

## **ASI Presents PNY Quadro for Workstations**

0:00

Now, starting, all attendees are in listen only mode.

0:05

Good morning, good afternoon, everybody. This is Kent Tables with ASI, I want to thank you guys all for joining us today.

0:12

We have with us today, kicking off our Tech summit, webinar series.

0:17

We have PNY, and we have Adrian here with us today, and Wyllie, who are going to be going through their presentation, and talking about the Quadro products, and what PNY has in that product line, and some opportunities for you guys, as resellers using the Quadro product.

0:37

Before we do that, there's a couple of things. I wanted to do, real quick announcements, and then we'll kick everything off and get into the presentation.

0:45

First, I want to remind everybody that we are doing a seminar series.

0:51

So, we're starting.

0:52

today, this is our first day during the theories, and we have a webinar session today, and we have one, tomorrow, and Thursday and Friday, so each day, we're doing a different series from a different vendor. All these seminars start at 11 o'clock.

1:08

So today, at 11, we have PNY, tomorrow.

1:12

At 11, we'll have Intel talking about V pro technology.

1:16

On Thursday, we have Samsung and there'll be talking at 11 o'clock about their SSD drives, an SSD solution. And then on Friday we wrap it up with Supermicro who will be talking about AMD servers and all of these seminars take place at the same time each day. So, we want to welcome you guys to come back and join us for each session.

1:37

Also, as a reward for you guys participating in this session. We have some great prizes at the end of each of the seminars.

1:44

So, today, P N Y is going to be giving away an iPad.

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So we will announce the winner of that iPad at the next days.

1:55

Webinar session. So be sure to come back and join the next day, so you can hear who's gonna get announced as being a winner, but we'll be giving away an iPad today. Tomorrow, or Intel were given away, and then tell Nook.

2:09

For Samsung, it's a 50 inch LED display, and then on Friday, supermicro is doing some headphones.

2:18

Some beats headphones, and then if you guys attend all four sessions, you'll be entered into a raffle drawing for a chance to win an Intel gaming notebook. So lots of cool prizes. Lots of opportunities for you guys to get stuff when, when things, so be sure to make sure you come back and join each one of the sessions.

2:38

So with that said, I'm going to kick things off.

2:41

But before I do that, really quick one more thing, if you guys have questions on the side, you'll see your go to meeting control panel, there's a box that says questions. You can go ahead and type in your questions there. You just open up that window and type in your questions.

3:01

And then we'll be able to ask Willy and Adrian and we have J Chen on the line with us as well today. We'll be able to ask the entire ... any of your questions, and we'll go ahead and do that at the end.

3:12

So, as we're going through, if you have a question, go ahead, type it into the question box.

3:17

And we'll be sure we get that two to the ... team.

3:21

So, with that said, Willie, I can see you're anxious and you're ready to go, and you're ready to get started, and get everything kicked off for.

3:29

So, I'm gonna go ahead and turn everything over to you, so let you go ahead and get us going.

3:36

OK, thank you. Anyway, Good morning, good afternoon, everyone. I hope you guys as well, and say, first of all, I wanna thank you for taking time out of your busy schedule to join this webinar. Hopefully the information when I present to you is useful, and any questions you might have, we will address them at the end. Once again, my name is William T Sum, that Fuel Sales Engineer Manager for BMI Technologies. Being four with the company 20 years since we started the relationship with Nvidia back in 2000 started with the forest products. Then, we got Quadro it, and we started the Tesla business, when the, when, in 2006, when they release Kuda and library, so we specialize on GPU, and we can proudly say, P and Y is the only company that carries professional quarter line and, and, and the consumer G force. No other company can do that.

4:29

And the events are working would be unwise because we carry both lines, based on your customers' needs and requirements. We can find the right solution based on, on the project.

4:42

With that being said, I'm gonna get started, though, We've got a lot of information to cover.

4:46

Today, this webinar is going to be a bus service, the Nvidia RTX, for rendering for AI and we're going to go and start the training.

4:59

So server in a data center just in challenges today, from growing demand for compute intensive architectures to work across multiple workloads.

5:09

Are the challenges that difficult, time maintaining and availability of time maximize resources, improving capacity utilization and increase in IT efficiency to use of AI automation?

5:23

So those are the challenges that are being counted today because everybody wants to virtualize how we work Today has changed and everybody knows that it especially this is an example, where are we doing today? We use platforms, like go to meeting, teams, zoom, WebEx, so now conduct trainings that we will do normally in person. So, the thing about it we have webcams where we still can see each other to communicate and provide information. So, although a few organizations planned for the global ... will have a copper 19, many will now decide to have some type of desktop virtualization. Places to expecting this assumption and everybody wants to virtualize but sometimes they don't know how to do it. So we're gonna go over on, on how to deploy it. So, 70% of the new desktop for visualization business cases will be used on business continuity, demands on highly during the ... crisis. 70% indicate work from home in. Employment models will be permanently changing the ....

6:26

A lot of companies probably after the pandemic is done we'll implement people to work from home. And especially if you have kids and the kids are sick you still can stay at home and be productive. And I lose a day of work because now we have the tools to do so. This cover 19 pandemic has allowed us to lead the way we invent the way we work today.

6:49

Work Trends for 2020, working from home, or remote, is the new normal, right?

6:54

91%, indicate they have recently limited work from home arrangements, and reduce pandemic it. Not an organization is already working remotely. Some of them were, fortunately, they already had deployed virtualization in place, but most of them were 54%, indicate the knowledge, or infrastructure for remote working, is the biggest barrier effective, remote working.

7:15

Um, so with the archaic servers, other challenges can be solved.

7:20

IPCC predictions, but G 2000 companies. by 2021, the workplace is being re-invented.

7:26

60% will utilize employee experience as a key differentiator. 60% will have adopted future workplace models and 65% will offer remote work options, which is great. Even our company being why only essential work is going to the office and most of us remotely and now shown with the tools we have to be able to work from home and be productive.

7:50

And that's the work options I think with a pandemic solver still because we prove that we can work from home.

