FW: Teradici - BlackBox

Peter Shelley

Tue 14/06/2022 16:16

To:John O'Sullivan <John.OSullivan@BlackBox.com>;

From: Tim Tomlinson [mailto:ttomlinson@teradici.com]

Sent: Monday 7 December 2020 14:36

To: Peter Shelley; Greg Weir Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Thanks, Peter. Understood. I don't believe that would change the system recommendations, but let me run it up the chain and double check. Would you be looking at running the client on Windows 10 or Ubuntu? Or both?

We don't specify GPU requirements on the client side, but this is typically an integrated, onboard GPU such as the Intel, or could be a discreet GPU like NVIDIA or AMD. If you wanted to take advantage of H.264 hardware decoding on the client side, then that has to be Intel and it also has to be the Ubuntu client.

Tim Tomlinson

OEM Solution Architect

Dallas, Texas

Mobile: 214.548.0098 | www.teradici.com



From: Peter Shelley < Peter. Shelley @ BlackBox.com >

Sent: Saturday, December 5, 2020 5:24 PM

To: Tim Tomlinson ttomlinson@teradici.com; Greg Weir gweir@teradici.com;

Cc: John Hickey < John. Hickey@BlackBox.com>; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com>

Subject: RE: Teradici - BlackBox

Hi Tim.

Yes. That is the scenario.

We want the option of running multiple connections to different hosts from the same client and then either tiling them on a display or allowing very quick switching while the connections are maintained live in the background.

Does the Teradici client require a physical GPU or any particular graphic subsystem requirements?

Regards

Peter

From: Tim Tomlinson [mailto:ttomlinson@teradici.com]

Sent: Thursday 3 December 2020 23:42

To: Peter Shelley; Greg Weir Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Hi Peter,

See responses below to your questions.

Tim Tomlinson

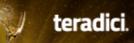
OEM Solution Architect

Dallas, Texas

Mobile: 214.548.0098 | www.teradici.com



Engineering Emmy* Award Winner



From: Peter Shelley < Peter.Shelley@BlackBox.com>

Sent: Thursday, December 3, 2020 4:39 PM

To: Greg Weir <gweir@teradici.com>; Tim Tomlinson <ttomlinson@teradici.com>

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

Hi Greg,

Thanks for all the documentation. We are still reviewing.

For now, I have two questions.

1. When you refer to H.264 decoder for the HD and UHD specifications, are you referring to a software version running on the core. Or is this a hardware requirement?

This is a hardware decode only if it's enabled and an Intel GPU is present. See the following: https://www.teradici.com/web-help/pcoip_client/linux/20.10/configuration/h264_hardware_decode/

2. Is there any restriction on more than one client running concurrently on the same platform? If so, what assumptions should we make on the CPU and memory needs?

Are you referring to the client being launched multiple times from the same endpoint (and perhaps connecting to different hosts)? You can launch the client multiple times. I don't believe that scenario has specifically been characterized from a performance perspective, but I don't think it would actually alter the specifications. We are limited to 4 screens and we care about how many pixels are changing on those screens. So from that perspective, if I'm running 1 monitor for example, and I launch the client a single time and run an application full screen... All the pixels on the screen may be changing. If instead I launch the client twice into two different hosts... I'm now running partial screen for each, and the maximum number of pixels changing on that single screen has not changed. I can double check this, if this is the scenario you're asking about.

Regards

Peter

From: Greg Weir [mailto:gweir@teradici.com] Sent: Friday 20 November 2020 20:58 To: Peter Shelley; Tim Tomlinson Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Peter,

Information from my Solutions Architect Tim and I have attached the OEM TAPP & TCA Agreements for you to review. Let me know when you want to get on a call to discuss.

- 1. OEM TAPP & TCA Agreements See attached
 - a. Note you can cross out TAPP program fees. But I can explain when we get on a call to discuss.
- 2. Client requirements for both HD and UHD solutions.
 - a. HD Client Requirements:
 - i. we recommend the endpoint supports 120 MPPS or higher. This is achieved using Core i3 10110U or equivalent configured using either AVX2 or H.264 4:2:0 decoder modes
 - b. UHD Client Requirements:
 - i. The endpoint needs to support 250 MPPS or higher to achieve full screen 4K30 playback. The Core i3 *should* give the requisite performance using H.264 4:2:0 (or Auto-Offload)
 - ii. More substantial processor is needed to achieve 250 MPPS using AVX2
 - Core i5 10210U or better.
 - c. Additional Requirements:
- i. For both HD and UHD, 2x4 GB RAM is recommended
- 1. Dual banks are important to maximize memory bandwidth. The decoder should not require more than 8GB total.
- 2. Memory speed is also important to maximize pixel rate and faster RAM may provide better cost-benefit than a faster more expensive processor in many cases. i.e. DDR4 2400MHz.
 - ii. OS: Windows 10 (64-bit) or Ubuntu 18.04 (Ubuntu 20.04 in Q1 2021)
- 1. Using Ubuntu can take advantage of the local H.264 hardware decoder
 - a. If using H.264 hardware decoder, Intel GPU is recommended
- i. AMD should be

