Release Guide

ERDAS APOLLO 2022

Version 16.7.0
21 October 2021

Contents

About This Release

Enhancements for ERDAS APOLLO 2022 are described in this document.
This document is only an overview and does not provide all the details about the product's capabilities.
See the product description, the online help and other documents provided with ERDAS APOLLO for more information.

New Platforms

Java

Java remains an external dependency in the server and client applications. ERDAS APOLLO 2022 is certified on the latest Long Term Supported (LTS) version 11 from Oracle, including other Java platforms such as OpenJDK and Amazon Corretto.

Operating Systems

Windows Server 2022 has now been certified as a Supported Platform for this release.

For ERDAS APOLLO Essentials Linux customers, platform support remains Redhat derived v7 and v8 releases. Debian-based distributions are considered viable.

Azure Virtual Machines have now been certified as a Supported Windows Platform for this release.

Databases

Latest releases of SQL Server 2019, PostgreSQL 11+, and Oracle 19c are also now certified for this release.

Miscellaneous

ERDAS APOLLO 2022 has undergone sweeping platform changes across the software, removing overlap and updating core technology dependencies throughout. In many cases, security vulnerabilities have been resolved, or security footprint minimized by deprecating old application interfaces.
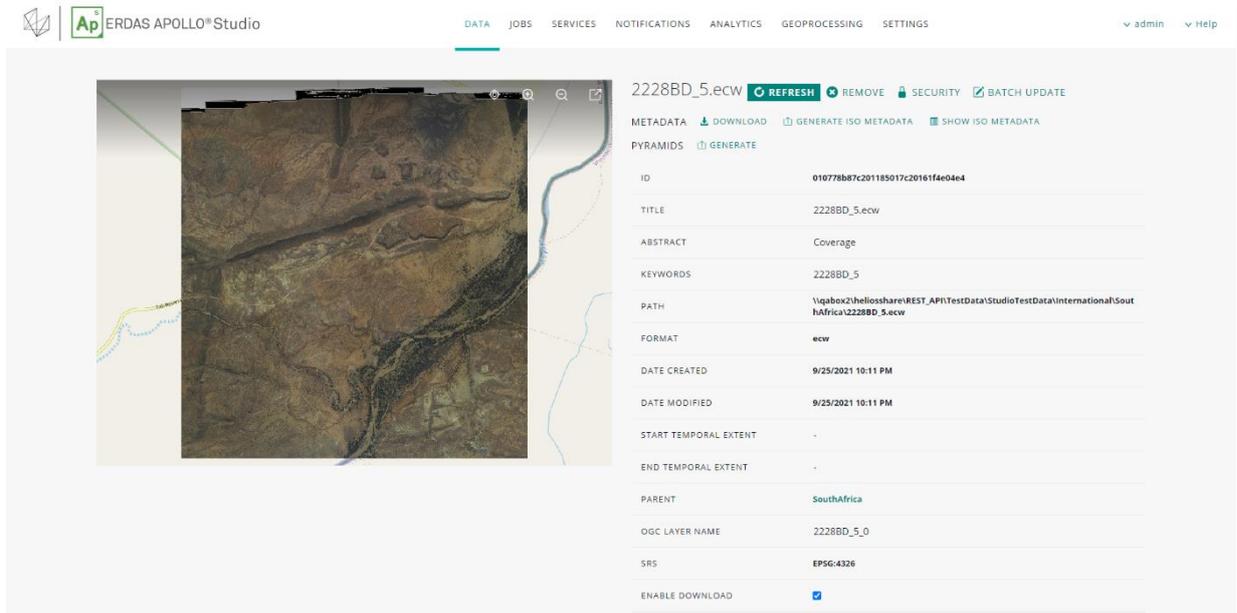
New Technology

New Web-based Administration Client

The ERDAS APOLLO 2022 release introduces a new web-based administration client known as the APOLLO Studio. It has been designed to replace the previous desktop-based Data Manager application and consolidate other existing applications like the Catalog Web Interface and the APOLLO Landing Page.

