# Release Guide

GeoMedia Smart Client 2020

Version 16.6
14 October 2019

# Contents

# About This Release

This document describes the enhancements for GeoMedia® Smart Client. 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 enhancements and fixes. For information on fixes that were made to GeoMedia Smart Client for this release, see the Issues Resolved section. For information on Enhancements, see the New Technology 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 Smart Client for more information.

# GeoMedia Smart Client Product Tiers

GeoMedia® Smart Client is a GIS workflow management system that connects tasks and dependencies across different roles in a process and dynamically configures to reflect a user's role and specific workflow steps. End users can use advanced geospatial functionality via simple-to-use, map-based tools, which removes them from performing non-essential tasks and allows them to focus their time on their area of expertise.

Workflow Manager is a standalone product and a rich toolset that lets you construct highly-focused business workflows that primarily support attributive data, but that also may contain a spatial component. It provides the means for third parties, contractors, and even the public to use task-specific, highly-specialized processes that tie back to your enterprise operations. No programming skills are required to build optimized form-based workflows that can be made available in the browser and through Geospatial Portal.

GeoMedia Smart Client is available in three product tiers (Essentials, Advantage, Professional) to complement a broad range of customers – from small businesses with few users doing simple vector editing, to large, multi-disciplinary environments supporting multiple business workflows across various departments.

## GeoMedia Smart Client Essentials

GeoMedia Smart Client Essentials provides organizations with high-end vector redlining functionality as well as the ability for an unlimited number of users to display raster and vector maps, analyze and query data, print, measure, and use dimensioning functions.

## GeoMedia Smart Client Advantage

GeoMedia Smart Client Advantage contains all the features and functionality of the Essentials product, plus the ability for an organization to use predefined business process workflows and edit data. The additional Workflow Manager – Runtime module enables customers to run pre-built workflows, edit attributes, or capture and change spatial data on the web client and push the changes back to the server database.

## GeoMedia Smart Client Professional

GeoMedia Smart Client Professional contains all the features and functionality of the Advantage product, plus it includes Workflow Manager – Editor, which enables an organization to develop workflows or revise the structure, process, and forms of current ones.

# What's New in 2020

## OpenJDK / OpenJFX

As a result of Oracle's licensing changes, in GeoMedia Smart Client 2020, the default Java Development Kit has been replaced by OpenJDK as the standard virtual machine. With this change, GeoMedia Smart Client provides a solution based on a vendor-independent, resilient, and community-maintained technology stack. There are several benefits for the customer, such as:

