



ERDAS APOLLO Image Web Server Essentials

Release Notes
Version 11.0.3
March 2012



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Table of Contents

Version 11.0.0	1
Web Map Tiling Service (WMTS) support.	1
New reprojection engine	1
Improved performance	1
Miscellaneous improvements	1
Customer Resolutions	1
Console	1
Discovery Service	2
Installation	2
JPEG 2000	2
JPIP	2
Miscellaneous	2
Native plug-in	2
OTDF	3
Projection	3
Security	3
WMS	3
Known Issues	3
ArcGIS Server Integration.	3
ArcXML	4
Console	4
DHTML Control	4
ECWP	4
ImageX	4
Installation	5
JPIP	5
Logging/Statistics	5
Miscellaneous	5
Native plug-in	5
OTDF	5
Samples	6
WMS	6
WMTS.	6
Version 11.0.1	6
What's New	6
Web Map Tile Service	6
Internet Protocol version 6	6
Customer Resolutions	7
Console	7
ECWP	7
JPIP	7
Miscellaneous	7
OTDF	7
Projection	7
Web Plug-in	7
WMS	8
WMTS.	8
Version 11.0.2	8

Customer Resolutions	8
Miscellaneous	8
Projection	8
Security	9
Utilities	9
Web Plug-in	9
WMS	9
WMTS	10
Version 11.0.3	10
What's New	10
OpenGIS Web Map Server Version 1.3.0.	10
Customer Resolutions	10
ECWP	10
ER Viewer	10
ImageX	10
Projection	10
Utilities	11
Web Plug-in	11
WMS	11

Release Notes

Version 11.0.0

Web Map Tiling Service (WMTS) support

Optimized Tile Delivery Format (OTDF) technology is now available through an OGC compliant Web Map Tiling Service (WMTS) interface

- Allow third-party applications to consume OTDF, ECW and many other formats through WMTS
- No client-side plug-in is required
- Easily create mashups with OpenLayers and Google Maps

New reprojection engine

New coordinate reference system library in Essentials IWS server, tools and utilities:

- Uses the ERDAS IMAGINE projection toolkit
- Reprojection is now up to 20% faster
- New options allow for setting re-projection quality/speed

Improved performance

Accelerated speed and performance optimizations:

- Faster decoding of GeoTIFF and other GDAL formats (up to 15% faster)
- Faster generation of WMS capabilities documents
- Bug fixes and enhancements to the ECW JPEG2000 SDK.

Miscellaneous improvements

- Enhanced security options for WMS, ImageX, and discovery services
- Improved handling of extended character sets in filenames

Customer Resolutions

Console

- ERDAS APOLLO Image Web Server now supports UTF-8 encoding, allowing it to support files with non-ASCII characters [IWS-2361].
- It is now possible to configure the resampling method used for JPEG 2000 images. Users can choose between the faster nearest neighbor or the more accurate bi-linear interpolation [IWS-2810].
- Under certain environments, the ERDAS APOLLO Image Web Server Management Console will not launch using Java Web Start. This issue has been resolved [IWS-2862].

Discovery Service

It is now possible to configure security for the Discovery Service [IWS-2950].

Installation

On systems with multiple websites configured, the ERDAS APOLLO Image Web Server installer would sometimes crash during the installation process. This issue has been resolved [IWS-2972].

JPEG 2000

JPEG 2000 images that are greater than 8-bits per channel are now automatically scaled to 8-bits when viewed using the JavaScript map control (including the console viewer). To scale these images using the web plug-in, set the "downscaleenabled", "downscalemin" and "downscalemax" parameters on the layer [IWS-2553].

JPIP

It is now possible to configure the virtual directory that the JPIP service uses [IWS-2615].

