

## Real-Time Automated API Testing and Performance Monitoring



David O'Neill - CEO

### **About APImetrics Inc.**

APImetrics provides real-time automated API testing and performance monitoring for enterprises, developers and individuals building technology on or with APIs. Understand the performance from different regions, and get real-time alerts for failures and slow performing APIs.

**Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine**

### **CEOCFO: Mr. O'Neill, what is the concept at APImetrics?**

**Mr. O'Neill:** Basically, the entire Internet and mobile app world has become dependent on many different services communicating and talking to each other, and the way they do that is through these things called APIs – Application Program Interfaces. We discovered that there was huge variation on how well they performed and how they worked and what they did. Essentially, we realized that there was a space in the market for tools to tell developers and providers how these critical APIs worked. Effectively, it is like there is a great deal of plumbing out there connecting things together, but no one knows how leaky the pipes are and how much is actually going through. That is what we do.

### **CEOCFO: Were people looking for the ability to do that or is it that now they know it is here and they are really happy?**

**Mr. O'Neill:** What we discovered before we built the first version of the product, was that we went to find the information, and we were very surprised it was not there. What we are hearing from our lead customers is that they went through the same cycle that somebody must be able to tell them how long it takes to connect to Facebook, share something or use a particular service. They realized there was nothing out there to tell them, and then they started looking around. That is how many of them are coming to us – they found we were one of the only sources of this information out there at the moment. I think the growth of APIs has been nothing short of spectacular in the last five years, but the pace of the support network for those APIs has lagged quite significantly. I think what we have seen over the year or so that we have been offering our product is people are really starting to realize that they have to know these things if they are going to be successful.

### **CEOCFO: What are you providing to your customer? What is the business model for you?**

**Mr. O'Neill:** We have a software as a service tool. It is a completely online product where they can set up tests against the different APIs they either have in their applications or they offer to their customers. Our tool will run tests against those APIs on a regular basis from different geographies and with different parameters and then provide them with statistics, information and analytics on what their performance is. So it is fast, reliable and sends them alerts when something goes wrong. If something goes slower than expected or something starts failing that they were not expecting it to fail, we provide them with the information essential to fixing things. What we heard from some of our customers was the first time they often found out that their solution was down was when a customer phoned and complained.

### **CEOCFO: What kind of input does your customer need to do in order to make the product viable for them?**

**Mr. O'Neill:** It is a technical product. You certainly need to understand how an API works, but we designed the interface to really minimize the technical skills you need beyond knowing the basics. They will need to input information like the endpoint that is being called, which is usually a web address, and then some parameters for the API call, but one of the things where we believe we have something that nobody else has is we have a very simple to use interface that even relatively non-technical people can use to configure tests and build up reports on the things they need. Once you have configured the test and you schedule it to run every few minutes, you can then create reports of your API performance against other APIs and you can plot different versions of your products over time. It is really a very powerful way of visualizing the data that is being generated around the service you are offering and the service that you are using.

### **CEOCFO: What were the biggest challenges in putting it together for you?**

**Mr. O'Neill:** The biggest one was that many of these services were designed to be very secure. They are actually extremely hard to run something against over and over again on an automated basis. We had to come up with some fairly

new ways of handling Internet security in a safe way in order to be able to repeat tests over and over again without somebody having to go in every day and physically do something. With many of the services that have been available in the past, you have not been able to leave them running. You can do them as a one off thing just to check your code, so to speak, but you have not been able to leave it to run automatically for weeks or months. That is really the big thing that we have brought to the market, which is the ability to leave things running, and not quite forget about it, but it will certainly let you know if you have to go in and change a security setting. It is a very new approach to these things. Otherwise, what you will find is that the tests will run for a day or two and then shut down.

**CEOCFO: *Would you tell us about the recently announced partnership with Radius Inc.?***

**Mr. O'Neill:** One of the things we realized very early on was the tool can be used by any customer, and it is actually standalone. They can build the test themselves, but we were finding that for many customers they also would like to have customized output. Some of our customers were already asking us if they could create a dashboard for their management team or an infographic to distill the technical information down into a format that the management team would want to see every week. For example, one of our customers is AT&T, and they wanted to have something that would just go in an email as an image and would show people the facts and just the facts they wanted. We realized that as a startup focusing on products, we did not really have the resources to build up a services team to support customers, particularly on the scale of AT&T. Although we wanted to have the things like the infographic, they wanted somebody to be creating new tests for them, managing the tests and actually providing insight on what was being seen. We started looking for a partner who could essentially provide us with the services group we did not really have the ability to set up or the design to set up, and that is what Radius brought. They are a specialist consulting company focused on the Internet space, and as they call it, the Internet of things. They bring the ability to take our tools, customize things and configure them and build dashboards and services around our product for their customers. What we are helping create at Radius is an entirely new strand for their services business, which they knew they wanted to do but they did not want to spend essentially hundreds of thousands or millions of dollars building a product to do.

