Up in the Cloud
An Introduction to Airbus DS Cloud Services

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Geospatial Data Made Easy

Airbus Defense and Space’s Cloud Services represent an innovative approach to meeting the growing Big Data requirements of the global geospatial community.

- Secure, instant access to geospatial data, anytime, anywhere
- Efficient, cost-effective geospatial data management and delivery
- Easy integration of geospatial data into existing workflows
CLOUD SERVICES

Custom-Branded Portal
Custom-branded portal to view, distribute and monetize your content

Managed Hosting
Hosting & management of your Airbus DS and proprietary data

Geoprocessing
Advanced data processing in the cloud

Virtual Tasking
Directly task the Airbus DS satellite constellation online

Catalog
Direct link to the Airbus DS imagery products archive

Streaming
Access Airbus DS and proprietary imagery & basemaps

Firewall

On-site installation of a DataDoors Appliance to host, manage and deliver data to a community of users.
Managed Hosting Offer

Secure, Managed Hosting of Your Data in the Cloud
- Hosting, Backup, Redundancies, Reporting, System Monitoring, Overall Management

Data Ingest
- Imagery, Maps, Terrain, LiDAR, Vectors
- Data ingested by experienced “Big Data” specialists

Options
- Custom-Branded Portal w/Airbus DS Catalog
- Streaming Service
**What is Streaming?**

**Definition:** (Geospatial) Streaming is a method of efficiently relaying geodata between a storage environment and a computer terminal to allow for viewing over the web.

**Airbus DS streaming services are used to:**
- Deliver satellite imagery to clients as a view-only service
- Provide clients with a way to access imagery anytime, anywhere
- Enable customers to easily integrate geodata into current systems and workflows
Streaming Offer

Standard Streaming Service
- Stream your Airbus DS, 3rd party and/or proprietary data
- Monthly subscription fee based on hosted data + usage (map views)
- One-time ingest fees apply for 3rd party and proprietary data

Multiple Protocols Supported and Provided by Default
- OGC WMS & WMTS
- Esri SOAP & REST
- Google Earth Super Overlay

Nearly Unlimited Access!
- Packages are available for up to 1 million map views* / month
- Specific packages available upon request

* One map view is one display of imagery on the end-user screen
Streaming Delivery

Data Delivery Example

http://gisservices.datadoors.net/wms/[subscription ID]

http://gisservices.datadoors.net/wmts/[subscription ID]

http://gisservices.datadoors.net/soap/[subscription ID]

http://gisservices.datadoors.net/rest/[subscription ID]

http://cdn1.datadoors.net/kml/[subscription ID]

Example of a ‘live’ URL

http://gisservices.datadoors.net/i3_ArcGIS/wmts/999g320e-4f1w-428f-97o0-6b97f69a0d36
Share Data Across Multiple Gov’t Agencies

Data streaming service for Western Australia provided by Landgate

Need:
• Supply data across government
• Minimize the duplication of resources by collecting location data once and sharing

Solution:
• Multi-year SPOTMaps hosting & streaming service provided with a 99.5% online service guarantee, which is critical when supporting emergency services operations.

Benefits:
• Reduced infrastructures costs and maintenance for location information
• More efficient utilization of funding across the government
Custom-Branded Portal
An Easy-to-Use Web Portal with Your Branding

- **Manage & distribute** all your geospatial data with one proven solution
- **Quickly search for data** using a map-centric user interface
- **Monetize** your content
- **Collaborate** on projects and purchases
- **Directly task** the Airbus DS satellite constellation online
Easy Data Ordering & Delivery

Order

• e-Commerce
  • Data ordered and delivered using an e-commerce functionality
  • Data values can be set at $0 for free ordering and delivery
  • Supports the use of credit cards and purchase orders for data purchases

• Airbus DS, 3rd Party and Proprietary Data

Deliver

• Clip, Zip, and Ship
  • Deliver only the data a user needs
  • Provides smaller files for limited bandwidth or limited memory applications

• Supports Most Common Industry Formats and Data Projections
User Management

Standard User Management Tools
- Control Access to Archive(s)
- Manage Licenses
- Track Data Usage
- Request Job Approval

Typical User Roles

<table>
<thead>
<tr>
<th>Administrator</th>
<th>Organization Administrator</th>
<th>Organization User</th>
<th>Approval Supervisor</th>
<th>Individual User</th>
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</thead>
<tbody>
<tr>
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Advanced Geoprocessing in the Cloud

- Processing done on-the-fly
- No advanced spatial data processing training needed
- No need to store, host or manage products locally
# Geoprocessing Examples

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contours from LAS files</td>
<td>Generate contours from a seamless set of LAS files</td>
</tr>
<tr>
<td>Band Extract</td>
<td>Extract a sub-set of bands from a hyperspectral scene</td>
</tr>
<tr>
<td>Colorizing using differential superposition</td>
<td>Merges the color information of a low-res dataset with the detail of a high-res dataset to produce a colorized high-res product using i-cubed's proprietary differential superposition algorithm.</td>
</tr>
<tr>
<td>Parcel Point Extract</td>
<td>Extract Parcel and Point Feature Classes</td>
</tr>
</tbody>
</table>
imagery Products Catalog

• Connect to the Airbus DS Imagery Products Archive

• Provide Access to the Airbus DS Catalog Through Your Custom-Branded Portal

• Available Products
  - SPOTMaps
  - SPOT
  - Pléiades
  - GEO Elevation
  - TerraSAR-X
Virtual Tasking

Full-Automated, Online Tasking Services Available 24/7

Directly Task A Multi-Satellite Constellation Online
- Available: Pléiades 1A & 1B and SPOT 6
- Currently available through www.geostore.com
- Coming Soon: Virtual Tasking through your own Custom-Branded Portal

Instant Tasking
- For expert customers requiring imagery in an emergency
- Guaranteed image acquisition on a given day
- Imagery collected as soon as the next satellite pass
- No cloud cover commitment

Automatic Tasking
- Available for small areas
- Requires standard acquisition parameters
- Acquisition period is provided
Timeline of a SPOT 6 Instant Tasking Request

December 4\textsuperscript{th}

14:55
Order is placed.

December 5\textsuperscript{th}

18:47
Satellite passes over the target.

20:40
Production is launched.

02h25min

21:12
Product is available for download.

Time is UTC
Timeline of a Pléiades Automatic Tasking Request

06:58
Pléiades tasking order is placed.

03:32
Request is integrated into the tasking plan

03:32
Pléiades passes over the target and shoots the AOI until an image is validated

14:29
Production is launched.

14:51
Product is available for download

Time is UTC

Only 6 days after ordering, the product is delivered to the client through a fully automatic process
Custom-Branded Portal Offer

**Standard Custom-Branded Portal**
- Standard DataDoors Interface with Your Branding
- Custom URL (mycompany.datadoors.net)
- Link to the Airbus DS Catalog
- Standard e-Commerce Solution

**Custom Options**
- Custom Branding (Documentation, Links, etc.)
- Other e-Commerce Tools
- Ingest and storage of your proprietary data
Dutch Satellite Data Portal
Provided by the Netherlands Space Office (NSO)

- INSPIRE compliant web portal
- Broad access to data over The Netherlands territory
- Data free for registered Dutch end-users
- Daily imagery updates
- Data available within 24 hours after acquisition

http://nso.datadoors.net/dd3

2014 Geospatial World Technology Innovation Award Winner!!
Contact Us

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