7:58

Some employees going to be able to state to work from home a few days a week, and maybe the whole week. I myself been working remotely for many years, and now with the technology, and they will do anything I need, upfront.

8:12

So the Nvidia GPU Accelerated Data Center, making remote virtualize workspaces, accessible to the entire workforce. Being to the applications are three-d. applications of AI.

8:21

Application Nvidia has a server capable of running any workload.

8:29

Enable remote workforce, raise the bar and productivity, uses experience. Meeting increase graphics demand for modern digital workplace, rapid provisional, virtual workstations.

8:41

And I'm going to show you how you get to implement, those were virtual workstation in less time, with lower cost access to anywhere, any device experience, rivals of physical PC. So now we're showing ..., if you're using a middleware, could be Citrix, where you can enable any device in a tablet, a phone or a laptop or on each level of workstation by installing the client's upbringing half full capabilities availability for that. The high-end GPU. So eliminate.

9:13

Constraints or workflows, increased use of productivity, and enable a geography, spends teams collaborate without borders. So, now, with this new technology, as we're doing today, all of us in different places in the states, different states, you still can communicate, and now, you can collaborate with anybody anywhere in the world. I don't know if you saw in the keynote frankincense and the marbles video that I created and they created the updated a video using the aquatic or the eight RTS, a 6000 I'm sorry, I was gonna say quadro! The rebranding and still quadra Product is still the goodness of collateral.

9:49

They just remove the Quadro name on it, but he's now R T X 86,000, but that board has the new generation of Tensor Cores, RD Corps.

10:01

So with those bores that I keep, you know, the really powerful you able to virtualize and worked for any way in the world. They collaborate. So that video models that I was talking about was produced by people that are working for Nvidia Remotely and they collaborated with a middleware for that platform to create a video that you enjoy yourself.

10:23

So service a NVidia R to R T X defined solution scope, high performance virtualization, visual computing, AI platform. So, enable time and cost effective BQ.

10:34

The GPU we shall we say, you should test invalidated across Rachel workloads. Being a computer aided design, collaborations, design, quadra, virtual workstations, data science and compute, accelerator rendering AR VR, at the Edge. So this complete box could be utilized for different platforms, different vertical markets if in the way you deploy it, and what your needs are.

10:59

Service within video tapes or virtual workstations, So bring the power to CloudWatch, TX two virtual workstation once again with a middleware. You can be a tablet or a laptop, a phone. You will have the power or the GPU and your hands. And so, these are some of the vertical markets that can take advantage of this Signal E Once again.

11:18

AEC, education, energy, financial services, government, healthcare manufacturing, and media and entertainment. Media entertainment has taken a hit, because we've covered 90, and as you can see now, most of the Mayor movie releases of the bean release, in streaming platforms.

11:37

They still enable them to, to generate revenue, and you're going to see how that when they create the content, you realize the archaic service time, allow them to actually cut the time, that it costs, to produce a movie, or do a scene. And I'm going to show you some numbers, in a few slides.

11:56

So what do you need to enable an Nvidia virtual workstation?

12:01

So Nvidia has a solver called Virtual GPU, and there's a profile for that gives you the option, the Nvidia V W S.

12:11

It's the profile that allows you to have a full workstation virtualized using an RTS server. So, you get the advanced features, like he had acquired of Rural High performance. And you still keep the application ... that Come with a Quad Rewards enterprise. Reliability. So you've got tools, and very important is data security because now this is in a data center. You still have to execute.

12:35

You require a new need is resource optimization, data, proximity, and IT management tools that allows you want to see deployment to manage it and deploy and maintain the solution.

12:51

So this is just a quick overview of how decisions are being deployed. Remember, Virtualization was done in the CPU environment, and what you see on the left-hand side is the way it is deployed, how many layers you get to it, with the apps in VMs. And I see hypervisor and disability itself.

13:11

The way you do it with the GPU now with a very archaic server, is, it's different layers and different form. And it gives you better performance. Once again, you're able to slice and dice the

resources. For example, your token RTX, 8000, you able to take 48 gigabytes of memory, and slice and dice that memory to, depending on your users and your power users. So this is the ways deployed to the applications, to open Yale or high into the apps, or just meet in the media streaming. So you have the ISV apps. You like always your Autodesk, D S max. And once again, the drivers to satisfy for those platforms, then you get the video graphics driver layer with the with the computer if you needed. The VDI virtual GPU with Nvidia virtual GPU is used to call Grid.

14:02

And then you need a video visualization software but as you upgrade your ISP supervisor, but keep in mind you still need that layer, the middleware, being a Citrix and v.m-ware.

14:13

So Nvidia, Virtual you use software, so GP virtualization for every workload. So as I mentioned before, there's a video profile if you only want to the apps multiple monitors. You get Nvidia Grid for virtual PC obligations. If you're running a three D S max and you're going to have the Nvidia VW yes profile so for your virtual workstation. And now, you also can now take that same platform and use AI deep learning data science and HPC pilot process. And so, you will need a compute profile. But, as you can see, the one solution is flexible. Depending on your workload, you can deploy, all of them are just two of them or just one individually, depending on the environment of the customer.

15:01

So in the quarter virtual workstation, GPU accelerated features. So even though it is virtualized, this is the latest features that you get, you will get the multi virtual machines to be sharing. Like, I mentioned sharing the resources multi GPU aggregated as well. And then on the Linux only, you can have peer-to-peer using an empty link. You still have the features. If your application requires ECC memory, you can turn that on, right?

15:28

So it, by default is turned off, but if you environment of PCC Memory, you still have the option to enable that is the same as if you had a condo board, they able to right click on your desktop, and enable hardware features funded. The Control Panel can be called a support for Windows and Enhanced flexibility as scheduled. So you can now deploy and maintain the resources in and give priority to use these as well.

