



HEXAGON
GEOSPATIAL



POWER PORTFOLIO 2015 SYSTEM REQUIREMENTS

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PRODUCER SUITE

ERDAS IMAGINE (including ERDAS ER Mapper and IMAGINE Photogrammetry)

Computer/Processor	<p>32-bit: Intel® Pentium® 4 HT, Core™ Duo, Xeon®, or 100% compatible</p> <p>64-bit: Intel 64 (EM64T), AMD 64, or equivalent</p> <p>(Multi-core processors are strongly recommended)</p>
Memory (RAM)	4 GB minimum, 8 GB strongly recommended, especially for 64-bit systems
Disk Space	<ul style="list-style-type: none"> ● 4 GB for software ● 7 GB for example data <p>Data storage requirements vary by mapping project¹</p>
Operating Systems	<ul style="list-style-type: none"> ● Windows® 7 SP1 or higher, Professional and Ultimate (64-bit) ● Windows 8 (Standard), Professional and Enterprise (64-bit) ● Windows 8.1 (Standard), Professional and Enterprise (64-bit) ● Windows Server® 2008 R2 SP1 (64-bit) ● Windows Server 2012 (64-bit) ● Notes: ● Server Operating Systems are not supported for IMAGINE Photogrammetry² or ERDAS ER Mapper ● ERDAS ER Mapper is not supported on Windows 8 or 8.1 ● Windows 7 Professional SP1 32-bit and Windows 7 Ultimate SP1 32-bit are all Viable platforms
Software	<ul style="list-style-type: none"> ● OpenGL 2.1 or higher (this typically comes with supported graphics cards³). ● Adobe® Reader® 7 or higher ● Internet Explorer® 7 and higher with JavaScript enabled, or Firefox® 3 and higher with JavaScript enabled

¹ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

² The 3D stereo viewing and peripheral requirements of IMAGINE Photogrammetry limit its operating system options.

³ Windows provides a generic OpenGL driver for all supported graphics cards. However, an OpenGL-optimized graphics card and driver are recommended for these applications.

	<ul style="list-style-type: none"> ● Java Runtime 1.7.0.67 (installed automatically) ● Python 2.7.3 (32-bit) ● Microsoft DirectX® 9c or higher ● .NET Framework 4.0 ● MSXML 6.0
Recommended Graphic Cards	<ul style="list-style-type: none"> ● NVIDIA® Quadro® K5200, K4200, K2200, K420 ● NVIDIA Quadro K5000, K4000, K600 ● 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 ● AMD ATI FireGL™ V8600
Recommended Stereo Display Monitors	<ul style="list-style-type: none"> ● Planar® SD 3D/Stereoscopic Displays ● Planar SA2311W 3D Vision™ Ready Monitor ● 120 Hz LCD Monitors with NVIDIA 3D Vision™ Kit⁴ ● True3Di Stereoscopic Monitors
Peripherals	<p>All software installations require:</p> <ul style="list-style-type: none"> ● One Windows-compatible mouse with scroll wheel or equivalent input device ● Printing requires Windows-supported hardcopy devices⁵ <p>Software security (Intergraph Licensing 11.11.1) requires one of the following:</p> <ul style="list-style-type: none"> ● Ethernet card, or ● One USB port for hardware key <p>Advanced data collection requires one of the following hand controllers⁶:</p> <ul style="list-style-type: none"> ● TopoMouse™ or TopoMouse USB™ ● Immersion 3D Mouse ● MOUSE-TRAK

⁴ NVIDIA 3D Vision™ Kit and a compatible NVIDIA graphics card required.

⁵ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

⁶ Stealth S-Mouse (S2-S model) and MOUSE-TRAK are the only supported hand controllers in Stereo Analyst® for ERDAS IMAGINE.

⁸ 3Dconnexion SpaceExplorer mouse is supported in IMAGINE Photogrammetry 2014.

