



Release Notes



1Generalise

Version 1.1.104

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1 Introduction

1.1 Scope

The purpose of the Release Note is to document the new functionality provided by the release and any known issues or limitations. The release notes will also record any administrative instructions that are specific to this release and not recorded elsewhere.

1.2 Purpose of Release

The main purpose of this release is to simplify the installation of 1Generalise. The Gothic Data Access Manager (DAM) is no longer required as a separate component. The grid configuration parameters have been removed; each grid includes all servers sharing a repository.

The release also includes a number of bug fixes, including several enhancements to the building short edge removal and short edge stellation algorithms.

1.3 System Requirements

1.3.1 Server Platforms

This version of 1Generalise is supported on the following server platforms.

Windows Server 2012 R2

Application Server	Java
Oracle WebLogic Server 12c (12.1.3)	Oracle Java JDK 1.7.0_80 (64-bit)

Common components (required with any application server):

- Microsoft Visual C++ 2013 runtime (may be downloaded from <https://www.microsoft.com/en-us/download/details.aspx?id=40784>)

Red Hat Enterprise Linux 6.7 (64-bit)

Application Server	Java
Oracle WebLogic Server 12c (12.1.3)	Oracle Java JDK 1.7.0_80 (64-bit)

1.3.2 Client Platform

This version of 1Generalise is supported with the following browser clients:

- Microsoft Internet Explorer version 10 or 11
- Chrome version 46
- Mozilla Firefox version 41

Other browser clients may be used, but support requests will only be progressed if the issue can be replicated on a supported browser.

1.3.3 Oracle Database Platforms

This version of 1Generalise is supported on all operating systems listed in section 1.3.1, with the following database platforms for both the **1Generalise repository** and as a **spatial data source**:

- Oracle Database 11g R2 (11.2.0.2 or newer) Enterprise Edition
- Oracle Database 11g R2 (11.2.0.2 or newer) Standard Edition

1.3.4 1Spatial Software

All required 1Spatial Software is included in the 1Generalise release. See the Installation Guide for more information.

1.4 Dependencies

This release updates the Gothic core version from 5.44 to 5.45. There are no changes expected to impact 1Generalise.

This release depends on 1Integrate 1.1.126, updated from 1.1.125. See the release notes for full details.

1.5 Compatibility

Existing customer flowlines may not be compatible with this release - see section 2.2 *Configuration changes required by this release* below.

The SOAP web service is compatible with version 1.0.110 to 1.1.103.

The REST web service is compatible with versions 1.0.100 - 1.1.103.

2 Release details

2.1 Summary of changes provided by this release

This release contains several fixes to the building short edge removal and stellate algorithms to avoid spikes and sharp angles from being introduced in the final result:

- 1Generalise no longer requires the Gothic DAM to be installed
- The configuration required for installing 1Generalise has been simplified.
- Two issues related to the partitioning mechanism have been fixed
- A fix was made to geometry combination - a regression introduced in 1.0.102
- Several fixes to the building short edge removal and stellate algorithms to avoid spikes and sharp angles from being introduced in the final result:
 - A new approach to reconnect the edges either side of a hat that has been removed was implemented to prevent the algorithm generating spikes.
 - Implemented a hat-shape filter to ignore hat-shaped sections in short edge stellation to prevent the algorithm generating spikes.
 - A new `MinAngleBetweenEdges` parameter has been added to both the `building_remove_short_edges` and `building_stellate_short_edges` *Building* builtin functions. This is allowed angle between edges (degrees.) These algorithms will not introduce angles between edges smaller (sharper) than this value. The *Remove Short Edges* and the *Stellate Short Edges* actions in the *1Generalise Algorithms - Building* folder have been updated to retrieve the parameter value from the Profile Parameters. The parameter definition for the new `MinAngleBetweenEdges` parameter has been added to the 1 25000 Map system flowline (see Configuration section below).
- The "Failed to invoke `building_remove_short_edges` Caused by: Lines do not intersect" error no longer occurs when invoking the Hat algorithm on a building.

2.2 Configuration changes required by this release

2.2.1 Changes to the installation

The mechanism to decide which servers belong to a same grid has changed. Previously, each server specified a grid name, multicast group and address. All servers specifying the same parameters were part of the same grid.

The new version does not use multicast network messages to find other nodes in the grid. It finds other nodes through connections to the Oracle repository schema. All nodes connected to the same Generalise repository are part of the same grid.

Installing manually (without using the UI)

The following installer properties are now ignored. It is recommended they are removed from any existing `config.properties`:

- `64bit_jdk`
- `generalise_par_grid_name`
- `generalise_par_multicast_group`

- `generalise_par_multicast_address`

If `goth_dataroot` is defined, the installer assumes a configuration to run with a real DAM. However, no DAM is provided with this release and this configuration is not supported.

If `goth_dataroot` is not defined, the system operates without a DAM. `Goth_dam_host` is ignored. If the new property `cache.directory` is defined in `config.properties`, that directory will contain the Gothic caches. A separate dataroot will be created for each session. If `cache.directory` is not defined, the default Java temporary directory will be used.