15:57

So a small list of applications that, once again, certify for the solution for every user or any application, knowledge, workers to the odds of being a PowerPoint, that, it could be just to get a browser office applications or creative and technical professionals and it can power professional graphic, use it with great flexibility once, again order this AutoCAD, fatigue, Solidworks just to name a few Unity or Unreal Bloomberg. So you still have the stability and performance as if you had acquired a board, but now you're deploying that solution in a data center environment.

16:32

Just to give you some performance numbers when you virtualize with RTI, 14,000. And, I'll show you a list. We actually have two flavors of the board. We have an active skill, and we have a passive skill. And, they keep in mind, and I'm going to cover this the only go into certify server environments, You just cannot plug them everywhere, especially the passive boards. If you don't put into Certify Server, they would burn out, because I don't have proper cooling.

17:01

But as you can see, expect you SW 13, which is the benchmark utilized to two, makes my professional solutions. You see the performance difference using a 84 in a Tesla V 100, I guess the archaic 14,000. So definitely, you see the performance boots in there, and increments.

17:20

Oh. ...

17:22

dream, RTX accelerated applications, so Quadratics rendering, great performance. As you can see here using Autodesk, are, we comparing 160 times faster than the CPU. And as you can see, there's more chart that is in front of you shows you the performance between the two and Keep me my lower is better, in this instance, right, Because you you're minimizing the rendering time, so they lowered the time it takes to render the better performance you get.

17:51

Started with Nvidia, export three-d.

17:53

production increased productivity, you analyze while decreasing cost. So content creation is very important. I show you a slide on how Netflix utilize the RTS servers to reduce the time he come into production for Infosys space. So it doesn't matter if the application is run media entertainment CAD. Design fluid.

18:15

Simulation the RTO survey acts like a render farm, and will help you render your products and your projects.

18:25

Proven Nvidia, Aquatics Ms..

18:26

Anyone once again. So Nvidia has a solution for you, depending what your needs are. So you have a physical quantity of work in a workstation, or your local workstation. You can also have quite in the data center. While we're discussing today, virtual workstations in a quarter of VWF is NVidia virtual CPU profile, a quadrant in the cloud as well.

18:50

So 90% of the world profession workstations, that power by the Nvidia Quadro, um, so that's impressive.

18:59

So now we're going to cover Nvidia RTX for rendering.

19:04

So, just a quick overview of the, the production pipeline.

19:10

The workflow from pre production, assay, Creation, cleanup, and shots, RTX series, if we allow you to take those steps and render the user in many phases of the stage, and give you better performance and wants to make minimizing the time that it takes to render a frame.

19:32

So, there's different options to do rendering for warlock configuration. So, if you look on the left-hand side, option one offline rendering. So, final frame you'd be rendered, you get your Kuda Axial AI, your optics once. Again, this is supporting RTX, 6000, and 8000 active, or passive.

19:50

Virtualization will be supported on the new RTX, 86,000.

19:56

But, keep in mind, it does take a while because we need to validate the solution. Now with this, the only way with distorted remix of the thermostat there, because you've put in for eight boards in the system.

20:09

So you probably going to see archaic service with a 6000 sometime in Ravioli.

20:17

March timeframe, 2021, because the Board would be available for deployment. But on the I TH seven environments, certify, it takes about three months or four months. Validate and solidify the solutions. keyword here certified. So option two is our on demand view rendering. So I see applications to be a rendering hypervisor. Once again, didn't eat will need the nvidia VW as profile an option to his work by rendering note work by day and rendering no by nighttime. So now you're thinking, as you see the flexibility of the solution, you can use it in different forms. Once again, you can use it likes that has made a note of an item, or why did, utilizing the resources. You still have your eyes, the application.

20:59

If you render your hype advisors not the Nvidia ... server to if you want to deploy AI solutions, you can get the containers for the Nvidia AGC website in the plane through a nvidia ... server for AI.

21:17

This is an example I was giving you how this Archaic server has enabled people that do content creation, from Disney, when they produce Cocoa. And this example is Netflix lost in space as you can see in a CPU nodes, dual Skylake, single frame rendering, time 38 minutes total render time in 120 clients looking at 76 hours.

21:42

If you look at the number of nodes required is 25 power requirement, 13.2 kilowatts.

21:49

Acquisition costs \$188,000 by the cost of power, \$68,000, total cost of a CPU based solution, so \$156,000.

22:00

Now let's compare that to the Nvidia archaic server before I T X \$8000.

22:05

So you render a single frame. This, under six minutes, 120 frames.

22:10

three hours.

22:12

A single rendering not required? Power consumption of the state and 1.9 kilo watts. So acquisition cost: \$25,000. five year, course of power, \$10000. Total cost of that solution is \$38,000 versus \$256,000. Imagine with \$256,000 I'm in the Arctic service, you can employ in that environment. So six times that performance, 25% performance on Frank, out on rendering, number of nodes 25 times. Right, So performance improvement and cost savings is great, so six times faster than a single frame, 25 faster than the entire shot. So this is why Netflix deployed that solution in the environment.

22:56

Servers with Nvidia RTX dramatic Imbues rendering work flow performance blender cycles through RTX eight times faster than the CPU versus dubois Address the X R D X X thousand bores running lend it to 2.81 V, ray Next GPUs. It seems you see the performance versus The CPU 80 times faster, you look in the order of this Arnold RTX up to 70 times faster than the CPU.

23:25

Using the R T X an eight thousand, eight of them, versus CPU and solidworks Visualize. Since they fasted CP against once again, this is running Dual RTX 6000 environment on the Solidworks, Visualize 2020.

23:43

So now not only Nvidia gives you the performance stability with the RTX 6000 solutions But they also give you independent software vendor sophistication. So when you deploy this solution, you have the peace of mind that is being tested. And validated, you probably are, familiar with some of these ISVs on duty to blender at T out of this are know the list goes on and on On a rendering this.

24:10

This is the service that utilized for rendering take advantage of the Quadro RDX server.

24:19

Serverless, we nvidia RTX for data science and AI.

