

DISH Wireless Selects Oracle for 5G Core Service-Based Architecture

5G network slicing and cloud-native automation enable DISH Wireless to power a new level of innovation and services for customers

DISH Wireless is redefining services for consumers, small businesses and large enterprises by building the nation's first cloud-native, OpenRAN-based 5G network. As DISH takes the unprecedented step of building a 5G network in the cloud, it has selected Oracle to enable a Service-Based Architecture (SBA) for its 5G core. SBA, part of the 3GPP 5G standard, enables network services to be rapidly incorporated into new applications by DISH or DISH customers through automated, intelligent configuration between network functions.

With this technology, DISH Wireless will be able to provide enterprise customers added control of the software and services they utilize, taking advantage of their individual "network slice." This "network of networks" will enable enterprises to configure dedicated, logical network instances and policy management for different applications and customer experience models, such as manufacturing or telehealth.

"Oracle's capabilities will essentially serve as the control tower of our network core, enabling our customers to consume software on demand and facilitating the advanced core functions required to power a truly automated network," said Marc Rouanne, chief network officer, DISH Wireless. "While many carriers may claim to have 5G, there are certain attributes only possible with a cloud-based standalone network, and our working with Oracle will yield results that will unleash the power of true, fully-optimized 5G."

Aligned with the Cloud Native Computing Foundation (CNCF), Oracle's 5G core control plane includes network functions that will help operators automate and scale to meet the expected growth in 5G subscribers and connected devices. DISH Wireless will be using a number of network functions from Oracle including:

- [**Policy Control Function \(PCF\)**](#): dynamically routes low-latency applications to edge data networks, while simultaneously considering network data analytics and slice information to provide optimized policies minimizing network resource utilization while maximizing quality of experience.
- [**Network Repository Function \(NRF\)**](#): serves as a central repository for

all of the network functions in DISH's 5G network, along with the services provided by each of these elements.

- **Network Exposure Function (NEF)**: acts as a centralized point for service exposure and plays a key role in authorizing all access requests originating from outside the DISH network to enable Cellular IoT, non-IoT, edge computing and API gateway use cases for DISH and its enterprise customers.

Additionally, DISH will utilize Oracle for 5G Service Communications Proxy (SCP), Network Slice Selection Function (NSSF), Security Edge Protection Proxy (SEPP) and Binding Selection Function (BSF).

A network built for 5G

DISH Wireless is entering the 5G market with a business strategy completely built on innovation. The company is aiming to offer thousands of network slices, each with a tailored customer experience leveraging network and subscriber-level service data. The Oracle network control functions will enable DISH to easily create and manage custom, service-specific network slices, deliver powerful policy control and provide granular access to third party-enterprises and web applications. These features will support use cases such as enhanced Mobile Broadband (eMBB), ultra-Reliable Low Latency Communication (uRLLC), Mobile Internet of Things (mIoT), and User Equipment (UE) policies. With support for DevOps principles and continuous integration and delivery (CI/CD), Oracle's cloud-native architecture will enable DISH to reduce operational expenses and time to market for these new services.

"DISH Wireless is completely disrupting the wireless industry," said Andrew Morawski, senior vice president and general manager, Oracle Communications, Networks. "Using Oracle's 5G cloud-native technology to automate their network, DISH will be one of the most agile operators in the world enabling enterprise digital transformation journeys across many diverse industries."

Additional Resources:

- eBook: [Managing 5G Signaling Complexity](#)
- Omdia Analyst Report: [Converged Policy in 5G](#)
- ABI Research Analyst Report: [The Importance of Signaling in 5G](#)

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About DISH Wireless

DISH Network Corporation is a connectivity company. Since 1980, it has served as a disruptive force, driving innovation and value on behalf of consumers. Through its subsidiaries, the company provides television entertainment and award-winning technology to millions of customers with its satellite DISH TV and streaming SLING TV services. In 2020, the company became a nationwide U.S. wireless carrier through the acquisition of Boost Mobile. DISH continues to innovate in wireless, building the nation's first cloud-native, Open RAN-based 5G broadband network. DISH Network Corporation (NASDAQ: DISH) is a Fortune 250 company.

About Oracle

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