

TEAMRGE EVENT 2024 WHERE FUTURE OF END USER COMPUTING MEETS REALITY

10+ community sessions around GPUs, VDI,
DaaS, DEX, Remoting Protocols and AI



15th February 2024

16:00 CEST / 10:00AM EDT / 07:00AM PDT

Register Now

www.teamrge.com/events

This FREE community event is made possible with support of:

DIZZION

itq

EUC Score



Dr. Benny Tritsch
Managing Director at
Dr. Tritsch IT Consulting



Bram Wolfs
Consultant at
Wolfs IT Solutions



Eitjo van Gulik
Principal Product Manager
for HDX Graphics & Seamless
at Citrix



Esther Barthel
Solutions Architect
at Cognition IT



Joe DaSilva
PMTS, Solutions Architect, Cloud
Graphics at AMD



Johan van Amersfoort
Technologist EUC & AI
at ITQ



Magnar Johnson
Manager | Solution Architect
Sopra Steria



Rody Kossen
Senior Principal Quality
Engineer at Citrix



Ruben Spruijt
Field CTO
at Dizzion



Ryan Ververs-Bijkerk
Technical Evangelist
at GO-INIT



Shawn Bass
Start-up advisor and
former EUC CTO of Desktop
Technologies at VMware



Thomas Poppelgaard
Independent Consultant and
Technology Evangelist at
Poppelgaard.com



TeamRGE
Remoting Graphics Experts



What's new in Remote Display Analyzer

Bram Wolfs & Ryan Ververs-Bijkerk



TeamRGE
Remoting Graphics Experts



Bram Wolfs

Founder

@BramWolfs



Ryan Ververs-Bijkerk

Developer

@Logitblog

#1 

Created in
2017

Downloads
10.000+



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AMD 

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DIZZION 

Remote Display Analyzer
Running for: brw
Session: RDP-Tcp 72

Virtual Channel Display mode



Detected Display mode:
RemoteFX

Transport protocols used:
UDP and TCP

Available bandwidth detected:
46,4 Mbps

Real-Time Statistics

Bandwidth Output UDP: **18,3 Mbps**
Bandwidth Output TCP: **0 Kbps**

Round trip latency UDP: **12 ms**
Round trip latency TCP: **0 ms**

Package flow Statistics

Total Package FEC rate: **234 %**
Total Package Loss rate: **65 %**
Total Retransmission rate: **67 %**

Frame Statistics

Frames per second: **30**
Frame Quality: **100 %**

Skipped Frames due to:

Insufficient client resources: **22**
Insufficient network resources: **5**
Insufficient server resources: **0**


Total Statistics

Total UDP bandwidth used: **2525,1 Mi**
Total TCP bandwidth used: **38 Kb**
Total frames send to client : **2374**
Average UDP bandwidth used: **29,7 Mb**
Average TCP bandwidth used: **0 Kb**

Exit Less 1:37 GPU

Remote Display Analyzer
Licensed To: Ryan Verwey-Sijterk
Running for: frame
SessionID: 1


Virtual Channel Display mode



Windows Server 2019 Datacenter 1809
Frame Session ID:
Bv7xe0jx2lpDrjAM
Frame Product Version: **v1.4.7.0**

Number of Displays: **1**
Display Resolution: **1680x896**
Video Encoder Type: **NVENC**
Video Codec Type: **H264**
Video Display Type: **NvFBC DX9**

Real-Time Statistics

Framerate: **16 FPS**
Maximum Framerate: **60 FPS**
Network Latency: **12 RTT**
Available Bandwidth: **16 MBps**
Bandwidth: **382 Kbps**
GPU Utilization: 

Other Statistics


Pixel Ratio: **0**
Average Frame QP: **12**
Send Queue Size: **0**
vBV Buffer Size: **2400000**
Maximum Audio Bitrate: **128**
Maximum Video Bitrate: **16000**

System CPU Usage: **11 %**
System CPU Frequency: **2,50 GHz**
System CPU Queue Length: **0**