24:24

So once again the same platform. Being a flexible, so data science and AI use cases in every industry, I'm sure you have customers that falling into this vertical market on retail. Supply chain, inventory management, project management, part of optimization for motion. Precision, is targeting. You got telecom. no tech network security. And normality is Forecast Network that we're Secure Optimization. You got health care. We got consumer Internet, financial, services, manufacturing.

24:55

Energy. So, as you know, sensitive data, type mapping, anomaly detection, and robust fault detection in automotive and personalization, intelligent interaction, connected vehicle, predictive maintenance, forecast and demand capability or capacity of planning. So, RTX server with the science in AI allows you to do that. So you see how flexible this one platform.

25:21

It's just the way to deploy, based on your needs and your environment, services within the objects, with data science and AI. Could I X AI end to end GPU accelerated workload, So data science workstation software data, science servers packages.

25:38

You see the workflows. So nvidia Data Science Workstation for OEM partners, service and ... service in Cloud.

25:48

The biggest hippie yesterday, that size for workflow built equal to X A, I am, teaching rabbits, so data. You got your data. You got you there at this stage. Your Workflows, you got your data, you got good data preparation, and that takes time. And you know that the data preparation and data, data scientists, most of the time, is yet to be paying the data. And then waiting Waze, we pay, deploy for the model training, which can take some time.

26:14

Um, then you see there was ..., and predictions all the stages of workflow, and now a smooth, they take less time, because now the data scientists and are waiting for four to the model to fill is finished training. Now the training doesn't less time, And they actually get to go home, at least five o'clock, in the work they did before, because they have, they don't have the hardware the fast enough to help them with this workflow. It will stay working late now, the, because of the VR T X server solutions, they have more time to spend with family and be productive, not waiting for, for the model training to end, and then deploy it and see the predictions.

26:55

So rapid with Nvidia RTX, \$48,000, presented data science performance wasn't going to keep your money. He is shorter, is better. So you see the, for the workflow end to end, How you saving time to X G. Boost to data preparation? So just look how productive this data scientists could be now because they have a robust solutions alarm to actually deploy the workflow.

27:20

Here's a chart with TensorFlow. We quarter RTX at FB 60 larger batch sizes, as you can see, it's great performance here as well.

27:32

And now we're going to cover Arctic Sabra again for see in simulation.

27:38

So, so, simulation, we did product design workflow, so, conceptual design, design, simulation, and prototyping, all of this. Before. and remember, the commercial with a test, crash dummies, right? You had to destroy a lot of cars back in the day to get to the stage, and now without the server and you use a professional software package for simulation. You able to simulate design SME crashes. And then, at the end of your simulation, you actually take a car and see the results.

28:12

Collaborate with your simulation results that you did in your physical crash testing. So, common complex, and lengthy process is shorter. The computational intensive, high level of expertise required. Often a time, where we source of bottlenecks.

28:30

So answers is a good application on simulation. And I'll show you that.

28:35

So in the sea simulation product development workflow, you have your hypervisor. You see applications, you get your optics. You also have your elite NPC containers, if you're doing deep learning. And once again, the solutions are supported across a separate environment with RTX 8000, 6000 active, or passive.

28:56

As you can see, answers and PDC on demand Powerfully Engineering Simulation accelerated to the simulation obligations, Fast and model simulation in peak processing. Orders of magnitude for speed up, incorporate the CPU only based systems, visualize and evaluate physical acquisition relation. We souls are faster and work where he, the keyword here, faster results.

29:20

As you can see here, you got Altair Alter Fluid Access Layer, C is Scalable quadratics, 8000 look at the performance, versus a single board do awards, or gore six floors and eight words. Depending on your requirements, You can deploy any combination of boards and quantity.

29:44

So, we actually going to share this presentation at the, at the end of the webinar, but we're also sending you a PDF with platforms that are certified. Whereas here, you can see the applications that are certified for, for RTX Server and ....

30:03

So, as you can see, that list is intensive, And depending on the environment, that, because you have values, you want to have the peace of mind as the test and validate.

30:13

So servers and with a video checks required boards, and I keep on saying that, but I have it here listed for you. We have the ... six, active and passive.

30:25

Keep in mind, and I'm going to repeat this again: you wanna get a PDF, a list of servers that are certifying. It tells you the servers, but by OEM, could be Supermicro, it could be Thailand, HP Dell. I personally work directly with Supermicro on the validation on these wars in the certify platform. My colleagues in Kiev, while you're working already we tie in. So we know the process by which is what we did is we made it easy for you to select a platform. We have the PDF you're gonna get that tells you that the servers, how many boards the supports, and he tells you is the active version of the passive versus. So now, if you want to deploy a solution like that, you can buy a chassis, boom, one rules, OEMs. And then you can source of the graphics where a deploy yourself.

31:16

Because now, because we certify that platform, you can self certify platform, because already, super ..., validation certifications.

31:30

And as you can see, you see the performance difference between the skews, the passive SKUs have a little less performance, minus eight point six hundred percent.

31:42

As you can see there, because they're passive, um, and they also require the way you power the board. The ... 14,000 Active require, the ... Power Connector, as the passive one, requires a 18 CPU. Connector. We include inside the box a thing to do or a dangling. They're mostly your servers when you deploy the solutions. The OEM will also sell a GPU enablement kit that will allow you to provide power to the boards.

32:20

You also have the capability of a stability and GPU memory pooling and performance using the nvidia in the late and we offer two types. We offer a two slot spacing of two sides facing. So depending on the server model that you have, you were able to store either or, but also some servers might not have this base. Once you connect the ... on top, to able to close the lid of the server. So you'll want to make sure, right now we do not list the services that support the link. Some several manufacturers and modify that covers and have a little hump to accommodate the ... require, like that you don't require the in building to have an archaic server for virtualization.

33:10

This will be something more, you know, more peer-to-peer performance, and you will double the way the invalid works. So, you will double the capacity series, you have dual RTX.

33:24

Uh, 8000 is not going to put away in the links.

33:28

You have 96 gigabytes, where you enable that NV Link.

33:33

Fine. So you basically have a huge frame buffer, you analyzing two boards.

