Brian Gracely (00:01.422)
Good morning, good evening, wherever you are and welcome back to the Cloudcast. We are coming to you live from the massive Cloudcast studios here in Raleigh, North Carolina. Hope everybody is doing well. We are getting to the end of July, 2024. Another month has rolled by. The summer is continuing to roll by and again, hope everybody is doing well. You know, want to do a weekend perspective a little bit in the style that I did, I feel like earlier in the year and some of the earlier shows that we did in which, you know, as the week's going along, as you're kind of keeping up with what's going on in the industry, maybe over the last week or last couple of weeks.

You start seeing some things and hearing some things and you start connecting the dots and you go, hmm, this might be, you know, something that's, worth bringing up, something that's worth diving into something that's worth bringing to people's attention. And this week, you know, what sort of triggered it as it did for many people was, you know, we saw the, outages that happened all over the world, impacted things like airlines and other stuff. know for myself.

I was finishing up vacation. family got stuck in the Atlanta airport for two or three hours, not so much because of canceled flights, but I think we were sort of at the end of it, you know, kind of dealing with the backlog of flights. And so we, you know, we sat in the Atlanta airport, I think for three or four hours. So we didn't get the worst of it. Obviously lots of people got much more, but what got me thinking was, you know, earlier in the week, I think before I had left for vacation, I was kind of scrolling through Twitter and saw an interesting, you know, blurb kind of a thing from some people I,

I like and trust a lot. the name of the article was essentially the industry or the career of network engineering is dying. And so for myself, having started my career in the networking space, I've gotten to CCIE a long time ago. That was one of those things that I was sort of like, I don't think networking is dying. think we are massively interconnected. But it sort of got me thinking, OK.

Why are we starting to say things like that? are people who, and this was coming from the folks who do things like Network Field Day and Tech Field Day and so forth, Stephen Foskett and all those good folks, they were writing an article basically saying, hey, the industry of kind of highlighting networking professionals is sort of dying, right? It's becoming something that, I don't wanna paraphrase it, but basically similar to the way that we think about things like mainframes, right?

Brian Gracely (02:22.146)
You know, what's funny is the mainframe business is still very, very healthy. It's still gross quite a bit. If we were to just sort of break it out as a standalone business, even if it was just IBM's business, you would go, that's a, that's a pretty good tech business. It's not, you know, it's not terribly, terribly sexy. Like something like AI or blockchain or crypto or, you know, mobile app development or something that gets a lot of attention these days. What is a really stable business? It still grows every year. the things that they do in terms of adding new technologies every year is still, you know, quite impressive and so forth.

And that headline kind of got me thinking. And then I went on vacation. I didn't really think about it too much. And then I woke up one morning and there was all sorts of articles about how the CrowdStrike stuff had happened. And it was due to bad deployment and so forth. And I want to get into this after the break, but I saw a lot of follow -up conversation and some other conversation that I had later in the week from a lot of people that were saying, look,

This may not be talked about a lot, but we are losing or we're ignoring or forgetting about a lot of really, really core skills, a lot of really core capabilities that are foundational to what builds a lot of these new technologies that people get all excited about and are in the headlines and so forth. And so I want to kind of talk about this week on the weekend perspective, you what happens when we start forgetting and we start ignoring kind of really core fundamental skills.

Things like networking and how to manage storage and how to manage data and how to deploy updates and all those sort of things that we sort of take for granted. What happens when that happens? So I want to dive into that after the break.

Brian Gracely (00:01.474)
Welcome back to the Cloudcast. I'm your host, Brian Gracely. And on today's Weekend Perspective, I want to dive into what I talked about at the top of the show in terms of, you know, I think we're starting to see a little bit. And this, think, has been going on for a while. I think it's one of those things that we kind of ignore or we forget or, you know, we sort of take for granted. But a couple of things sort of triggered for me over the last week or so. And sometimes I try and connect the dots by some things that I see that may not seem like they're necessarily.

