

Jeff Ton:

A few weeks ago, we launched a new series about cloud journeys. Inter Visions Field, CTO for Cloud Dustin Milburn Kick things off with a look at a people first approach to your cloud journey. Today we're going to hear firsthand from one of the people involved in a cloud journey. We are joined by the Rouge. Solemn Occasion for Rouge is a senior director of information technology for the Los Angeles Unified School District. The LAUSD is the second largest school district in the U. S. With a student population of over 750,000. As senior director, very rouge is responsible for the development of enterprise applications. Welcome to status. Go via rouge. Thank you. I'm happy to be here. I'm looking forward to our conversation today because I know we've got several different aspects of your cloud journey that we're gonna talk about. And I love talking about it from the perspective of people. So let's start with you. Would you mind sharing a bit about your own career journey and what led you to the role that you're in today?

Varouj Seuylemezian: Sure. Um, my passion and career path has always been in technology. Um, I was a developer over 15 years, mostly on the Microsoft Technologies. Um, And after the Y two k, um, I left the corporate world and accepted a contract at L. A s t My previous boss from Transamerica had landed to L. A USD, and she had she hired me to close projects and, ah, we had no Web based systems at the time. I started coding and Microsoft a SP. And 15 years later, now we have 300 applications. Uh, we support and maintain mostly homegrown.

Jeff Ton:

It's, uh it's a sector that I'm not sure a lot of us would associate with custom applications. And so to have 300 different applications, a lot of them homegrown. That's been quite a journey over the last what, almost 20 years. If it was post Y2K? Yeah, yes, we have a lot of unique requirements. So it's It's really hard to find packages that would meet our needs. And and given that tenure with the school system, you've seen a lot of change in the technologies that you not only code with, but in the infrastructure, the underlying infrastructure that you write On my own programming background, I go back to the mainframe days that that's how old I am. Very rouge. I started writing COBOL back in the probably the eighties. I think so. Where my journey with some of these technologies probably ended is where about the time you were starting with the school system. So talk about this journey to the cloud. I know we're going to talk about two or three projects to use as calling case studies for our conversations. So let's start with the student enrollment app and if you don't mind set the stage for us, What was L. A U S. D. Using for student enrollment at the time that this project kind of got legs and took off.

Varouj Seuylemezian:

So everything was paper based, uh, and we know we've had many attempts on automating these and we had push backs from various groups, regulatory or internally. And then when Covid came upon us, we suddenly started getting all these requests to automate some of the manual processes. For example, these enrollment application system. In the past, we had enrollment packets where parents went to

schools to pick up and then apply and then deliver the required documents back to the school. So, you know, it was it was a mess. Uh, but that's what they had to follow. Um, now, like I said, with covid, we needed to develop a system in the matter of weeks and make sure it's scalable to support our large parent student base. Um, you know, hence the cloud scalability came up, and ah, we had conversations with, you know, a W s and got introduced to inter vision through them to help deploy and scale these systems on the AWS cloud. You know, developing is one thing, and deploying and scaling is a whole another process. Um, you know, we could easily develop systems, you know, in the past, you know, we have to wait for to purchase the server to install the operating system and then deploy it and then scale it. And you know it takes so long to do these things with the cloud. You know, it's a couple of clicks away, and we have a system that's running, and it's almost as easy as that right to to get something set up. And I want to remind our listeners as very rouges describing those packets for enrollment. We're talking 750,000 students. That's an incredible workload in the manual world. So was this the first foray into using cloud to solve some of your application development challenges? Absolutely. This was the first, uh, system that we were able to develop in such a short time. And we, you know, we did have unbelievers that this is gonna scale are, you know, student and parent population. And, uh, sure enough, we did not have a single hiccup with this. And now in our parents apply online, upload their required documents and administrators in the background sitting at home are managing administering these documents and enrolling Children to our regular enrollment process.

Jeff Ton:

That is a great success story. Talk to me a little bit about the people. You have a team of developers. How did you get them Ready to code on the cloud. Is it a lot different than what you were doing before? And if so, how do you prepare to move in that direction so quickly?

