



ERDAS TITAN 2009 DESCRIPTION

ERDAS TITAN 2009

Product Description

ERDAS TITAN is an innovative data sharing solution, enabling users and organizations to publish, discover and ultimately consume geospatial data, web services and location-based content, in an online, dynamic, collaborative network. TITAN enables permission-based publishing of data and content directly from desktops and laptops and ensures digital ownership rights are retained. Using a 3D virtual globe, users can create data and content mashups that can be quickly published and viewed by others. ERDAS TITAN also translates data on the fly to “view only” formats for consumption into a variety of other desktop, internet and 3D virtual globe applications.

TITAN Client Key Features

Publish data

- Publish a variety of geospatial data, location-based content and geospatial web services
 - Format support includes open source project GDAL. ERDAS IMAGINE raster libraries (where IMAGINE 9.3 is installed) and custom format support
- Direct support for publishing
 - Feature datasets
 - Raster imagery
 - KML and KMZ
 - Web Services
 - Location-based content (such as image overlays, screenshots, notations and metadata)
- Data is published with permissions, both publicly and privately, for access and retrieval by individuals, workgroups or the public
- Publish data
 - for access into other applications utilizing Geospatial Instant Messenger (GeoIM)
 - for 3D interactive presentation utilizing TITAN Viewer
- Organizations make data accessible both internally and externally
- Authors of geoproducts and location-based content serve data and content directly from their laptops or desktops
- Data stays local and is indexed on a proxy server when published and cached upon first fetch
- Data providers protect digital ownership rights by delivering data for ‘viewing only’
- Styles set for raster and vector datasets are maintained when accessed by others. Style setting includes:
 - Select colors, width and size
 - Symbolology for point vectors, including default DHS Symbol Library
 - Change band combinations
 - Extrude vectors by attributes
 - Change standard deviation stretch
 - Add Labels
 - Set background transparent
 - See extent using footprints feature
- Metadata is harvested for published local data and can be edited for individual or multiple files
- Publish via drag and drop from Windows Explorer or Add Files dialog

Search, discover and access data

- Search from both the Geospatial Instant Messenger or directly from the TITAN Viewer
- Discover data and web services from unlimited public and private data publishers
- Search published raster and vector datasets and KML/KMZ files by keyword and spatial extent
- Search and discover ERDAS APOLLO Image Manager (EAIM) data exposed as OGC web service interfaces
 - Query an ERDAS APOLLO Image Manager (EAIM) catalog to discover data
 - Query metadata using keywords, spatial extent and date and time

- Authentication support
- Support for scale dependent security for WMS layers
- Searches are federated across multiple APOLLO catalogs

Support for web services

- Supported geospatial web services include:
 - Web Map Service (WMS)
 - Web Feature Service (WFS)
 - Web Coverage Service (WCS)
 - ECWP image streaming protocol from IWS
 - ImageX simple HTTP protocol from IWS
 - ERDAS APOLLO Image Manager (EAIM) metadata catalog
- Maintain a list of geospatial web services
 - Set that list to be publicly available or not
 - List is available in both Geospatial Instant Messenger and TITAN Viewer
- Authentication support
- Access Map Collections provided by your TITAN network

Visualize data in other geospatial applications

- Data and web services published to TITAN are translated on the fly for consumption into a variety of desktop rich client, Internet and virtual globe applications including Google Earth, Microsoft Virtual Earth, ERDAS IMAGINE, ArcMap, ArcGIS Explorer, MapInfo, GeoMedia, AutoCad and more
- Data translation products to support viewing in other applications include:
 - WMS
 - KML
 - Encoded tile URL request
- Proxy file load for direct data load into ERDAS IMAGINE Viewer
- Create one web service for all of a users' shared data or your own and visualize layers in other applications

TITAN Viewer (3D virtual globe)

- Add local data including
 - Raster
 - Vector
 - KML/KMZ
 - Supports HTML in placemark balloons
 - Supports KML with network links
 - Terrain
- Add multiple DEMs and use as terrain sources.
 - Adjacent terrains will stitch together
- Draw points, lines and polygons and Save to KML
- Take 3D screenshots and geo-locate pictures
 - Add textual information to screenshots
- Create an interactive 3D presentation space (i.e. a MyWorld)
 - Build interactive 3D presentation spaces with geospatial data and location-based content and enable other users to interact, navigate and participate in those spaces
 - Capture screenshots, add photos, geodata and information to present rich location-based data
 - Maintains permissions set on data
- Switch to, interact in and superimpose local data onto another user's MyWorld
- Save multiple local scene files complete with local data, data consumed from others, web services, location-based content and save all plus extent
- Identify feature attributes for:
 - Local data you added to the Viewer
 - Data consumed from others in the Viewer
 - Data viewed in another user's MyWorld (by switching worlds)