tied completely together. But, you as I mentioned at the top of show, were all, many of us, not everybody, but many of us were impacted by the issue in which CrowdStrike delivered a Microsoft Windows update to a lot of different industries, a lot of different companies. And unfortunately it caused all sorts of havoc and outages and stuff like that. And so a couple of things kind of jumped out at me from that. Number one, we were talking on the software defined talk Slack, which a number of us do. I know you've

heard us mention that with Brandon Wichert a number of times. But Aaron, who oftentimes likes to refer to himself as sort of a old man yells at the cloud because his background was very much in operations. He had done a lot of that type of work prior to newer jobs that he had. And he sort of made a comment. said, now, help me understand this. Essentially, the concept that happened with the CrowdStrike problem, for the most part, was they deployed a patch

into production for hundreds of companies. And again, I'm getting the sort of post -mortem probably overly simplified, but in essence, he said, since when did it become normal? When did it become acceptable? When did it become approved to deploy a patch, any sort of patch, just

directly into production without testing? And it was a pretty straightforward sort of question. And he kind of clarified it and he sort

put a caveat on, said, hey, I know there's new ways of doing stuff and there's rolling deployments. And he said, I'm going to feel a little bit like old man yelling at the cloud. said, but back in my day, we never would have done something like that. We never would have at least not tested it, validated it for the most basic things. Because this essentially became a blue screen of death. And for those of you that don't know the Windows world, blue screen of death just means the machine just won't boot.

Brian Gracely (02:24.654)
crashes goes into infinite sort of crash loop and you get this blue screen that says, you know, in essence, you're screwed. Like your machine is, is no longer going to have a good day and you're going to have a bad day until you can get this thing fixed. Aaron's comment over on the Slack channel kind of got me thinking in terms of, know, he was sort of joking around saying like, Hey, we wouldn't have done this back in my day, back when I was doing this stuff, you know, why is this now acceptable? But I think

It sort of highlights a bigger issue we have. And to a certain extent, I think the cloudcast is, you know, probably as much to blame. I don't know as much to blame, but we're, in the bucket of people that you could point some fingers and blame at that is an industry we've, we've fallen in love and sort of accelerated that falling in love with new, with what's, what's new and sort of forgetting about the foundation. We've really kind of taken for granted or forgotten how difficult it

to make the systems that run underneath all the new stuff that we do, whether it's streaming video or social media or blockchain or AI or whatever the heck it is, we've sort of forgotten how difficult it is to build those sort of systems. Again, whether you're running them on premises or in the cloud, how hard it is to secure those systems, how hard it is to make them highly available. And the people that used to be very visible in lots of different technology circles talking about, how do you go about doing

have essentially, I don't wanna say been marginalized, but the viability of those discussions has sort of been forgotten. We've sort of just taken it all for granted. It's sort of a little bit like when you drive down the road, you forget how long it takes to build roads. You forget how long it takes to build bridges and the difficulty of building things like bridges and things like that. And so there was a couple of things this last week or two weeks or so that kind of jumped out at me that made me think,

Maybe there is a need for whether it's us on the cloudcast, whether it's the industry as a whole to sort of get back to thinking about, a second, are we building all these new things on top of a foundation that's sort of forgotten what it takes to build really stable, secure, highly available foundations? And so here's a couple of things that I saw. So as I mentioned at the top of the show, the folks

Brian Gracely (04:48.294)
a tech field day and so forth, put out an article that said, you know, network engineering is a dime profession. And I was like, okay. And I've heard those guys talk before, like they get, you know, they're very much in the networking space. cover, you know, all things Cisco and Juniper and Palo Alto networks and all sorts of, you know, all the sort of new stuff going on, but also, you know, they cover core networking as a part of what they do. And that may or may not be for everybody, but it's a really super important.

thing because if the network's not there, as everybody knows, whether you're on a plane or you're at your house or you're in your office building or whatever it is, if the network's not there, nothing else matters. And so they put out this article that said network engineering is a dying profession. And to a certain extent, what I think they were trying to highlight is that this is a space that used to be really well developed, really established

considered of high value within our community in terms of, know, if you were a really good network engineer, you knew how to design systems, you knew how to troubleshoot, you knew how to build for scale and high availability, you were considered very, very valuable. And, and more and more so because less people are maybe touching the networks again, maybe we're using the cloud and the cloud take care of networking for you or, you know, certain things, you know, we're working more from home. And so you're not having, you know, the people

you know, the network you have in your home is pretty simple compared to what you have maybe in an office or something complicated, whatever it might be. You know, they were just trying to highlight like, look, we've gone many years in which kind of the viability or the value perceived of network engineering is slowly going away, if you will, right? I had a conversation and this will come out in a show coming up, I think next week, if not the week after, with some folks from Vast Data and one of the founders of Vast Data. we, you know, we got into sort

you know, data platforms and storage and all these sort of things now in the world of AI. And as we were talking, we were wrapping up at the end, and I'll sort of, this is spoiler. He said, you know, one of the biggest changes that he's seen, especially from a people perspective, is that so many people nowadays have sort of forgotten or lost the basics of, you know, how to manage data, how to manage storage, what it takes for those things. And some of that comes from the systems have gotten more advanced and

