

2017 FedHealthIT Innovation Award Winner – Virtual Data Center Cloud Computing Services

INNOVATION AWARD

Cloud Solutions



The Centers for Medicare & Medicaid Services (CMS) Virtual Data Center Cloud Computing Services (VDC CCS) program was conceived to create an Amazon Web Services (AWS) cloud hosting solution that enforces adherence to CMS architectural and security standards. The transitive routing solution remains the first of its kind to be implemented within AWS. This approach supports connectivity to the program's shared services at lower costs and simplifies connectivity across AWS and CMS data centers.



ABOUT THE AWARD

The FedHealthIT Innovation Awards* recognize 25 of the top Federal Health leaders. Nominated and chosen by their peers, the awardees stand out from the rest based on their willingness to take on achievable risk, and more importantly, to deliver real results in support of their mission.

*www.fedhealthit.com/Summer2017

About VDC CCS

The VDC CCS program aims to maintain flexibility to enable near-immediate provisioning of infrastructure to support agile software development and DevOps operations for CMS applications. Leveraging General Dynamics Health Solutions' (GD Health) Infrastructure-as-a-Service and utilizing AWS as a public cloud enables CMS near-unlimited capacity of infrastructure that is pay-per-use, rather than owned.

An Innovative Solution that Lowers Costs and Simplifies Connectivity

GD Health, a division of General Dynamics Information Technology, developed a CMS-compliant architecture that provides automated solutions to quickly deliver infrastructure. The innovative transitive routing solution, designed and implemented by GD Health, remains the first of its kind to be implemented within AWS. Expanding the CMS environment beyond AWS' inherent networking limitations required the design of an overlay network comprised of virtual routers to enable transitive routing across virtual private clouds. This approach supports connectivity to the program's shared services at lower costs and simplifies connectivity across AWS and CMS data centers.

Advancing Health IT Through Agile and DevOps Methodologies

The VDC CCS program and the immediate availability of computing resources increased adoption of agile and DevOps methodologies across CMS, resulting in faster time-to-market and a risk reduction for CMS applications. The ability to move faster within a public cloud provider versus a traditional data center for web-centric applications prompted a number of CMS programs to migrate to the cloud – making CMS a true leader in adopting the “cloud first” policy set forth in the Federal Cloud Computing Strategy.