- Deployment of a single Java VM across the organization

- No licensing costs for Java

- No production downtime caused by Java updates

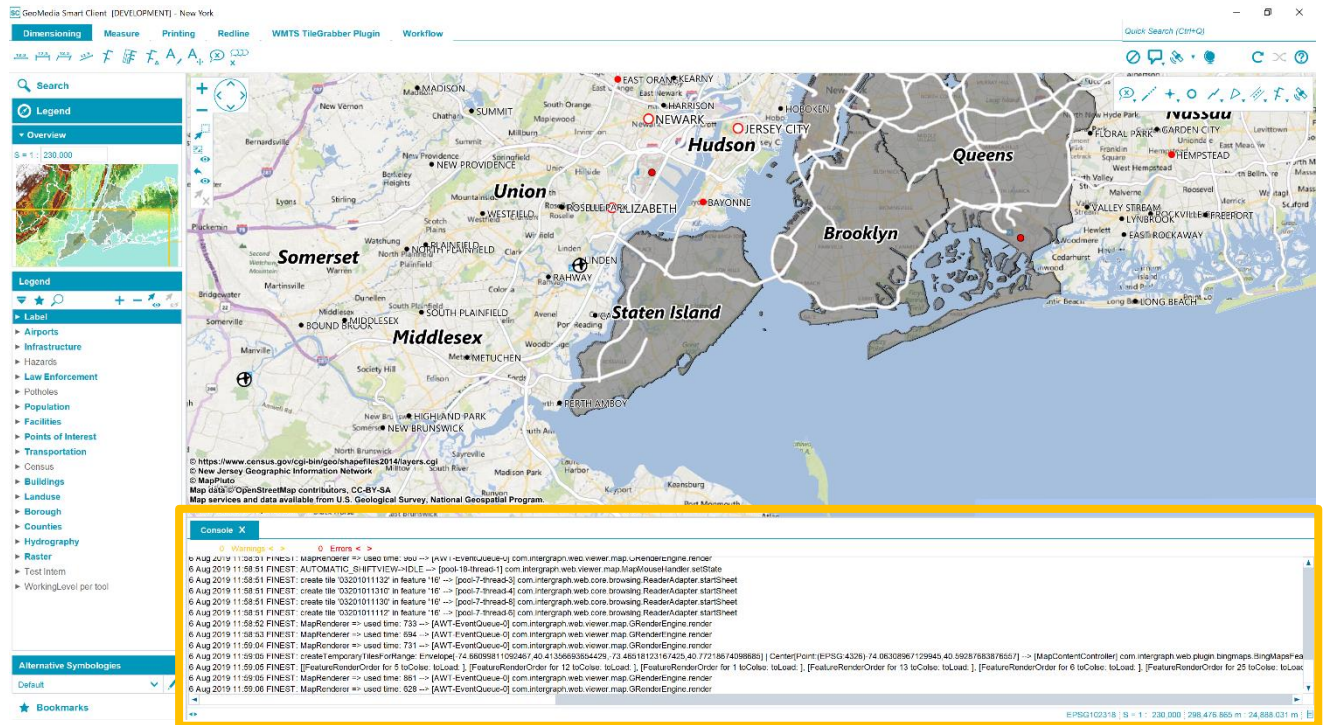- Simplified deployment and performance improvements

## 4K Display Support in Workflow Manager

With GeoMedia Smart Client 2020, you get a fully 4K supported Workflow Manager. A responsive design was introduced to automatically select the best fitting resolution.

## Integrated Log Console

With the new integrated log console, users can gain direct insights into the status of the application at runtime. The log messages are categorized into info, warnings, and errors. The console can be toggled by pressing the F12 key and is a powerful tool for testing and troubleshooting.



# Community Influenced Enhancements

The following list contains a selection of new features and enhancements to existing features that were influenced by the Hexagon community. For a detailed list of improved features and bug fixes see the Issues Resolved section in this document.

## Persist Legend State (expanded groups) in Editing Mode and After Editing

With this update, the legend's state is persisted across different modes. This ishandy for users that manage a high number of legend entries and themes in the user interface.I.

## Support of FormField Names with More than 30 Characters

Limiting Workflow FormField names to 30 characters has been dropped. In rare cases, this limitation has caused problems in mapping field names to database columns.

## Extended Copyright Text in Public Maps

By the request, the previous maximal length of copyright texts for public maps has been increased to 1024 characters.

## SSO Improvements

In GeoMedia Smart Client 2018, SSO was extended to include nested Active Directory (AD) groups. In some cases, users observed performance issues during login. With GeoMedia Smart Client 2020, SSO and the underlying AD queries and caching have been significantly improved to provide a high performing login process. Additionally, users in very large AD environments now have the option to opt-out of querying nested AD groups to speed up SSO.

## WMTS Cache Improvement

GeoMedia Smart Client 2020 includes a completely revised WMTS caching component. By utilizing a comprehensive set of caching strategies based on various HTTP cache-control mechanisms, the performance of public WMTS services, such as OSM and Bing Map, has increased significantly.

## DB / Service Outage

GeoMedia Smart Client 2020 publishing service has been improved so that jobs, interrupted by database or power outages, continue automatically after the underlying services come back online.

## New GPS Base Technology

RxTx has been replaced by jSerialComm as standard serial-port access library. The jSerialComm based integration of GPS devices enables a smooth user experience.

## Reverse Proxy Support

With this release, GeoMedia Smart Client can be used in a reverse proxy environment. A reverse proxy can be used to provide useful features like application firewalls, load balancing and many more.