33:39

So performance features, and this is the 6000, it has been released. So basically, it's 48 gigabytes of DVR six it based on the new Nvidia and peer architecture.

33:52

You have the new generation of tenths Of course an RD Corps, 48 gigabytes of data sets, ECC memory. So this, once again, when you is releasing able to purchase that, you can put on a workstation, but, it will take a few months, As I mentioned previously, to have the solutions certify an RTS server environment. Once again, because you put in so many boards in the survey, we're gonna make sure that the thermal, so there is no power spikes, and that's the first layer certification. And then you have the applications, certification being, could be our neural, whatever, D T. So that takes time to validate that The assure. sometime in March it probably will have an option to purchase an RTO survey with it, then your RTX, a 6000.

34:43

So it's exponentially power in fraction of the cost, as you can see for, ranging on the left-hand side.

34:50

Look how many nodes you require with the Skylake servers, Any all that power in the station, a data center being replaced by a single eight GPU RDX server. So one fourth of the cost you have for our fishing challenge is the same thing. Replacing 6 to 8, and of course, ...

35:10

with a single GPU archaic server. So now we are going to fit for the cost for simulation. Now, is replacing 8 X 2 8 core Skydeck servers with a single GPU or the server now at a savings of one seventh of the cost.

35:30

This is the PDF that you're going to get. Actually, this is just a quick snapshot, But he's going to be similar to like, this budget is going to say, passive or active. one of the GPU will tell you how many you, GPUs equals support. It will tell you that form factor in the rack, at least even, at least he makes it easier for you to decide what platform you want to deploy in your environment. Nvidia does have a lake, and I can send it, but it's a little cryptic on the on the visualization side. Actually tells you the platform, how many supports, but it doesn't tell you if it's active or passive. You deploy the wrong solution, if he doesn't support, inactive solution, will create a thermal cows in your server. So that's why the PDF that you will receive these resources, because it tells you actually, X, X, Q that you can deploy it.

36:20

Just quick sample of you see that these are the servers that mean validate an unqualified, an empty quality, use those solutions.

36:36

So, as I stated before, we actually worked closely with Supermicro, Ty and I personally did not work with eight AIC, but our value added ... specializing GPU, and we provide resources to this tier two OEMs to now be able to certify the chassis that you can actually put your logo and name on it because that chassis will carry the acidification to you. So, once again, it's a good way to compete against that, till 1 0 ... to provide a solution with your company logo because now you have that certification everything done by this tier two OEMs.

37:23

So additional PMA and video marketing financially support demand generation. So if we're doing today, the Hawaiian Nvidia Demand Generation Activity, generation activity, world-class in the enterprise support, we specialize in GPUs and we have direct relationship with Nvidia. When you tell me why you took an Nvidia, will have the resources we work and collaborate together detailed configuration, cookbooks, and then the cloud based applications. So, basically, ... is a tool that Nvidia provide to us into two OEMs and wants to make sure when you run the solutions. They want to be running 24, 7, 365 because it means certified thermally to work properly, because, once again, you're putting a lot of GPUs in an enclosure.

38:06

And then he got the acidification software layers of workflow, to use cases Pacific Guides, Any questions that you might have? You can work with ... my colleague, that you see on screen insurgency information. We don't have an e-mail LEAs, ... dot com, your basic e-mail box, B and Y dot com. Rather you, at the end of April, to provide our, our e-mail areas, because now we can support you directly, and he manages our relationship with the ASI, so he will be that great resource. And if you need me to get into a call your customer, or even to set up which organizations have the user's guide that I can provide you some guidance. So, reach out to AJ, and he can get in touch with me. And we have available radiating once again if you have

customers and you're gonna get a conference called the configuration guide. So that is a platform as a service unsatisfied curiosity to contact vessel, OK.

39:03

So I want to make it clear because this is where I grew up in this environment.

39:08

G Force, it doesn't come and play. First of all, if you look at the new G four, RTX 30 sees great performance boards. They do take three slots. They draw a lot of power to 150, wasn't at 3 90, 220, 380. 220 are on the semi, but they do have an active cooling design. Normally, P Y will have a lower design. We're working on it but is not recommended to enact the board, especially that size in the power and a sovereign bar. It's not going to be stable customers and conduct any issues if there's no have ISO certifications. There's no support in Nvidia in a data center environment on a consumer board is not certify for professional applications.

39:51

And as you guys know, quite Ge-force Wars are here today, gone tomorrow. The new RTX series is highlighted in demand. And now, if you send the rise in one of the solutions, and you say, well, I want to make it work. And all of a sudden, you cannot get product, and now you were not able to ship solutions to your products or customers.

40:12

So stay with certify solutions.

40:15

And once again, data center deployment is not covered by Nvidia, gives you that or warranty.

40:20

So, I just wanted to make that clear, because I know that question that might come up.

40:27

And any questions you might have, and I'm sorry, I should have modified this. You actually want to e-mail ... dot com, and we will share that e-mail list. We have a P and Y quadra LEAs in RTI server, dedicated page, where you can see more information.

40:44

With that being said, we're going to open the line for questions. So there's any questions you might have.

40:51

So if we can do that, that will be great.

40:54

Yep, so thank you very much Willie and Nvidia team or .... Sorry about that. For those of you on the line, if you do have any questions, go ahead and submit your question through the question box.

41:09

You should see on your console a little tab that says Questions. And you can go ahead and type your question in.

41:16

And then I'll be sure to ask \*\*\*\*\* and the team the question.

41:22

While I'm waiting for some additional questions to come in, we do have a few. And I'll keep waiting for some more to come in.

41:28

Just to let you guys know, everybody on the line, we will provide copies of the presentation that Willie just went through, and he talked a lot about the PDF file being available. And that is something that we will send to you guys after the presentation. So after the presentation is over, you'll get a few things from us. What will be the PDF file, will get you the presentation.

41:52

We also have a survey that we're going to send out to you that we'd like to ask you guys to take, and I'll talk about that a little bit at the end.

42:01

With that said, let's go ahead and let me dive into some of the questions that we have here in our inbox.

