In Conversation

In Conversation with Marc Power (Auth0) and Alex Mattos (i6)

Carol Baker

Providing a frictionless login experience continues to thwart most businesses, and as they continue to grapple with authentication, we talk to Marc Power, Regional Director for UK, Ireland, Middle East and Africa at Auth0 (https://auth0.com), and Alex Mattos, COO and Co-founder of i6 (https://i6.io), providers of fuel management software on how they have collaborated to address the authentication challenges facing the fuel industry worldwide.

Marc Power is regional sales director for Auth0's UKI & MENA business. With 20 years' experience in a B2B environment, he has led sales organizations at Tableau, CA Technologies, and Hewlett Packard, and is passionate about developing happy and healthy teams.

Auth0 provides a platform to authenticate, authorize, and secure access for applications, devices, and users. Security and application teams rely on Auth0's simplicity, extensibility, and expertise to make identity work for everyone.

Safeguarding billions of login transactions each month, Auth0 secures identities so innovators can innovate, and empowers global enterprises to deliver trusted, superior digital experiences to their customers around the world.

Alex Mattos is Chief Operating Officer at i6 Group. Alex holds a Degree in Electronics Engineering from Southampton and an MSc in Systems Engineering & Management from UCL. Alex also worked in the Royal Navy mainly training to be a Weapons Engineering Office. He is a Chartered Engineer with the IET and is currently working towards a Fellowship.

His career path took him from electronics engineering in defence and the aerospace business designing equipment for aircraft and fighting vehicles (tanks). Then he moved on to embedded software development on 16-bit microcontrollers for the same industry with CANbus and other comms protocols leading onto Systems and Architecture design for aerospace systems.   Just before i6 Alex was running the engineering side of a customer services and through-life support department within the military/aerospace market. He has spent the last seven years at i6 pushing the company on to where it is now.

Marc, tell our readers a little about Auth0.

Marc Power (MP) – Auth0 makes login and user management secure, private, and convenient with an easy to implement authentication and authorization platform. Each month we safeguard billions of login transactions, secure identities, and help empower global enterprises to deliver trusted, superior digital experiences to their customers around the world.

The company was formed in 2013 by Eugenio Pace and Matías Woloski who both have Microsoft backgrounds. The Auth0 platform has been built with developers in mind, and security and application teams rely on Auth0's simplicity, extensibility, and expertise every day to make identity work for everyone.

Today, every application needs to know who you are (authentication) and what you can access (authorization). Whilst Auth0 essentially provides an authentication and authorization service, it goes much deeper than that. Our aim is to help companies deliver superior and seamless customer interaction, regardless of the systems they are using.

Some common problems we help our clients solve are around things like customer friction due to the sign-up and login process. If you have an application that people are logging in to, you may have certain challenges, such as users not being able to remember their password, problems signing in, or abandoning their carts – all factors which give a poor customer experience.

We also address the issue around scalability. A lot of our customers, i6 being one of them, have developed home-grown identity solutions. But as those solutions scale, it can be very difficult to meet all the needs of different customers. Add to that the risk around security attacks, and the cost implication which businesses are then facing can be highly damaging.

Then there is the connectivity issue and development talents within those businesses. A lot of our customers have very talented developers, and the best use of their time is not really in trying to maintain troublesome identity solutions because it's not their expertise. Their time should be better spent in development and innovating the business.

In essence, Auth0 provides software capabilities, APIs, and a clear path to give secure access for any application and any user. By leveraging Auth0, companies don't have to worry about building authentication and maintaining it themselves, and they can instead focus on the real priorities which are innovation and expansion of their businesses.

In the UK, our customers range from enterprises to small businesses, as well as public sector clients. We currently have approximately 10,000 customers worldwide and counting.

Alex, tell our readers about i6.
Alex Mattos (AM) – As a fuel management software company, i6 started purely in aviation, but we are now rapidly expanding into other fuel management sectors. When i6 first started, our very first customer was British Airways which immediately led to challenges around large enterprise corporate identity management.

Marc is right. We started with a homegrown solution with our own user database to manage everything. That was OK to begin with when we only had a few hundred users – it was quite manageable, but as we started moving outwards and

connecting the whole fuel supply chain, it became very problematic. The system then needed to connect to not only contract management and ground operations, but also to airport systems and even pilots themselves, and we certainly couldn't have over 4,000 pilots in our identity solution at the time. And these challenges were present even before we then ventured into working with fuel suppliers themselves who also wanted i6 to connect to their systems.

We might not have users from all those fuel suppliers, but we are constantly passing data back and forth, so even when it is an individual user, we still need to exchange data between systems.

We have a number of customers who say: "We love what you are doing, but we need to use our single sign-on (SSO) solution that we already have because that meets our security requirements". Auth0 helps us do that because we no longer have to build a new integration with every customer or identity provider we work with.

Equally, we have big organizations which don't want to change. So, to put it in a nutshell, Auth0 enables us to abstract identity away from our platform, whilst still giving us all the same benefits.

