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TECHNOLOGY. Our priority is to deliver products and solutions that make our customers successful. Hexagon Geospatial is focused on developing leading-edge technology that is easily configurable. Through extensible, scalable and collaborative products, we enable you to transform multi-source content into dynamic and actionable information. We are constantly re-conceptualizing and improving our products.

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About this Release

This document describes the enhancements for ERDAS Extensions 2014 which has been released to support ArcGIS 10.2.1. ERDAS Extensions 2014 includes Stereo Analyst for ArcGIS, Feature Assist for ArcGIS and Terrain Editor for ArcGIS, note that Image Analyst has been discontinued at this release. Although the information in this document is current as of the product release, see the Intergraph Support website for the most current version.

This document is only an overview and does not provide all of the details about the product’s capabilities. See the online help and other documents provided with ERDAS Extensions for more information.

New Platforms

Please refer to the Supported Environments document for full details on all platforms supported by ERDAS Extensions 2014. However some key changes are noted below.

Microsoft Windows 8.1

The official release version of Windows 8.1 has now been tested and certified as supported with ERDAS Extensions 2014.

New Technology

ERDAS Extensions 2014 introduces several new technology areas. The key areas include:

- ERDAS Foundation
- Intergraph Licensing
- Geospatial Imaging 2014 core technology

ERDAS Foundation

ERDAS Foundation is a bundle of several components which are shared by multiple ERDAS-branded products. This includes providing support for EGM 2008 (Earth Gravitational Model)
geodetic datum in all ERDAS vertical-datum-aware products. Rather than require you to
download multiple, redundant copies of this large datum (and other capabilities) for each
product you install, ERDAS Foundation is a uniform, prerequisite installer that delivers a single
copy of EGM 2008 and several other large files used across the ERDAS product lines.

The principal drivers for this change are as follows:

- An accelerating trend of growth in Geodetic Datums of the world, which are being
collected with increasing precision and density, and which are updated more frequently to
reflect seismic and volcanic changes in the Earth’s surface.

- A firm decision by ERDAS that all of our vertical-datum-aware products must support the
latest Earth Gravitational Model (EGM 2008), at the highest level of precision.

- A decision that all ERDAS products share a single copy of this large datum, and all current
and future large datum models we choose to support.

A consequence of these decisions is that many ERDAS products now require a two-step
installation process. First, you must install ERDAS Foundation, and then you can install any
number of ERDAS applications.

This reflects our commitment to fully support high-precision coordinate accuracy, and to
handle coordinate systems consistently across the entire ERDAS product line.

**Intergraph Licensing**

With this release of Extensions we have upgraded to the current release of the Intergraph
Licensing 11.11.1. Now all Hexagon-Geospatial products utilize the same version of licensing
technology. Refer to the ERDAS Extensions 2014 Installation guide for license configuration
information. Note that new license codes are required to operate this product.

**Geographic Imaging 2014 Core Technology**

We have upgraded the Extensions product to use the GI 2014 core libraries which allow us to
take advantage of extra sensor models and raster format enhancements released with
Geographic Imaging 2014 products. Examples include support for the Palaides, KOMPSAT-3,
SPOT-6 and TH-01 sensor models that were added to IMAGINE 2014 as well as upgraded
support for ECW files through the ERDAS ECW/JP2 SDK v5.1.
New Features

While the main objective for this release is to support the ArcGIS 10.2 platform, we have taken the opportunity to implement a number of enhancements and address some reported issues in the software.

New features include:

- Additional Sensor Model Support
  - Paladies
  - KOMPSAT-3
  - SPOT 6
  - TH-01

- Support for Vertical Coordinate systems for Virtual 3D elevation sources.

- Usability improvements for the Blockfile Image Pair Manager.

- Reset Mean Elevation from a DEM source during project file import.

- Upgraded Coordinate system Support.
  - Canadian CGV28 and CGG2010 vertical datums
  - NAD83 (2011) Datum
  - AUSGeoid09 Datum
  - ITRF 2005 and 2008 Datums
  - S-JTSK / Krovak East North Projection system (EPSG: 5514)
  - Various Coordinate system changes for Norway and Finland
  - ED50 to ETRS89 / UTM zone 31 for Catalonia (Spain)
  - Hong Kong 1980 projection
  - GDM2000 projections (EPSG: 3376, 3377, 4742)

- Improved ECW support due to adoption of ERDAS ECW/JP2 SDK v5.1.

- Improved TIF support.

- Extra construction templates for Feature Assist.
  - Wall Tool
  - Gabled N Ridge Roof
  - Hipped N Ridge Roof

For resolved issues please refer to the ERDAS Extensions 2014 Issues Resolved document.

