Contents

About This Release ........................................................................................................... 3
Impacts ............................................................................................................................... 3
Visual Studio 2017 ............................................................................................................. 3
New Platforms .................................................................................................................. 3
GeoMedia Desktop ........................................................................................................... 3
Oracle ............................................................................................................................... 3
SQL Server ....................................................................................................................... 4
New Technology ............................................................................................................... 4
General ............................................................................................................................. 4
Licensing .......................................................................................................................... 4
System Requirements ..................................................................................................... 4
System Requirements Notes .......................................................................................... 5
Issues Resolved (16.5 Update 1) .................................................................................... 6
Issues Resolved (16.6) .................................................................................................... 6
Deprecated ....................................................................................................................... 6
Contact Us ....................................................................................................................... 7
About Hexagon ............................................................................................................... 7
Copyright ......................................................................................................................... 8
About This Release

This document describes the enhancements for GeoMedia® Transportation Manager 2020. Although the information in this document is current as of the product release, see the Hexagon Geospatial Support website for the most current version.

This release includes both enhancements and fixes. For information on new features, see the New Technology section. For information on fixes, see the Issues Resolved section.

This document is only an overview and does not provide all the details about the product's capabilities. See the online help and other documents provided with GeoMedia Transportation Manager for more information.

GeoMedia Transportation Manager provides the key geospatial technology to help professionals in Departments of Transportation (DOTs), rail companies, waterway agencies, and pipeline operations to efficiently analyze and maintain the transportation infrastructure. Functionality is included for building and maintaining a linear network model that will support a linear referencing system (LRS), multilevel linear referencing system (MLRS), and vehicle routing applications.

Impacts

Visual Studio 2017

GeoMedia® and GeoMedia Transportation Manager have been upgraded to use of Visual Studio 2017. Application software based on GeoMedia objects must be rebuilt for compatibility with GeoMedia Desktop.

- The managed components of GeoMedia are built against the 4.7.2 .NET Framework. As a result, the components that are built on top of them are required to update their C#, VB.net and managed VC++ components to be targeted to the .NET Framework 4.7.2 or higher and then be rebuilt. A side effect of not doing this is that managed content will not be found due to incompatible frameworks.
- The VC++ components of GeoMedia are built against the Microsoft VC++ 141 runtime components. As a result, the components that are built on top of them may be required to be updated to the same runtimes and then be rebuilt.

New Platforms

GeoMedia Desktop

GeoMedia® Desktop 2020 is required for this release.

Oracle
Oracle 18c is now supported.

SQL Server
SQL Server 2017 is now supported.

**New Technology**

**General**

**Licensing**
A new product license is required for the 2020 release. The latest Geospatial License Administration tool should be downloaded and used for this release.

**System Requirements**

<table>
<thead>
<tr>
<th>Computer/ Processor</th>
<th>64-bit: Intel 64 (EM64T), AMD 64, or equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory (RAM)</td>
<td>4 GB minimum, 8 GB recommended</td>
</tr>
<tr>
<td>Disk Space</td>
<td>10 GB for software</td>
</tr>
<tr>
<td></td>
<td>Data storage requirements vary by mapping project¹</td>
</tr>
<tr>
<td>Peripherals</td>
<td>Software security (Hexagon Geospatial Licensing 11.14.0) requires the following:</td>
</tr>
<tr>
<td></td>
<td>• Ethernet card</td>
</tr>
<tr>
<td>Operating Systems²</td>
<td>• Windows¹⁰ 10.0 Professional (64-bit)</td>
</tr>
<tr>
<td></td>
<td>• Windows Server® 2016 (64-bit)²</td>
</tr>
<tr>
<td></td>
<td>• Windows Server® 2019 (64-bit)²</td>
</tr>
<tr>
<td>Virtual Server and</td>
<td>• VMware ESX 5.1</td>
</tr>
<tr>
<td>Virtual App Technology</td>
<td>• Oracle VM Virtual Box</td>
</tr>
<tr>
<td></td>
<td>• XenApp 7.6</td>
</tr>
</tbody>
</table>
### Database Server Engines
- Oracle® Server 11g, 32-bit and 64-bit, at least version 11.2.0.4
- Oracle Express 11g, at least version 11.2.0.4
- Oracle® Server 12.1
- Oracle® Server 12.2
- SQL Server® 2012, 64-bit
- SQL Server® Express 2012
- SQL Server® 2014, 64-bit
- SQL Server® 2014 Express
- SQL Server® 2016, 64-bit
- SQL Server® 2016 Express
- SQL Server® 2017, 64-bit
- SQL Server® 2017 Express

### Database Client Engines
- Oracle Client 11g, 32-bit
- Oracle Client 12.1, 32-bit
- Oracle Client 12.2, 32-bit
- SQL Server Native Client 10.0 or higher

### System Requirements Notes

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. GeoMedia runs on 64-bit systems in 32-bit emulation mode.

3. Oracle Data Access Components (ODAC) is required if using the Feature Accessor option for Oracle in the PublishIFC utility, or if using the Database Utilities utility to manage an Oracle warehouse. ODAC is typically delivered by the Oracle Client Administrator installer, but not by the Oracle InstantClient installer. ODAC contains many components, of which PublishIFC requires the Oracle Data Provider for .NET, and Database Utilities requires the Oracle Provider for OLEDB.

4. The SQL Server Native Client 10.0 or higher is needed in order for the Database Utilities utility to automatically create the correct GeoMedia metadata for date, time, and datetime2 data types when using a SQL Server or SQL Server Spatial warehouse. You can get SQL Server Native Client 10.0 or higher from the corresponding Microsoft websites. If the SQL Server Native Client is not installed on the system, you will need to manually choose Date as the data type from the dropdown combo box for these data types in the Feature Class Properties dialog and set the format properly.
Issues Resolved (16.5 Update 1)

<table>
<thead>
<tr>
<th>CR #</th>
<th>Summary</th>
<th>Description / How to Reproduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>00021499</td>
<td>Crash with calibration of pure loops</td>
<td>There is a fatal regression for the fix to IG-6816 for calibration of loops. They have some route segments where the LRS key set form a circle / ring (like the I-285 loop around Atlanta). Attempting to calibrate these causes an application crash when using the fix. The crash is a regression from build 169 that’s in delivery (and build 201).</td>
</tr>
<tr>
<td>00020892</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00027875</td>
<td>Commands fail to start when using permanent nodelocked license</td>
<td>GeoMedia Transportation customers who use a permanent nodelocked 2018 (16.5) activation code are reporting that the commands in Transportation do not work. The commands have tooltips and can be selected but nothing happens after selection.</td>
</tr>
<tr>
<td>00027876</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Issues Resolved (16.6)

<table>
<thead>
<tr>
<th>CR #</th>
<th>Summary</th>
<th>Description / How to Reproduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Deprecated

The Windows 7.0, Windows 8.1, and Windows Server 2012 operating systems are no longer supported.
About Hexagon

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

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

Hexagon’s Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 4.3bn USD. Learn more at hexagon.com and follow us @HexagonAB.
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