Cloud to Service Endpoints - The Missing Link

Paul Anderson, Wind River (www.windriver.com)

I remember as a kid I was fascinated with phones. The idea that you could pick up the phone, dial it, and talk to someone on the other end was pretty neat. And… at the time, a phone was an elegantly designed electro-mechanical work of art, and it was fun to take them apart to try and figure out how they worked. I could understand how the phone itself worked, but as a kid, what happened after those two wires headed off to the pole was somewhat of a mystery to me. Eventually I came to understand the massive infrastructure that allowed reliable telephone service into the home to be possible. Hats off to Alexander Graham Bell, the inventor of the telephone.

When you think of a basic phone, it seems like such a simple thing. It can receive, it can transmit, and it can provide bidirectional signaling. Receiving and transmitting is obviously important, and it took a while for folks to figure out how to do both simultaneously without a bunch of extra wires and things. Signaling is equally important. The user of the device needs to know when someone is trying to contact them, and to be able to establish contact with someone else out on the network. A phone is actually a very clever thing, particularly when one thinks of what people did with what they had at the time, particularly in a world before the transistor.

But, what is a phone really? It is a service gateway. In its most simple form, it provides telephone service. That service then allows connectivity to other services, like the ability to call the plumber when your sink gets clogged, or order a pizza. Quite amazing! The phone as a communication gateway gave way to a great number of services being offered, including the ability for the average person to communicate information digitally across a vast worldwide communications network. Wow… that’s really cool too.

Fast forward now to modern times. Thanks a few little inventions like the transistor, the integrated circuit, and storage technology, we now live in a word where there is network connectivity, and the ability to access a wide variety of information and services from this thing called The Cloud. Now you can get on-demand movies with the push of a button, or have your refrigerator figure out you are getting low on milk and order more for you. Imagine trying to explain that to our friend Alex, the Phone Guy!

The ideas of services that could be offered from the cloud to an endpoint are

coming fast and furious. During this disruptive phase, it is very difficult for equipment manufacturers, carriers, and service providers to stay current. Right now, there is only so much a cable modem, set top box, or digital television can do. And, in the commercial world, retrofitting communications gateways is expensive and time consuming. The missing link is a standards-based smart services gateway that is flexible enough to be able to serve the quickly changing world around us. Without this missing link, it will be difficult to realize the next evolution of services available to us.

Wind River has recognized the need for smart services gateway technology and has developed Wind River Platform for Gateways. This platform allows equipment manufacturers to quickly build smart service gateways for consumer, and M2M applications in the networking, medical, and industrial and other sectors. With Wind River Platform for Gateways, equipment makers have a platform they can use right away to develop service gateways that easily manage connected devices and services at the network edge and also scale to meet the demands of new services.

It will be hard to imagine what will happen next, but one thing is for sure, the service gateways will play a key role in whatever is to come.

Source URL (retrieved on *12/08/2013 - 1:11pm*):
http://www.wirelessdesignmag.com/blogs/2011/11/cloud-service-endpoints-missing-link?qt-digital_editions=0