NFV applications emerge from ISVs, but challenges loom

by: Lee Doyle
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A new group of ISVs is producing exciting NFV applications that bring automation to a range of network services. But these developers face enormous challenges in establishing a new set of technologies.

The ISV community has the potential to drive network functions virtualization (NFV) adoption, bringing IT’s dynamic innovation to the staid telecom environment. But with limited resources, it’ll be a challenge to build sales channels and create market awareness for NFV applications.

Who are the NFV ISVs?

The NFV ISV community comprises a group of approximately 50 companies ranging from startups to established software suppliers. The category excludes leading network equipment suppliers (e.g., Cisco, Ericsson and Huawei, which derive the vast majority of their product revenue from equipment), as well as leading IT suppliers, such as HP, IBM, Dell and Oracle.

Wide breadth of NFV applications

The NFV ISV community provides applications that span a wide range of the providers in the telecom infrastructure landscape, including:

- Routing and broadband remote access server, or BRAS -- e.g., Brocade and Adara
- Virtual CPE (home and business) -- e.g., Active Broadband and Netsocket
- Orchestration, management and monitoring -- e.g., Overture and Nakina
- Evolved packet core (mobile core) -- e.g., Affirmed and Connectem
- Deep packet inspection, or DPI -- e.g., Saisei and Procera
- IMS or VoIP -- e.g., Mavenir and Metaswitch
- Session Border Control, or SBC -- e.g., Edgewater
- SDN -- e.g., Pica8, Big Switch, Cumulus
- Security -- e.g., Catbird and vAmour
- WAN optimization -- e.g., Vello Cloud, SilverPeak, Viptela and Pertino

The first challenge [for NFV ISVs], of course, is to develop an innovative, virtualized product that meets the reliability and scalability requirements of the telecom industry.
Challenges for NFV ISVs

NFV ISVs face a number of vexing challenges as they bring their products to market. The first challenge, of course, is to develop an innovative, virtualized product that meets the reliability and scalability requirements of the telecom industry. In addition to the technical challenges, ISVs also must develop a succinct value proposition (elevator pitch) directed at large telcos, explaining why they should introduce a new, unproven product into their highly complex network operations.

In a recent survey of 40 NFV ISVs, Doyle Research found their top challenges include:

- Creating market awareness
- Building effective sales channels
- Ability to scale with qualified people
- Finding the financial resources to invest in long-term growth

A marketing message that can be heard in a sea of hype

The surge in interest in NFV by the tier one telecom service providers has led to a rapid increase in the number and volume of marketing messages around NFV products and solutions. The challenge for NFV ISVs is to break out of the market noise and make potential customers aware of their unique solutions. These efforts are often hampered by limited marketing resources and people as the ISVs focus their resources on technical efforts.

NFV channels tackle lengthy sales cycles

NFV is a complex and highly technical sale to network operators. The sales cycle can be one or two years long, especially if it involves starting in the labs, moving to proofs of concept and then to limited deployments. NFV ISVs generally hire a few direct sales folks to develop “lighthouse” accounts, but must rely on partners and the channel to sell to a broader audience. A number of large IT and network suppliers, including Intel, Alcatel-Lucent and HP, have created their own ISV ecosystems designed to help smaller ISVs get their products to market.

How to handle the challenge of a small staff

Most NFV ISVs have limited technical and support resources, sometimes with only a few dozen people on staff. For those lucky enough to land a tier one customer (or two), those resources can easily be consumed during a six-month trial or proof-of-concept engagement. NFV ISVs need partners to help them scale their technical integration and global support resources.

Finding the financial resources to push through trial periods

The investment community remains strongly supportive of NFV and SDN startups. The challenge for NFV ISVs is to maintain the required financial resources for long enough to sustain them through a period of limited revenue as customers trial their products (generally for free). The NFV market is quite small now but is expected to grow strongly during 2015 and 2016 as customers move to limited, then broader production deployment.

Conclusions

ISVs are critical in delivering NFV technology to the traditionally slow-moving telecom industry. A large number of network software suppliers are delivering initial NFV applications across a wide variety of use cases. In addition to developing technically excellent products, these ISVs will need to clearly articulate the use case and benefits of their products, attract the right sales partners, and work to scale their technical resources as they gain new customers. The development of the NFV market will be relatively slow in the near term, and investors and IT partners will need to take a long-term view to nurture the tremendous value of this community.
Will we see virtual network functions from startup ISVs or from traditional IT providers?

Lee Doyle asks:

Will we see virtual network functions from startup ISVs or from traditional IT providers?

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About the author:
Lee Doyle is a principal analyst at Doyle Research, which delivers quantitative and qualitative analysis, forecasting, and market positioning advice to network and IT industry professionals. At Doyle Research, Lee researches the evolution of intelligent networks: SDN, Opex and Commercial off the Shelf.

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