APOLLO Studio greatly improves the administration user experience and enables:

- General management of the APOLLO catalog
- Crawling of data
- A landing page with links for documentation, examples, acknowledgements, and the API definition
- AOI Notification setup
- Administration of the new Geoprocessing Server component
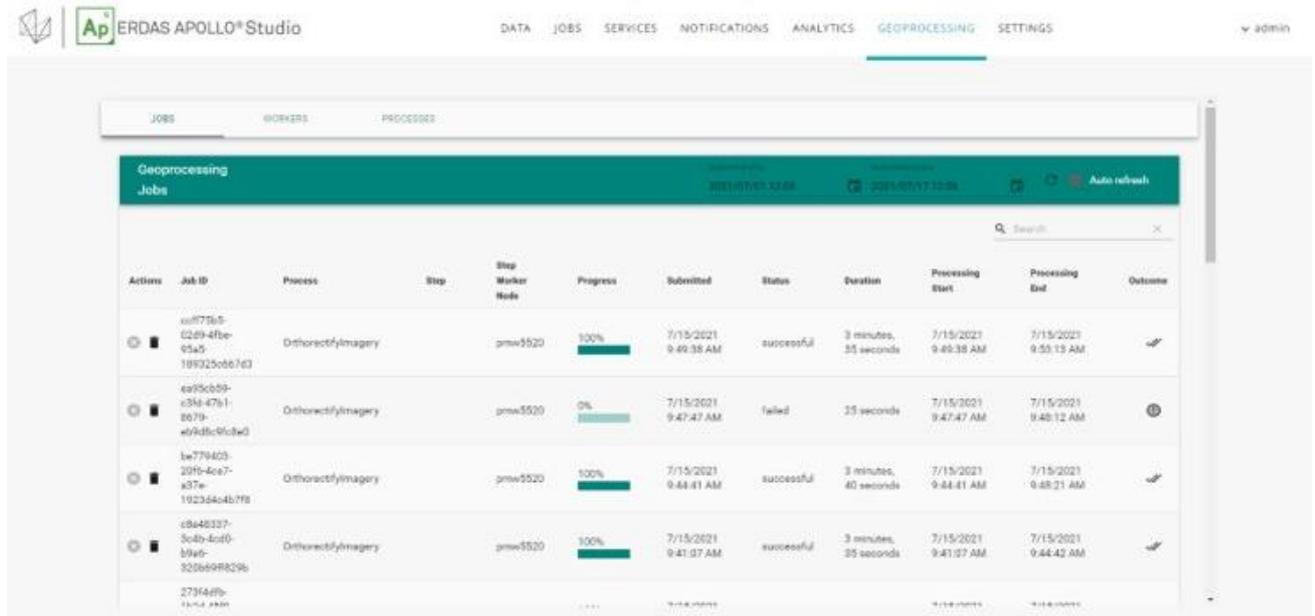- Direct links to configured user clients or the REST API

The existing Data Manager administration tool will remain available to ease transition; however, we encourage all customers to start adopting APOLLO Studio. During v2022, additional capabilities will continue to be added exclusively to Studio.

Geoprocessing Server Modernization

ERDAS APOLLO 2022 introduces a new standalone geoprocessing component for ERDAS APOLLO Professional customers. The new Geoprocessing Server component harmonizes geoprocessing capabilities across the Power and M.App Portfolios, giving greater control over scalability, exposing more of the underlying power of the Spatial Modeler, and implementing the new OGC API - Processes (OAPI) to enhance integration opportunities with the simplified REST APIs.

Together with the new APOLLO Studio, administrators now have full visibility into the Geoprocessing Server to control scaling, review history, and job execution. By also providing the Geoprocessing Server as a separate installable component, APOLLO v2022 now supports much more diverse deployment architectures through Geoprocessing Workers that are included with all ERDAS APOLLO Professional licenses.

Customers can now deploy these Geoprocessing Workers on-machine, or across as many machines as required to meet expected loads or performance requirements. Previously, Geoprocessing execution was fixed to the same ERDAS APOLLO instance, which could be incredibly limiting. We are excited to see how customers can make use of this new capability to generate more derived output products faster than ever.

