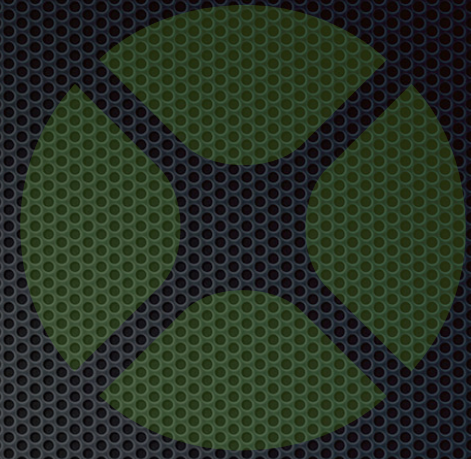


Windows improvements

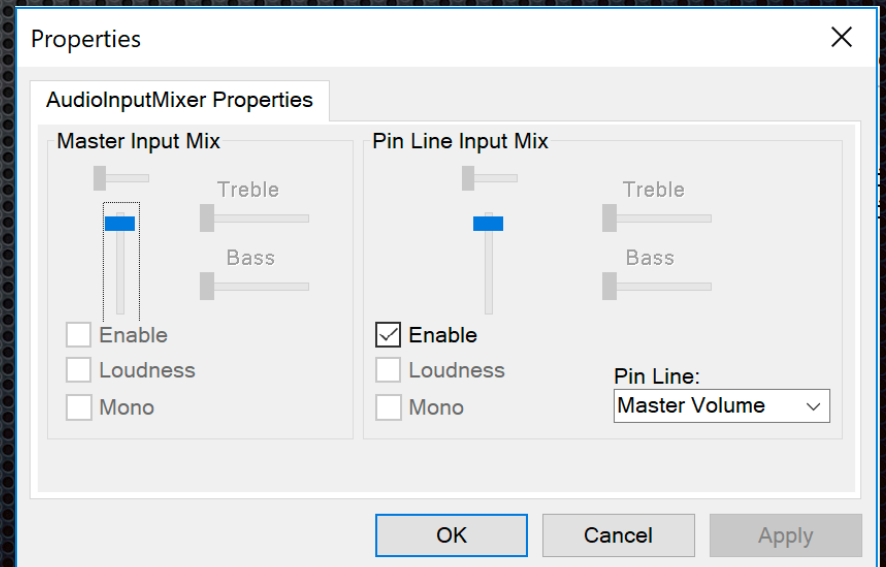
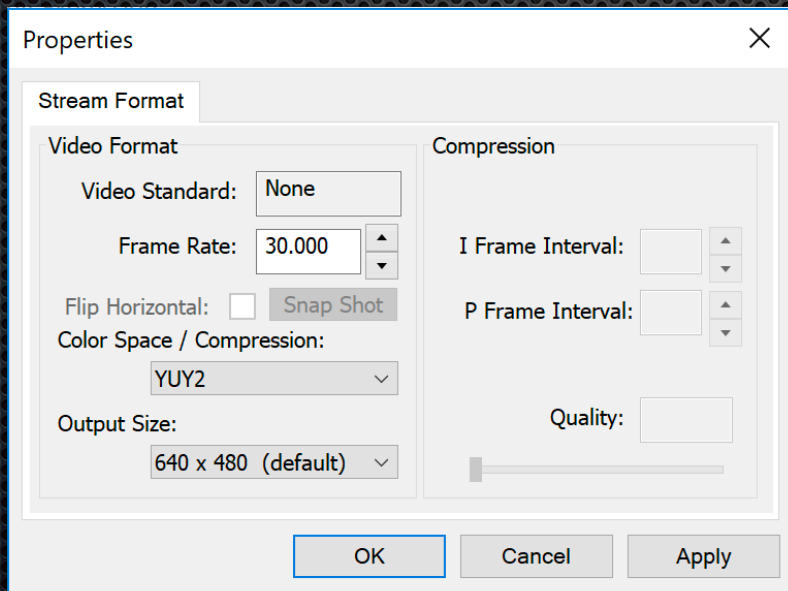
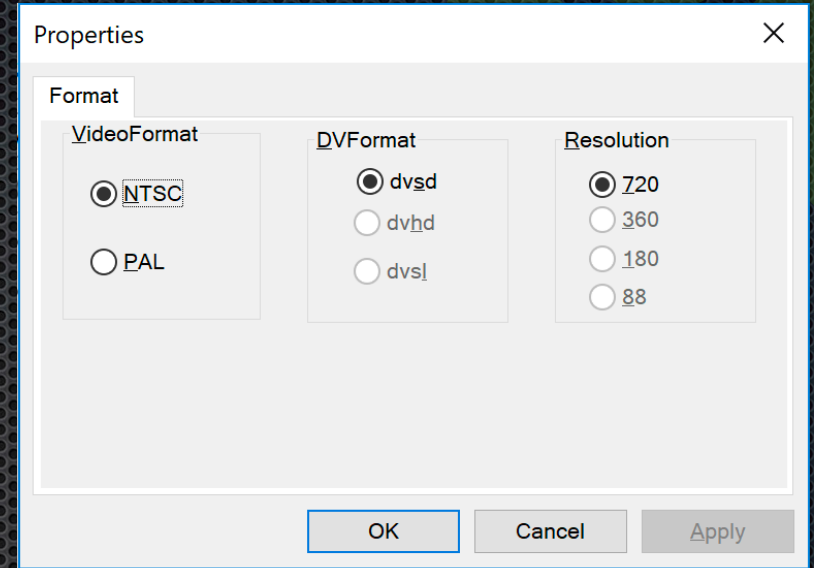
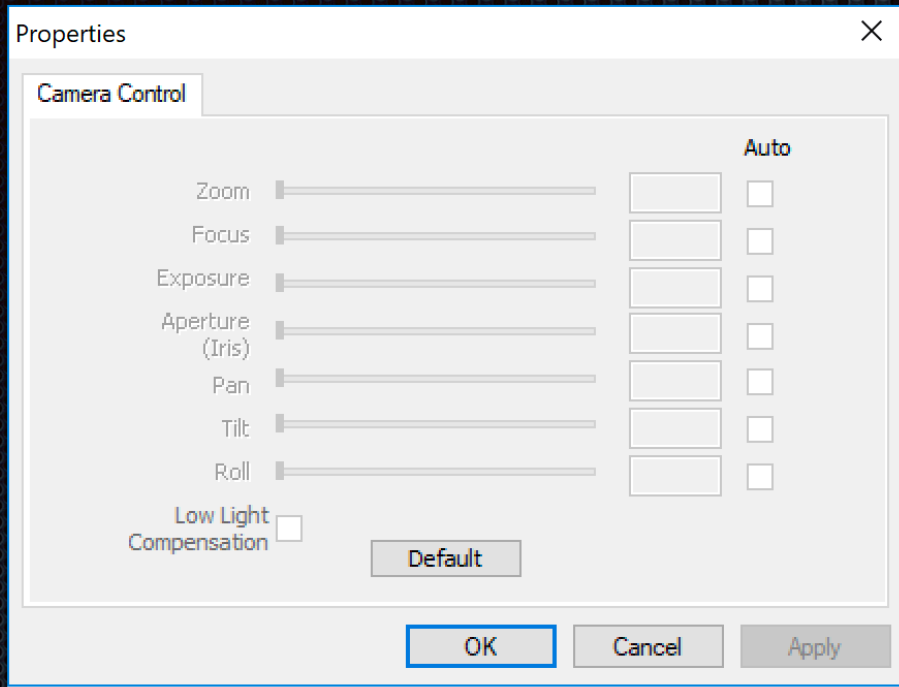
- Show font dialog
- WinShowFontPanelMBS



DirectShow



- Higher resolution for DirectShow cameras
- Compression settings
 - DirectShowAMVideoCompressionMBS class
- Properties dialogs for settings