Miscellaneous

- The "Copy to Clipboard" feature of the web plug-in now works in Internet Explorer 8. [IWS-2853]
- ERDAS APOLLO Image Web Server is now able to reproject imagery to the MGI Austrian Gaus-Kruger projection [IWS-2879].
- It is now possible to configure security for the DSInfo (ImageX) request [IWS-2949].
- After installing ERDAS APOLLO Image Web Server on a Windows Server 2003 R2 (32-bit) system, the initial IISRESET may cause ERDAS APOLLO Image Web Server to become unstable. Run the console after installation (before performing an IISRESET) to verify that the installation was successful [IWS-3132].
- ERS files that simply reference an image are no longer loaded into ERDAS APOLLO Image Web Server. These files are ignored even if they contain modified metadata for the referenced image. The metadata contained within the ERS files should be integrated into the image file itself using the ECW JPEG 2000 Header Editor [IWS-3139].

Native plug-in

- The method GetLayerParameter on the web plug-in will return an empty string if called with the "bands" parameter, before the parameter has been set, even though the control has rendered an image. This represents the default "bands=1,2,3" and can be safely assumed to be that value [IWS-1868].
- In some browsers, when specifying a zoom area via the zoom box, the zoom box itself might be drawn with an offset. The web plug-in has been updated to correct this [IWS-2931].
- The ECWP URL of a layer can now be set/reset using the web plug-in's SetLayerParameter method. A layer that was once handling ECWP streams should not be changed to handle JPIP streams and vice versa [IWS-2956].
- The compatibility of the web plug-in with OpenLayers has been enhanced, allowing for smooth and responsive roam and zoom operations [IWS-3078].

OTDF

- The OTDF Builder now supports TIFF as an input source file, allowing TIFF images (or a mosaic of TIFF images via an algorithm) to be converted into the high speed OTDF tiling format [IWS-2523].
- It is now possible to configure security for OTDF files, enabling ERDAS APOLLO Image Web Server to serve tiles that are both fast and secure [IWS-3085].

Projection

- If a reprojection requires a grid file, and that grid file is missing, ERDAS APOLLO Image Web Server no longer generates any errors. It will instead try to perform the reprojection without the use of the grid files. Make sure that all the files needed for the required reprojection are present to eliminate inaccuracy in the reprojection [IWS-2763].
- Previously, the reprojection from EPSG:26911 to EPSG:4326 used EPSG:1251 (NAD83 Aleutian Island) as its default datum shift. This is no longer the case. To re-enable this datum shift, add the following configuration parameter to the EPrjDatumChanges.xml file, "<Shift CoordSys1="EPSG:26911" CoordSys2="EPSG:4326" Datum1="NAD83 (Aleutian Islands)" Datum2="" Notes=""/>" [IWS-3016].
- The Spanish NTv2 grid files (R2009V9.gsb and BALR2009.gsb) are now shipped with ERDAS APOLLO Image Web Server. Their use can be configured via the EPrjDatumChanges.xml configuration file by setting the datum to either "European 1950 (Spain Iberian Peninsula) (NTv2)" or "European 1950 (Spain Balearic Islands) (NTv2)" [IWS-3025].
- ERDAS APOLLO Image Web Server now correctly handles JPEG 2000 images that are geo-referenced in US survey feet [IWS-3107].

Security

- It is now possible to configure ERDAS APOLLO Image Web Server to enforce requests made to the Web Map Service use https [IWS-2613].
- It is now possible to configure security for the Web Map Service [IWS-2843].

WMS

- ERDAS APOLLO Image Web Server now has the ability to reproject between EPSG:28354 and EPSG:3107 [IWS-2663].
- Configuration changes made to the WMS service would sometimes not persist after an IISRESET. This issue has been resolved, and WMS configuration changes now persist [IWS-3007].

Known Issues

ArcGIS Server Integration

- The SetLayerParameter method does nothing if it is called before the addLayer method. Add the layer first before setting any parameters on it [IWS-2256].
- The ArcGIS Server ECW Connector cannot be installed if ArcGIS Server is running. Stop ArcGIS Server before installing ERDAS APOLLO Image Web Server and the ArcGIS Server ECW Connector [IWS-2593].

