Application-Driven Data Center Solution
H3C Application-Driven Data Center (AD-DC) Solution is a new-generation data center solution based on SDN architecture. It accelerates network infrastructure deployment, simplifies network operation and management, and optimizes network efficiency with AI empowerment. Based on openness architecture, AD-DC solution could integrate with Openstack-based cloud platform to deliver a resilient, secure, visible and automated data center.
Features and Benefits

Elastic, Reliable Network Architecture

H3C AD-DC is designed for openness. It provides extensive support for standard protocols, including BGP EVPN, VXLAN, OVSDB, OpenFlow 1.3, NETCONF, INT, gRPC, and ERSPAN. Customers can integrate it with mainstream resource management platforms or cloud platforms to provide unified management or avoid the risk of vendor lock-in.

End-to-end Automation

**Network fabric automation**—The solution offers not only automated role-based underlay deployment but also automated overlay deployment.

**Service automation**—The SeerEngine provides automated service-based network configuration deployment to help customers accelerate service provisioning. The SeerEngine communicates with devices through standard southbound protocols such as NETCONF, OVSDB, and OpenFlow. When IT managers or tenants launch new services, the controller quickly delivers the abstracted logical network configuration to related physical devices, improving service deployment efficiency greatly.
Integrated All-facet Security Protection

AD-DC provides a coordinated closed-loop defense system that encompasses analysis, control, and implementation capabilities. Security resources are pooled, service-oriented for orchestration based on policy-driven security service chaining.

Through SeerEngine, AD-DC automates business-driven policy establishment and deployment and enables the transition from using manual approaches for network management and maintenance to AI-driven operations (AIOps).

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Compute Resource Collaboration

The data center network requires seamless integration and compatibility with compute resources. Based on the standard OpenStack architecture, AD-DC can automate provisioning of all types of compute resources including virtual machine, bare metal, and container, improving compute resource provisioning efficiency greatly.
Proactive Operations and Maintenance

Powered by SeerAnalyzer and technologies such as gRPC, Telemetry, ERSPAN and in-band telemetry (INT), AD-DC can achieve millisecond-precision data capture, megascale VM data analysis, and real-time fault detection:

- Provide a holistic view of the health status of entire network and applications.
- Provide a closed-loop process for fault events from discovery, diagnosis, solution, to closure.
- Perform accurate fault location, risk prediction, and trend analysis.

Openness and Programmability

SeerEngine provides richer and more flexible functions to help enterprises adapt to changing network trends and build an intelligent, secure, and reliable information network.

In the northbound direction, SeerEngine adopts open, standard RESTful APIs or Java embedded APIs, allowing users to develop programmable SDN apps of their own. In the southbound direction, SeerEngine adopts standard southbound interfaces defined by the OpenDayLight organization, including OpenFlow, NETCONF, and OVSDB interfaces.

Key Values

- Provide a converged architecture and concentrate management, control and analytics to improve operational efficiency.
- Accelerate business provisioning and delivery with end-to-end automation ability.
- Provide closed-loop business O&M to ensure business consistency.
- Build a zero-trust network by comprehensive security capabilities.
- Setup an ecological foundation with open and programmable platform