- Intuitive 3D scene navigation
 - Full scene navigation controls using mouse or navigation panel
 - Online users have OpenStreetMap as default basemap
 - Terrain source is GTOPO30
- Switch between two unique viewing modes
 - Full View is the default and provides a full screen view of the globe
 - Work View moves often-utilized tools from the button bar into an organized panel on the left side of the screen
- Camera Feeds: Add live camera feeds and pin to terrain. Refreshes every 2 minutes.
- Measurement Tool: Includes distance and area measurements, plus x, y and z (elevation) for points.
- Display Coordinates As: Set your coordinate display preferences
- Find places by place name, address or latitude/longitude
- Search
 - EAIM, TITAN Network and your own local data directly from the TITAN Viewer
 - By spatial extent utilizing a bounding box in the TITAN Viewer.
- Web Services
 - Query web services directly from the TITAN Viewer
- Clear entire scene
- Change basemaps using sources provided by the network, other users or your own local data
- Multi-Screen Support: Enables spanning one TITAN Viewer display across multiple PCs/multiple screens. Both immersive environment and flat-wall displays are supported
- Operational as a standalone application or in conjunction with a TITAN Network
 - Operational while offline from the Internet

Communicate with others

- Interactive communication with online users via chat using Geospatial Instant Messenger
- Block chat with individual users

Manage your experience

- Manage published local geospatial data and geospatial web services
 - Create a personal list of geospatial web services (WMS, WCS, ECWP, EAIM Catalog)
 - Manage published data and permissions
- Request subscriptions to different GeoHubs participating on the network
- Change password or request a forgotten password to the network
- Review limitations and usage statistics for participation with different GeoHubs
- Block chat for individual users
- Add other subscribers to a private group (MyNetwork)
- Set preferences in the Geospatial Instant Messenger and the Viewer, including but not limited to:
 - Set language
 - Chat rules
 - TITAN launch, sign in
 - Viewer opens with TITAN launch
 - Viewer enhancements including fog, clouds, atmospheric effect, terrain exaggeration
 - Turn navigation panel on or off
 - Clear cache
- Data clearing options for TITAN
 - Clear Scene in Viewer: clears all data and content out of Viewer
 - Clear Cache to clear all local cache for TITAN
 - Clear Shares to clear all data and permissions from the GeoIM

Localize the Client to any language

- Use a translator tool to localize the TITAN Client to any language, including two-byte characters
- Experience the TITAN Client in that language
- TITAN comes translated to five languages by default
 - Chinese

- Japanese
- Korean
- German
- Spanish

Connect from anywhere

- For any online TITAN network, connect via cell phone, aircard and laptop

Embed the TITAN Experience in other applications

- Embed the IM as a dockable list of TITAN users and their data shares directly in ArcMap
- Embed the IM and browse users and load TITAN data directly within ERDAS IMAGINE
- SDK for embedding the IM experience in other applications

TITAN Server Key Features

GeoHub

- Enables organizations to create a secure community within an ERDAS TITAN network
- Enables secure, permission based data distribution for any organization
- Data may be published both internally and externally
- Data caches on the GeoHub (a 'caching proxy server') for fast re-fetching
- Create a GeoHub-wide map collection available to other GeoHub subscribers
- Admin Management
 - Set default subscriber profiles, including max files, max volume, public and private publishing permissions and expiration date
 - Import/export CSV files to create subscriber lists
 - Bulk, multi-select or single select to email user subscription notification
 - Edit individual subscriber profiles
 - Create and manage groups
 - Kick or ban subscribers
 - Create a GeoHub-wide map collection with:
 - Participating subscribers' shared data (permissions apply)
 - Participating subscribers' shared geospatial web services
 - Add external web services, including WMS, WCS, ECWP, ImageX and EAIM Catalog
 - Configure a mail server for email notifications
 - Manage Web Cache Servers
 - Set maximum KML/KMZ publishing limit for GeoHub
 - Manage Security
 - Change Admin password
 - Designate basemap sources for subscribers

Web Cache Server Key Capabilities

- Web Cache Server is a subset of the GeoHub
 - Runs on a separate system from the GeoHub
- Scales the GeoHub providing additional support for activity across large numbers of users
- Improves data throughput for geographically dispersed users
- Increased refetch efficiency for cached data
- Ensures client-side performance by eliminating bottleneck at one GeoHub