	<ul style="list-style-type: none"> ● 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 mouse⁸ ● EK2000 Hand Wheels ● EMSEN Hand Wheels ● Z/I Mouse
<p>ArcGIS and GeoMedia Interoperability</p>	<ul style="list-style-type: none"> ● ERDAS IMAGINE can be safely installed on a computer that has GeoMedia 2013, GeoMedia 2014 or GeoMedia 2015 installed. However for greatest compatibility, it is highly recommended to install matching versions (with GeoMedia being installed first). ● ERDAS IMAGINE 2015 requires GeoMedia 2015 for live linking. ● ERDAS IMAGINE can interact with both types of personal Geodatabases (*.mdb and *.gdb). ● ERDAS IMAGINE can be safely installed on a computer that has ArcGIS[®] versions 10 through 10.2.2. ● ERDAS IMAGINE and IMAGINE Photogrammetry can interact with ArcGIS Server 10 Geodatabase servers (ArcSDE). To read or interact with an Enterprise Geodatabase, you must either: ● Install and license the appropriate version of ArcGIS for Desktop versions 10 through 10.2.2, OR ● Install the IMAGINE Geodatabase Support (based on ArcEngine 10.1), which requires no license

ImageStation

Computer/Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (Multi-core processors are strongly recommended)
Memory (RAM)	4 GB, 8 GB for some applications
Disk Space	<ul style="list-style-type: none"> 4 GB for software Data storage requirements vary by mapping project ⁷
Operating Systems	<ul style="list-style-type: none"> Windows® 7 SP1 or higher, Professional and Ultimate (64-bit) Windows 8.1 (Standard), Professional and Enterprise (64-bit) Note: <ul style="list-style-type: none"> Stereo support is limited for Windows 8.1 at this time
Database Server Engines	<ul style="list-style-type: none"> Access, SQL Server, Oracle for GIS-based workflows
Database Client Engines	NA
Software	<p>ImageStation is compatible with the following software packages and may require them, depending on the modules used.</p> <p>ImageStation Photogrammetric Manager ImageStation Automatic Elevations ImageStation Automatic Elevations – Extended ImageStation DTMQue ImageStation Image Formatter</p> <ul style="list-style-type: none"> No prerequisites <p>ImageStation Automatic Triangulation</p> <ul style="list-style-type: none"> ImageStation Photogrammetric Manager is required <p>ImageStation Satellite Triangulation</p> <ul style="list-style-type: none"> ImageStation Photogrammetric Manager is required ImageStation Automatic Triangulation is required <p>ImageStation Stereo Display ImageStation Feature Collection ImageStation DTM Collection</p> <ul style="list-style-type: none"> MicroStation V8i is required <p>ImageStation OrthoPro ImageStation PixelQue ImageStation Stereo Viewer for GeoMedia ImageStation DTM for GeoMedia⁸</p> <ul style="list-style-type: none"> GeoMedia Essentials, Advantage, or Professional tier is required

⁷ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

⁸ GeoMedia Advantage or Professional tier, and ImageStation Stereo for GeoMedia are recommended.

	ImageStation Stereo for GeoMedia <ul style="list-style-type: none"> GeoMedia Advantage or Professional tier is required
Graphics Displays	The following monitors are currently qualified for stereo viewing (although others may adequately perform). <ul style="list-style-type: none"> Planar, model SA2311W (<i>best</i>) Acer model GD235 Samsung model 2233rz Viewsonic model VX2268wm Viewsonic model V3D245 (single display only) ASUS model VG278H ASUS model VG278HE (single display only) BenQ models XL2420T/Z
Graphics Boards	See table “Currently Qualified Graphics Boards for Stereo Viewing”
Peripherals	3D pointing device (ZI Mouse, Immersion, Stealth, Topomouse) recommended

ImageStation supports the following stereo display configurations:

- Single Stereo
- Single Stereo + Single Mono
- Dual Stereo
- NVIDIA 3D Vision

Currently Qualified Graphics Boards for Stereo Viewing

Graphics Board	NVIDIA 3D Active 1 display	NVIDIA 3D Active 2 displays (stereo/mono)	NVIDIA 3D Active 2 displays (stereo/stereo)
Quadro K6000	Yes	Yes	Yes
Quadro K5200	Yes	Yes	Yes
Quadro K5000	Yes	Yes	Yes
Quadro K4200	Yes	Yes	Yes ¹

Quadro K4000	Yes	Yes	Yes ¹
Quadro 6000	Yes	Yes	Yes ¹
Quadro 5000	Yes	Yes	Yes ¹
Quadro 4000	Yes	Yes	Yes ¹
Quadro FX 5800	Yes	Yes	Yes
Quadro FX 4800	Yes	Yes	Yes ¹
Quadro FX 4700	Yes	Yes	Yes
Quadro FX 4600	Yes	Yes	Yes

¹ BizLink DP to DVI-D dual link adaptor required, supported on Windows 7 only.