Total Statistics

Total Bandwidth Usage: **7 MBps**
Average Bandwidth Usage: **710 Kbps**
Total Framerate: **125 FPS**
Average Framerate: **13 FPS**
Average System CPU Usage: **21 %**
Total System CPU Queue Length: **10**

GPU Information



Active GPU:
NVIDIA Tesla T4
Total Memory:
4095 MB
Primary Screen Resolution:
1680x896
DPI Scale: **100 %**
Driver Version: **27.21.14.6231**
License Server: **N/A**
License Server port: **N/A**
License Type: **N/A**

Real-Time GPU Statistics

GPU Utilization: **17%**
Memory Usage: **7% (1135 MB)**
Video Encoder FPS: **106**
Video Encoder Latency (ms): **1**
Video Encoder Sessions: **1**
Video Encoder Usage: **10.00%**
Video Decoder Usage: **N/A**

Exit Less 0:17 GPU



Remote Display Analyzer
Licensed To: [Redacted]

Running for: [User]
Session ID: 10

Virtual Channel Display mode: **HDX**

Windows 10 Enterprise 1803
Virtual Desktop Agent version: 1811.1
Detected Display mode: Thinwire

Video Codec usage: For the entire screen
Available bandwidth detected: 14,0 Mbps
Active transport protocol: UDP

Change display mode on the fly
Switch to Framehawk
Advanced Settings

Change display settings on the fly
Use video codec for compression: For the entire screen
Visual Quality: Always Lossless
Allow visually lossless compression:
Max Frames per second: 30
Use hardware encoding:
Optimize for 3D graphics Workload:

GPU Information
Active GPU: GRID P4-2Q
Total Memory: 2048 MB
Primary Screen Resolution: 3440x1440 DPI Scale: 100 %
Driver Version: 412.15
License Server: 7070
License Type: Quadro vDWS

Detected settings
Visual Quality: AlwaysLossless
Max Frames p/s: 30
Video Encoder type: H264 (Yuv444)
Hardware Encode: Enabled
Text Optimizations: Disabled

Real-Time Statistics
CPU time used by encoder: 3%
Memory used by encoder: 157 MB
Thinwire Frames per second: 6
Thinwire Bandwidth Output: 5,0 Mbps
ICA Network Latency: 17 ms
ICA Round Trip Time (RTT): 0 ms
GPU Utilization: [Progress Bar]

Total Statistics
Total bandwidth usage: 14,0 Mb
Total frames send to client: 332
Average bandwidth usage: 1,0 Mb
Average available bandwidth: 19,0 Mb
Average CPU utilization: 3%
Average GPU utilization: 4%

Real-Time GPU Statistics
GPU Utilization: 13%
Memory Usage: 57% (1104 MB)
Video Encoder FPS: 16
Video Encoder Latency (ms): 5
Video Encoder Sessions: 1
Video Encoder Usage: 6%
Video Decoder Usage: 6%

Exit Less 0:33 GPU

Remote Display Analyzer
Licensed To: [Redacted]

Running for: [User]
SessionID: 2

Virtual Channel Display mode: **VMware Blast**

Windows 10 Enterprise 1803
VMware View Agent version: 7.7.0
Detected Display mode: VMware Blast
Available bandwidth detected: 425,0 Mbps
Active Encoder: NVIDIA NvEnc H264 4:2:0
Active transport protocol: TCP

Change display settings on the fly
Select encoder: H.264 encoder (default)
Max Frames per second: 60

Change image quality levels
H264maxQP (0-51): 28
H264minQP (0-51): 10
H264 High Color Accuracy:
Reset Apply

Real-Time Statistics
CPU time used by encoder: 5%
Memory used by encoder: 95 MB
Frames per second: 31
Bandwidth Output: 6,0 Mbps
Packet loss percentage: 0%
Round trip latency: 1 ms
GPU Utilization: [Progress Bar]

Total Statistics
Total bandwidth usage: 4089,0 Mbp
Total frames send to client: 22234
Average bandwidth usage: 8,0 Mb
Average available bandwidth: 425,0 Mbps
Average CPU utilization: 6%
Average GPU utilization: 37%

