EPISODE 1209

[INTRODUCTION]

[00:00:02] JM: A co-location data center is a center that leases out networking and compute infrastructure to retail clients. Co-location centers host clients with a wide variety of infrastructure strategies from small retail customers to medium-sized teams running hybrid cloud models, to large corporate clients who prefer not to incur the capital cost of building their own data center. While Equinix is already a market leader in co-location data centers, they've expanded to provide a wide variety of services including managed infrastructure as a service, disaster recovery and integrations with cloud providers such as AWS and Google Cloud.

Shaedon Blackman is a partner developer analyst at Equinix. As a partner developer analyst, Shaedon works to build Equinix's network of corporate partners while also advocating for diverse and inclusive human capital within the organization. Before he joined Equinix, he was a core fellow at Pursuit, a software engineering fellowship funded by Google, and the chief operating officer of a non-profit youth program. He joins the show today to talk about a wide variety of important topics facing the tech industry today including diversity, inclusion and education and also how Equinix is building partnerships and sponsoring open source projects to achieve its goals.

[INTERVIEW]

[00:01:12] JM: Shaedon, welcome to the show.

[00:01:15] SB: Thank you so much. How's everything, Jeff?

[00:01:18] JM: So you work at Equinix, which is like a cloud provider, slightly different than some of the other cloud providers we might hear of. Can you explain the difference between Equinix and other cloud providers?

[00:01:32] SB: Okay. So there're a couple of differences. In general, like most of it is co-location. So Equinix started as a data center provider or is mostly our biggest service is in the

data center space. And we use Equinix Metal to offer basically bare metal services and infrastructure as a service and we've combined the metal services and the data center reach of Equinix to basically have a more viable cloud solution where you could not only deal with public clouds but also dealing on the edge and having private cloud services and basically infrastructure and bare metal as a service solutions. So that basically your whole infrastructure can be built on some API calls.

[00:02:33] JM: So what kinds of applications would that programmability be important for compared to typical cloud providers or other cloud providers?

[00:02:43] SB: Right. So we see a lot of activity in basically different service providers. So basically ops applications and things that help you to run infrastructure. We see a lot of our clients coming from that space. So like if you think about whether it'd be low balancing solutions, or whether it'd just be Kubernetes management or container management solutions, we find a lot of our customers in that range, but it's not limited, right? We serve telcos. We serve healthcare, oil and gas. So it's not really limited, but I guess we see the biggest customer service needs met sometimes at least from like my day-to-day is in cloud ops type applications.

[00:03:51] JM: You're a developer partner analyst or partner developer analyst. So you work pretty closely with these companies. Can you talk a little bit more about their needs and how you work with them?

[00:04:03] SB: Yeah. So a lot of startup programs like my general cloud providers are like set it and forget it. Here's some money. Here're some credits. Do whatever you want to do. And we try to have a more high-touch approach. So we build solutions and integrations with these companies offering our devrel team, partner team, our documentation team and our engineering team and also our marketing team so that we can, one, create better solutions around Equinix Metal; and two, so that we can bring market view to the partners that we're working with. And also like to help just the community in general to be able to understand some of the difficulties in terms of building integrations and migrating and just the whole startup to scaling process, right? So those things, they embody a whole lot. But in general, the most of the work is done around implementation and documentation. And sometimes we know like it's harder or it takes a lot of

investment to make these things work and we just want to be a leader on the service provider side in terms of the support that we provide around our partners. I guess a little more of it is like we also provide some bare metal and infrastructure to companies who need to test environments, need help to scale just so that they have the ability to grow and to scale at a more, I guess, easy rate, lack of a better term right now.

[00:05:54] JM: That term bare metal, does that just mean you're providing access to infrastructure that does not have virtualization on top of it?

[00:06:06] SB: Essentially, yes, right? So bare metal as a service. Basically sometimes like you used to have to rack your server, find out where you're going to have that space for it. You have to do a lot of things in terms of managing the launch of the server and like the OS and understanding those things. And as our model puts it, we just like to have that same bare metal or that same ability to control your hardware with the quickness and the fluidity and latency of being able to do it from your computer screen on an app.

[00:06:55] JM: So in a given relationship with a company, what does your day-to-day experience look like? Like what is your relationship with a company?