Master Server

- Enables an autonomous ERDAS TITAN network
 - Master registry service for all the GeoHubs and individual users on a network
 - Manages login requests and user authentication
- Supports multiple GeoHubs and enables users on the network to switch GeoHubs at any time
- Admin Management
 - Monitor GeoHubs
 - Designate basemaps and sources of terrain for use by the entire network

- Add sources for basemaps and terrain
 - Basemap support via WMS, WCS, ECWP, ImageX
 - TITAN Tiled Basemap: Option to create a custom tiled version of basemap imagery which can be placed on a standard web server and streamed to TITAN Clients
 - TITAN Tiled Terrain: Option to create a custom tiled version of a terrain source which can be placed on a standard web server and streamed to TITAN Clients
- Configure a mail server for email notifications
- Generate unique GeoHub IDs and keys directly from the Master Server Admin Tool.
- Change Admin password

Supported Geospatial Data Formats

TITAN supports a variety of raster and vector formats and also KML and KMZ formats. Format support includes open source project GDAL/OGR for both raster and vector datasets, ERDAS IMAGINE raster library support (when IMAGINE 9.3 is installed) and also custom implementations. TITAN utilizes Google's library 'libkml' to parse KML files and a custom code to process and render KML and KMZ. TITAN also utilizes a custom implementation for support of ECW and ECWP.

All data has to provide projection information or already be in the geographic projection.

Raster and Vector formats supported by GDAL/OGR:

Local Raster Data

- First Generation USGS DOQ (.doq,.doq1) [old style]
- New Labelled USGS DOQ (.doq,doq2) [new style]
- Military Elevation Data(.dt1)
- ERMapper Compressed Wavelets(.ecw)
- Envisat Image Product (.n1)
- TIFF
- GeoTIFF
- ERDAS IMAGINE raster data (.img)
- JPEG JFIF
- JPEG2000 (.jp2,j2k)jp2ecw
- JPEG2000 (.jp2,j2k)jp2MrSID
- Multi-resolution Seamless Image Database (MrSID - 2000)
- National Imagery Transmission Format (NITF 2.1) [note support for NITF in GDAL is limited]
- USGS SDTS DEM(*CATD.DDF)
- USGS Optional ASCII DEM (and CDED)

Photo Ribbon Support

- Portable Network Graphics (.png)
- MS Windows Device Independent Bitmap (.bmp)
- Graphics Interchange Format (.gif)
- JPEG (jpg)

Non-georeferenced (Overlay) Support

- Portable Network Graphics (.png)
- MS Windows Device Independent Bitmap (.bmp)
- Graphics Interchange Format (.gif)
- JPEG (jpg)

Local Vector Data

- ESRI shapefile
- MapInfo File

- TIGER

Raster formats supported by IMAGINE 9.3 (when installed):

Local Raster Data

- SPOT DIMAP
- DTED
- ERDAS 7.5 LAN
- ERDAS 7.5 GIS
- ENVI
- ER Mapper
- TIFF
- GeoTIFF
- IMG
- JPG
- MrSID
- NITF 2.0/2.1 (classified data)
- TerraSAR-X
- Oracle Raster

Requires Defense Productivity Bundle

- TFRD (.tfrd) (classified data)

Supported Geospatial Web Services

- Web Map Service (WMS)
 - image/bmp
 - image/gif
 - image/ppm
 - image/ico
 - image/iff
 - image/ras
 - image/rgb
 - image/xpm
 - image/jpg
 - image/jpeg
 - image/png
- Web Coverage Service (WCS)
- Web Feature Service (WFS)
- ECWP image streaming protocol
- ImageX simple HTTP protocol
- ERDAS APOLLO Image Manager (EAIM) Catalog

About ERDAS

ERDAS – The Earth to Business Company – helps organizations harness the information of the changing earth for greater advantage.

ERDAS creates geospatial business systems that transform our earth's data into business information, enabling individuals, businesses and public agencies to quickly access, manage, process and share that information from anywhere.

Using secure geospatial information, ERDAS solutions improve employee, customer and partner visibility to information, enabling them to respond faster and collaborate better. It also means better decision-making, increased productivity and new revenue streams.



ERDAS is a part of the Hexagon Group, Sweden. For more information about ERDAS or its products and services, please call +1 770 776 3400, toll free +1 866 534 2286, or visit www.erdas.com.