This new geoprocessing capability allows users to run models/processes to create value-added products, write that data to an APOLLO Dropbox, and automatically harvest the new data in the catalog.
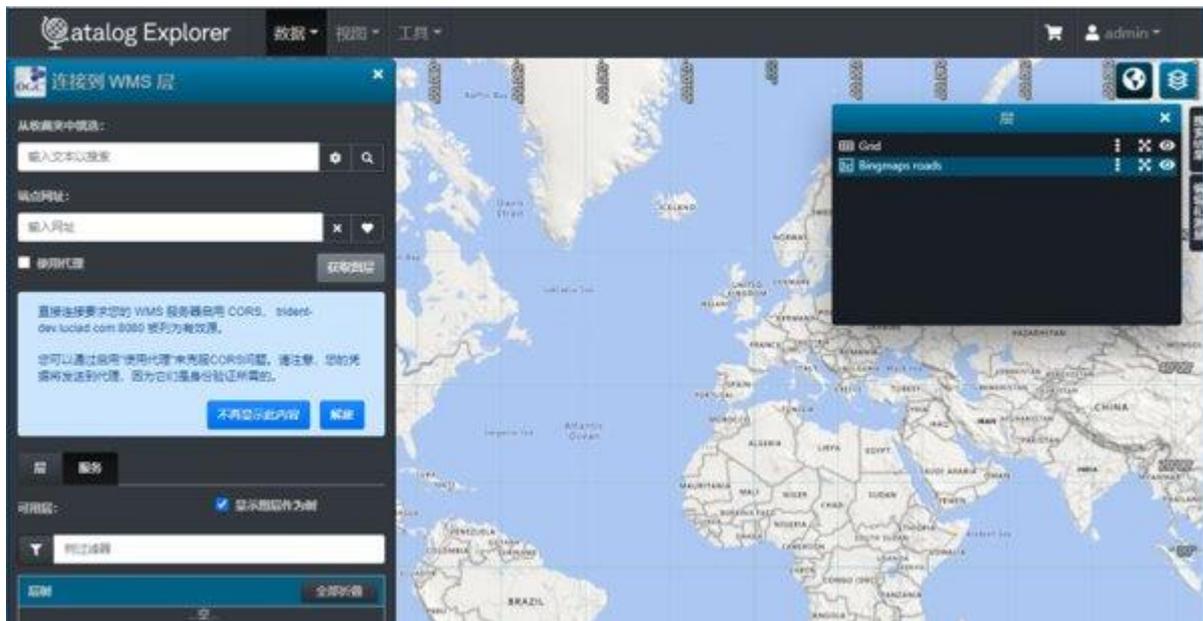
Also, see the section on the enhancements to Catalog Explorer to see how client functionality was added.

Catalog Explorer Enhancements

Catalog Explorer remains the modernized web client experience for ERDAS APOLLO, available for download as a separate component. In line with this distribution model, Geospatial Portal is no longer packaged with the v2022 installer but remains available as a separate download. For ERDAS APOLLO v2022, the client choice is up to our users, but the focus on new features will remain in Catalog Explorer only. We encourage existing users to explore the updated client.

In addition to being updated to the latest LuciadRIA v2021 framework, giving significantly faster load times and improvements in performance, several new enhancements have been added:

- **New OGC API – Processes support:** This feature is introduced primarily to support the execution of spatial models against the new Geoprocessing Server. The client has been written to utilize the new RESTful interfaces of the recently approved processing standard within the OGC and should be compatible with any standard service.
- **New OGC API – Features support:** Catalog Explorer now supports the new OGC RESTful API standard for features as well. All the other older standards, such as Web Feature Service (WFS), remain supported.
- **Internationalization:** Users can now select a language by choosing it from a pulldown menu for localized interface. This includes most common languages, including Arabic, Chinese, French, German, Italian, and many more.
- **Queryable search capabilities:** In the advanced search panel, users will now see an additional search box only when an APOLLO catalog is available and active in the search. This panel will allow the user to provide query information used by APOLLO in the search of queryable properties.
- **Temporal filtering within search results panel:** Within the advanced search, the user can perform a temporal query against a single property. However, two issues may occur in this scenario. First, it is not possible to direct the search to apply the temporal value to different date fields. Second, if multiple catalogs are active in the search, a catalog query can only apply the temporal aspect to each catalog independently. With this new capability, the results from all the catalogs can be filtered by either acquisition date or registration date.