42:09

You guys can keep sending those in. And, we'll, we'll be sure to ask a \*\*\*\*\*, so, \*\*\*\*\* and ...

42:16

team, did I see correctly this is the Quadro name going away and the Tesla names going away. Maybe you can talk a little bit about the naming naming scheme for the future car.

42:30

Yeah, so, so, what nvidia is doing is it's the product is still a quadro product. Same performance ISP, certifications, longer life cycle. So, so, the benefits of a quantum board I'm not going away it is still there. So, what am video marketing did? Instead of that you just remove the collateral that the quadro and Tesla name.

42:52

Honestly what are you going to see, is that you're gonna see an RTX 86,000 and you still know that's quadro Product, but still it quadro solution, with a quarter of all the lateral goodness and benefits, that you always had a non for many years. The only thing is the marketing collateral and Tesla had been taken away from, from the board's buddy.

43:16

Keep in mind, and then we'll show you is still the same quality of product and benefits with among the life cycle. The study design, the certified drivers. And the support that is required on a professional solution.

43:28

So, we see it in the future for Marketing, in naming perspective, the Quadro cards or called RTX, 6000, RTX 8000.

43:39

Yeah, On the Tesla will be a one hundredths of a.

43:42

you're not going to have Tesla anymore, But, still, it's still a Tesla product, by, just without, the marketing name, in front of it.

43:51

OK, so, Great.

43:55

Got a question about the certification. I know you talked a lot about the systems that are on your current certification list. And that's going to be in the PDF that we send out to everybody.

44:05

But is there a process to get server certified for our customers that maybe they have their own server design and they would like to get, you know, something in the RTX 6000 or 8000.

44:19

Serious certified. Is there a process for doing that?

44:24

Not directly for a platform. With them because it takes time. and they have resources At BYU Resources.

44:32

So what it does is, we work directly, once again, with a tier two OEMs like Diane and Science supermicro, In, those platforms are certified. So you can take those platforms and I can provide you a list.

44:51

And because there's Birnbaum systems, you can actually, you don't have to go through the process Once again. That process can take 3 to 4 months. And you just take the Tier two or your platforms, and put your logo on it, and still Sarah. So an archaic server, we get a company name. Because the platform itself is already set up.

45:13

Like there's no resources to be able to do one-on-one. We work directly with a Tier one hundred M Nvidia, those NPM live, with the tier two.

45:20

Yeah, that's, that's a great suggestion and be able to use, like a high-end, or supermicro, or Gigabit already certified.

45:28

So rather than kind of build the same one, so when they get the PDF file, does it include the details of what components are in there? Or they would need to reach out directly to you to find out what it tells you the video? Of course, that I support it.

45:43

Um, and there's also cookbooks on archaic servers that tells you that the minimum amount of memory that you need, if that's something you're interested is posted on nvidia dot com, I can share that with you. But the best way for the Channel business, for what we do is take one of those platforms and deploy an RTS server.

46:02

Now we own logo because you're using a certified chassis from the worker is being done OK.

46:10

Yeah, so we actually have a couple of questions kind of around the configuration of servers and essentially just mention cookbooks, so if we have, like, some questions from customers that want to know if they're doing a server or workstation?

46:28

There are Cookbook's, to kinda tell you, what are the best known components to put into, let's say, an Intel based workstation.

46:38

Yes, and actually, we also have a cookbook, so data Science workstation, my colleague, Jason Nikolay, they are not be able to talk.

46:47

He has worked with me and then our technical team on, on, on those configurations. Jay, can you talk about that.

46:57

Yeah, so, similar to the site so that similar to the RTS Server, we do have the data science workstation cookbook.

47:06

If you want to make the request, I think the best ways to contact Adrian and, or ASI ... dot com.

47:14

It does have, like cut recommendation and V D phi VDI themselves that they validated to working with.

47:21

For example, we said Supermicro pedestal Server, or I believe it's high-end as well, so it kinda get a lot of those try error process out of the way for you guys. And the other thing that it's critical for the data science workflow is that it has also has extraction about how to setup an Nvidia GPU Cloud, AKA NGC.

47:46

It is a registry of all the kind of framework that's popular in science ecosystem, right.

47:55

So it's all containerized, though. So for you, as resellers, the minimalist is set up, sorry, the minimus and it's gonna be very easy for you, just kinda support your customer because the old how work's been taken care by Nvidia. So if you're interested in that cookbook, you know, definitely reach out to us.

48:16

Yeah, so what I'll do is I'll go ahead and connect with Willie and Jay. And we'll get the link for the Cookbooks.

48:25

And then we'll send that out to everybody so that we can provide you guys with only, because we do have quite a few questions around this topic.

48:32

So I think it would be great We can provide you a link to the Cookbooks. So, I have a note here to get that from you guys So Willie Adrian Jay. I'm gonna be pinging you after that after this session to get that link and then we'll send it out to the customer so that they can have it done.

48:52

I have a question on, you talked a lot about the virtual machines, so on, uh, VMs, you know, can, can a VM utilize more than one the GPU?

49:06

Yes, so basically, if you're interested in, once again, normally Nvidia does not, to Virtualization, is a little complex. And if you talk to them very high, because of the extra, that will send it to someone.

49:22

Specialize in Hawaii, in the other hand, we help you with our system. I can show it to you a user's guide decision, that sort of how to set it up, how to deploy the Nvidia virtual use licensing, enabling the licensing server, and how deploy those resources.

49:39

Because with Citrix and v.m-ware, you have the ability on the configuration, to enable users, and give him, any amount slice and dice with the V U software. Given, if you have a power user, maybe work with huge files. You can give me a gigabytes of memory and maybe you have a user that works in smaller files. So even two gig. So you slice. And those resources.

50:03

So if I can send you the user's guide, that goes through all the steps, and it will make it easier for you.

50:11

So I actually have a, an e-mail that I got to the, you know, when I support customers as every link, how to deploy the virtual CPU software, the hardware that is needed and the configuration but the middleware. So that's something you're interested. We also can share that after the webinar is over.