² There are still some significant problems with video drivers when running in Windows 8.1. Windows 7 is recommended for stereo applications.

ORIMA

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)	4 GB minimum, 8 GB strongly recommended, especially for 64-bit systems
Disk Space	<ul style="list-style-type: none"> 100 MB for software Data storage requirements vary by mapping project⁹
Operating Systems	<ul style="list-style-type: none"> Windows® 7 SP1 or higher, Professional and Ultimate (64-bit) Windows 8 (Standard), Professional and Enterprise (64-bit) Windows 8.1 (Standard), Professional and Enterprise (64-bit) Notes:

⁹ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

	<ul style="list-style-type: none"> • Stereo-capable graphics cards are not supported by Windows 8 or 8.1 at this time • Windows XP SP3 32-bit, Windows XP SP3 64-bit, Windows 7 Professional SP1 32-bit and Windows 7 Ultimate SP1 32-bit are all Viable platforms • ORIMA was certified with the pre-release version of Windows 8.1. Status of the release version of Windows 8.1 will be announced at a later date
<p>Software</p>	<ul style="list-style-type: none"> • OpenGL 2.1 or higher (this typically comes with supported graphics cards¹⁰). • Adobe® Reader® 7 or higher • Internet Explorer® 7 and higher with JavaScript enabled, or Firefox® 3 and higher with JavaScript enabled • Java Runtime 1.6.0.20 (installed automatically) • Python 2.7.3 (32-bit) • Microsoft DirectX® 9c or higher • .NET Framework 4.0 • MSXML 6.0
<p>Recommended Graphic Cards</p>	<ul style="list-style-type: none"> • NVIDIA® Quadro® K5200, K4200, K2200, K420 • NVIDIA® Quadro® K5000, K4000, K600 • 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 • AMD ATI FireGL™ V8600
<p>Recommended Stereo Display Monitors</p>	<ul style="list-style-type: none"> • Planar® SD 3D/Stereoscopic Displays • Planar SA2311W 3D Vision™ Ready Monitor • 120 Hz LCD Monitors with NVIDIA 3D Vision™ Kit¹¹ • True3Di Stereoscopic Monitors
<p>Peripherals</p>	<p>All software installations require:</p> <ul style="list-style-type: none"> • One Windows-compatible mouse with scroll wheel or equivalent input device

¹⁰ Windows provides a generic OpenGL driver for all supported graphics cards. However, an OpenGL-optimized graphics card and driver are recommended for these applications.

¹¹ NVIDIA 3D Vision™ Kit and a compatible NVIDIA graphics card required.

	<ul style="list-style-type: none"> • Printing requires Windows-supported hardcopy devices¹² <p>Software security (Intergraph Licensing 11.11.1) requires one of the following:</p> <ul style="list-style-type: none"> • Ethernet card, or • One USB port for hardware key <p>Advanced data collection requires one of the following hand controllers¹³:</p> <ul style="list-style-type: none"> • 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 mouse⁸ • EK2000 Hand Wheels • EMSEN Hand Wheels • Z/I Mouse
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PRO600

Computer/Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (Multi-core processors are strongly recommended)
Memory (RAM)	4 GB minimum, 8 GB strongly recommended
Disk Space	<ul style="list-style-type: none"> • 1 GB for software <p>Data storage requirements vary by mapping project¹⁴</p>
Operating Systems	<ul style="list-style-type: none"> • Windows® 7 SP1 or higher, Professional and Ultimate (64-bit) • Windows 8 (Standard), Professional and Enterprise (64-bit) • Notes:

⁵ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

¹³ Stealth S-Mouse (S2-S model) and MOUSE-TRAK are the only supported hand controllers in Stereo Analyst® for ERDAS IMAGINE.

⁸ 3Dconnexion SpaceExplorer mouse is supported in IMAGINE Photogrammetry 2014.