**“If you are involved in running a website or a service in the real world that involved different technologies all interacting and talking to each other, or even if you are offering your service out to developers or third parties that you want to engage with you and are you doing it using APIs, we are the service that you need to use.” - David O'Neill**

**CEOCFO: *How are you able to get a client like AT&T?***

**Mr. O'Neill:** Sales perseverance. We actually were doing consulting work prior to that with AT&T on a small scale around their developer program, and that is how the first contact was made. Many of our initial enterprise customers has been through actually getting out there, attending networking events, calling people and showing them what we can do and holes in the information they have. We have been very lucky because we have trials underway with a number of blue chip technology companies where we have created tests for them and then we are going back to them with information that they did not realize they did not have.

**CEOCFO: *It seems to me, as a non-technical person, it should be hard to resist having this information or wanting this information if you can get it.***

**Mr. O'Neill:** To be honest, that is what we are finding. Once people have seen information and they have got used to knowing on a week to week basis how reliable their services are and what the problems have been, particularly senior management likes to have that information on a regular basis. In large companies where they are spending millions or tens of millions of dollars making their solution available to the mass market of developers, they do not want poor performance on their part to impact on their brand experience. Essentially, what we are giving management teams that are non-technical is comfort that the money they have spent is spent wisely.

**CEOCFO: *What do you bring from previous ventures that has been helpful for you not only in developing the product but on the business side?***

**Mr. O'Neill:** My background has been that I have worked in the mobile sector for over 15 years now as my technical co-founder, and a great deal of bad experience has been in the services space and solving real problems for customers. I think the basis of any focus on the enterprise sector has to be something that solves an actual problem that people want to have solved. In previous companies, I have been in a situation where we have had a great technical solution but nobody has wanted to pay for it. One of the things we realized some time ago was that as we build our company and move forward, we really want to be focused on technology that people actual want to not only like a believe is great but actually want to pay for. Success involves actually making money. We did not want to try to kick off by raising a ton of venture money and then see where customers wanted to go before we started thinking about raising capital to grow. Now we have validated a business, we starting to grow some partnerships and angel funding, but we are still cautious about making sure we have a maintainable business. We want to validate that we have the right stuff to grow and build actually has legs.

**CEOCFO: *Is there a common thread amongst the companies that are looking to use your services or that you would be addressing first?***

**Mr. O'Neill:** We have not seen any standard customer yet. We have carriers like AT&T, and we are actually in trials with other carriers around the world who are offering APIs and also using them extensively internally and having the problems that I described. We have a major vehicle manufacturer who are offering APIs to their users. We have carriers and we have companies that provide commercial equipment where they have enabled their equipment to speak to the Internet. They want to be able to support the entire new mobile and web eco-system. We have companies who build technology for other companies that want to monitor with not just what they are building but what they are integrating to and we also have just individual developers that are building mobile apps and want to validate the assumptions of the technology they are using. At the moment, anybody who is doing something on the Internet or in the connected world is a potential customer.

**CEOCFO: *How would one create the tests?***

**Mr. O'Neill:** You go to our website and create an account, so [www.apimetrics.io](http://www.apimetrics.io), and you simply click the button marked create test. We built essentially a little wizard like what you find in a Microsoft package for setting you through each of the stages you need to make the call that you need to. We have a library of over 100 different API calls that people make, such as Facebook or Twitter or Amazon. If we see that you are trying to do something you have already done, you can use our library of pre-built tests and it will pre-populate all of the sales for you. You just need to customize it with your own security tokens. It is very simple, you sign up for an account and it is self-serve, and we have tried to think of as much as possible to also make the process for our customers.

**CEOCFO: *What are the next steps? What is the strategy for the next year or so?***

**Mr. O'Neill:** We are looking to expand. One of the challenges with having more customers is the more things they want built on our roadmap. The direction we are going in is to allow people to not just compare APIs but look at how mobile apps on the Internet work from different technologies. If you build your solution on Amazon, how that effect how things work if you are looking at another service on Microsoft. We will be providing people with the ability to test different meshes of solutions. The second part, which we think is far more exciting, is that we have been collecting data on API performance now for more than 12 months. We actually have over 60 gigabytes of test results. It is a huge test database representing over 3.5 million tests that we have conducted. What we are working on is automated intelligence based on that data to start to be able to predict what happens when something goes wrong. Rather than just being able to, we want to get to the situation in which someone is a customer of rather than just reporting that something has failed but actually coming back to them with a solution or even providing them with an automated way of fixing it without them having to do anything. With some of these things, it just means they have to reset something or maybe they have to restart a server. It might even be something simpler and they just have to send a request to a website. We want to look at how to use the database and the data we generate to build an intelligence monitoring tool – something that can respond to what it is seeing and look back at what we have experienced before and come up with solutions to save people having to try and dig in and do it for themselves.

**CEOCFO: *Put it together for our readers. Why should people be paying attention to APImetrics today?***

**Mr. O'Neill:** If you are involved in running a website or a service in the real world that involved different technologies all interacting and talking to each other, or even if you are offering your service out to developers or third parties that you want to engage with you and are you doing it using APIs, we are the service that you need to use to monitor and be assured that your customers and your users are getting the experience you want them to. That is what we are about. If you are not measuring it and you are not monitoring it, you do not really know what is happening. That is essentially what we do. We give you the confidence that what you think is happening is actually happening, and we give you warning if it is not so you can fix it before anybody notices.



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