Linux improvements

- All plugins built for Linux 32/64bit and ARM
- Including function names
- LinuxIconMBS module



Changes



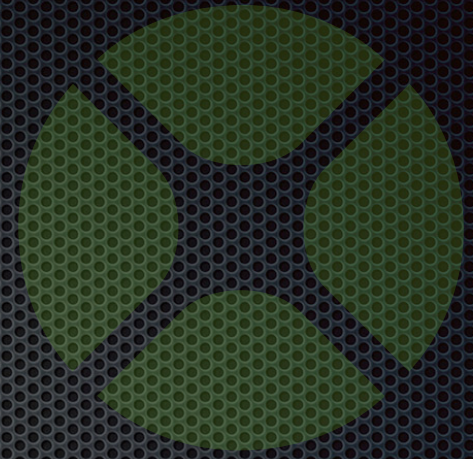
- Removed all MacOS Carbon only functions
 - All of QuickDraw
- Real Studio plugins on demand
- Socket classes got IPv6 support
- LDAP timeouts work

ShellMBS

- Shell class replacement
- Mac, Windows and Linux
- StdErr / StdOut
- StdIn



One more thing



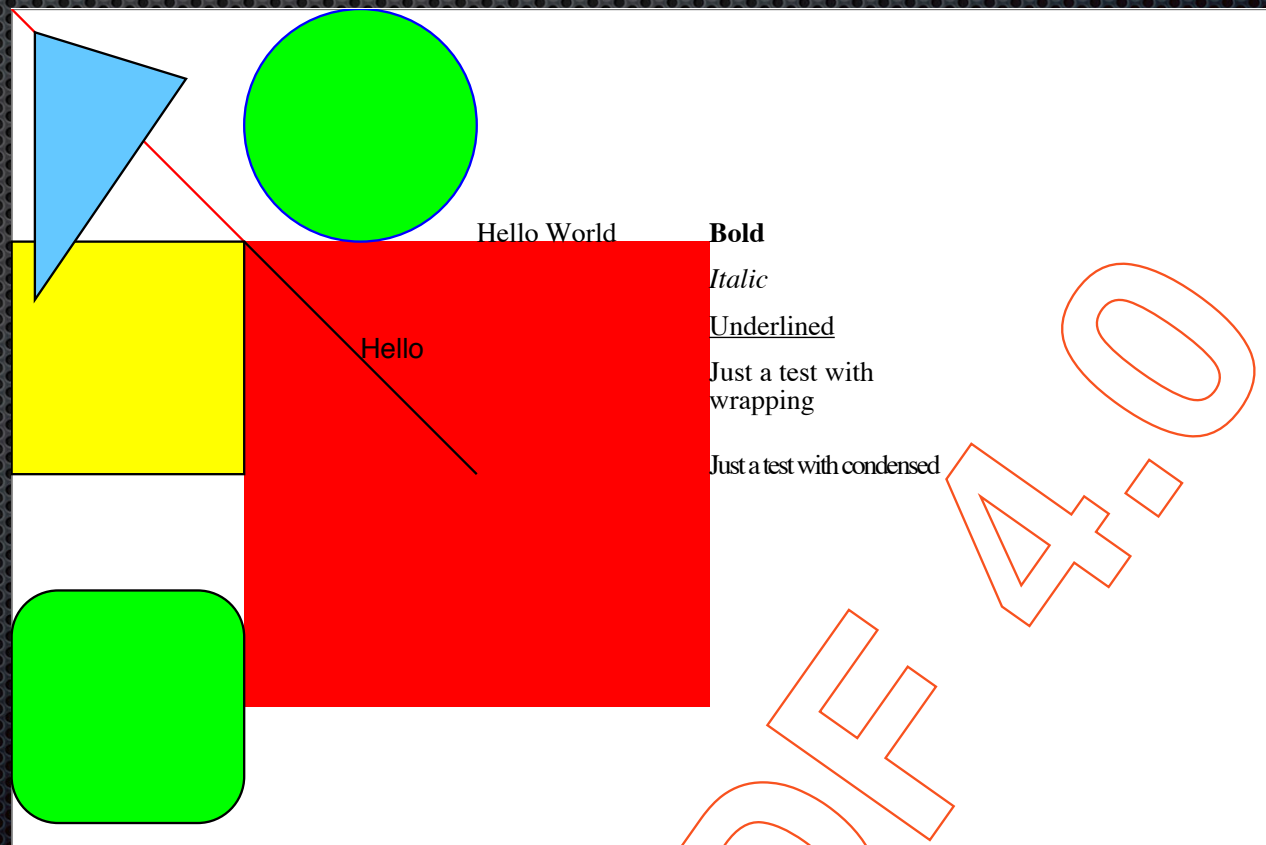
Graphics for DynaPDF



- New Graphics class integration
- Dim g as graphics = pdf.PageGraphics
- Graphics object from temporary picture
- Dim p as picture = pdf.PageGraphicsPicture
- All draws there duplicated to PDF page

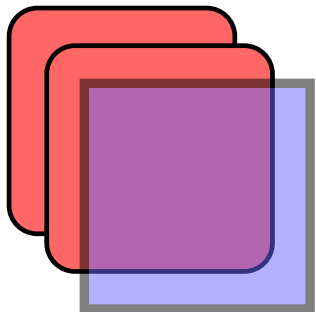
Graphics for DynaPDF

- Supports normal draw commands
 - Draw/Fill Oval/Rect/RoundRect/Line/Polygon
 - DrawString
 - StringHeight
 - StringWidth
 - DrawPicture
 - NextPage