¹⁴ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

	<ul style="list-style-type: none"> • Stereo-capable graphics cards are not supported by Windows 8 at this time • Windows XP SP3 64-bit is a Viable platforms
Software	<ul style="list-style-type: none"> • IMAGINE Photogrammetry 2014 • One of the following products from Bentley Systems, Inc. • MicroStation V8i (SS1- SS3 Update 1) • Bentley Map V8i (SS1 - SS3 standalone or for MicroStation) • Bentley Map Enterprise V8i (SS1 - SS3) from Bentley Systems, Inc. • Any further requirements defined by any of the above apply implicitly to PRO600.
Recommended Graphic Cards	<ul style="list-style-type: none"> • NVIDIA® Quadro® K5200, K4200, K2200, K420 • NVIDIA® Quadro® K5000, K4000, K600 • 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 • AMD ATI FireGL™ V8600
Recommended Stereo Display Monitors	<ul style="list-style-type: none"> • Planar® SD 3D/Stereoscopic Displays • Planar SA2311W 3D Vision™ Ready Monitor • 120 Hz LCD Monitors with NVIDIA 3D Vision™ Kit¹⁵ • True3Di Stereoscopic Monitors
Peripherals	<p>All software installations require:</p> <ul style="list-style-type: none"> • One Windows-compatible mouse with scroll wheel or equivalent input device • Printing requires Windows-supported hardcopy devices¹⁶ <p>Software security (Intergraph Licensing 11.11.1) requires one of the following:</p> <ul style="list-style-type: none"> • Ethernet card, or • One USB port for hardware key

¹⁵ NVIDIA 3D Vision™ Kit and a compatible NVIDIA graphics card required.

¹⁶ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

Advanced data collection requires one of the following hand controllers¹⁷:

- **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 mouse⁸**
- **EK2000 Hand Wheels**
- **EMSEN Hand Wheels**
- **Z/I Mouse**

¹⁷ Stealth S-Mouse (S2-S model) and MOUSE-TRAK are the only supported hand controllers in Stereo Analyst® for ERDAS IMAGINE.

⁸ 3Dconnexion SpaceExplorer mouse is supported in IMAGINE Photogrammetry 2014.

GeoMedia

Computer/Processor	<p>32-bit: 2GHz microprocessor, Intel® Pentium® 4 HT, Core™ Duo, Xeon®, or 100% compatible (viable for GM 2015, will not be supported in GM 2016)</p> <p>64-bit: Intel 64 (EM64T), AMD 64, or equivalent (recommended)</p>
Memory (RAM)	4 GB - recommended
Disk Space	<ul style="list-style-type: none"> ● 4.75 GB for software <p>Data storage requirements vary by mapping project¹⁸</p>
Operating Systems¹⁹	<ul style="list-style-type: none"> ● Windows 7 SP1 or higher, Professional and Ultimate (32-bit and 64-bit)¹⁸ ● Windows 8 (Standard), Professional and Enterprise (32-bit and 64-bit)¹⁸ ● Windows 8.1 (Standard), Professional and Enterprise (32-bit and 64-bit) ● Windows Server® 2008 R2 SP1 (64-bit) ● Windows Server 2012 (64-bit) ● GeoMedia runs on 64-bit systems in 32-bit emulation mode.
Database Server Engines	<ul style="list-style-type: none"> ● Oracle® Server 11g, 32-bit and 64-bit ● Oracle Express 11g ● Oracle® Server 12.1, 64-bit ● SQL Server® 2012, 64 bit ● SQL Server Express 2012 ● SQL Server 2014, 64-bit ● SQL Server 2014 Express
Database Client Engines	<ul style="list-style-type: none"> ● Oracle Client 11g, 32-bit ● Oracle Client 12.1, 32 bit

¹⁸ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

¹⁹ Windows 7 32-bit, Windows 8 32-bit and Windows 8.1 32-bit are considered viable platforms. Support for 32-bit systems will be dropped after GeoMedia 2015. **Viable** platforms are not an explicit requirement and have not been tested as a standard scenario in Intergraph SG&I's Development and Quality Assurance cycles. However, the technology is similar to one of the supported platforms that compatibility is practical. Although we expect our applications to be compatible with viable platforms, contractual performance or high availability requirements cannot be guaranteed