Brian Gracely (07:09.11)
you know, more capabilities are built in to help you do those things. But it was another one of those things I went, that's interesting. The people in the storage and data industry are also feeling like the core skills are starting to fade away, right? That people aren't thinking about them as much. And yet, you know, we're trying to build an entire ecosystem or an entire ecosystem is building up around AI and AI is fundamentally about data. And here's somebody who's been around the industry for a while saying, you know, those, those core skills around.

managing data and high availability and storage and all that kind of stuff are starting to whittle away and starting to go away. And so I was sort of like, okay, so those are two of the most critical pillars we have networking and storage and people in that industry are starting to feel like, okay, the skillset isn't necessarily there. We're not necessarily developing those skillsets. And again, you know, this is, this is one of those weird things that happened in marketplaces in which obviously, you know, people

They go to work on things that they're interested in, but at the same time, they go to work on things that they feel like is going to help maximize their own value. Right. They want to make, you know, make as much money as they possibly can in order to take care of their family and, you know, do interesting things with their lives. so, you know, we we've seen maybe less of that. We've seen things like developers are the new King makers and all sorts of, you know, chasing, chasing new stuff. And again, like I mentioned, you know, the cloudcast has

you know, the forefront of that, terms of, know, we've always tried to highlight what's, what's new and maybe we're somewhat to blame for not, you know, highlighting enough of what's, what's stable and what, foundational. but again, that was partially Aaron and I sort of interested in things beyond our own domains. He comes from a lot of storage domain. come from a lot of networking domain. So, you know, we're probably as much to blame for those things as, as anything. but it was another, one of those instances in which it was like, okay, another.

foundational thing and people are kind of calling this out. Another data point that sort of jumped out at me was, you know, back in the day, we used to have folks like A Cloud Guru on the show and the folks from A Cloud Guru, the founders of A Cloud Guru, basically built a bunch of training that was, hey, if you're new to cloud computing or serverless or some, you know, sort of new things, but really just this new paradigm, here's a great way to learn about it. And we had them on for a number of years. They were sponsored the show for a number of years. We had a really good relationship with them.

Brian Gracely (09:32.206)
They were acquired by a company called Pluralsight. And Pluralsight, again, was another very good training company. We've had a number of training companies sponsor the show over the years in which we knew a number of people that had written trainings for them, were instructors for them. They were very fundamentally good. They just did things at scale that was bigger than people like A Cloud Guru. And they eventually acquired A Cloud Guru. And then eventually they got acquired for, I think, $3 .5 billion by private equity.

And the reason I, the reason I mentioned that is there was an article this last week that the private equity company that acquired them is writing, writing, basically writing their business off. Now, not necessarily getting rid of their business, but basically writing off that investment, because they weren't necessarily seeing the, the, return that they had expected. And I highlight this not to, not to, to dig on Pluralsight or A Cloud Guru or anybody, but it, sort

reminds me and sort of reckons back to, or beckons back to something that we used to talk about all the time on the show, which was, you know, it's really important for people to keep their skills up. If they're going to stay in the technical domain, it's really important to keep their skills up. And we used to talk a lot about home labs and how, you know, in the, earliest days. we went back, let's go back to say like 2010, roughly, just to give you a timeframe perspective, even earlier than that, the people who

kind of on the leading edge of even technologies that we sort of take for granted now, like virtualization, were building their own home labs, right? They were building some things that they could play around with, you know, in their own time, on their own dime, within a controlled environment. And we would, you know, we would sort of praise that. We had a number of people on the early, early shows who talked about, you know, how do they go about doing that? Here's how you can simplify managing it. Here's the right technologies to buy. And then we started seeing...

you know, more and more of these training organizations kind of being built and they were building virtual labs and they were building virtual environments and they were helping you essentially replicate that home lab concept except, you you could do it in the cloud and you wouldn't necessarily have to shell out two, three, four, $5 ,000 in hardware and maintain it yourself. They would just give you these sort of sandbox labs. And so that was something that in the early days of cloudcast, I know we very much highlighted, we were always talking with it. You you kind of need to keep your skills up. you need to keep certifications

Brian Gracely (11:55.252)
Aaron was a huge advocate for certifications. He was sort of Mr. Certifications. I think he probably owned a dozen of them at the time. And some of those he had to get because of his job, but some of them, he realized that understanding networking and storage and security and some other things was helping to make him more well -rounded, was helping to make him better from an operational perspective as a technologist. And I think that's something that we haven't necessarily covered as much. think part of it