ArcXML

- Algorithms are not checked for correctness when they are loaded into ERDAS APOLLO Image Web Server. ERDAS APOLLO Image Web Server only knows if an algorithm is valid or not when it processes it. Invalid algorithms can therefore be published as valid imagery, but will fail when a request is made to them. When adding algorithms to ERDAS APOLLO Image Web Server, users should use the console viewer to verify that the algorithms can be rendered [IWS-1836].
- The ArcXML service does not support HTTP port numbers. When setting up the ArcXML service, ERDAS APOLLO Image Web Server must be running on the default HTTP port (i.e. 80) [IWS-2874].

Console

- Under some circumstances, changes made to the configuration of ERDAS APOLLO Image Web Server may not be persisted immediately to disk. If you perform an IIS reset as soon as changes are made, those changes may not be available on next restart of IIS. Wait one minute or so after changing the settings before performing an IIS reset to ensure the changes are saved [IWS-1911].
- Images that have been configured to require ssl are not viewable in the console. To view the image in the console, disable the requirement for ssl when viewing the image. The image can also be viewed via the ecwps and https (WMS, ImageX, and ArcXML) protocol if they have been enabled for the image [IWS-1914].
- If a WMS layer is given a custom title or name, there is no way to return it to the default inherited value using the console. You must manually edit the filelist.xml configuration file and remove the tag [IWS-2317].

DHTML Control

The quality of the JPEG tiles cannot be set via the SetLayerParameter method. It is defined when the layer is constructed and can be customized by redefining the nNonProgressiveQuality member variable [IWS-1736].

ECWP

- If an ECW file has an associated ERS header, and the registration information differs from the ECW file, the information in the ERS file will not be picked up when served over ECWP (but will via ImageX, WMS and ArcXML). To work around this, edit the header for the file with the ECW Header Editor to reflect the updated values [IWS-1613].
- The ECWP and JPIP services are only capable of reading metadata from within the ECW or JPEG 2000 file. If there is an associated file (e.g. ers, prj, aux, etc) that contains the metadata, the spatial reference information contained within them will not be read. To work around this, use the ECW JP2 Header Editor utility to embed the spatial reference information into the image [IWS-2148].

ImageX

- When using multiple web gardens with ERDAS APOLLO Image Web Server and IIS (as documented in the "Advanced Configuration" section of the User Guide), the console may not work as expected, as it will only attach to one instance of a web garden. All configuration management options will work as expected, however the "Activity" tab will only reflect the statistics for the current worker process [IWS-2274].
- When using the ImageX tiling interface, tiles on the edge of the image are clipped. The fillcolor parameter only sets the fill color. If tiles are required to be padded

beyond the image bounding box to the tile size, the world extents interface should be used [IWS-2823].

Installation

ERDAS APOLLO Image Web Server cannot be installed into a directory that contains extended characters. Only install ERDAS APOLLO Image Web Server into a directory that contains only ASCII characters [IWS-3158].

JPIP

- Some types of JPEG 2000 images may not be viewable in the IAS client viewer via JPIP. To be viewable, these images must contain the correct metadata required by the IAS software [IWS-1946].
- JPEG 2000 images whose filename contain characters that are not part of the Latin character set are not serviceable via JPIP. These files should be renamed if they are to be served via JPIP [IWS-2995].

Logging/Statistics

When using some database managers to view the ERDAS APOLLO Image Web Server statistics, it should be done on a copy of the database. This is because the program may lock the database, and prevent ERDAS APOLLO Image Web Server from updating the statistics while the database is open [IWS-2614].

Miscellaneous

ERDAS APOLLO Image Web Server will not read projection and datum information stored in an auxiliary files (.aux). To update the projection information for an ECW or JP2 image, use the ECW JP2 Header editor, or use an ER Mapper Pro ERS header file (.ers) [IWS-1958].