<p>Software</p>	<ul style="list-style-type: none"> ● Microsoft® .NET Framework, Version 4.0 or Version 4.5, Windows Installer 3.1 or higher
<p>Graphics Display</p>	<ul style="list-style-type: none"> ● SVGA display required (single monitor recommended), 1026 x 786 resolution and 32-bit color recommended.
<p>Peripherals</p>	<ul style="list-style-type: none"> ● All software installations require: ● One Windows-compatible mouse with scroll wheel or equivalent input device ● Printing requires Windows-supported hardcopy devices²⁰ ● Software security (Intergraph Licensing 11.11.1) requires one of the following: ● Ethernet card, or ● One USB port for hardware key
<p>ERDAS IMAGINE and ArcGIS Interoperability</p>	<ul style="list-style-type: none"> ● ERDAS IMAGINE 2015 requires GeoMedia 2015 for live linking ● GeoMedia 2015 is not compatible with ERDAS IMAGINE 2014. ● GeoMedia 2015 supports Read and Read/Write of ArcGIS File Geodatabase (FGDB) files. ● There are no know issues of having ArcGIS 9.x, ArcGIS 10.1 or ArcGIS 10.2 installed on the same system as GeoMedia 2015.

²⁰ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

GeoMedia 3D

Software	<ul style="list-style-type: none"> Either GeoMedia Essentials 2015, GeoMedia Advantage 2015 or GeoMedia Professional 2-15 Microsoft® .NET Framework, Version 4.0 or Version 4.5, Windows Installer 3.1 or higher, DirectX Version 9 or higher
Computer/Processor	32-bit: 2GHz microprocessor, Intel® Pentium® 4 HT, Core™ Duo, Xeon®, or 100% compatible 64-bit: Intel 64 (EM64T), AMD 64, or equivalent
Memory (RAM)	4 GB – Minimum (8 – 16 GB Recommended)
Disk Space	<ul style="list-style-type: none"> 2.3 GB Total: 122Mb Installation (Required), 1.1 GB Tutorials and Data (Optional) 1.1 Import 3D Utility (Optional)
Operating Systems²¹	<ul style="list-style-type: none"> Windows 7 SP1 or higher, Professional and Ultimate (32-bit and 64-bit)²¹ Windows 8 (Standard), Professional and Enterprise (32-bit and 64-bit)²¹ GeoMedia 3D runs on 64-bit systems in 32-bit emulation mode.
Database Server Engines	<ul style="list-style-type: none"> Oracle® Server 11g, 32-bit and 64-bit Oracle Express 11g Oracle Server® 12.1, 64-bit SQL Server® 2012 SQL Server Express 2012 SQL Server 2014, 64-bit SQL Server 2014 Express
Database Client Engines	<ul style="list-style-type: none"> Oracle Client 11g, 32-bit Oracle Client 12.1, 32-bit
Graphics Display	SVGA display required (single monitor recommended), 1026 x 786 resolution and 32-bit color recommended.

²¹ Windows 8 32-bit and 7 32-bit are considered viable platforms. 32-bit system will not be supported after GeoMedia 3D 2015. **Viable** platforms are not an explicit requirement and have not been tested as a standard scenario in Intergraph SG&I's Development and Quality Assurance cycles. However, the technology is similar enough to one of the supported platforms that compatibility is practical. Although we expect our applications to be compatible with viable platforms, contractual performance or high availability requirements cannot be guaranteed.

<p>Recommended Graphic Cards</p>	<ul style="list-style-type: none"> ● Mid-level to high-end professional video card with a minimum of 1 GB of dedicated memory and DirectX Version 9 or higher support.
<p>Peripherals</p>	<p>All software installations require:</p> <ul style="list-style-type: none"> ● One Windows-compatible mouse with scroll wheel or equivalent input device ● Printing requires Windows-supported hardcopy devices²² <p>Software security (Intergraph Licensing 11.11.1) requires one of the following:</p> <ul style="list-style-type: none"> ● Ethernet card, or ● One USB port for hardware key <p>Optional installation:</p> <ul style="list-style-type: none"> ● Logitech® Dual-Action® Controller

