ATOMIUS CLOUD – Brief Technical Spec

ATOMIUS CLOUD (SDWAN CLOUD) is OMNIA's multi-cloud connectivity fabric. It turns a single SD-WAN site into a gateway to public and private clouds, IaaS and SaaS instances, and more than 900 global data centres, with centralised security, policy and consumption-based billing.

Area	Technical specification
Platform role	Cloud component of OMNIA providing a highly interconnected multi-cloud architecture for ATOMNIA networks. Appears as a site on the customer's SD-WAN/OMNIA network and acts as a gateway to IaaS and SaaS provider instances.
Cloud and data-centre reach	Connects to public and private cloud providers and cloud services, including IaaS, SaaS and PaaS. Provides real-time access to IaaS and SaaS instances and more than 900 global data centres through Console Connect.
Single logical gateway	Connects any site, user or device to any cloud and more than 900 international data centres from a single logical gateway.
Multi-vendor interoperability	Enables communication between different SD-WAN vendor technologies, allowing multi-vendor SD-WAN networks to interoperate through ATOMIUS CLOUD.
SD-WAN architecture	Operates as a node in the SD-WAN topology, with traffic steered to it as the optimal next hop for cloud access. Removes the need to deploy and manage separate SD-WAN virtual appliances in each cloud-provider environment.
Cloud operations	Centralises multi-cloud control and allows connections between clouds and regions to be spun up or down within minutes.

Area	Technical specification
Portal and provisioning	Central customer portal for viewing, managing and provisioning cloud on-ramps and virtual cross-connects (X-connects). X-connects can be self-provisioned or delivered as a fully managed ATOMNIA service.
Hybrid cloud	Access Ports connect enterprise data centres and sites into the multi-cloud fabric, supporting hybrid-cloud architectures.
Security	Centralises cloud security and access at the ATOMIUS CLOUD layer. Works with OMNIA Integrated SASE and Data Assurance to provide encrypted and inspected traffic into and between clouds.
Performance and resilience	Designed for high-performance, high-availability access to multiple clouds without tromboning traffic through on-premises data centres. Uses redundant paths and the carrier-class Console Connect fabric for always-on access to critical applications.
Backup and recovery	Supports automated inter-cloud data backup and recovery across reliable and redundant connectivity.
Commercial model	Consumption-based billing with monthly-commit or pay-as-you-use (PAYU) options, aligning spend with actual usage.

Deployment and Management

ATOMIUS CLOUD is part of the SD-TRUST ecosystem and integrates international cloud providers and has global data-centre reach. It supports rapid rollout through zero-touch provisioning and is designed, managed and supported by ATOMNIA's SD-WAN/SASE specialists.

It provides a single dashboard for managing and monitoring cloud connectivity, while enabling network capacity and cloud reach to expand as business requirements grow.

Operational Benefits

- Centralises cloud connectivity, security and access rather than requiring each cloud to be secured separately.
- Simplifies disaster-recovery procedures and multi-cloud management by enabling secure inter-cloud links to be provisioned quickly.
- Reduces infrastructure complexity, hardware requirements and the number of SD-WAN instances required per cloud.
- Supports the adoption, testing and scaling of multiple cloud providers without network re-architecture.
- Provides a single SD-WAN instance plus ATOMIUS CLOUD as an alternative to multiple per-cloud SD-WAN deployments.