OK, but would require driver installation work (has some complexity)

ii. NVIDIA GPU not

currently supported

- 3. Information on any SDK required
 - a. SDK not used. Standard Software Client will be used. If branding is required, that will be supported in 21.01, currently in Beta.
- 4. Licencing information.
 - a. Attached PDF

Greg

From: Peter Shelley < Peter. Shelley @ BlackBox.com >

To: Greg Weir <gweir@teradici.com>; Tim Tomlinson <ttomlinson@teradici.com>

Sent: Friday, November 20, 2020 11:04 AM

14/06/2022, 16:41 FW: Teradici - BlackBox - John O'Sullivan

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

Greg,

We have our own Management Tool called the Boxilla AV/IT Manager.

See https://www.blackbox.com/en-us/solutions/by-technology/kvm-switches-and-extenders/centralised-kvmav-manager---boxilla

Regards

Peter

From: Greg Weir [mailto:gweir@teradici.com] Sent: Friday 20 November 2020 17:01 To: Peter Shelley; Tim Tomlinson

Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Peter,

Quick question. What Management tool do you use?

Greg

From: Peter Shelley < Peter.Shelley@BlackBox.com> Sent: Wednesday, November 18, 2020 2:25 PM

To: Greg Weir <gweir@teradici.com>; Tim Tomlinson <tomlinson@teradici.com>

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

Greg,

We have accepted all the changes and signed.

Regards

Peter

From: Greg Weir [mailto:gweir@teradici.com] Sent: Tuesday 17 November 2020 20:30

To: Peter Shelley; Tim Tomlinson Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Peter,

I checked my file and we never finalized the NDA. Attaching the NDA where we last spoke 4/17/2019. Can we finalize so we can share the requested information?

Greg

From: Greg Weir

Sent: Monday, November 16, 2020 8:20 AM

To: Peter Shelley < Peter.Shelley@BlackBox.com ; Tim. Tomlinson (ttomlinson@teradici.com) tt

14/06/2022, 16:41 FW: Teradici - BlackBox - John O'Sullivan

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

+Tim, my solutions architect

Peter,

Thank you for reaching back out to me. My solutions architect and I will gather the information for you and send over

Greg

From: Peter Shelley < Peter.Shelley@BlackBox.com>

Sent: Sunday, November 15, 2020 4:28 PM To: Greg Weir < gweir@teradici.com >

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

Greg,

We are current working on the feasibility of a x86 based solution and would like to re-engage discussions with Teracidi.

Can you provide details for your client solution?

In particular, we are interested in the following:

- 1. Host requirements for both HD and UHD solutions.
- 2. Information on any SDK required
- 3. Licencing information and costs.

Regards

Peter

From: Greg Weir [mailto:gweir@teradici.com] Sent: Thursday 22 October 2020 21:25

To: Peter Shelley

Cc: John Hickey; Tom Fitzgerald

Subject: [EXTERNAL] RE: Teradici - BlackBox

Peter,

We are still x86 based for now. If you decide to support an x86 based solution let me know.

Greg

From: Peter Shelley < Peter. Shelley @BlackBox.com >

Sent: Thursday, October 22, 2020 3:18 PM To: Greg Weir < gweir@teradici.com >

Cc: John Hickey < John. Hickey@BlackBox.com >; Tom Fitzgerald < Tom. Fitzgerald@BlackBox.com >

Subject: RE: Teradici - BlackBox

Hi Greg,

Still in the pot to decide. ARM is still our preferred options. Are your plans hardened here?

Regards

Peter

From: Greg Weir [mailto:gweir@teradici.com] Sent: Thursday 22 October 2020 16:57

To: Peter Shelley

Cc: John Hickey; Tom Fitzgerald; Greg Weir Subject: [EXTERNAL] Teradici - BlackBox

Peter,

Hope all is well. In our last discussion you mentioned your solutions were ARM based but you were investigating x86 as a possible future option. Have you made any decisions?

Cheers,

Greg Weir

Director, Global OEM Accounts

Mobile: 512.750.6367 | gweir@teradici.com | www.teradici.com



My Solution Architect

Tim Tomlinson

ttomlinson@teradici.com

214.548.0098

To Request Post Sales Technical Support: https://help.teradici.com/s/

Teradici Wins Emmy Award - To learn more:

- Television Academy Announcement
- Teradici Announcement

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