¹³ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

PROVIDER SUITE

ERDAS APOLLO

	ERDAS APOLLO Essentials	ERDAS APOLLO Advantage & Professional
Computer/ Processor	Intel® or AMD quad-core processor with a clock speed of 2.0 GHz or higher	
Memory	8 GB or higher	8 GB or Higher (16 GB recommended)
Server Disk Space	~500 MB for application footprint	4 GB for application footprint
Spatial Data Storage	Minimum: 7200 RPM speed disk storage Recommended: High Speed Disk Storage, >15000 RPM, SSD, RAID Arrays, or External SAN/NAS ²³	
Network Backbone	100 MB or higher. 1 GB recommended	
Server Operating Systems	<ul style="list-style-type: none"> • Windows Server® 2008 R2 Standard and Enterprise Edition (64-bit) • Windows Server 2012 & 2012 R2 Standard and Enterprise Edition (64-bit) • Red Hat® Enterprise Linux® 5.x, 6.x (64-bit) • CentOS 5.x, 6.x (64-bit) 	<ul style="list-style-type: none"> • Windows Server 2008 R2 Standard and Enterprise Edition (64-bit) • Windows Server 2012 & 2012 R2 Standard and Enterprise Edition (64-bit)
Cloud Environments	Amazon Elastic Cloud Compute (EC2)	

²³ Disk I/O remains the bottleneck for almost all deployments and needs to be carefully analysed for peak IOPS and latency

<p>Supplementary Operating Systems for Testing & Development</p>	<p>Windows 7 can be used for development purposes, but deployments must be done on supported Server Operating Systems listed above.</p>	
<p>Software</p>	<p>N/A</p>	<ul style="list-style-type: none"> ● Microsoft® .NET Framework 4.5 ● JDK 1.7.0 (-33 or higher, 64-bit) and Java Advanced Imaging 1.1.3 (both embedded in installer)
<p>Minimum Client Software</p>	<ul style="list-style-type: none"> ● Internet Explorer® versions 9.0 or higher ● Firefox® 14.0.1 or higher ● Google Chrome™ 21.0.1180.79 m or higher ● Safari® 5.1.7 or higher ● Java JRE v1.6 or higher (for administration console use) 	
<p>Licensing</p>	<p>Intergraph Common Licensing 11.11.1</p>	
<p>Application Servers</p>	<ul style="list-style-type: none"> ● Microsoft® IIS 7 or higher (Windows) ● Apache 2.2 or higher (Linux) 	<ul style="list-style-type: none"> ● Microsoft IIS 7 or higher ● JBoss 7.1.1 (JBoss 7.GA is embedded in installer) ● Tomcat 7.0.55 (embedded in installer)
<p>Databases</p>	<p>N/A</p>	<ul style="list-style-type: none"> ● Oracle Database 11g, Standard or Enterprise Edition ● Oracle Database 12c (12.1.0.1), Standard or Enterprise Edition ● Microsoft SQL Server® 2012 R2 Express or Standard or Enterprise Edition (Express Edition should be used for testing & development purposes only) ● Microsoft SQL Server® 2014 Express or Standard or Enterprise Edition (Express Edition should be used for testing & development purposes only) ● PostgreSQL version 9 or higher (with PostGIS 2.0 extension)

<p>Admin Tools</p>	<p>ERDAS APOLLO Essentials Administration Console</p>	<ul style="list-style-type: none"> ● ERDAS APOLLO Data Manager ● ERDAS APOLLO Style Editor
<p>Compatible Client Applications</p>	<ul style="list-style-type: none"> ● Geospatial Portal 2015 ● ERDAS APOLLO 2015 Catalog Web Client ● GeoMedia® 2015 ● GeoMedia Viewer 2015 ● GeoMedia Professional 2015 ● ERDAS IMAGINE® 2015 ● Esri® ArcGIS® for Desktop plugin ● ECWP-enabled applications ● OGC-compliant WMS, WMTS, WCS, WPS client applications 	
<p>Admin Tools Operating Systems</p>	<ul style="list-style-type: none"> ● Windows 7 (32-bit and 64-bit) ● Windows Server 2008 R2 Standard and Enterprise Edition (32-bit and 64-bit) ● Windows 8 (64-bit) ● Windows Server 2012 & 2012 R2 Standard and Enterprise Edition (64-bit) ● RHEL / CentOS v5.x, v6.x (Essentials only) 	