Native plug-in

- The standard parameter names for the web control (e.g. "onmousedown", "onmouseup", and "onmousemove") are also used by the DOM. In FireFox, you may experience multiple events being sent. This is not an issue if the web control is created using the NCSCreateView JavaScript function [IWS-1783].
- Setting the bands parameter for an RGB ECW file to a value other than "1,2,3" has no effect, due to the way the image is encoded. You can work around this by creating an algorithm containing the ECW file displaying the bands in a different order, and serving it via one of the other protocols (ImageX, WMS, ArcXML) [IWS-1869].
- If an image is viewed via the web plug-in and that image contains white spaces in its filename, an ECW exception might be raised during an IISRESET. It is recommended that if a user experience this behavior that they remove all white spaces in the filenames of the files they are serving [IWS-2587].
- The Google Chrome web plug-in draws a black background in areas that contains no image data. It should however render the underlying HTML page. This appears to be an issue with how Google Chrome handles transparent windowless plug-ins [IWS-2833].

OTDF

- The argument "-imageSize" in the command line OTDF builder only applies to WMS input [IWS-2636].

- The OTDF Builder does not support files whose filename contain characters that are not part of the Latin character set. Rename these file before processing them with the OTDF Builder [IWS-3035].

Samples

Windows Server 2008 does not enable ".asp" processing by default. This option will need to be added to run the "advanced security" demonstration in the sample pages [IWS-1358].

WMS

- Setting the ImageX scale hints in the console, will not affect the WMS service for that image. To set scale hints for the WMS service, you must edit the custom WMS configuration XML file [IWS-2103].
- Invalid ERS and ALG files that have been configured for the Web Map Service will appear in the capability document, even though they are unserviceable. Remove these images for the Web Map Service to remove them from the capability document [IWS-3097].

WMTS

When defining a custom tile matrix set for the WMTS service, specifying a tile width and height less than 128 may cause invalid tile rows and columns to appear in the WMTS capability document. When customizing a tile matrix set, specify a tile width and height that is equal to or greater than 128 [IWS-3121].

Version 11.0.1

June 2011

The ERDAS APOLLO Essential Image Web Server 2011 Service Pack 1 release provides fixes and enhancements to ERDAS APOLLO Essential Image Web Server 2011.

What's New

Web Map Tile Service

ERDAS APOLLO Image Web Server 2011 Service Pack 1 further enhances the Web Map Tile Service (WMTS) introduced in the previous release. It is now possible to configure multiple WMTS services on a single ERDAS APOLLO Image Web Server instance, which results in lower hardware requirements and better hardware utilization. ERDAS APOLLO Image Web Server 2011 Service Pack 1 also introduces the ability to define a virtual WMTS layer with scale hints. A virtual WMTS layer appears as a single layer to clients but consist of multiple images mosaic together dynamically, without the need to pre-render anything. Also, each image within the virtual WMTS layer can be assigned a scale hint that defines at what scale the image will be visible.

Internet Protocol version 6

ERDAS APOLLO Image Web Server 2011 Service Pack 1 adds support for IPv6, making it ready for networks of today and the tomorrow.

Customer Resolutions

Console

It is now possible to disable and unload files that have an active ECWP connection [IWS-3342].

ECWP

The ECWP server has been enhanced improving overall performance and stability [IWS-3252].

JPIP

- Certain JPEG 2000 images would render in reverse band order when served via JPIP. This has been addressed and images now render in the correct band order [IWS-3255].
- The JPIP server and client have been enhanced improving overall performance and stability [IWS-3263].

Miscellaneous

- Added support for palette GeoTIFF [IWS-3301].
- Added support for the CIT image format [IWS-3326].
- The reported MINE types in an ImageX DSINFO request have been revised to be more consistent [IWS-3334].

OTDF

- Under certain conditions serving OTDF files using world coordinates would sometimes result in invalid images being returned. This has been addressed and invalid images are no-longer being returned [IWS-3295].
- Support has been added to enable requesting image tiles from an OTDF file using the ImageX tiling API that are not in the file's native coordinate system [IWS-3260].
- Creating OTDF files from WMS sources used to result in the OTDF file containing invalid coordinate information. This has been addressed and the correct coordinate information are now stored within the OTDF file [IWS-3325].

