

Rexx in OS/2/ArcaOS

Dutch OS/2 VOICE foundation



Introduction

- Roderick Klein been using OS/2 for 24 years
 - Candy dispenser running OS/2, rexx scripts for order processing (intermediate vocational education)
 - 15 years chairman of Dutch VOICE foundation
 - Worked at Mensys B.V. 12 years in Haarlem.
 - European OS/2 specialist.
 - Company used and is using rexx scripts everywhere!
 - Worked on eCS (eComstation) for 10 years
 - REXX is used in a lot of places
-
-

Rexx in OS/2, tools/programs developed!

- Semi end user perspective.
- REXX in OS/2 had/has a big influence on the platform/
- REXX libraries from IBM such as DB2 for OS/2.
- REXX GUI tools: GPF-REXX, VX-REXX
- Large companies get REXX developed applications:
 - France Telecom ran more than 100.00 PC's with sales application written in Object Rexx (not certain).
- Third party applications such as:
 - Mesa spreadsheet from Sundial software, rexx interface.
 - IMPOS/2 from import (resize images from rexx script).
 - PMFAX for OS/2 with REXX interface

REXX at Mensys B.V.

- Webshop use in conjunction with Netdata/webshop.
 - Price lists imported with DB2 DLL via REXX.
 - DB2 front CRM system written in GPX rexx.
 - REX X scripts to create report for accountant.
 - Print invoices with Vispro reports
 - Prepare faxes: fill in creditcard approval forms (before it was possible via web portal!).
 - Process creditcard payments with CURL and rexx.
 - Resize images with IMPOS2 for webserver.
 - Control CD burn robot and key number generators
 - Send mailings to customers
-
-

eComStation and REXX

- OEM of OS/2 Serenity Systems->Mensys->>Xeu
 - REXX does a lot, worked on some of the code:
 - CID backend for installer GUI.
 - OS/2 migration code desktop and system
 - Start all the other install backends such as RSPINST/MPTS.
 - MINSTPM (GUI for minstall replacement).
 - EVFSGUI (Netdrive/Samba)
 - Archive Viewer
 - eCups (CUPS printer wizard).
 - Icon themes tool (manage icons).
 - Disc resizer (DFSEE front end).
 - Timeset
 - lmsync (sync protocol.ini/ibmlan.ini)
-
-

Dutch OS/2 VOICE foundation

- Left Mensys in 2013, time for something different.
- ArcaOS push to move on!
- Organises the yearly Warpstock Europe conference
- Distribute OS/2 news
- Fund open source software development.
 - Browser almost ready QT webkit based!
 - Rexx projects ?



ArcaOS, OS/2 moves on...

- ArcaOS new current OS/2 distribution, active development.
 - Small subset of private users who write REXX scripts for fun.
 - More development on OS/2 to run on bare metal:
 - USB 3.0 released
 - UEFI in development (public demo).
 - ACPI compliant driver
 - New browser in development out this year.
 - Open Office, CUPS support
-
-

REXX in ArcaOS

- CID backend completely in REXX again for installers
- MPTS replaced by NAPS (rexx NIFUTIL.DLL)
- Print manager (rexx RXPRUTL.DLL)
- AMPM (Arca Noae Packager Manager, RPM repos).



ArcaOS UEFI proof of concept.

- Preloading OS/2 system files via UEFI disc services before ArcaOS boots (INT 13 not used)
- Display text output during ArcaOS boot.
- Full screen and OS/2 text window works.
- Example low level support: text TRAP screen
- PM SHELL loads with DIVE support working.
(Next screenshot)



View: E:\var\log\vbe2grad.log

```

Panorama v1.13 log for GID=0 started at 20.4.2019 2
This copy of Panorama is licensed to Arca Noae for
Profile setting for Shadow...Disabled
VESA version is 201
BIOS-supplied information
OemVendorNamePtr   = 8E000022
OemProductNamePtr  = 8E000026
VideoModePtr       = 8E000034
TotalVramSize      = 500000
OemVendorName      = AOS
OemProductName     = UEFI boot
Get EDID failed
VBE VRAM Base=E0000000 Size=500000 (5120Kib) (round
Mode 0x140: 1280x1024x32bpp planes=1 Attr=0xDB
Video Aperture: Base=0xE0000000 Size=0x500000 Round
Shadow buffer is not defined! - 0

```

SP image viewer v1.29.5



Normal mode | 1400 x 907 | 45.14% | I:\Archive\Pics\natureB4.spl

SysBench 0.9.4e - Ready

File Graphics CPU-int CPU-float DIVE File I/O Memory Disk I/O CD-ROM I/O

Graphics		
BitBlt S->S copy	: 2.820	Million pixels/second
BitBlt M->S copy	: 682.889	Million pixels/second
Filled Rectangle	: 1250.122	Million pixels/second
Pattern Fill	: 561.062	Million pixels/second
Vertical Lines	: 80.443	Million pixels/second
Horizontal Lines	: 132.173	Million pixels/second
Diagonal Lines	: 88.466	Million pixels/second
Text Render	: 23.559	Million pixels/second
Total	: 354.742	PM-Graphics-marks

CPU integer		
Dhrystone	: --,---	VAX 11/780 MIPS equivalent
Hanoi	: --,---	moves/25 microseconds
Heapsort	: --,---	Million Instructions Per Second
Sieve	: --,---	Million Instructions Per Second
Total	: --,---	CPU integer-marks

CPU float		
Linpack	: --,---	MFLOPS
Flops	: --,---	MFLOPS
Fast Fourier Transfrm	: --,---	VAX FFT's
Total	: --,---	CPU floating point-marks

Direct Interface to video extensions - DIVE		
Video bus bandwidth	: 2837.102	Megabytes/second
DIVE fun	: 9669.039	fps normalised to 640x480x256
M->S, DD, 1.00:1	: 9688.372	fps normalised to 640x480x256
Total	: 3619.535	DIVE-marks

File I/O - Drive J:		
4Kb seq. Uncached w	: --,---	Kilobytes/second
4Kb seq. Uncached r	: --,---	Kilobytes/second
4Kb random Uncached w	: --,---	Kilobytes/second
4Kb random Uncached r	: --,---	Kilobytes/second
4Kb seq. Cached w	: --,---	Kilobytes/second
4Kb seq. Cached r	: --,---	Kilobytes/second
4Kb random Cached w	: --,---	Kilobytes/second
4Kb random Cached r	: --,---	Kilobytes/second
8Kb seq. Uncached w	: --,---	Kilobytes/second
8Kb seq. Uncached r	: --,---	Kilobytes/second
8Kb random Uncached w	: --,---	Kilobytes/second
8Kb random Uncached r	: --,---	Kilobytes/second
8Kb seq. Cached w	: --,---	Kilobytes/second
8Kb seq. Cached r	: --,---	Kilobytes/second
8Kb random Cached w	: --,---	Kilobytes/second
8Kb random Cached r	: --,---	Kilobytes/second

Future of OS/2 and REXX

- While some people are running OS/2 in VM you can run on bare metal. Seems for now that will remain possible.
- New browser coming



Questions!?

- Interested sponsoring software development ?
- REXX projects ?
- Questions!?
- I am not an professional software developer.