Some of the people that we knew doing that stuff kind of got away from it. And again, I think what I'm kind of highlighting with all this is we are potentially in a situation in which, you know, we may have more and more of these sort of crowd strikes, crowd strike type of situations, not to dig on them, but as we begin to lose more and more of our fundamental skills, the things that are really necessary to build the foundations of whatever comes

And we sort of downplay those folks. We say, well, they're not as important. They're not going to be paid as well or whatever. And that's a tough, tough scenario for people is that in our industry, there is a lot of money that floats around. There is a lot of opportunities and people are generally sort of trying to maximize what their opportunity is. They'd like to make as much as they can given the hours that they have, given the finite number of things that they can focus on.

And I don't blame anybody for that. But I think we may be coming back into a scenario in which there is an opportunity, if you think about this from sort of an economic perspective or a market perspective, for the concept of sort of buying low for an asset in terms of networking skills, storage skills, basic computing skills, automation skills, and so forth. Essentially, for people to sort of move away from some of the sort of sexy

dev rel content creation types of things and get back to focusing on really foundational stuff. And again, you might say, well, that, you know, does that really make sense? Is there really a market for that stuff? But at the end of the day, I think what we tend to see in our industry is we go and chase new stuff. get excited about new stuff. say, you know, we say in a repeat, stupid things like, you know, build fast and break things. And, and, you know, people have sort of learned, okay, well, that might have, might not have been the greatest idea,

Brian Gracely (14:23.106)
You know, once we get back into sort of ages of accountability, which to a certain extent we are now across the industry, you more so than we were the last three or four years, maybe even the last decade. There may be opportunities in which a renewed focus on, you know, what are the skills needed? What are the concepts needed? What are the awareness needed to do things as high availability to have really stable foundations

You be able to build the next generation of whatever it might be. And so anyways, you know, this is, I'm going to sort of make this show a little bit shorter this week, but you know, I do think we are starting to see a few red flags, a few warning lights pop up that as an industry, we've kind of gotten away from the idea that that foundational things should be stable, that we should have people that are experts in that stuff, that we should, we should highlight those, those folks, those concepts, those aware, make that aware.

And, you know, not get away from the other new stuff. The new stuff is always fun and exciting and it's new shiny things and it's sexy and so forth. you know, I think we maybe, you know, maybe this crowd strike thing is a reminder, that if you don't do the foundational things, the things that we've sort of done for many, many years, a decade, two decades, three decades in terms of foundational things, keeping things stable, the, the new cool stuff

you know, gets people excited, does IPOs, makes the stock price go up, blah, blah, aren't really going to be possible. if, know, we were not able to create foundations in which new things can be built upon them. And that's kind of, you know, how the internet grew out. That's how cloud grew out over the last 10 years, 20 years and so forth. but yeah, I think, you know, just kind of keep your eyes and ears open. I think we're starting to see more and more red flags from people who granted they

in the networking industry or storage industry or compute industry or whatever it might be, but are saying, you know, don't, don't forget about, about that functionality. Don't forget about that capability, about that mindset of thinking. And I think that's, it's a good thing to remember. especially after, know, after we've had an incident, after it's sort of been resolved, after we

learned from it, it might be worth sort of spending a little bit of time thinking like, okay, how do we, how do we bring some foundational, some solid foundational things back into what we're doing? Because again, if

Brian Gracely (16:47.232)
If we're beginning to take off on a new run, maybe AI is the thing, maybe there's going to be something else coming right around the corner. If those foundational things aren't in place, if you can't network at scale and keep it up all the time, if you can't do basic operations and automation, if you can't manage data and so forth, it's going to make for very bad days for a lot of other things that live on top of it. So anyways, just a weekend perspective, couple of thoughts, connecting the dots on a couple of things that we've seen lately.

Maybe just raising a little bit of a yellow flag or a red flag to get people to go, if you're in this space, there may be room for you and for others to bang that drum again. It's important to have really stable foundations and fundamentals and so forth. Anyways, with that, I hope you all had a good July. We will be doing Cloud News of the Month for August or for July here pretty soon. We'll get that out pretty quickly. Hopefully, everyone is doing well.

hope everybody is enjoying the sort of end of summer as we start to see people talking about getting back to school and so forth with the kids. know Aaron and I are taking the kids back to school here in the next couple of weeks or so. But anyways, thank you all for listening. Thanks for telling a friend. Thanks for helping us grow the community. Show at thecloudcast .net if there are things that we can help you with or if you've got questions. And with that, I'll wrap it up. We'll talk to you next week.