PLATFORM SUITE

GeoMedia WebMap

Computer/Processor	Intel® Core™ i5 or compatible microprocessor, minimum 2 cores, 2GHz clock
Memory (RAM)	4 GB RAM or greater recommended 200 MB RAM per map server, minimum
Disk Space	2GB disk space required for typical installation
Operating Systems	<ul style="list-style-type: none"> Windows Server 2008 R2 (64-bit) Windows Server 2012 (64-bit) Windows Server 2012 R2 (64-bit)
Cloud Environments	<ul style="list-style-type: none"> Amazon Elastic Cloud Compute (EC2)
Database Server Engines	<ul style="list-style-type: none"> Oracle® Server 12.1 Oracle® Client 12.1 (32-bit) Oracle® Server 11g (64-bit) Oracle Server 11g R1 (32-bit) Oracle Server 11g R2 (32-bit) Oracle® Client 11g (32-bit) Oracle® Express 11 g SQL Server® 2014 SQL Server® 2012 SQL Server® Express 2012 Access® 2003 (MDAC 2.7 & 2.8)
Internet Browsers	Internet Explorer® versions 9.0,10.0 or 11.0 <ul style="list-style-type: none"> Firefox® 31.0 or higher Safari® 6.0 or higher Google Chrome™ 37.0.2062.94 m or higher

Software	<ul style="list-style-type: none">● Microsoft® .NET Framework 4.5● Microsoft IIS 7.x● Windows Installer 3.1
Graphics Displays	<ul style="list-style-type: none">● Minimum 1280x720 resolution with 16-bit color.
Peripherals	Access to CD-ROM drive <ul style="list-style-type: none">● Mouse or compatible digitizer for input

Geospatial SDI

Computer/Processor	Intel® Core™ i5 or compatible microprocessor, minimum 2 cores, 2GHz clock
Memory (RAM)	4 GB RAM or greater recommended
Disk Space	2 GB disk space required for typical installation
Operating Systems	<p>Windows Server 2008 R2 (64-bit)</p> <ul style="list-style-type: none"> Windows Server 2012 (64-bit) Windows Server 2012 R2 (64-bit)
Cloud Environments	<ul style="list-style-type: none"> Amazon Elastic Cloud Compute (EC2)
Database Server Engines	<ul style="list-style-type: none"> Oracle® Server 11g (64-bit) Oracle® Server 10.2.0.4 or higher (64-bit) Oracle® Client 11g (64-bit) Oracle® Client 11g (64-bit) SQL Server® 2008 R2 <p>Access® 2010 (MDAC 2010 v14)</p>
Internet Browsers	<p>Internet Explorer® versions 9.0,10.0 or 11.0</p> <ul style="list-style-type: none"> Firefox® 31.0 or higher Safari® 6.0 or higher Google Chrome™ 37.0.2062.94 m or higher (recommended)
Software	<ul style="list-style-type: none"> Microsoft® .NET Framework 4.5 Microsoft IIS 7.x Windows Installer 3.1 Windows Identify Foundation
Graphics Displays	Minimum 1280x720 resolution with 16-bit color.
Peripherals	<p>Access to CD-ROM drive</p> <p>Mouse or compatible digitizer for input</p>

Geospatial Portal

Computer/Processor	Intel® Core™ i5 or compatible microprocessor, minimum 2 cores, 2GHz clock
Memory (RAM)	4 GB RAM or greater recommended
Disk Space	2 GB disk space required for typical installation
Operating Systems	Windows Server 2008 R2 (64-bit) Windows Server 2012 (64-bit) Windows Server 2012 R2 (64-bit)
Cloud Environments	Amazon Elastic Cloud Compute (EC2)
Database Server Engines	<ul style="list-style-type: none"> ● Oracle® Server 12.1 ● Oracle® Client 12.1 (32-bit) ● Oracle® Server 11g (64-bit) ● Oracle Server 11g R1 (32-bit) ● Oracle Server 11g R2 (32-bit) ● Oracle® Client 11g (32-bit) ● Oracle® Express 11 g
Software	Microsoft® .NET 4.5 Microsoft IIS 7.x
Graphics Displays	Minimum 1280x720 resolution with 16-bit color.
Client Machines' Internet Browsers	Internet Explorer® versions 9.0, 10.0 or 11.0 Firefox® 31.0 or higher Safari® 6.0 or higher Google Chrome™ 37.0.2062.94 m or higher (recommended)