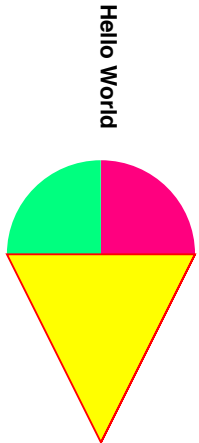


Graphics for DynaPDF

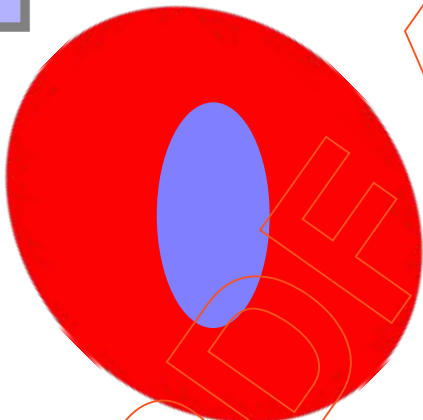
- Supports vector graphics classes (Object2D)



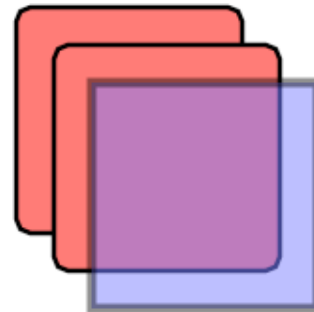
Hello World



Hello World



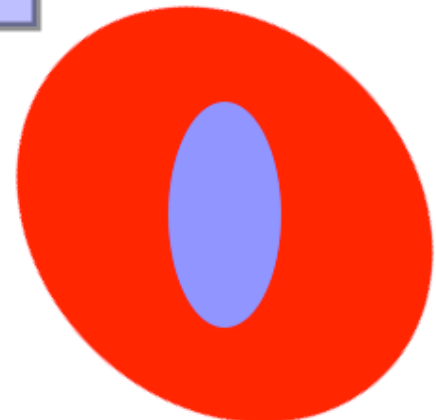
PDF 4.0



Hello World



Hello World



Graphics for DynaPDF

- Supports report engine

Orders by company

Company	Order #	Total
BFF International	10023	249.99
	10036	1,498.98
	Total for company	1,748.97
Chameleon Industries	10026	3,999.00
	Total for company	3,999.00
Mantas Burgers	10021	1,499.00
	10030	749.97
	Total for company	2,248.97
Orange Stripes	10024	249.99
	10031	1,998.00
	10033	129.99
Total for company	2,377.98	
Second Thought Publications	10027	7,539.27
	10037	538.73
	Total for company	8,078.00
Snow West	10022	386.64
	10034	1,615.15
	Total for company	2,001.79
Two Palms	10028	4,376.98
	10035	179.00
	Total for company	4,557.98
Wideload Productions	10020	249.99