[00:07:08] SB: Well, I don't want to give too much away. But, definitely, we take a high-touch approach. So usually it runs something like we'll have contact and then we'll have an initial meeting and we just discuss like the partner and what their technology is, what their stack is and what their needs are so we can identify exactly of what assistance we can be. Then we foster a relationship with the company as they scale in as they grow, right? So we also try to understand how to best service our partners and our general customers through our partners. Any problems that we have or any difficulties that our partners see, we try to address them. And documentation is a really big thing. We know that the most important part of being able to integrate and being able to build is having good documentation. So our team works really hard around finding out which documentation needs to be procured and then building good documents around that and just trying to be the support, whether it'd be connecting to other companies who are in the same space.

We have a model Equinix plus two partners equal a good partnership. So what we're trying to do is just not necessarily direct traffic, but we want to be open communication source for people in the community to be able to connect and be able to find the resources that they need whether it's our services or the services of somebody else in our network.

[00:08:49] JM: So there are obviously a lot of pieces of open source software these days. And in some other cloud providers the open source software might be turned into like a service offering. And that service offering might be managed. And the benefit of the management is that it's kind of a hands-off piece of infrastructure, but the downside of it is you get less control over it. So for those companies that are running like pieces of open source software like Kubernetes or Kafka, do you try to help them run it or do you just give them the infrastructure and then they deploy it themselves?

[00:09:31] SB: I mean, I think we take a more in-depth approach as to how we look at these companies, right? So we try to understand like what are the needs surrounding. If you can just be able to grab the service and use it and manage it at your own pace, then fine. And if not, we don't necessarily manage, but we try to connect companies with other companies that have those services available. So I think it's not so just like, “Oh, here's the metal. Figure out how to use it.” We try to look at what are your needs surrounding the metal offerings and if you need some more service and some more support outside of what our team is already equipped to offer. Then we'll be able to find you a partner essentially to help the integrations and the builds go smooth.

[00:10:36] JM: So your personal experience towards getting to Equinix, you started working as a software engineer I guess like four years ago or so? Tell me a little bit about your personal journey towards becoming a software engineer.

[00:10:54] SB: Okay, for sure. So before I decided to transition to software engineering, I was working construction, and I went through a wonderful fellowship called Pursuit. It's a one-year training fellowship. Similar to a boot camp, but it's a little more intensive and inclusive. So basically in Pursuit I took a full stack or web development course. And throughout this course I was with a class of 32 other transitioning engineers and we learned the basics of software engineering using JavaScript, Node, React, Postgres using SQL databases and just the basics

of engineering and software engineering. And from that, one of my final projects was the Capstone Project where I presented with a team of four other engineers and we presented an application that we thought of from scratch called Cookbook. And it was a social sharing recipe, a social recipe sharing application. And we presented that at PayPal headquarters in New York.

And from that presentation I got the opportunity to work with Manuela Zoninsein, who is an amazing leader in the sustainability space. And we worked on a project called Footprints. And Footprints was an app that would allow users to be able to analyze and offset their carbon emissions from their cloud service usage. And also I had a great team of five engineers that worked with me on that project. And from there, that project was sanctioned or commissioned by Packet before we became Equinix Metal. And I just built a great relationship with Zach and Jacob and the team over at formerly Packet, now Equinix Metal, and it just blossom from there honestly.

[00:13:14] JM: What kinds of reflections do you have on that overall journey from going from construction all the way to being a full-time software engineer?

[00:13:25] SB: I mean, I think especially when talking to devs that are in, I guess, my age group, it seems like the stories are similar, right? People figure – Or I'll make it more personal, but it was definitely a long journey, right? From being in construction, the work was good and salary was good, but it was a little inconsistent and I felt like I could be doing something more to have impact on the world that we live in. So I looked for things that would possibly help me do that. And as I came across software engineering it just like a light bulb went off and I tried to figure out like what I had to do to transition. And then I looked into Pursuit, and it was a tedious application process.

But one of the things about transition and taking the next steps to reach the next plateau of success in life, it's always a struggle and it's always a process, right? So there were struggles day to day of course, like not having any engineering background and being a little bit behind on my DSA. Just learning what I need to leverage to be a successful person in the software engineering realm. It was a struggle, but it was so fun also. Like being able to face a new challenge every day, like the fact that the challenges weren't redundant was something that made me so exciting.

And I guess the biggest part of the process was starting to look at everyday processes as functions or apps and starting to break things down. As an engineer, it's so weird, and that was one of the things that it really made me smile as I started to move deeper into my transition. Just seeing how things work on an engineering level. But in terms of the process, like yeah, it was definitely a challenge. It was something that I had to commit to every day, but it was so rewarding in the end especially being able to come up with and code my own apps and launch them and moving up the development cycle to the point where now I have input and have real relationships with new technologies. It's so exciting.