GeoMedia Smart Client

Computer/Processor	Server side: requires Dual-Core > 1 GHz, minimum Client side: 1 GHz minimum
Memory (RAM)	Server side: 4 GB minimum Client side: 500 MB minimum
Disk Space	Server side: 250 MB for application Additional disk space requirements vary depending on the amount of geodata
Operating Systems	Server side: <ul style="list-style-type: none"> ● Windows Server 2008 SP2 (64-bit) ● Windows Server 2008 R2 (64-bit) ● Windows Server 2012 (64-bit) ● Windows Server 2012 R2 (64-bit) Client side: <ul style="list-style-type: none"> ● Any operating system certified for Java Runtime Environment (JRE) version >= 1.8.20 For example: <ul style="list-style-type: none"> ● Windows Vista SP1 (32-bit and 64-bit) ● Windows 7 SP1 (32-bit and 64-bit) ● Windows 8 (32-bit and 64-bit) ● Mac OS ● Linux For a complete list, please see http://www.oracle.com/technetwork/java/javase/certconfig-2095354.html
Cloud Environments	Amazon Elastic Cloud Compute (EC2)
Database Server Engines	Database Servers (Read / Write) <ul style="list-style-type: none"> ● Oracle® Server 10g (32-bit and 64-bit) ● Oracle Server 11g (32-bit and 64-bit) via Oracle Client 11g ● Oracle Server 12c (32-bit and 64-bit) ● Oracle Express 10g via Oracle Client 11g ● Oracle Express 11g

	<ul style="list-style-type: none"> ● Oracle Express 12c ● SQL Server® 2008 R2 ● SQL Server Express 2008 R2 ● SQL Server 2012 ● SQL Server Express 2012 ● Access® 2003 (32-bit and 64-bit) <p>Database Servers (Read only via GeoMedia WebMap)</p> <ul style="list-style-type: none"> ● Oracle Server 10g (32-bit and 64-bit) ● Oracle Server 11g (32-bit and 64-bit) ● Oracle Server 12c ● Oracle Express 10g ● Oracle Express 11g ● Oracle Express 12c ● SQL Server 2008 R2 ● SQL Server Express 2008 R2 ● SQL Server 2005 SP5 ● SQL Server Express 2005 ● Access 2003 (MDAC 2.7 & 2.8)
<p style="text-align: center;">Software</p>	<p>Server side:</p> <ul style="list-style-type: none"> ● .NET Framework 4.5 ● Windows Installer 3.1 or Higher ● MDAC 2.7 or WDAC 9.0.1 ● IIS 7 or higher ● SQL Server System CLR Types >= 10.5 (part of the GeoMedia® Smart Client installation media) ● MS Visual C++ 2010 Feature Pack Redistributable (part of the GeoMedia Smart Client installation media) <p>Depending on database:</p> <ul style="list-style-type: none"> ● Access Database Engine (64-bit) - part of the GMSC installation media ● Oracle ODP .NET 4.112.3.0 <p>Client side: Java Runtime Environment (JRE) version >= 1.8.20</p>
<p>Graphics Displays</p>	<p>Recommended screen resolution of 1024 x 768 or better with 24-bit color</p>

Peripherals

Server side: Access to DVD drive

Client side: Mouse or pen for geodata input

Mobile MapWorks

Computer/Processor	2 GHz microprocessor
Memory (RAM)	4 GB RAM
Disk Space	50 MB for installation 20 MB for Tablets
Operating Systems (Tablet)	<ul style="list-style-type: none"> • iOS version 7.x and 8.x Tested devices: iPad 2, iPad3, iPad mini, iPad 4, iPad mini Retina and iPad Air • Android™ version 4.0.3 or later (Ice Cream Sandwich) Tested devices: Samsung Galaxy Tab® 10.1, Samsung Galaxy Tab® 4 10.1, Nexus 7, Nexus 10
Operating Systems (Server)	<ul style="list-style-type: none"> • Windows Server® 2008 SP2 (32-bit and 64-bit) • Windows Server 2012 (64-bit) • .NET 4.5
Software	<ul style="list-style-type: none"> • WFS 1.0 or greater • WMS 1.1 or greater • WMTS 1.0.0

Mobile Alert

Operating Systems (Phone or Tablet)	<ul style="list-style-type: none"> • iOS version 7.x and 8.x Tested devices: iPhone® 4, 4S, 5, 5S, 6 • Android version 4.0.3 or later (Ice Cream Sandwich) Tested devices: Samsung Note 3, Samsung Galaxy Ace 2, Samsung Galaxy Trend, Sony Ericsson Xperia Arc S, Sony Xperia Z2, Nexus 7
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