

Shaping the world of connected devices with LwM2M

InterComms talks to Slawomir Wolf, CEO at AVSystem



Slawomir Wolf is the Founder and CEO of AVSystem. Since 2006, Mr. Wolf has been main person responsible for the company's constant evolution, strategic development and management of all AVSystem branches worldwide.

Q: What is unique about AVSystem that differentiates it from other IoT software vendors?

A: I think that our greatest strength lies in the fact that we come from the telco sector, which gives us a very strong experience in scalable and advanced device management. Thanks to that we also value standardization in technology. The competition between IoT software vendors is getting tougher every day. And yet thanks to specializing in device management our Coiote IoT Device Management complemented by Anjay LwM2M SDK will definitely stand their ground. Add to that our integration platform Coiote IoT Data Orchestration and I daresay there are few companies that could beat our IoT trinity.

Q: Can you tell me what are the key trends emerging in the IoT and how can they affect the IoT market?

A: Everything is happening very fast in the IoT. There is a lot of talk about security issues, machine learning, AI, or blockchain. What is the most important for us, however, is definitely a changing environment in device management. Since everything in IoT happens at great speed, LwM2M also had to adapt to these rapid changes. A few months ago there was a new version of LwM2M released which comes with quite a lot of meaningful improvements. Among many other features, LwM2M 1.1 introduces new transport bindings such as Non-IP Data Delivery and CoAP over TCP. These changes are particularly interesting since they reflect the demand to further expand IoT usability. The addition of NIDD means that LwM2M is no longer only about Internet Protocol and will be used more widely in radio networks such as LPWA networks. Other significant changes in LwM2M 1.1 include CBOR which is an even more reliable encoding. There have also been some updates within LwM2M interfaces that further enhance LwM2M performance. We are looking forward to putting this upgraded version of LwM2M into use with our Anjay LwM2M SDK which is full of new features supporting LwM2M 1.1 for end user devices. We are also finishing our work on incorporating these changes into our Coiote IoT Device Management platform which is responsible for the server-side of the LwM2M Enabler. Having been widely adopted by tier 1 telco operators, LwM2M is in my opinion ready to dominate enterprise market with its versatility and IoT-oriented lightweightness.

Q: Can you give examples of how customers can benefit from using LwM2M in the IoT?

A: I think that one of the most important things about LwM2M is its interoperability. LwM2M allows cross-vendor

and cross-platform data management along with device management capabilities which automatically solves so many problems a company can have when dealing with deployments of heterogeneous devices. Add to that a well-defined data model and proper customization and you can basically do anything you want with this technology.

Q: As the IoT is gaining popularity across almost all industries, we can observe that IoT platforms coming in different types and designed for various purposes have become a large area of the market. What do you think about this multitude of platforms and its effect on developing IoT solutions?

A: Right now you can easily find hundreds of different IoT platforms on the market. I believe that this might be misleading and discouraging for enterprise customers because it makes it very hard to find the right platform for your needs. We have industrial platforms, data analytics platforms with AI, connectivity management platforms, service enablement platforms, and many more including device management platforms. All of these areas need to be addressed in these varied IoT deployments. The thing is you can't do everything. So if you see a platform that advertises itself as an IoT platform without specifically indicating in what area - you should know you're probably dealing with platform that is trying to cover all those areas in one place. This is simply impossible. The key is to specialize while offering flexibility at the same time.

Q: How is the Coiote product suite different than other platforms on the market?

A: Coiote product suite consists of Coiote IoT Device Management and Coiote IoT Data Orchestration. Coiote IoT Device Management is complemented by client-side Anjay LwM2M SDK. AVSystem is an active member of OMA SpecWorks and takes part in creating LwM2M. All this gives us the potential to offer full support for LwM2M and be the best LwM2M solution vendor on the market.

Our platforms are designed to be scalable and interoperable. It means that you can manage basically countless number of devices and integrate with third-party platforms. Scalability is ensured by the ability to easily create customized groups of devices and thus manage them in bulk. It is also ensured by multitenant architecture that allows easy-to-understand methods for device management.

Interoperability, on the other hand is achieved thanks to customizable dashboards, widgets, monitoring plots, use case specific actions, and many more. You can say that after setting up Coiote you get a stand-alone solution with flexibility that allows to customize almost all of its components. I believe this is our big strength. Our expertise in device management gained through more than 10 years of providing solutions for tier 1 telco operators, flexibility and fully developed products give us the ability to offer complete IoT solutions.

Q: What are the next steps for AVSystem?

A: IoT is moving fast, so we cannot allow ourselves to fall behind. Currently, the most important for us is expanding our partner network by forming partnerships mostly with hardware vendors. This will help us further improve our solutions and propose real value to the customers. I often say that and I will repeat myself: you can achieve much more when working together and I believe it especially holds true in the IoT. The scene is just too big to cover it on your own.

We are also putting a lot of effort into popularisation of LwM2M especially in the enterprise world. The standard is very commonly used in telecommunications, and now it's time for it to become more known in other IoT verticals. I strongly believe that the latest LwM2M 1.1 version will be a turning point in this regard. Apart from that, we grow, evolve, and do our best to be in the loop to know what's new in the IoT. After all, you have to stay up-to-date if you want to **shape the world of connected devices**.

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