We currently integrate with six or seven of the big identity providers, and this is all done and managed through Auth0. Not only does it allow my team the ability to have less resources looking after users and identity, but using Auth0 also helps with the ISO and SOC2 accreditations we maintain as a business.

One of the main reasons for us to use Auth0 was because it was no longer cost-effective or rapid enough for us to handle identity. It was fine with just one customer, but then the next customer has a different identity provider, and the following one has yet another – and on and on; it can snowball.

Did you find that your authentication problems were causing a delay in onboarding customers and has Auth0 allowed you to onboard customers quicker, grow your customer base and give you any competitive advantage?
AM – If I'm honest, last year was supposed to be our mass scaling year; we secured some investment in February 2020 and that was meant to be our year to 'go for it'. For most businesses, the pandemic has delayed that big push, so instead what we focused on was developing the product. We have now grown from two to six products in terms of our technology and its application – and that is really exciting, especially with the economic and travel recovery soon coming. So, in essence, we have now moved our scaling year into 2021.

When it comes to onboarding customers, I'll take Budapest Airport as an example. They were the last customer we onboarded during the pandemic. Normally, we would arrange to get together physically and install hardware and so on, but our collaboration with Auth0 has enabled us to integrate with Budapest Airport's IT department and create a single sign-on and identity provision in just one operation completely remotely.

MP – We pride ourselves on the fact that Auth0's platform provides 80% of the functionality you need straight out of the box with the ability to customise the last mile. Providing flexible and scalable solutions to developers is key to our success, and we're pleased that we can continue to support and serve our customers like i6 with onboarding – remotely or otherwise.

During the pandemic, Auth0 has worked with many businesses who have had their go-to-market model become more significant so that they can survive, so what changes has i6 been making?
AM – Whilst we have been developing our product range, we have also been changing the way we are approaching the market, and we now offer technology that allows pilots to be part of the fuelling process without having to leave the flight deck. This allows for a more COVID safe and socially distanced refuelling process. Being able to assist our customers in this way to move forward has been really critical.

We have also had the time to more significantly focus on our sustainability outlook, so that we can help airlines and oil companies work towards their green agendas. By helping them put fuel on planes more precisely, it massively increases the industry's cost savings, efficiency and green recovery. We're excited that i6 can help move this data around faster and enable the savings not only from a carbon emissions perspective, but also from an operations point of view. There is a lot that goes on behind the scenes before you get on your plane to go on holiday – and it's essential that data connects it all.
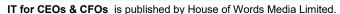
What are going to be your plans for the future? Alex, you said you are planning to expand into new markets, and Marc can you tell us how Auth0 is going to help i6 to do it?
AM – i6 currently operates with a fairly European heavy base, but we're also established in Dubai, Australia, Canada and a few states in the US. Looking ahead, we're keen to explore how we can expand our business in the Far East such as China and Japan – and we will be turning to Auth0 to help us do that.

Continuing to expand in the US is also a massive focus for us as it is the largest aviation market in the world – not just commercial aviation, but also the private jet side of things as well, and there are operation efficiencies to be gained there as well.

MP – Auth0 is already active in the Asia Pacific (APAC) region, so when i6 are ready to implement their expansion plans, we'll be there to help them deal with any authentication issues. From a technology perspective, we look to abstract away any complexity or need for our customers to integrate with local identity providers. Today we support more than 50 social and identity provider connections out of the box, including many citizen or national IDs.

In terms of industries, we have seen particular growth around the traditional bricks and mortar businesses which have had to accelerate their digital transformation process to move their stores online.

The aviation industry is very interesting as it has certainly been impacted during the pandemic! We have other customers in the aviation industry and whilst the sector has suffered greatly, all our conversations have been very positive about how the industry is going to right itself. Regardless of the sector you are in, the quicker we can roll out the vaccines, the better.

What is Adaptive Multi-Factor Authentication and how can it help?

MP – When you think about traditional Multi-Factor Authentication (MFA), every time you want to log on to an application, it creates an extra step whereby users always need to supply additional information. But with adaptive MFA, users are only prompted to provide secondary authentication if the login or authorization is deemed "risky". The way this works in operation is, for example, if you usually log on to Facebook on your phone in London every morning, adaptive MFA would only pop up requesting a user provides secondary authentication if, all of a sudden, a login was attempted on a different device in a different place, or from a different IP.

That is pretty relevant in the market right now as recently, over three billion emails were reportedly leaked on to the dark web which was a compilation of many previous breaches. Although we're often told to constantly update our passwords, we know this is not often done. However, if hackers try to use these leaked emails and passwords to break into user accounts, technologies like adaptive MFA can really help to make that login more difficult for hackers and protect users.

Our view is when it comes to identity – it is not just a one-time thing. You don't just log in and that's it. For organizations, it's about being able to manage digital identities across all platforms and all devices in a safe and secure way, but also adopting more intelligent context-based authentication solutions.