Projection

ERDAS APOLLO Image Web Server is now able to serve imagery in the New Zealand NTv2 coordinate systems [IWS-2633].

Web Plug-in

- Support for ECWP within OpenLayers has been improved. If the ECWP layer is the base layer, the map's base coordinate system will be automatically set to the ECWP layer's native coordinate system. It no longer needs to be set manually [IWS-2805].
- Support for Firefox 4 has been enhanced, resulting in improved performance and stability when using the web plug-in within Firefox 4 [IWS-3249, and IWS-3386].
- Fixed security issue with CaptureView method [IWS-3299].

- The web plug-in's GetCoordLongitude and GetCoordLatitude methods no longer return "NaN", but the longitude and latitude values of the specified point [IWS-3264].
- In certain web browsers the SetLayerTransparency method will fail to work as expected. This has been addressed and it now works under all web browsers [IWS-3273].
- Adding and deleting multiple ECWP layers from the web plug-in has been enhanced, resulting in improved performance and stability in the web plug-in when dealing with multiple layers [IWS-3278].
- Under certain situation requesting a Base64 PNG image via the CaptureView method would result in a crash in the web plug-in. This has been fixed and the crash no longer occurs [IWS-3332].
- The handling of GISOverlay layer within the web plug-in has been enhanced, resulting in improved performance and stability when dealing with GISOverlay layers [IWS-3356, and IWS-3364].

WMS

The WMS service has been revised to conform more strictly to the specification [IWS-3319, and IWS-3324].

WMTS

The WMTS service has been revised to conform more strictly to the specification [IWS-3317, IWS-3318, and IWS-3363].

Version 11.0.2

The ERDAS APOLLO Essentials Image Web Server 2011 [11.0.2] release provides fixes and enhancements to ERDAS APOLLO Essential Image Web Server 2011. This release addresses over 40 customer related issues, some of which are highlighted below.

Customer Resolutions

Miscellaneous

- When unloading multiple files in quick succession, under certain conditions ERDAS APOLLO Image Web Server can become unstable. This has been resolved and multiple files can be unloaded without issues [IWS-3497, and IWS-3499].
- Under Windows Server 2008 R2, when customizing the identity the application pool runs as, ERDAS APOLLO Image Web Server can become unstable and not startup. This has been addressed and it is now possible to customize the identity the ERDAS APOLLO Image Web Server application pool runs as [IWS-3444].

Projection

- ERDAS APOLLO Image Web Server now supports EPSG:2326 (Hong Kong 1980 Grid System) [1-5ZOV9].

- ERDAS APOLLO Image Web Server now supports EPSG:28992 (Amersfoort, Netherlands) [IWS-3503].
- ERDAS APOLLO Image Web Server now supports EPSG:102100 (WGS 1984 Web Mercator Auxiliary Sphere) and EPSG:102113 (WGS 1984 Web Mercator) [IWS-3495].
- ERDAS APOLLO Image Web Server now supports EPSG:102171 (GDA94/VicGrid94) [IWS-3494].
- It is now possible to define the coordinate system's datum as an EPSG code [IWS-3493].

Security

- Authentication servers with SSL configured are now supported [IWS-3505].
- Security can now be applied to custom WMS services [IWS-3411].

Utilities

- The ECW Opacity Builder now detects whether the input ECW or ERS file already contains an opacity band and will exit if one is detected [IWS-3421].
- The ECW Check utility will now detect and check the opacity band if it exists [IWS-3478].

Web Plug-in

- The performance, stability and resource usage of the Web Plug-in has been improved as a result of numerous bug fixes and enhancements [IWS-3395, IWS-3471, IWS-3481, IWS-3498, and IWS-3506].
- When displaying ECW or JPEG 2000 images that have more than 3 bands, the progress bar would sometimes not reach 100%, even though all available data has been received and rendered to screen. This has been addressed and the correct progress is now reported [IWS-3509].
- Support for Google Chrome browser has been improved [IWS-3397, IWS-3401, and IWS-3508].
- Previously it was possible to install the Web Plug-in without all required system components being present. Without these system components the Web Plug-in will not work. The installer now detects whether all required system components are installed and will exit if any are missing [IWS-3443].

