Amazon Web Services Announces AWS Ground Station

Amazon Web Services (AWS) has announced AWS Ground Station, a new service that makes it easy and cost-effective for customers to download data from satellites into AWS Global Infrastructure Regions using a fully managed network of 12 ground station antennas located around the world.

Once customers receive satellite data at a ground station, they can immediately process it in an Amazon Elastic Compute Cloud (Amazon EC2) instance, store it in Amazon Simple Storage Service (S3), apply AWS analytics and machine learning services to gain insights, and use Amazon's network to move the data to other regions and processing facilities. There are no up-front payments or long-term commitments, no ground infrastructure to build or manage, and customers pay-by-the-minute for antenna access time used.

Satellites are being used by more and more businesses, universities, and governments for a variety of applications, including weather forecasting, surface imaging, and communications. To do this, customers must build or lease ground antennas to communicate with the satellites. Customers also need servers, storage, and networking near the antenna to process, store, and transport the data from the satellite.

AWS Ground Station allows customers to more easily and cost-effectively control satellite operations and save up to 80% of their ground station costs by paying for antenna access time on demand, and they can rely on AWS Ground Station's global footprint of ground stations to downlink data when and where they need it. The recency of data is particularly critical when it comes to tracking and acting upon fast-moving conditions on the ground. This timeliness depends on frequent communications between ground stations and satellites, which can only be achieved with a large, global footprint of antennas maintaining frequent contact with orbiting satellites.

"We are giving satellite customers the ability to dynamically scale their ground station antenna use based on actual need. And, they will be able to ingest data straight into AWS, where they can securely store, analyse, and transmit products to their customers without needing to worry about building all of the infrastructure themselves." said Charlie Bell, Senior Vice President of AWS.

AWS Ground Station's interface allows you to identify antenna locations and communications windows, and schedule antenna time. This enables customers to review confirmed times in the console and cancel or reschedule prior to the scheduled contact time. Because many AWS Ground Station antennas are co-located with AWS Regions, customers have low-latency, local access to other AWS services to process and store this data.

"At DigitalGlobe, we employ AWS Ground Station to augment the capabilities of our global network of ground station antennas. With greater connectivity to DigitalGlobe's high-resolution constellation and more downlink capacity, our collection planning teams can now optimise the interval from planning to image collection, downlink, and analysis – especially valuable when time matters," said Jeff Culwell, Chief Operations Officer, DigitalGlobe.

"AWS listened to our inputs on price point and considered our needs to influence the timing and approach to their service baseline. AWS Ground Station provides important growth and scalability for a global, self-service ground station-as-a-service. This product seamlessly integrates with our AWS hosted architecture, enhancing our ability to deliver an unprecedented level of service to our customers," said Nick Merski, Vice President of Space Operations, BlackSky/Spaceflight Industries.

To get started with AWS Ground Station, visit https://aws.amazon.com/ground-station.