Clip/Zip/Ship Enhancements

Clip/Zip/Ship has been a part of ERDAS APOLLO for many years, but it has been limited to raster and point cloud formats. ERDAS APOLLO 2022 can now clip vector features, including those stored in an underlying supported spatial database. This is accomplished using Spatial Modeler processing functionality.
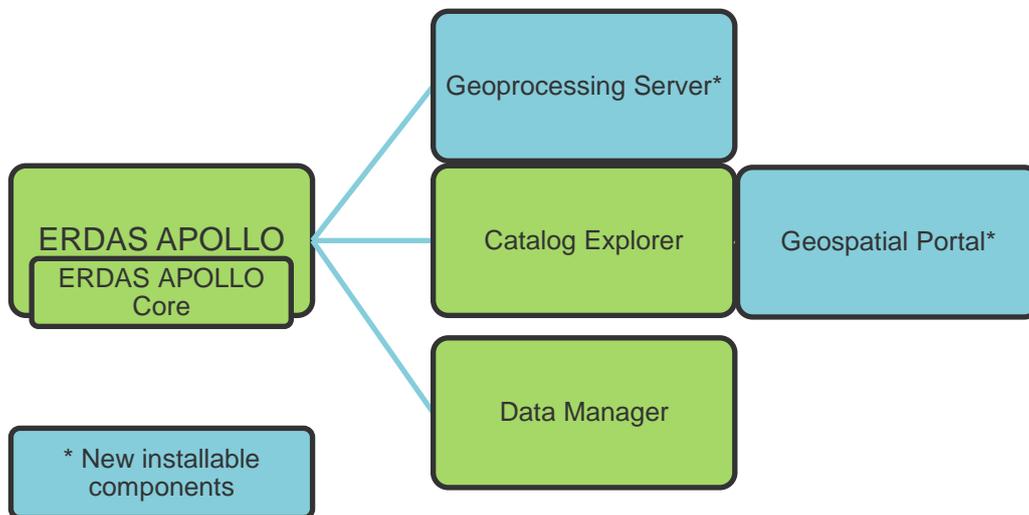
ERDAS APOLLO 2022 can also now export raster and vector data into an OGC GeoPackage format, opening even more collaboration opportunities and ease of use since different data types can be embedded. This has been a highly requested feature.

These new capabilities are also available within the Clip/Zip/Ship interface of Catalog Explorer.

Updated Packaging

ERDAS APOLLO 2022 simplifies packaging of key components, enabling the product team to release updates independently. Customers can deploy only the components that they need.

- Geoprocessing Server is available as a standalone installer for ERDAS APOLLO Professional customers.

- The Geospatial Portal APOLLO template is no longer integrated and is available via the Geospatial Portal 2020 installer. It is now up to the customer whether to use Geospatial Portal or Catalog Explorer. Both are available separately

- The ERDAS APOLLO Core installer remains focused on image delivery workflows only and can be seen as a subset of the full ERDAS APOLLO installer. It remains the only cross-platform component across Windows and Linux and is historically referred to as ERDAS APOLLO Essentials.

Other Improvements

Additional notable updates include:

- New and updated support for raster formats
- Improved metadata parsers
- Enhanced job reporting
- Several platform upgrades to improve security, bugs, and performance

