

Nominee: AERO Data Center Team: Walter Ho & Gloria Hernandez: IT PM / Warren Rigney, Tom Smissaert, and Lieven Colman: Network Engineers / Michele Cozza: Compute Engineer / Benoit Mendy, Daniel Spinale, and Anand Sengar: Storage Engineers

Nomination title: **ACI AERO Build**

Cisco ACI is a comprehensive SDN solution, making the application the focal point. It is delivered on an agile, open, and highly secure architecture. Its application-based policy model offers speed through automation, reducing errors and accelerating application deployment and IT processes from weeks to minutes.

As part of this project, Cisco's AERO Data Center in the Netherlands implemented this transformative solution with new Network, Compute, and Storage technologies, brought forth according to the latest design and architecture guidelines determined by Cisco IT. The ACI build showcased how we scaled to build in a smaller data center vs. our larger US counterpart.

- Netherlands DC: 123 Virtual Machines, 2 Databases reside on two Cisco UCS clusters with 194.1TB of storage. Product installation included CISCO3945, CISCO-APIC, Nexus 9396, Nexus 9508, and NetApp solutions.
- United States DC: 268 Virtual Machines, 27 Databases reside on eight Cisco UCS clusters with 388TB of storage.

With this build out, it also gives us an opportunity for continued learning on how to accelerate ACI implementation - how fast we can do it, how to build a holistic customer story. In the process, IT resources in the EMEAR region – Europe, Middle-East, Africa, and Russia – are engaged, which build out skillsets and cross-domain knowledge. As such, the Almere Data Center will serve as a Customer Showcase.

When comparing the Traditional Data Center to the ACI-based AERO Data Center, we were able to see tangible benefits in the following areas:

- **Reduction in Network Power/Cooling Costs (OPEX):** The ACI gear per component has lower kw cost providing an 85% decrease in Operation Cost.
- **Reduction in Network Footprint (CAPEX):** Replacing Traditional Network Gear with ACI Gear reduced the network footprint thus increasing our Network Data Center Space by 55%.
- **Reduction in CAPEX:** The capital expenditures of ACI Infrastructure vs. the Traditional model provided a 17% CAPEX savings.

With the ongoing migration and operation of existing applications onto ACI, we're seeing opportunities for additional benefits related to simplified management and automation:

- **Reduction in Management Costs:** Based on combined calculated savings of Incident Management, Problem Management and Event Management.
- **Reduction in Network Provisioning Time:** Based on a combination of Actual \$ Savings and SLA Provisioning Improvement.

As we continue to harness ACI's automation capabilities and migrate additional applications onto ACI, we'll be able to quantify these benefits.

Why nominee should win

- **Providing a transformative product that Automates and Simplifies data center operations.**
- **Outstanding team collaboration between Cisco IT team members in EMEAR and overseas in Planning, Executing and Issues Management.**
- **Delivery within implementation timelines and design expectations.**
- **Close collaboration of IT resources in the EMEAR region, building out skillsets and cross-domain knowledge.**