[00:16:09] JM: Do you have any advice for people who are looking to make a career transition like that?

[00:16:17] SB: Oh, I've got loads of advice, man. I can talk for hours, but I think most importantly is like you have to understand the level of mental aptitude it takes to be an engineer and you have to commit to it. It's definitely a commitment and it's definitely a learning process. But on the other side of that commitment in that learning process is sweet, sweet code. And, especially, I think that it's unrealistic to overlook the financial point of becoming an engineer because like we all want to live a specific way. And of course it's not the only thing, but in terms of having a well-rounded career where you feel like, one, you're gaining financially enough. And two you're making the impact that you want to make on this world. Technology is everywhere and we use technology for everything. So the possibilities are so endless. So don't be closed-minded. You don't have to work at Facebook. You don't have to work at Google. Like there are so many cool grassroots orgs and social organizations. It basically opens the world to your hands. So I definitely say make the commitment. Do the work and work hard to transition and don't tell anybody. Don't let anybody tell you that you're not good enough, because there will be a company out there who sees the value in you. And I'm so happy that Equinix was the company that's seen the value in me. So apply to Equinix.

[00:18:09] JM: Equinix has some work around diversity and inclusion and belonging. Can you elaborate on some efforts or programs that Equinix is involved in in the diversity inclusion category?

[00:18:24] SB: Yeah. So we have our Connect networks. So within the broader organization, we have [inaudible 00:18:32] Connect. We have Black Connect. We have Pride Connect. And those are not just communities for the people who fall into those categories. Those are communities so that we can learn about each other and support each other and be able to understand the things that we might not understand.

There's a lot of effort company-wide just around making sure that everybody who you work with is comfortable. Everybody who you work with is a person and they belong here. And if you've had some prejudice or misunderstanding about a certain group of people, then we definitely have a very diverse team in general where personalities are welcome, and not only welcome, but they're celebrated. So it kind of makes space for people to learn about each other and it creates an atmosphere where learning is positive. So I definitely can speak to not just the words and the marketing around being diverse and inclusive, but every day I experience the diversity and the inclusivity on the Equinix team and it's very refreshing.

[00:19:56] JM: So getting back to the engineering side of things, let's say I'm a small business and I'm looking to have the right amount of infrastructure, the right type of infrastructure associated with my business and I come to Equinix. What is the experience? What is the onboarding experience or what am I getting up front?

[00:20:22] SB: Well, we usually have three different funnels of outreach, right? Some of it is internal. So if we have some of our – Some of my colleagues will bring interesting technologies to the field. Some of it is direct, like a direct recommendation. So maybe a partner or a company that we already work with might have pointed you in Equinix's directions. And sometimes we get like request, inbound requests at the next Metal site. And pretty much we tried to deal with them all the same way, right? We set up an intro conversation where we discuss building needs. And then from there we talk internally on the team and figure out like what's the best way to support the partner and if it's the best option. And a lot of times like it is. We don't have many situations at least that I've seen where we have to turn a partner away. So it's really just about figuring out the best team and the best process. Because like in a high-touch environment that we have, we can't necessarily have just the structure like, "Yes, we have the way we view things," but we try to, I guess, personalize each partner experience so that it's not just a feeling of, "All right, this is what we do. Fit into our program." How can we help? And we take that very seriously and we

have a conversation about it. So we'll have like 30 minutes to an hour Zoom where we discuss things and hash it out and figure out what's going to be the best ways to move forward. And then we set up like a Slack, a company Slack channel where the partner can have direct access to the partner team that works closely with that partnership. And that way we have almost immediate communication transaction, right? So like if you're having a question about maybe like a bug that you have and you tell our team on a Slack channel. Like usually it gets resolved in a couple of hours. So that just makes the integration and building a lot smoother and the downtime between a ticket and a solution, it makes it more expedient. I guess I think I might have went a little bit deeper, but just in terms of like that first interaction is usually about a 30-minute to an hour Zoom call where we're trying to hash out what the best options for partnership is.

[00:23:18] JM: Interesting. And have there been any learnings about working with partners? Like things that have surprised you about what it takes to successfully deliver for these kinds of customers?