List Of Products

Name	Price	Part #	Image
SlimBox S12MB - Silver	\$249.99	EMPS-0468-9712	
MPIO FD100 256MB - Blue	\$249.99	EMPS-7354-6533	
WeWa WMP6803FM Rigidity 128MB	\$129.99	EMPS-6534-9324	
Palm Zire 71	\$249.99	EPDA-4656-3794	
Canon Oplura 300 Mini DV	\$999.00	EVID-6749-9721	
Canon GL2 Mini DV	\$2,799.00	EVID-1234-7964	
Canon XL-12 Mini DV	\$3,999.00	EVID-8915-9917	
Sony Cybershot DSC-T1 5.0 Megapixel	\$1,299.00	ECAM-1879-2497	
Nikon Coolpix 220 Digital Camera	\$179.00	ECAM-0174-9731	
Canon EOS 100 6.3 Megapixel	\$1,499.00	ECAM-1687-9776	

Historical Gas Prices

Year: 1976			
January	0.605	May	0.600
February	0.600	June	0.616
March	0.594	July	0.623
April	0.592	August	0.628
		September	0.630
		October	0.628
		November	0.628
		December	0.626
Year: 1977			
January	0.627	May	0.659
February	0.637	June	0.655
March	0.643	July	0.667
April	0.651	August	0.667
		September	0.666
		October	0.665
		November	0.664
		December	0.665
Year: 1978			
January	0.648	May	0.655
February	0.647	June	0.663
March	0.647	July	0.674
April	0.649	August	0.682
		September	0.688
		October	0.690
		November	0.695
		December	0.705
Year: 1979			
January	0.716	May	0.844
February	0.730	June	0.901
March	0.755	July	0.949
April	0.802	August	0.988
		September	1.020
		October	1.028
		November	1.041
		December	1.065
Year: 1980			
January	1.131	May	1.266
February	1.207	June	1.269
March	1.232	July	1.271
April	1.264	August	1.267
		September	1.257
		October	1.250
		November	1.250
		December	1.258
Year: 1981			
January	1.298	May	1.400
February	1.382	June	1.391
March	1.417	July	1.382
April	1.412	August	1.376
		September	1.376
		October	1.371
		November	1.369
		December	1.365
Year: 1982			

Graphics for DynaPDF



- All Xojo versions
- All DynaPDF editions
- Coming in version 19.2.
Please try beta soon.

MBS Xojo Conference

- 24/25th October 2019



Special Offer

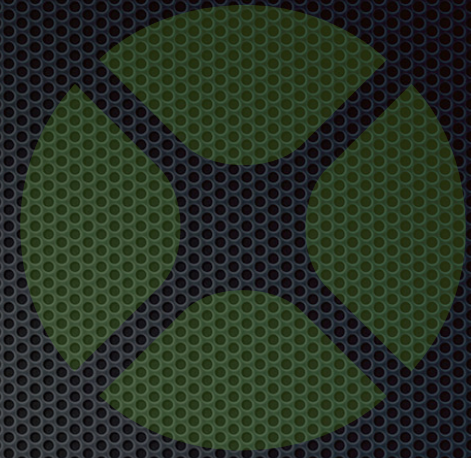


- Use coupon code **XDC2019** to
- Save 20% on all MBS Plugin licenses including DynaPDF, SQL and ChartDirector.
- Save 20% on your conference ticket for our Xojo conference in Cologne.
- Offer valid in May 2019.

Q & A

Christian Schmitz

support@monkeybreadsoftware.de



Give us feedback on this session in the XDC app!