System Requirements

ERDAS APOLLO

	ERDAS APOLLO Essentials	ERDAS APOLLO
Computer/Processor	Intel® or AMD x86 four-core processor with a clock speed of 2.0 GHz or higher	
Memory (RAM)	8 GB or higher (16 GB recommended)	
Server Disk Space	4 GB for application footprint	
Spatial Data Storage	High Speed Disk Storage, >15000 RPM, SSD, RAID Arrays, or External SAN/NAS	
Server Operating Systems	- Windows Server 2016 (viable) - Windows Server 2019 - Windows Server 2022 - Red Hat® Enterprise Linux® 7.x, 8.x - CentOS 7.x, 8.x	- Windows Server 2016 (viable) - Windows Server 2019 - Windows Server 2022
Cloud Environments	Amazon Elastic Cloud Compute (EC2), Microsoft Azure Virtual Machines	
Supplementary Operating Systems for Testing and Development	Windows 10 or higher can be used for development purposes, but deployments must be on supported server operating systems listed above. Microsoft SQL Server Express Edition should be used for testing and development purposes only.	
Software	- Microsoft® .NET Framework 4.7 or higher (Windows) - Latest Java 11 LTS versions	
Licensing	Geospatial Licensing Administrator 2022 with 16.7 feature code versions configured	
Application Servers	- Microsoft® IIS 10 or higher (Windows) - Apache 2.4 or higher (Linux)	- Microsoft® IIS 10 or higher (Windows) - Tomcat 9.0.52 (embedded in installer)
Databases	- Oracle Database 19c, Standard or Enterprise Edition - Using Service Name or SID connection - Microsoft SQL Server® 2017 or 2019, Express, Standard, or Enterprise Edition	

	• PostgreSQL version 10.8 or higher • SQLite (Essentials only)	• PostgreSQL version 10.8 or higher • with PostGIS spatial extension 2.4 or 3.0 or higher installed
Admin Tools	ERDAS APOLLO Core Console	• ERDAS APOLLO Studio • ERDAS APOLLO Data Manager
Compatible Client Applications	• Catalog Explorer Version 4.0 • Geospatial Portal 2022 • GeoMedia® 2022 • GeoMedia Viewer 2022 • GeoMedia Professional 2022 • ERDAS IMAGINE® 2022 • GeoCompressor Viewer 2022 • Esri® ArcGIS® for Desktop plugin • ECWP-enabled applications • OGC-compliant WMS, WMTS, WCS, OGC API – Processes client applications	
Admin Tools Operating Systems	• Windows 10 • Windows Server 2016 (viable) • Windows Server 2019 • Windows Server 2022 • RHEL / CentOS v7.x, v8.x (Essentials only)	

Issues Resolved

ERDAS APOLLO Core 2022

Support Ticket	Summary
IW-7121 00082347	Improve fuzzy matching of Datum and Spheroid strings to improve likelihood of matching EPSG code
IW-7060 0008001	Configuration Wizard was not enabling Usage Statistics with "Include ImageX query" despite it being selected
IW-7177	Remove empty "Warning" HTTP header (Linux)
IW-7171	Resolved missing libQt5Svg dependency on CentOS v7 (Linux)
IW-7164	Improve SQL Server ODBC Driver handling on Windows Server 2022
IW-7143	Improved potential dead-lock in the server due to a race condition
IW-7136	Format support deprecation of OTDF, CIT, COT, HPC formats
IW-7130 IW-6751	Enhance RPM installation scripts to accommodate more environments (Linux)
IW-7124 IW-6511	JSViewProxy API has been deprecated
IW-7088	TBB memory allocator upgraded
IW-7068	GDAL Decoder upgraded from v2.4 to v3.3
IW-7058	Qt runtime upgraded from v5.12.4 To 5.15.2
IW-7042	AWS CPP SDK Logging now integrated into APOLLOCore.log for improved diagnostics
IW-6904	Resolved initialization issue where JP2 datasets could decode slightly different on first request
IW-6903	Improved error checking of config.xml to prevent invalid or deprecated options causing unintended behavior
IW-6902	SDI Components have been removed from the APOLLO Core installer. Existing users should source the Geospatial SDI installation from the separate package.

IW-6896	Configuration Wizard will now correctly decode existing config.xml database connection settings, rather than require users to re-enter the connection details
IW-6890	Resolved encoding issue handling double quotation characters in layer names
IW-6888	Fixed potential segmentation fault on Linux when utilizing advanced security
IW-6843	Fixed potential crash generating GetCapabilities documents on startup
IW-6842	Improved performance registering JPEG2000 files into the server
IW-6836	Fixed projection related issues reporting failure to load table paths (Linux)
IW-6832	Configuration Wizard Windows Feature detection page now times out when DISM calls fail. This typically occurs when Windows Updates are pending and previously would block installation.
IW-6790	GeoServices export size now enforces the server configuration option and throws error if exceeded
IW-6531	Improved checks for corrupt datasets to reject datasets rather than lead to server instability
IW-6481	Database Upgrader now performs additional integrity checks on SQLite upgrade
IW-6346	Fixed potential Linux server crash when connecting to an Oracle Database
IW-5673	Configuration Wizard options for SQL Server improved to enable a wider variety of supported drivers