## 3D Data and Arc Support in Postgres

The Postgres data adapter has been revised so that with GeoMedia Smart Client 2020, 3D data and arcs can be processed. With this update, 3D data and arcs are now fully supported across all supported database engines.

# System Requirements

| Computer/ Processor | Server-side: requires 1.4 GHz minimum (64-bit)<br><br>Client-side: 1 GHz minimum (64-bit) |
|---|---|
| Memory (RAM) | Server-side: 8 GB minimum<br><br>Client-side: 2 GB minimum |
| Disk Space | Server-side: 512 MB for application<br><br>Additional disk space requirements vary depending on the amount of geodata |
| Operating Systems | Server-side:<br><br>• Windows® Server 2012 (64-bit)<br>• Windows® Server 2012 R2 (64-bit)<br>• Windows® Server 2016<br><br>Windows® Server will be supported until the end of Microsoft's Mainstream support of the product.<br><br>https://support.microsoft.com/en-us/lifecycle<br><br>Client-side:<br><br>• Hexagon App Launcher<br><br>For example:<br><br>• Windows® 7 SP1 (64-bit)<br>• Windows® 8.1 (64-bit)<br>• Windows® 10 (64-bit)<br><br>Windows® OS will be supported until the end of Microsoft's Mainstream support of the product.<br><br>https://support.microsoft.com/en-us/lifecycle |
| Database Server Engines | Database Servers (Read / Write)<br><br>• Oracle® Server 12c or higher (32-bit and 64-bit)<br>• SQL Server® 2014 SP2 or higher (32-bit and 64-bit)<br>• Postgres SQL 9.3 or higher (32-bit and 64-bit) |
| Additional Software | Server-side:<br><br>• .NET Framework 4.5.2<br>• Windows Installer 3.1 or higher<br>• MDAC 2.7 or WDAC 9.0.1<br>• IIS 8 or higher<br>• Oracle 12c ODAC or higher (64-bit)<br><br>Optional:<br><br>• Access Database Engine (64-bit) - part of the GMSC installation media |

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| | Client-side:<br><br>• Hexagon App Launcher |
| Browser | • IE 11 and Microsoft Edge<br>• Chrome 63<br>• Firefox 57 |
| Graphics Displays | Recommended screen resolution of 1280 x 1024 or better with 24-bit color |
| Peripherals | Server-side: Access to DVD drive<br><br>Client-side: Mouse or pen for geodata input |
| Input device for tablets | Client-side: Digitizer is recommended |

# Issues Resolved

| Issue # | Summary | Description / How to Reproduce |
|---------|---------|-------------------------------|
| 00013460 | Publishing ARCs from PostGis is not possible | ARC's cannot be published from PostGis. Layer 64 was skipped due to errors. System.FormatException: 24115: The well-known binary (WKB) input is not valid |
| 00042489 | Label texts with geometry function are rendered in reverse order when printing with landscape format | If you define a symbology with a text symbolizer that uses a geometry function, then letters of the text are displayed in reverse order when printing with landscape format. |
| 00042838 | GeoMedia Smart Client 2018 GetFeatureInfo against WMS only returns an error | GeoMedia Smart Client 2018 GetFeatureInfo only returns error against WMS.<br>Error returned: Can't parse XML request.<br><br>The same WMS used in GM Desktop and Geospatial Portal/WebMap returns valid feature info details. |
| 00043036 | Extended tooltip - unnecessary Pick Quick is added where snapping is active | Customer observes that using Extended tooltips, clicking on a location with two features will result in an additional dialog to choose a feature that did not exist in version 2015.<br><br>Choosing either feature will result in the same Extended tooltip information being displayed. Which means the user has to spend extra time reading and interacting (clicking on) an extra dialog with no benefit.<br><br>Users are frequently using Extended tooltips and the additional modal dialog and extra model dialog plus clicks are frustrating addition to the product after version 2015. |
| 00043044 | Publishing raster data gives an error: Access denied | Raster data are tiff-files with tfw-files. We tried different raster data and there is always the same error. Error: 09.04.2019 09:09:51 INFO – Publish Order 201d847e-2cfe-4929-83b7-a25eadb14b0b accepted. 09.04.2019 09:11:16 INFO - Layer 13995 has started. 09.04.2019 09:15:33 ERROR - Unexpected exception for Publish Order |
| 00043095 | Extended tooltips slow after upgrading from version 2015 to 2018 | Two clients are reporting that after upgrading from version 2015 to 2018 update 3 or pre-release of update 4 that Extended tooltips are significantly slower. I'm still working through collecting information / replication etc. |
| 00043299 | Point features with hotspot symbology display partially or don't display at all in the printed map | In GeoMedia Smart Client, there is a point feature with hotspot symbology. The feature instance displays fine in the map; however, when we did printing, on the printed map, the feature displays partially. We confirmed that with both feature loader "live" and "cached" modes. We tried to reproduce the problem in our environment, on the printed map, and the feature doesn't display at all. We looked at the log files, but there are no indicators of the problem. |
| 00043604 | Selection with geometry results in invalid polygon set | If you select an existing polygon as bounding geometry, the captured shape may convert to an invalid polygon set (areas with zero size) because of the addition of a buffer. |