[00:23:32] SB: Definitely. So the biggest thing is like – Most of our partner team is located in America and there's software being built all around the world, right? So definitely understanding people's customs and time zones and language barriers. Those are definitely cool to overcome. And the most learning we do I feel like is, not to be redundant, but it's in documentation, right? Our biggest problem is if we want to do this, we want to have to communicate as little as possible for bugs, right? Everything else can be very high-touch, but we don't want to be held back by bugs. And usually that can be solved by documentation, by great documentation.

So our biggest learning curve and our most active learning space is in documentation and how we document and what we document. But I think like a lot of the fun comes from just learning about the new tech that's being built and learning about the new founders and their stories and what made them build the tech and how they approach so. I mean, there's a lot of different ways we learn, but I would say those two stand out the most to me.

[00:25:08] JM: So as a company scales, if you compare the scalability of bare metal systems to virtualized cloud provider systems, how do they compare in terms of cost and latency and other features?

[00:25:29] SB: I think that part of the partner process is getting that information in the public so that you don't have to listen to me say, “We're better,” on a podcast or live stream, right? And I think the short answer is we believe that we have a pretty significant model in terms of well-roundedness. In terms of pricing, we beat most of the competitors. And we have good relationships with them. So it's not about necessarily beating, but we just do have a very strong offering system. So in terms of latency, we have the biggest data center footprint in the world. So like latency is not an issue, right? And usually what it comes down to is how well and how easy it is to integrate on our bare metal. And we're getting better at it every day. So, definitely, I’m advised to like do the research because it's there for the public. And I can say it a million times, but there are studies that show how we stack up. Hopefully, everybody else we'll see what we see.

[00:26:55] JM: Tell me a little bit more about your experience working at the company. What is it day in the life like?

[00:27:03] SB: I mean, it varies, right? I deal with partners. So a lot of my days depend on partner relationships and what needs to be addressed or what's on our schedule for that week. But generally I wake up to an amazing team thread with loads of strong content around what we're doing and also loads of just diverse personalities. So usually I check the Slack real quick. Check my emails. See what partner updates need to be done or what new conversations are on the board. If any checkups need to be or any of our partners need to be reached out to in terms of how testing is going, any discrepancies they may have. Any way we can improve. And then we definitely do a lot of conferences, tech conferences. So just going out researching new tech that's coming up, understanding what's going on with the community and being active players in the community especially around like – We do a lot in the Kubernetes world. So like the CNCF. We do a lot of work with ARM. So just generally it's very flexible what a day to day is like, but it's always exciting and it's definitely enriching.

Being in Equinix from September to now, I’ve grown so much understanding what our product is. Understanding how exactly we help our partners and just understanding what's what those relationships need to thrive and our help sometimes can help partners scale is amazing, right?

Because as technologies grow, it's good to be a part of the team that was there and believed in them before they were who they were. So it's very fulfilling and enriching.

[00:29:17] JM: Why is the relationship between Equinix and the open source community valuable?

[00:29:25] SB: I mean, I think it's because we value it, right? We know that open source community is just devs who want to make the net better for the most part. And to enable that is to help the net grow and to help it scale. And why not, right? We're all using that. It's where we serve. So I think that internally it's just important to make sure that having such a big footprint in terms of the internet in general, we'll be big players in the people who – And supporting the people who volunteer to make it better.

[00:30:17] JM: So as you've been at the company, how has it changed your perspective on what opportunities there are to expand educational access around software engineering? Have you gotten any new ideas to improve outreach to people that might want to become software engineers later on in their careers?

[00:30:41] SB: Absolutely. So I think it's threefold, right? So the first fold is how it comes down to pursuit and understanding how to create or how to curate more pipelines from fellowship to job, right? So definitely have been working with Jukay and Dave over at Pursuit. Understanding better how to create these relationships with companies as they grow and be able to help figure out ways to make transforming engineers more market-ready and more of a market staple, right? And the second fold is just understanding the different routes that you can take as an engineer. Like a little bit of my process was closed-minded and I don't think I necessarily understood the reach. I don't think I necessarily understood the reach of exactly how a career as a software engineer could allow me to have impact on the community. And being able to speak to that, it just allows people who are thinking about engineering to take that jump, right? Have an example of somebody who feels like this is what I was looking for and this is how it translated. It provides clarity. And I guess the third level is broadening my understanding and my reach so that in my day-to-day activities I can help to teach people who are looking to transition at a volunteer level especially in terms of fundamentals. And then as my knowledge grows and

as my software engineering expertise expands, then I'll be able to expand the knowledge that I can share with people in my community.