AM – It's really interesting the points Marc has made. One of the unique challenges we have with MFA is that some of our customers want it, but a lot of our users don't have a second device. For example, refuelling operators out on the field needing to refuel a plane may have a tablet on them at the time, but it's unlikely that they'll have a mobile phone because they wouldn't be allowed to take it with them. So traditional MFA or two factor authentication has a real limitation here on the field and presents a challenge for security teams who want to implement MFA for obvious reasons. This is why Auth0's adaptive MFA has been a really exciting development for us because it means our customers can now have the security they need, but the system still provides users with the convenience they seek as well.

As global organizations, how have you been managing the whole remote working aspect that we have all been thrown into?

MP – Remote working has indeed been challenging for a lot of people, and many of us are facing the additional pressures of home schooling plus working. However, Auth0 is very much a remote first business. When Eugenio and Matias founded the company, they were living 7,000 miles apart! So clearly, Auth0 has always supported the remote working model, and with it, we have been able to throw geographic limitations out the window and focus our hiring efforts on the talent and

passion that people can bring. We believe this has been critical in helping Auth0 grow and develop so significantly over the years.

With remote working, businesses need to ensure they are doing more to support their employees working off-site than just providing the right technology or software. Recently, Auth0 earned a '3 Star Accreditation' from Best Companies, which recognized us as being one of the best places to work in the UK. We are extremely proud of this accreditation, as it not only acknowledges Auth0's excellent leadership and management during the pandemic, but also our commitment to employee wellbeing and growth.

It has been really important to us in these unusual and challenging times to ensure we continually check in with our employees. We have rolled out lots of initiatives and applications internally which have focused on people's mental health and wellbeing. We constantly engage socially with our teams through Zoom meetings, and we use technology such as Slack to make sure that our communication is constant, fun and informal. It has been difficult at times, but I believe we have done a very good job to make sure that everyone feels supported, engaged and connected.

AM – I would say at i6, we are very much on the same wavelength as Auth0. As a software business, we don't have a huge number of office requirements. Being cloud-based means that we don't have any physical requirements in terms of servers and server rooms, or the kind of infrastructure which you need to be physically near, to function. So even before the pandemic, we were in a pretty good position to switch to complete remote working.

We did do some trials before the pandemic made remote working a necessity, and we had no major issues, so we have been very lucky. To be honest, our challenges haven't really been technical. Instead, our tasks at the beginning were mostly human centric as we had to learn to find new ways to boost team effectiveness and benefits now we were no longer co-located.

Having said that, these efforts in bolstering our communication across the business has significantly helped improve our work processes overall. We have really been able to make the most out of working remotely, so from that perspective it has been positive.

From surveying our staff as well, the work/life balance is clearly much better across the board. The feedback we get from our staff is that they don't necessarily want to go back to an office environment full-time. People don't want to waste precious hours each week driving to work or commuting by public transport, so I think we will see a positive change for the global workforce, and also the environment, following the pandemic.

MP – At Auth0 we have always had a hybrid office and home working model in place. I think it is based on individual circumstances though. Having spoken at length to my team on a regular basis, some of them are really missing the office environment and engaging with other people. The social element that being an

office brings is much more difficult to achieve or replicate when you are working remotely.

I know as a company, we still want to meet with customers like Alex and his team face-to-face and establish that relationship in person which we haven't been able to do in the last year. So, I think moving forwards, there will continue to be a hybrid balance. Rather than everyone going back to the office full-time, we anticipate that most people will predominately work from home and go into the office as and when they need or want to.

Are there any additional points you would both like to make?

MP – It is common when you think about identity that you automatically think 'security'. However, identity is the front door of every user interaction. It is important for companies to strike the right balance between user convenience, privacy, and security, and continue to improve customer experience by leveraging technologies such as SSO and adaptive MFA. Of course, every company is unique, so it is also important to ensure user security adapts to the needs of both now and in the future. Having the right solution in place helps drive customer acquisition and build brand loyalty. Auth0 is so much more than just a login box. By having a rich customer experience, it can really set your business apart from the competition.

AM – From my perspective, I'd like to reiterate how this year is all about scaling i6. Our focus this year is "#i6everywhere" – and that is absolutely our goal. In order to position i6 everywhere, we need to look at automation. Access and authorization needs to be easy, but we also need to look at overcoming those security challenges in this digital world in which we are connecting together.

The first thing our customers ask us is: "How are you going to protect my data, how are you going to protect my identity?". Having a partner like Auth0 helps us answer all those questions and alleviate those concerns. Working with Auth0 allows us to onboard new customers efficiently and in a trusted way, and our collaboration is key to i6 achieving its scaling plans.

What closing statement would you like to put across to our readers?

AM – I'd personally like to touch on inspiration. One of the exciting things for me is how we help our teams develop solutions. Our teams come up with great solutions to solve our customers' problems, and it is really inspiring to see what they come up with on a daily and weekly basis. Likewise, one of my goals every day is to inspire my team in the same way.

MP – I would have to agree with Alex. I am inspired by my team every day. We have a Public Sector strategy for 2021 and speaking with one of my team members recently, she really inspired me with her view and passion on how Auth0 can really help government organizations to deliver better services to all its citizens in the UK. We interact with a lot of clients on a daily basis who do really cool things with our technology and that is really inspiring to see, and help drives further innovation, I think.