Exit Less 12:40 GPU

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Use cases



Troubleshooting – Consultancy



End-user support



Internal product testing



Quality assurance



Project management / Configuration validation



Benchmarking



Community

€ 0.00 / Per Year

- ✓ Detect Display Mode
- ✓ Display Active Encoder
- ✓ Real-time Analytics
- ✗ Total Statistics
- ✗ Change Settings
- ✗ Support

Pro

€ 75 / Per User / Per Year

- ✓ Detect Display Mode
- ✓ Display Active Encoder
- ✓ Real-time Analytics
- ✓ Total Statistics
- ✓ Change Settings
- ✓ Support

Company*

€ 850 / Per Company / Per Year

- ✓ Detect Display Mode
- ✓ Display Active Encoder
- ✓ Real-time Analytics
- ✓ Total Statistics
- ✓ Change Settings
- ✓ Support
- ✓ Unlimited Users
- ✓ Custom Quote & Invoicing
- ✓ Select Currency

Roadmap

2106

Microsoft Teams offloading
Azure Virtual Desktop RDP-ShortPath
Citrix Built-to-Lossless Quality Slider
Disable GPU monitoring via GUI
Bugfixes & improvements

2305

Citrix IDD detection
VMware Blast optimizer slider
Hardware monitor preparations AMD & Intel
NVIDIA CLS&DLS licensing support
Bugfixes & improvements

T.B.D

The next generation of
Remote Display Analyzer

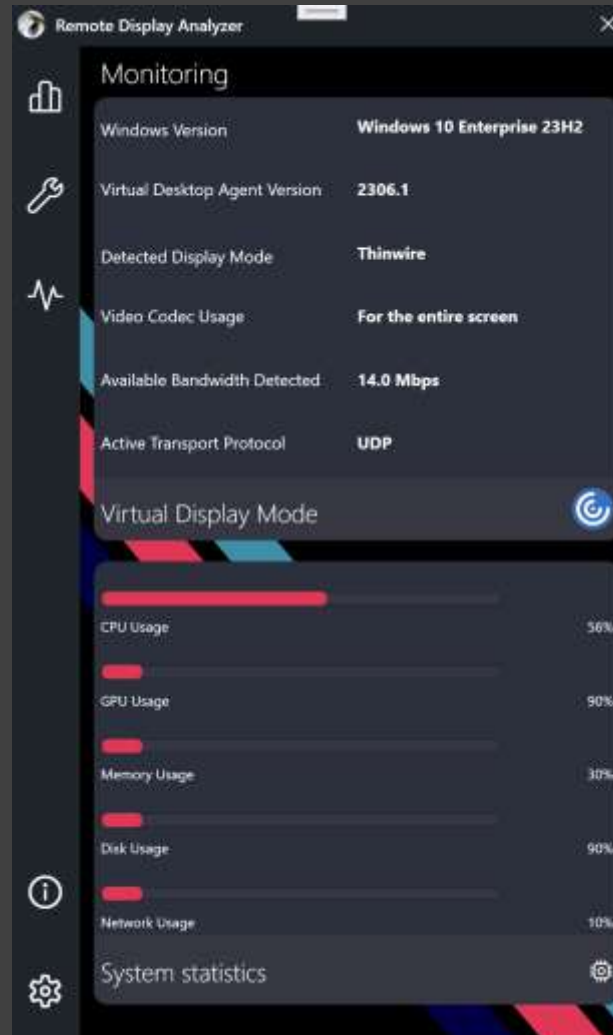
2205

Support Microsoft Windows 365
Added Nutanix Frame support
Added Citrix Rendezvous 2 detection
Bugfixes & improvements

2405

New Citrix metrics
Update protocols information
Bugfixes & improvements

Next Generation RDA – Sneak Peek



Remote Display Analyzer **intuitive** and **powerful**

The most accessible tool
to **analyze** and **change** display protocol settings
on the fly.

rdanalyzer.com