50:31

Yeah.

50:31

And just so everybody knows, for everybody that's on the call, all the questions that you guys are submitting right now, we will be providing those questions to, P N Y, so, that they'll be able to see, you know, who asked the question?

50:48

And in this particular one, they'll be able to follow up directly with whoever asked the question. So, if there's additional information that P and Y has available, they'll be able to provide that. We're gonna get them a list of all the questions, once everything is over.

51:03

So, again, even if you know you asked the question, and maybe we didn't have enough time to answer it, they'll have the questions, or they can follow up directly with you afterwards. But go ahead and keep sending those in.

51:16

We definitely want to keep getting your questions here. So \*\*\*\*\*, on the Quadro RTX card will those work in a for you chassis with the NV Link modules.

51:31

I that they should, depending on the manufacturer.

51:35

Once again, I see some manufacturers that have modified, um, their coverage because of the spacing and billing. And I cannot tell you, 100% is going to work. And everyone, each OEM has different design different way that you just cover.

51:53

If you're interested in deploying it for your chassis, let me know the chassis utilizing. We also have available if you have any resources, We can give you a step files for the RTX 6 and 8000 M B N B link. So now we would have passed software. You can simulate and make sure everything works.

52:12

And normally we do that on the level of the of the chassis manufacture was against the .... But if you have a specific model in mind, send us an e-mail we have a direct relationship with.

52:29

Tying this to the microwave one of those, and we can verify that he does, I ran and verify it and say, Yes, it will work. Because I see some cases, the roads are definitely that we use and I'm gonna work. I didn't, So, you should.

52:41

But I don't want to guess, if you have a specific platform model, non-person, that over Nabu, double check for you, OK, So, let's kind of switch gears a little bit here, have a question regarding the RTX, A 6000 release, or both, cards available yet, they've been released.

53:00

What's the data they have been launched? And announced? We should start to see shipping at the end of the month of beginning of next year? When do you expect them to see any distribution? Adrian?

53:16

Are you actually muted? Agent?

53:20

eight was muted.

53:24

You still might take care of media, You're muted. Maybe on your phone, Adrian?

53:31

Yeah.

53:32

There we go, OK. Sorry about that. Now, really, you're right. It's going to be beginning of next year.

53:38

We're good. We're getting a lot of inquiries. We have information ready on our side, of course, it's been announced. But availability won't be until next year.

53:46

What I would highly recommend to get more, some of these product announcement, if you guys are not on it yet, make sure you sign up for our partner portal, which is at P N Y, partners dot com.

53:55

It has all the all the information.

53:58

As a matter of fact, what we'll talk about here if you guys are interested in learning more about different verticals from AI to How to use quadra for AEC, ...

54:09

We are encouraging people to sign up for the P N Y University.

54:12

If you actually complete that, there's only 17 modules, you'll actually, Yeah, \$25, Amazon gift card by just completing that course, so if you guys are not on it yet, P&I partners dot com, you'll see a lot of the resources on there and plus information about a lot of new product releases.

54:30

Yeah, and the portal site is great, great resources you can to the ... you can request files. support, if you have an opportunity where you have special need, a special pricing, you can submit through there, you can see all the promotions that are going on. And like, my colleague, ... University is great. If you, there's videos like with this presentation provided by the personnel OPM why you can post and rewind the video. Watching my own time. I think we have videos from video, video walls, environments for CAE. So really this specific verticals, and you want to educate yourself in view of the great resource, and you have the ability to chat and talk to anyone. So I do encourage you to sign up to the PMI Partner Portal, and go through the ...

55:25

University, is a great resource. They will make you more knowledge, knowledgeable, so you can sell the solutions to your customers and have the confidence of knowing the environment.

55:36

And once again, we are here as a resource for you If you need us in a conference call, in a webinar, anything. Don't hesitate to say with an e-mail. ASI FEMA dot com you will get, is a complete team from Phil application engineers to self support, to customer service, product availability.

55:59

We can work with you in a site together, so once again uses the resources we here to help you sell, and the more you sell the one we sell. So it's a win-win situation for all of us.

56:10

So, we're coming up to the end here. And I've got a couple more questions. I want to try to squeeze in, and then I wanna wrap things up and let everybody know what the prizes are and how we're going to do that.

56:21

And so, I want to close things up real quick at the end and kinda leave enough time to do that.

56:27

So, let me try to squeeze in these last couple of questions on the rear blower on your P and why do you guys have RTX cards that are going to come out with rear blower?

56:41

On the G force front, we are working on our blower design.

56:47

It's been a difficult task because, as you guys know, the specs that boards are, takes about two slots, 2.7 slots. We still three slots are the big draw a lot of power. So, in order to release a blower version of the board, we need to pass NVIDIA's greenlight requirement, which has been a challenge. On the Lower East side.

57:10

We are working on it value added with P and Y, when we release our G forest products, if you look at an RTS 20 API Advantage of working with PMI is that we don't reduce costs, are consumer boards. We keep it with nvidia reference design because most of our customers about Jefferson, PMI are really not gaining they. Pulling in a professional environment and videos offer. A studio certified Congress would equal a studio divers. I don't want to say that.

57:36

If I test it because there's a difference between Quadro and I'm going to call it ..., because we still have powder solutions and G force.

57:45

If you go and look at our Autodesk web site, they list Chief Process Works. But if you look on the right-hand side, he says certify with aquatic front.

57:54

What does that mean to you? Let's say we sell both solutions, and we know everybody has a budget.

58:00

But if you release a cheapest product, any works, great.

58:03

The moment you content on an issue, I wouldn't be able to support your now, because, oh, look, really nice. I can go to Nvidia and submit a bug on a consumer or an unprofessional application or environment. So, in video of resist to the driver's seat for works, great, if you've got an anxious, you're on your own.

58:19

The difference in quadra is the acidification industrial work.

58:23

If you had an issue, we go through to the installation configuration, make sure everything's working properly. We able to report, we submit a bug directly with Nvidia and video will work with an ISP to resolve the issue. So, there's nothing we don't tell you go talk to all of this year. We actually deal with you guys that that doesn't happen on the consumer space.