Varouj Seuylemezian:

Good question that that was a challenge. Obviously, uh, you know, we we are Microsoft shop. We do use C sharp, for example, but at the same token, the typical processes typical software development had to a just, You know, we have to use dot net core, and you know, a little different technologies to be able to quickly and properly deploy to the cloud and have that capability be there. So, um, hence we parted with vendors and we hired vendors to help us quote these together. And that was part of the training that my staff side by side did this and then ah, got trained on the job, as they say, And, uh, that's the process that we use. And then obviously we have the vendors watch over things, you know, Make sure we do code reviews properly. The things will work properly, as it should on the cloud. Well, kudos to you that you were able to guide your team through that transition and that learning process, you mentioned that you might have had a few naysayers as you were approaching this project. Were any of them on your team of developers, or did they jump into learning this new environment in this new world kind of feet first, so to speak. Uh, the developers, I didn't have any pushback from the developers. Absolutely not. They were all excited to embrace the new technology. You know, Cloud Cloud Cloud. Everybody wanted to go there, and this was their opportunity. And, uh, to to get in there and enhance their career has and, ah, learn new things. You know, step away from that regular norm that they kind of used to and adopt these new devops methodologies. So that wasn't big challenge. I mean, they were scared that they're not might not succeed because it's new to them. And hence the vendor partnerships helped us and helped them oversee this.

Jeff Ton:

Yeah, kind of given that backdrop support. But you yourself had to sell this to your management through the rest of the I T team. What was that process like? How were you able to convince them that? Hey, we've got this problem, we can solve it with cloud and let's go do it. What was that like?

Varouj Seuylemezian:

Um, it wasn't as easy as convincing staff, but then again, I have a record of deploying systems, uh, and helped the district in various manual processes that it's always hard at the beginning, you know, there's always pushback from people, but then once they adopt the system and they don't want to let go, I can't even upgrade it because they don't want to let go. So that's always there. You know, there were some people thinking, you know, I don't know if this is gonna work. I don't know if if you guys are able to do this on the cloud, this is a whole new development. You know, we were focused to get this done, and we proved everybody wrong. That's gotta feel good. Absolutely. You convince them to take a risk so very rouge as you look at that project, and I know we're going to talk about a couple of more projects here in a minute. But as you look at that student enrollment project, what were some of the major lessons learned out of going through that? Well, it's not just that project. Specifically, it's just the whole concept of the cloud. Um, and I would say start small and build P. O. C. S and prove the technology will work in your environment and fits your organizational needs. That's usually the key. And don't be afraid of asking help from the cloud vendors. They are open to helping you. Ah, you know, make it a win win situation for both parties. Um, And then lastly, I would say, um, you know, doing arrow I to determine how much of a reduction in physical hardware will be gained, including, you know, the maintenance and downtime and obviously factor in the quick deployments in a scalable, uh, environment that, you know, the first applications comes up maybe a little bit slower, but then 2nd and 3rd, pushing those up in the same environment is just a right click and deploy.

Jeff Ton:

Yeah, yeah, I think one of the challenges had to have been convincing people that you were going to go from the former Capex where you buy you buy servers to run this and there's a lot of up front cash outlay. But then There's not much after that of real cash outlay. Did you get involved in those kinds of discussions about how we're going to have this op ex model on this application where we're going to get ongoing charges for the use of the underlying infrastructure on the cloud.

Varouj Seuylemezian:

Absolutely, absolutely. I mean, like you said before when we did a project, we had to factor in, you know, hardware purchases and deployment installations and this and that. Um, now I you know, it's a single line almost in the project scope documents saying, uh, ongoing cost, X amount. And then there's also support in our side. But in terms of the hardware and all that is just, well, usage based. So just a line item, just a line item. Yes, well, let's look at a different project. I know that this one was more of a Greenfield project. In other words, the application didn't even exist. As I understand it, talk to us about the beyond the bell app, and what was that process like? So this application came about. It's a mandate. State mandate, federal requirements to require common capture and reporting systems, you know, for our 802,000 elementary, middle school, high school. And then there were 4000 concurrent users that we're going to be using this thing. So, um, it's a mobile app. And this was again, um, our second mobile app. So we had some experience in that area, and this is basically a one stop shop for parents. Ah, and families to, ah to check in information but their kids and monitor beyond the bell needs. So it's got a it's

got a mobile front and then a cloud back end. Yes, that's correct. Yeah, and it's it's stand alone. So we had to architect it in a way where our data, you know, on premise data, which is a pretty sizable data, is nightly sync to the cloud. And then it's disconnected from the servers on premise. So it's it's running on its own, and the sinking is happening. Um, you know, daily or nightly or, you know, some of them are every couple hours. So it's been running Great. Um, now we're also working on our third version of the R. L A s T mobile app, and this is a huge success for us. Also, we're about to be deploying this. And this is for families to ah again monitor kids. Ah, keeping parents informed in their students grades, launch balances, activities, attendance assignments, critical information for parents to know and their hand held. So the beyond the bell app and the version three of the mobile app that you were just talking about those our front ended by a mobile app. And the back end is cloud as we mentioned the first project that we talked about the student enrollment app. Is that more web based, or is there also a mobile front end on that? No, the other. The student up is strictly, uh, Web based.