WMS

- The resultant map from a WMS GetMap requests from non ECW/JPEG 2000 image sources has been enhanced, with improvements to accuracy and image quality [IWS-3394].
- For custom WMS services, it is now possible to define the image path (i.e. <Path/>) over multiple lines [IWS-3439].
- Printing a map to A0 at 300dpi is now supported for WMS GetMap requests [IWS-3431].

WMTS

ERDAS APOLLO Image Web Server's WMTS implementation is fully compliant to the WMTS v1.0.0 specification as verified by the OGC Compliance Testing Program's TEAM Engine [IWS-3441 and IWS-3447].

Version 11.0.3

The ERDAS APOLLO Essentials Image Web Server 2011 [11.0.3] release provides fixes and enhancements to ERDAS APOLLO Essential Image Web Server 2011.

What's New

OpenGIS Web Map Server Version 1.3.0

ERDAS APOLLO Image Web Server 2011 [11.0.3] further enhances its interoperability by adding support for version 1.3.0 of the OpenGIS Web Map Service specification.

Customer Resolutions

This section includes a summary of improvements.

ECWP

- Under certain configuration settings, when ERDAS APOLLO Image Web Server is under heavy ECWP loads, and hundreds of files are being loaded and unloaded, the software can become unstable. This instability has been resolved [1-675VZR].

ER Viewer

- There was an issue with ER Viewer that prevented source imagery in the EPSG:4326 coordinate system from being saved as a jpeg image. This has been resolved and it is now possible to save an image in EPSG:4326 as a jpeg image [1-63H5ZR].

ImageX

- Under certain situation when ERDAS APOLLO Image Web Server mosaic image tiles that align perfectly together, without any overlap, white/black lines can sometimes been seen around various tiles. This has been addressed and the mosaic now appears seamless. [1-63H5ZR].

Projection

- ERDAS APOLLO Image Web Server now supports EPSG:2494 (Pulkovo 1942 / Gauss-Kruger CM 21E) [1-65PF5A].
- ERDAS APOLLO Image Web Server now supports EPSG:3045 (ETRS89 / ETRS-TM33) [1-65PF7R].
- ERDAS APOLLO Image Web Server now supports EPSG:3046 (ETRS89 / ETRS-TM34) [1-65PFLG].
- ERDAS APOLLO Image Web Server now supports the NTV2 approximation to the coordinate transform defined in EPSG:5166 (ED50 / UTM zone 31N to ETRS89 / UTM zone 31N) [1-63D7YZ].

- When reprojecting with the limit to envelop option enabled, certain projections would fail to reproject. This has been resolved, and ERDAS APOLLO Image Web Server can now reproject those projections [1-61HB29].

Utilities

- The OTDF Builder now supports secure WMS server as an input source [1-65OQZO].
- The stability and performance of building an OTDF file from a WMS source has been enhanced [1-65PEYP, 1-65PF2T, 1-65S2Z5, and 1-65S2ZE].
- It is now possible to specify the maximum number of errors the OTDF Builder can encounter before exiting [1-65S2Z5].
- It is now possible to specify the number of threads used by the OTDF Builder to create an OTDF file [1-65PEYP].
- The header editor was unable to update the header of a certain type of JPEG 2000 file. This issue has been resolved, and the header editor is now able to update the headers of those specific JPEG 2000 files [1-61JOD6].

Web Plug-in

- Although the web plug-in comes bundled with all its required packages, some packages (if not already present) require administrative privileges to install. The web plug-in installer has been upgraded to better detect and warn users when administrative privileges are required [1-62T3E4].

WMS

- ERDAS APOLLO Image Web Server now supports version 1.3.0 of the OpenGIS Web Map Service specification [1-62T3DG].