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| 00044563 | Improve Single Sign-On performance on complex AD structures | As a result of SC-1841, complex AD structures can seriously affect logon performance. Please review the attached Word document with performance comparison (2016 vs. 2018). |
| 00047108<br><br>00043875 | Yes/No dialog buttons are not localized | Using GMSC German Language Pack, we found Dialogs with Yes / No instead of Ja / Nein. Where do Yes / No come from? Is there a chance to get it in German? |
| 00048642<br><br>00043315 | Dimensioning reversed in print layout landscape | Printing a dimensioning in landscape reverses the order of the letters and numbers in the PDF. In horizontal and in Smart Client, printing dimensioning isfine. We tested PDF Creator, PDF Architect, and Adobe with the same results. |
| 00049126 | TileService stops working and I have to restart it manually | Sometimes the TileService.exe stops working. When I try to start a new publishorder, nothing happens. Only a restart of the TileService.exe solves this. |
| 00049588<br><br>00049524<br><br>00046885<br><br>00045423<br><br>00045152 | OpenStreetMap doesn't load with User-Agent: Java/12 | It seems that standard OpenStreetMap servers reject the currently used User-Agent: Java/12 string. If I try to reissue the request manually having e.g. 'User-Agent: Java', the tile will display. With 'User-Agent: Java/12' it fails to load with 403 Forbidden error. |
| 00051043 | Authenticated WMS uses non-standardized parameters generating unsecure URLs | We have a new image provider and I am trying to connect to their WMS, which I seem to be able to without error, but the image doesn't display in GMSC. |
| 00051582 | defaultlanguage URL parameter doesn't work (SSO) | Only the internal license disclaimer has a German caption on the button, but the rest of the interface is in English. German language pack is present in the installation folder. |
| 00051802 | App Launcher - no way to work with standard Java logging | Since introduction of the App Launcher, it is possible to use only custom logging, usually located at %TEMP%\log. While this is helpful in most cases, there are still situations that need more detailed logging - such as HTTPS traffic and encryption issues. |
| | Letters of Text Points are printed in reverse order when rotated 90° | Printing a dimensioning in landscape reverses the order of the letters and numbers in the PDF. The issue affects small dimensions - those which are rendered outside of the measured segment. See attached screenshots. Reproducible on the demo server. |
| | The Closing dialog is not localized | Regardless of the installed language file, the closing dialog is always displayed in English. |
| | Measure Plugin – Measure Settings Dock - Labels are cropped | Labels in measure settings docked are cropped despite having enough space in the panel |

| | Fix render of Dimensioning Plugin legend icon | Legend icon of the Dimension Plugin is not rendered correctly |
|---|---|---|
| | Precision WGS84 to project coordinates | Convertion lat/lon from WGS84 to project coordinate system loses precision |
| | App Launcher TSL version issue | App Launcher doesn't support TLS 1.3 |

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