Installing using the UI

The GUI installer will prompt for the cache directory instead of the data root. If left empty, the default Java temporary directory will be used.

2.2.2 Changes to Flowlines

Flowlines that use the 1Generalise Algorithms - Building - Remove Short Edges action and/or Stellate Short Edges action will need to be updated as follows:

Add the following parameter definition to the flowline (building subflow) metadata:

```
{
  "name" : "MinAngleBetweenEdges",
  "className" : "BUILDING_TGT",
  "description" : "Allowed angle between edges (degrees.) It is not permitted
                  to introduce angles smaller (sharper) than this value"
  "type" : "double",
  "value" : "70",
  "scope" : "FLOWLINE_DESIGNER",
  "useDefaultValue" : true
}
```

2.3 New Functionality in this release

1.0.104	
MSGEN-1389	Remove grid parameters from WebLogic installation files included in the release
MSCOMMON-497	Remove JDK selection from the installer and update the supported JDK check. All servers will use the JDK configured when the domain was created.
MSVALIDATE-515	Remove the need to install a Gothic DAM. It is no longer possible to view results of previous steps while a job is being processed. It may be possible to configure the command line installer to use an external DAM, but that configuration is no longer supported.
1.1.102	
MSGEN-1243	Extend the 1Generalise Algorithm for snapping Landcover features (or any area features) to handle impassable classes - a feature should not be extended if it interacts with a feature of one of these classes.
MSGEN-1244	Extend the snap areas algorithm to process features that overlap the calculated extension geometry. Where a feature is within the extension geometry it should be deleted. When a line crosses the extension geometry or an area overlaps the extension geometry, the portion within the extension geometry should be deleted (the geometry set to the difference). Points that lie on the boundary of the extension area and lines that are wholly or partly on the boundary of the extension area but not inside it will not be chopped or deleted.

2.4 Bugs Fixed in this release

1.0.104	
MSGEN-1317	Prevent <code>building_stellate_short_edges</code> from producing sharp angles
MSGEN-1391	Fix a bug where buffering partitions for National Load child job creation could fail, reporting "MultiPolygon cannot be cast to Polygon"
MSGEN-1395	Fix a bug where line features that extend a very short distance outside the partition boundary were not written to the target dataset.
MSGEN-1397	Buildings with spikes Output from the buildings subflow resulted in 'triangular' buildings or obvious spikes. A number of scenarios have been resolved: <ul style="list-style-type: none"> • Where one source building touches another at an angle • Where one generalised building touches another at an angle • Where a source building is not square; i.e. has angular sides within the building outline • Some other rare cases
MSGEN-1399	Resolve rare cases where building simplification generated spikes (<code>short_edge_removal</code> and <code>stellate_short_edges</code>)
MSGEN-1400	Fix a bug where <code>building_remove_short_edges</code> sometimes generated an error: "failed to invoke <code>building_remove_short_edges</code> Caused by: Lines do not intersect"
MSGEN-1410	Ensure that the ms-generalise-client application includes all required dependent jars (a regression introduced in version 1.1.100).
MSGEN-1413	ScalingGeometryCombiner fails with INVALIDGEOMTYPE. The problem was that it includes a workaround for generation of invalid areas. This failed when we ended up with an invalid geometry that wasn't an area. It has been fixed by verifying the result is an area.

1.1.103	
MSGEN-1396	Reading from a datastore using an Oracle datastore through JNDI fails
1.1.102	
MSGEN-1267	Snap areas fails when the snapping should produce a very thin polygon
MSGEN-1268	Snap Area fails when the area touches the line it needs to snap to
MSGEN-1386	In very rare cases building simplification enters an infinite loop, resulting in an out of memory error
MSGEN-1387	1Generalise does not run jobs on a SOA domain
1.1.101	
MSGEN-1295	When loading an existing classification into the classification UI, filter on attributes which contain several values with space in it could become corrupted, and will need fixing manually. Manual fix: edit all filter rules that use values with space in it, check that they appear correctly and fix those which are wrong.
MSGEN-1265	Snap areas misses some space at some corners

2.5 Known Issues and Unresolved Bugs

ID	Description
1	MSGEN-1315: Short-edge-removal not removing all short edges, leaving some buildings outlines not fully simplified.
3	MSGEN-1327: Develop the capabilities of the integrated Map Viewer, to make it easier to analyse the generalisation results.
5	MSGEN-908: Map Viewer is not available when job extent is defined by a polygon.
8	MSGEN-1393: Syntax error in parameter definition causes the profile UI to silently abort the edit
9	MSGEN-1234: Real attributes in Flowline classes not working. A temporary workaround is to declare the parameter as string and use the conversion built-in functions to convert between real and strings.

3 Installation

Follow the instructions in the 1Spatial Management Suite Installation Guide.

4 1Spatial Product Assistance

If assistance is required while deploying this release, contact either your Distributor or 1Spatial Support.

To contact 1Spatial Support, please visit our website: <http://www.1spatial.com/services/support>

Maximise the value of this release with 1Spatial foundation and advanced training courses. For training enquiries please contact your Account Manager or email training@1spatial.com