Note: ArcGIS 10.2 no longer supports the adding of SOCET SET® SUP files directly to the map document using the Add Data command. However it is possible to work around this limitation by using either the importer or the Block File Image Pair manager both of which allow selection of PRJ files as imagery source.
## System Requirements

| Computer/Processor | 32-bit: Intel® Pentium® 4 HT, Core™ Duo, Xeon®, or 100% compatible  
|                   | 64-bit: Intel 64 (EM64T), AMD 64, or equivalent  
|                   | Multi-core processors are strongly recommended. |
| Memory (RAM)       | 2 GB minimum, more strongly recommended |
| Disk Space         | ERDAS Foundation: 1.5 GB  
|                   | Stereo Analyst, ERDAS Terrain Editor and FeatureAssist: 800MB  
|                   | Example data: 400MB  
|                   | Customer data disk space requirements depend upon specific project requirements |
| Operating Systems  | You may select one of the following operating systems:  
|                   | Windows® XP Professional x32® SP3 or higher  
|                   | Windows® Vista x32 and x64 SP2 or higher, Business and Enterprise®  
|                   | Windows® 7 x32 and x64 Professional & Ultimate®  
|                   | Windows® 8.1 x32 and x64 Professional & Enterprise  
|                   | Windows® Server 2008 x32 and x64 SP2 or higher (license manager only) |
| Software           | OpenGL 2.1 or higher is needed for Stereo Analyst® Microsoft Windows® provides a generic OpenGL driver for supported graphics cards®.  
|                   | Adobe Acrobat Reader 7 or higher  
|                   | Internet Explorer 7 and higher with JavaScript enabled, or Firefox 3 and higher with JavaScript enabled |
| Graphics Displays  | 2D, Stereo, and Anaglyph Display:  
|                   | Display resolution of 1024 X 768 X 32 minimum, highly recommended  
|                   | Stereo Analyst: The latest graphics card drivers recommended  
|                   | On board video RAM of 128MB or higher recommended  
|                   | Stereo Display Graphics Cards®:  
|                   | NVIDIA Quadro® K5000  
|                   | NVIDIA Quadro 6000, 5000, 4000, 2000, 600  
|                   | NVIDIA Quadro FX 5500, 5600, 5800  
|                   | NVIDIA Quadro FX 4500, 4600, 4800  
|                   | NVIDIA Quadro FX 3400/4400, 3450, 3500, 3800  
|                   | AMD ATI FirePro™ V8800, V8750, V8700 |
### Graphics Displays

Stereo Display Monitors:
- Planar SD 3D/Stereoscopic Displays
- Planar SA2311W 3D Vision™ Ready Monitor
- 120 Hz LCD Monitors with NVIDIA GeForce 3D Vision Kit
- True3Di Stereoscopic Monitors (19” version tested)
- RealD (formerly Stereographics) CrystalEyes
- RealD Monitor ZScreen

### Peripherals

All software installations require:
- DVD Drive for software installation
- One Windows-compatible mouse with scroll wheel
- Windows-supported hardcopy devices

Software security (Intergraph Licensing 11.11.1) requires one of the following:
- Ethernet card, or
- One USB port for hardware key

Advanced data collection requires one of the following hand controllers:
- TopoMouse™ or TopoMouse USB™
- Immersion 3D Mouse
- MOUSE-TRAK
- Stealth 3D (Immersion), S3D-E type, Serial Port
- Stealth Z, S2-Z model, USB version
- Stealth V, S3-V type (add as a serial device)
- 3Dconnexion SpaceExplorer mouse
- EK2000 Hand Wheels
- EMSEN Hand Wheels
- Z/I Mouse

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**i** Systems with less than 4GB of RAM will page memory to the hard disk and not perform as well as systems with 4GB. The page file (swap file) should be matched to at least 1.5 x the amount of RAM. Please refer to your operating system requirements.

**ii** Typically, disk I/O is the slow point in geospatial data processing. Fast hard disks can help productivity. SCSI hard disks are typically faster than SATA and IDE drives. Solid state disk drives have quick access time, but sustained rates are slower than traditional spindle hard disks. Disk arrays can improve performance, but certain RAID configurations can slow performance.

**iii** Microsoft Windows XP x32 limits file sizes. The maximum file size depends upon system configuration and rarely exceeds 70GB. The other supported OS versions are not limited in this way.

**iv** Functioning quad-buffered stereo drivers are extremely limited on Vista and Windows. Please check for driver availability and workability before upgrading. Windows 7 is only supported when running as a local administrator on the machine.
Microsoft Windows provides a generic OpenGL driver for all supported graphics cards. However, an OpenGL-optimized graphics card and driver are recommended for these applications.

Stereo-enabled graphics cards supporting quad-buffered stereo are needed to view three-dimensional stereo. Because all cards do not work in all computers, verify that the card you select is compatible with your computer.

Support for the 120-Hz LCD Monitors with NVIDIA GeoForce 3D Vision Kit requires 191.00 3D Vision USB Driver. Only FX Quadro 4600 supports the GeForce 3D vision kit.

HP-RTL drivers are recommended. Windows x64 print servers require 64-bit print drivers.