58:45

The answer is yes, we're working to release a blower design.

58:48

so let me try to squeeze in one last question here and then we'll get everything wrapped up kind of on the software front and I will save this one to the end, because I wasn't sure if I was going to be able to ask it correctly. That's my issue.

59:03

But basically, on the, can software be, is there any specialized customization for multiple GPUs?

59:12

You need to do any special customization in the software for multiple GPUs.

59:18

I will have to look at the application. Keep in mind, in order for an application to, to take advantage of multiple GPUs in the application itself, needs to be multi BU aware, right?

59:33

I'll give an example, three D S max is able to, to take advantage of multiple GPUs, but if you're running a simple version of AutoCAD, you actually have two boards in there, but it's only going to utilize the resources of one. So when it comes to multi view environment, the application has to support the multi GPU.

59:53

So, if he does, there could be a preference, a setting where you see both of them automatically, if it's multi-day you aware, the application will recognize them or to be used and take advantage of it.

1:00:05

All right? All right. So, before I close it, wrap, wrap everything up and give everybody all the great details on what we're doing for prizes and talk about a survey and all that stuff.

1:00:17

Adrian, I wanted to give you one, last chance here at the very end. Does a lot of different products.

1:00:25

So, maybe just want to hit really quickly and let everybody on the line know, hey, when you're looking for P and Y, Um, no.

1:00:35

Here's some other, some other stuff that we do as well.

1:00:40

Now definitely, first of all, thanks again for having us kick off the virtual event.

1:00:46

I've been a ASI partner for a very, very long time and I just mentioned where one stop shop. Again, Willie is pretty much, what we call our SME, was absurd our subject matter expert.

1:00:56

We want to do all the heavy lifting when it comes to GPU, but not only do you want to penalize for our GPU.

1:01:02

We actually also have SSDS, We have our flash products.

1:01:06

And again, like Willie mentioned, you have to Quadro, and we do have the G four.

1:01:11

So we're always looking at, no, we can always support you with the best product.

1:01:17

And based on your needs, the value that we're bringing and what's unique with us compared to some of utter AIB partners, is they only can do G force and we have both.

1:01:29

So if we really know that you'd really need to push and go with a Quadro.

1:01:33

You know, we will make sure that you know, we provide you with all the details, But if you just tell us how do you want to go, but G force again, we still have that product. So we will support you either way.

1:01:41

But again, I mentioned earlier the partner portal.

1:01:44

Definitely sign up.

1:01:45

There is a lot of information on there.

1:01:48

But with all this stuff that when he talked about especially with the new upcoming products, should you guys want to try out let's say the new 8000 when it gets releases?

1:01:57

No ASI does have a program where you can submit a developer unit, know, once it gets qualified, once it gets approved, if it gets approved, we can get you 1 or 2 up between.

1:02:07

It's, again, it's based on approval where you can save between 65 to 75% off the MSRP of that card.

1:02:14

So make sure you talk to your ESI rep.

1:02:17

As I mentioned to them, hey, how do I qualify for our developer card?

1:02:19

Should you have any opportunities?

1:02:22

Again, since we're talking about Quadro, we do have also a reseller program at the moment.

1:02:28

That you can get some extra Amazon gift cards for the holidays.

1:02:32

So if you are looking at any of the entry level Quadro at 420, the 400 to 621,000, or anything that you buy, you actually get a \$10 Amazon gift cards so make sure to reach out.

1:02:47

Again Cam. Thanks for your time. Thanks to the ASI team!

1:02:50

Thank you, William, for spending the time.

1:02:52

I'm doing this training.

1:02:54

Great, thank you for being part of the panel.

1:02:57

All right.

1:02:58

So I'm gonna go ahead and wrap everything up and just to kind of close everything out here.

1:03:06

Really quick, there's several things that I'm going to be sending to everybody who joined our webinar today.

1:03:12

We've got the presentation deck, the PDF file that we're going to send out that talks about what the certified servers are that use the quadra cards.

1:03:22

And we're going to send out a link to the cookbook, that we talked about earlier, that kind of gives you an idea of how to configure and what to use in your configuration.

1:03:31

The last thing that we're going to Sen.

1:03:34

We have a survey that we want to send out, on behalf of P N Y.

1:03:39

So, we're going to send out that survey to you guys, as well, and as a special thank you for joining us today, for our first webinar, and for sticking with us, for the extra time that we ran over.

1:03:52

For all of you that go ahead and take the survey, I will put you into a raffle drawing for a chance to win an intel nook system.

1:04:03

So, take that survey, and we'll get you in a draw raffle drawing for a chance to win.

1:04:10

In addition to that, for you all joining us today for the P and Y seminar, we're gonna give away an iPad, and we'll announce the winner of that during tomorrow's seminar session.

1:04:22

After we've had a chance to kind of pull all the names for who joined us today. So, bunch of stuff coming your way. Great chance to earn some pretty cool prizes.

1:04:33

If you didn't hear at the beginning, our session tomorrow is from Intel, they'll be talking about ... Pro Technology and they will be giving away a Nook system for their presentation.

1:04:44

Then, we have Samsung on Thursday, and we're wrapping it up on Friday with Supermicro.

1:04:48

So, on behalf of all the Peon, why team that were with us today, and for ASI, I want to thank all of you guys for joining us. For our seminar session today, we look forward to seeing everybody back tomorrow.

1:05:03

Definitely come back, there's a lot of great content and the three remaining sessions we want you guys to, to hear about and learn about and also chances to win, you know, some, some pretty awesome prizes. So, again, thanks everybody for joining. Thank really, thank you, Adrian. Everybody.

1:05:23

Happy holidays, Stay safe. And well, then.

1:05:27

Let's sell a car together. Thank you.

1:05:30

Sounds great. And thanks, everybody, for joining. And we'll see you all tomorrow.

1:05:35

Thanks, everyone.

1:05:36

Thank you, guys.