Jeff Ton:

Okay, okay. So the beyond the bell app, what was the decision process like to use cloud for the back end on that, given the success that you had on the student enrollment app

Varouj Seuylemezian:

Again, this is there's 4000 concurrent users. You know, we otherwise, if cloud wasn't there, we had to scale several servers and make sure there's, you know, they have high availability. Uh, this beyond the bell mobile app could be used at a park or some school somewhere in the playground. They're checking in. Kids coming in, you know, for after school programs. So this system needs to be portable, probably going to be running mostly on iPads, where the, you know the parent comes in, you know, checks in the kid and then signs and then eventually come back and pick up in science. So there's a lot going on, and the system needs to be always up and running. And for us, we, you know, we could scale this easy easily on on the cloud. And then when there's no usage, you know, we could scale it back. We don't have to have, ah, this many processes running when it's not used.

Jeff Ton:

I assume since your role is senior director of the enterprise applications that there's a similar role in the infrastructure department. What's that relationship been like? As you and your APP Dev team move more and more to cloud based applications? Has there been some friction there that you can speak to? And if and if you don't want to go there, that's okay. We don't have to go there.

Varouj Seuylemezian:

No, I mean there hasn't we had a huge support from my coworker in the infrastructure team and he was all for it as well. Ah, I can't say some of his team members were as open to this. You know, it's always comes in with the change. There's always push back. But then once they realize and I was gonna do X y z and I'm doing a B C, you know, whatever still work, it's still different kind of work. But, you know, people not gonna lose their jobs because we're going to the cloud. We're just making things easier for everyone. And and, ah, have these systems running smooth, smoother than, you know, hardware on premises. So in this relationship between me and the infrastructure, uh, director has been great. Um, and it makes my life much easier having that relationship that way. Otherwise, it's, you know, things could be much, much slower.

Jeff Ton:

That is good to hear because I've talked to others in your role that maybe it hasn't been that smooth of a relationship. So I'm glad to hear that. So from the beyond the Bell application, that app what were your lessons learned as you work through that project?

Varouj Seuylemezian:

I don't think it was anything different. Anything new we learned after that project again. We did a POC on that one also with the same vendor. And, um, that helped us to, uh, to sell the product to the, you know, business unit. That's asking for it. And it was an easier transition. So we didn't have any hurdles on that project would be, since it was technically the second one. So from here on, it should really be easier to deploy these applications with no surprises.

Jeff Ton:

Let's say yeah, the lessons learned build on each other, right?

Varouj Seuylemezian:

Exactly.

Jeff Ton:

You mentioned earlier the version three of the student system or parent system, if you will. This is a little bit different project than the first two. We talked about the first one we talked about. You were automating or digitizing a very manual process. The second one was a Greenfield mobile app development for beyond the bell. This one You already had an existing application that I assume was mobile. But the back end was more traditional infrastructure. Do I understand that one, right?

Varouj Seuylemezian:

Uh, yes and no. The mobile app Version three is Web based and mobile. Uh, the website is you know, I u c dot net. Now we're pushing that and also the Ah student grades and and all these activities that students are doing today, you have to. There's no way for parents to see that information in one place. They have to go to three different systems to gather this with this mobile app. Version three. We're kind of bringing it all together into one stop shop for the families to log in. Or, you know, educators can log in to see you know where the kids are. Uh, it's very mobile friendly, easy to access. There's calendar school calendars in there. There's notifications, push, notifications, things like that, that it's scattered in different places today. And this is a very large project when you compare it to the other two. Correct? Yes. This is a very large project. This is our version three. We've already have aversion to out there working today, and, you know, we have pretty good responses from parents. Hence, the version three is coming up, and we're gonna do a big marketing push to get more parents to participate and sign up for this. When do you anticipate that version three is going to launch? Uh, we are studying our initial testing. Uh, small pilots February 1st, Very soon.

Jeff Ton:

So Yeah, that's like Monday.

Varouj Seuylemezian:

Yes, small pilot.

Jeff Ton:

Yeah. I'm glad you were able to take time out of your day to our listeners. We're recording this on Friday, January 29th. So right around the corner. I'm glad you were able to take time out of your day to talk with us when you've got that launch coming up on Monday.

Varouj Seuylemezian:

So it's very exciting with us. I'm happy to talk about it. So, uh, I'm happy to do this

Jeff Ton:

when you think about it. And you think about where you were a year ago. January 29th, 2020. You didn't have any cloud based applications. And fast forward a year. You're working on what will be your third major launch. And you may have some other apps in there that you've deployed in the interim, But your third major launch in less than a year. That's incredibly agile for your department and your coders and just that culture shift. And so talk us through what it's like sitting here today and looking back a year ago, could you have seen yourself here?