[00:32:50] JM: And how do you see that desire to expand the knowledge around programming? How do you see that desire shaping your career in the future?

[00:33:01] SB: The way I've looked at it and the way I've approached it is like that's what I do as a passion in the spare time. So I haven't necessarily got to the point where it's had indications on the way my career grows. I think like the most important thing for me is just growth in terms of my understanding and knowledge. And then like I can apply that in my spare time. There're a lot of variables in terms of like how you grow in terms of your career. And just in terms of where I'm at now, it's more so I'm not really in a dev position also. So like it's a little intricate, but I think like to narrow it down, like it's important that I make sure that I grow and that I learn on a daily basis so that I can reach the plateaus of my career and that will just allow me to have that effect on the community and even to the point where it might not be my day-to-day activity to unlock that educational access, but my day-to-day activity will allow me to space in my extracurricular to explore that in different ways.

[00:34:27] JM: Now, as somebody who went to a coding boot camp or a fellowship – And I'm sure you work with people who have more traditional educational paths. Do you have any sense of how those two educational paths compare?

[00:34:46] SB: I do, but I feel like it's not very broad. So I don't want people to just take what I say and run with it. What I will say though is that almost immediately coming from the Pursuit fellowship, it's like I'm able to code, right? So like in terms of as somebody who might have went to traditional route and came out a computer science program where they might understand the fundamentals and the networking and some more of the high-level intricate stuff a little bit better. Being able to come in and input to the code base usually takes some time. And from what I've seen in my personal experience and from my peers that graduated Pursuit either with me or after me, they feel like they're a little more prepared to contribute to the code base as soon as they come in to a job. Or it's like you have to learn the code base first. You have to understand what was written and the bugs, but it's almost um a quicker transition to writing lines of code.

[00:36:05] JM: Yeah. That's consistent with the other people I've talked to. Broadening the scope of the discussion, do you have an idea on concrete steps that the software industry as a whole could take to improve diversity and inclusion?

[00:36:22] SB: I have lots of ideas, man. For sure, like I'm an idea magnet. But I think we have opportunity, right? The first opportunity is to broaden the scope of search. Yes, people with traditional education provide a specific strength in terms of the workforce. But non-traditional education and people with non-traditional educations, I think some of the stigma around it is maybe – I won't speak to the stigma around it, but I think that what you find with people who have non-traditional especially in terms of engineering backgrounds who have been able to produce code at high-level is that these are the people who work hard. These are the people who really get stuff done day-to-day. They want to solve the problems. They want to be impactful. So it's not just something about getting started on the right track. It's something about having world experience and understanding that my impact should be more and I actually want to have high-level impact. And I see that with almost most of the people that I've come in contact with that have went the non-traditional route.

So besides diversifying your hiring pool, understanding how interviews relate to the day-to-day of a job and how interview processes can eliminate the candidates, right? Or the right candidate. And I think a lot of the language is changing around finding culture fits, right? So people who fit in the culture and make your culture stay the same. You need to find people who add to your culture. And you have to enable a space where those people feel comfortable being themselves. I think that like sometimes in my team meeting my greeting is yer, because that's how I greet my friends. And of course we're in a professional environment, but there's no negative connotation that comes with yer, except that it's an urban greeting, right?

So I think that having the space to do that definitely has impacted like my motivation in growth especially with Equinix. Like I feel like the way that the company approaches diversity inclusion and belonging makes me want to stay there long term at a highly productive clip, right? Like I don't want them to feel like their investment in diversity, inclusion and belonging is being taken advantage of. And I think that that improves your workforce. When you have people who love working for you and actually want to work for you, the work is better and it's easier, less tension. The impact is exponential.

[00:39:42] JM: Cool. Well, Shaedon, is there anything else you want to add about Equinix or your experience in the industry?

[00:39:51] SB: I don't know. I guess to all the devs out there, especially when finding new devs, definitely be mentors. And I think that we're in a really good space in terms of people trying to push the culture forward in terms of having an open Internet where everybody can learn and being supportive. And I think that that's great. And if we just keep moving like that, then we'll have a diverse and inclusive world.

[00:40:24] JM: Okay. Great. Well, thanks for coming on the show. It's been a real pleasure talking to you.

[00:40:27] SB: Likewise. Thanks, Jeffrey.

[END]