ERDAS APOLLO 2022

Issue #	Summary
AP-11154	Upgrade our version of Hibernate
AP-11190	Put an OGC API - Processes layer over the current API
AP-11224	Integrate Studio into APOLLO installation
AP-11252	Delete aggregate pyramids returns an exception
AP-11269	Detail a design to replace current APOLLO SMSDK based WPS implementation with one based on the Geoprocessing system
AP-11275	Deprecate HPC workflows
AP-11287	Test latest versions of PostgreSQL and PostGIS
AP-11296	Synchronize and update Netty
AP-11299	Upgrade Tomcat version
AP-11302	Update test systems with more current database versions
AP-11313 00070333	Geometry of CZS results is shifted
AP-11337	REST API Crawl with scheduled date is failing
AP-11351 00072495	ERDAS APOLLO Tomcat settings allow extract of WAR files and automatically rollout
AP-11356 00072784	APOLLO (SMSDK) generates point cloud LOD (level of detail) in a personal or a system folder
AP-11379	Need additional validation for new raster service API
AP-11389	New raster service creation still references old decoder.txt
AP-11397	Add support for PostgreSQL 13.0
AP-11417	Replication Issue with service creation in a clustered environment

AP-11435	Clip Zip Ship - Support Features from an ORACLE DB
AP-11441	Support MSSQL OLE DB driver to replace deprecated SQL Native Client
AP-11444 00078035	Request for support of new Saudi Arabian National Spatial Reference System
AP-11449	Remove WPS from the APOLLO server
AP-11450	Remove Geospatial Portal from the installers
AP-11451 00063960	Extend the APOLLO REST API search with ability to search by default last updated date
AP-11503	ISO Metadata xml containing extended tags was not being recognized
AP-11504	Image Decoder is reading the xml file, but the Metadata Decoder is not
AP-11505	A software issue prevents creation of APOLLO ISO Metadata
AP-11509	Postgres Features can no longer be read
AP-11513 00079441	WCS 2.0 and 16bit Datasets. 16 bit JP2 will be truncated to 8bit
AP-11539	Add Windows Server 2022 configuration to automated test mix
AP-11543	WMS and WMTS behave differently regarding read permissions
AP-11547	APOLLO can no longer send mail this causes Clip Zip Ship to fail
AP-11582	Upgrade Swagger - API Console
AP-11599 00081241	"Could not find file 'C:\Windows\system32\APOLLOWorkspaceTemplate.gpw'" error in silent installation
AP-11604 00081385	APOLLO server user guide "drop GAR project file in the rendering directory" is not correct
AP-11612 00072497	ERDAS APOLLO Core component throwing errors because of missing intergraph.png
AP-11613	Deprecate old web components
AP-11619	Improve dimap2 metadata parser

AP-11634	Update GDAL to 3.3.0
AP-11673	Re-certify services with OGC CITE tests
AP-11686	Enhance decoder.yaml default raster format support
AP-11698	Upgrade Tomcat to the latest 9.x.x version
AP-11704	Crawling Sentinel-2 data is failing
AP-11712	Batch Update API needs option to overwrite or append
AP-11714	decoder.yaml additions not reflected on crawl dialog
AP-11718	Mrf format fails to crawl
AP-11730	Remove use of WPS from the APOLLO SDK
AP-11733	Test standalone Geospatial Portal with APOLLO 2022

About Hexagon

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the performance, efficiency and resilience of vital services. Its Safety & Infrastructure solutions enable smart and safe cities. Its Geospatial software leverages the power of location intelligence.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.

.

Copyright

Terms of Use

Disclaimers

Links To Third Party Websites

Revisions

Hexagon reserves the right to revise these Terms at any time. You are responsible for regularly reviewing these Terms. Your continued use of this Document after the effective date of such changes constitutes your acceptance of and agreement to such changes.

Questions

Contact us with any questions regarding these Terms.