Varouj Seuylemezian:

Um, no, I couldn't. You know, we've always talked about the cloud. We've looked at various clouds. We've done small POC s. Um and, you know, my team was already using agile methodologies, deploying systems, small changes, and that's been successful for us. That's what people come to us. That's what we have 300 systems, you know, we're helping different divisions succeed themselves. So we already had the culture that develops this way. Now we have a system and architecture infrastructure that we could quickly deploy these things and scaled and, uh, more structured. And we're using proper device methodologies to deploy these systems and made our life much, much easier. And obviously the infrastructure people's lives easier to because, you know, we don't they don't have to constantly say, What's the server for And what are you doing with this and all? We need this CPU. We need this time around and we have a specific documentation we fill out. This is how how much we need This is how our user base and it's been a win win for everybody.

Jeff Ton:

That is so great to hear as you look at 2021. We're sitting here in January as I mentioned. What does 2021 look like for you. What other big initiatives do you have and will they be quote unquote 100% cloud?

Varouj Seuylemezian:

That's definitely our goal. To be honest with you, I don't know if we can be 100 but we can be very close to that. We're looking at, you know, D are obviously with clouds technologies. We we have that in place and, you know, we're looking at having our d are on the cloud. Uh, more systems as such. We're looking at, you know, are the larger systems to see if we can move those. We have a student information systems with several 100 servers. You know, we're going to focus on those I think we've we've carved away here with our small to medium sized systems that you know how easy, not easy, but how, you

know, successful. It's been to move to the cloud. And I think now, um, our goal is to, uh, move as many applications systems that we have to the cloud.

Jeff Ton:

That's fantastic. And one of the questions that I meant to ask earlier is how big is your dev team that's doing this work. How many people

Varouj Seuylemezian:

I have about 45 people, 45 people. But that that encompasses, you know, project managers leads not. They're not all just developers.

Jeff Ton:

That's an amazing amount of work that you were able to accomplish with that team. When we first talked the other day, I was just in awe of what you have accomplished in that year. So I would really love to turn our attention. Now, if you don't mind, as we talk status go is about action. And we love to leave our listeners with some really defined action items that they can take away from our conversation so very rouge. Talking to your peers who may not be as far along in the cloud journey as you are. What are one or two things that they should do tomorrow because they listen to our conversation today.

Varouj Seuylemezian:

Sure, I kinda covered this earlier, but I think the key is to do a narrow I to see. You know how much of this physical hardware that's going to go away, uh, moving to the cloud, you know, and, you know, factoring all these patches that we do, the shutdowns we do that we don't have to deal with as much in the cloud. Um, you know, the staff that supports the databases, the offering systems and all that Make sure you put that on the r o. I. And I think at the end of the day, you're gonna see Ah, a surprising benefit going to the clouds. Uh, you know, with these systems And again, I would say, you know, do a small POC. There's several opportunities to do this. And different vendors, um, proved the technology as we did that it works. And then after that, um, you'll see the between these two, you'll see the benefits we have seen it. And I know many other companies have and, uh, again partner with a vendor or vendors that can help you through this journey.

Jeff Ton:

I love that approach where you're talking about First of all, get your r o I. That's always important. But start with a POC because not only can you prove the technology your team can learn in a less critical environment than if you're doing a full blown application, right? You help with that learning curve by by peeling off some of the smaller POC s exact.

Varouj Seuylemezian:

That's exactly how we do. We put the team together. And here's the environment we're going to go to. Here's the application we want to build or change to move up to the cloud. And everybody went in, Uh, and then again, we had to help with the vendors to help us with this. And, uh, next thing you know, you know, it's running on the clouds. And that's how our journey started.

Jeff Ton:

Very good. I can't thank you enough for taking time out of your day to talk with us today. Uh, I know you've got to launch coming up very soon, and I appreciate the time commitment that it takes to record a podcast like this. Thank you so much for sharing your insights with us.

Varouj Seuylemezian:

You're very welcome. I'm glad to do it. It's very exciting. Thank you.

Jeff Ton:

And maybe we can have you back later in the year. And we can talk about how your journey continues because we're gonna be doing more of these cloud journey episodes as the year progresses. So we'd love to have you back on the show.

Varouj Seuylemezian:

Great. I'll be glad to

Jeff Ton:

To our listeners. If you have a question or want to learn more visit inter.vision.com. The show notes will provide links and contact information. This is Jeff Ton for Varouj Seuylemezian. Thank you very much for listening.