

Hybrid Connectivity: On-Prem to AWS Site-to-Site VPN

Case Study — Network Engineer I, Aston Technologies

OVERVIEW

This project established secure, repeatable connectivity between on-prem infrastructure and an AWS VPC for a cloud-connected workload, and packaged the result as a reusable pattern rather than a one-off build.

PROBLEM

On-prem infrastructure needed a secure path into an AWS VPC for a cloud-connected workload, with no existing hybrid connectivity pattern documented for future builds — each prior cloud connection had been handled ad hoc.

PROCESS

- Diagrammed the target topology before implementation, covering both the AWS and on-prem sides
- Authored the change request and implementation MOP
- Provisioned the AWS-side Customer Gateway, Virtual Private Gateway, and VPN connection
- Configured on-prem VPN termination with matching IPsec parameters
- Configured routing so the VPC subnet was reachable from the internal network in both directions

SOLUTION

Established and validated the site-to-site VPN tunnel, confirmed routing in both directions, and packaged the diagrams and MOP as a reusable template rather than a one-off build — so the next hybrid connectivity request could reuse the same documented pattern instead of starting from scratch.

OUTCOME

Delivered working hybrid connectivity and left behind a documented, repeatable pattern for future on-prem/AWS builds instead of tribal knowledge — the actual Change Request Form and MOP used are included as a companion document.

SKILLS DEMONSTRATED

AWS VPC networking (Customer Gateway, Virtual Private Gateway, VPN connections) · Site-to-site IPsec VPN · Hybrid routing design · Network diagramming · Change management (MOP authorship, CAB documentation) · Reusable documentation design