



## Release Notes

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## 1Integrate

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Version 2.8.1

18 March 2021

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# 1 Introduction

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## 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

A standard release of 1Integrate.

For users of previous versions, 1Spatial recommends the following before applying any changes to your live environment:

- Please read these release notes and the **Installation Guide** for your application server carefully before installing this release
- Ensure all running and paused sessions are completed
- Back up your live database, including your repository
- Test the release on your test platform

## 1.3 System Requirements

### Operating Systems

This version of 1Integrate is supported on the following platforms:

| Operating System    | Prerequisites  |
|---------------------|--|
| Oracle Linux 7.8    |  |
| Windows Server 2019 | Microsoft Visual C++ 2019 64 bit Redistributable packages<br>Download from this link and pick vcredist_x64.ex<br><a href="https://support.microsoft.com/en-gb/help/2977003/the-latest-supported-visual-c-downloads">https://support.microsoft.com/en-gb/help/2977003/the-latest-supported-visual-c-downloads</a> |

## Application Servers

1Integrate requires an application server and the following are supported (Note that WildFly is provided as part of the installation package and Oracle WebLogic is a pre-requisite that must be installed beforehand):

| Application Server              | Notes  |
|---------------------------------|--|
| Oracle WebLogic Server 12.2.1.3 | Any Edition, must be pre-installed               |
| WildFly 22.0.0                  | Delivered as part of the 1Integrate installation |

## Java JDK

The supported Java 8 (64-bit) JDK depends on which application server you are using:

| Application Server              | Java JDK                    |
|---------------------------------|-----------------------------|
| Oracle WebLogic Server 12.2.1.3 | Oracle JDK (8 update 281)   |
| WildFly 22.0.0                  | AdoptOpenJDK (8 update 282) |

## Database Platforms

A database is required to act as the 1Integrate repository to store **configuration**. In addition, databases can be used as a source for **spatial data**. The following database platforms are supported with the following restrictions:

| Database   | Restrictions  |
|--|---|
| Oracle Database 12c R2 (Any Edition)<br>Oracle Database 19c R1 (Any Edition) | None  |
| Microsoft SQL Server 2019  | When used as data source, requires FME desktop (see below).<br>When used as a rules repository, only supported on WildFly application server. |
| PostgreSQL 12.4/12.6 (with PostGIS 3.1)                                      | When used as rules repository, only supported on WildFly application server.  |

### Optional FME desktop integration

For full data format support please check the 1Integrate online help under “Basic Steps-> Data Stores -> Supported Data Stores”:

[https://1spatial.com/documentation/1integrate/v2\\_8/Topics/Data%20Stores/Supported\\_Datastores.htm](https://1spatial.com/documentation/1integrate/v2_8/Topics/Data%20Stores/Supported_Datastores.htm)

| Component                   | Edition              | Reason  |
|-----------------------------|----------------------|---|
| FME Desktop 2018.1 (64-bit) | Professional Edition | Read or write CSV, Bentley Microstation DGN, Autodesk DWG/DXF<br>Write Esri File Geodatabase  |
| FME Desktop 2018.1 (64-bit) | Esri Edition         | Formats listed above plus read or write Esri Enterprise Geodatabase. Requires installation of one of: <ul style="list-style-type: none"> <li>• ArcGIS for Desktop 64-bit Background Geoprocessing</li> <li>• ArcGIS Pro 64bit</li> <li>• ArcGIS for Server</li> </ul> |
| FME Desktop 2018.1 (64-bit) | Database Edition     | Formats listed above plus write to Microsoft SQL Server   |

### Web Browsers

This product works with most of the recent versions of Chrome, Firefox and Internet Explorer. The specific versions that have been tested for this release are:

| Browser   |
|---|
| Microsoft Internet Explorer 11  |
| Google Chrome 88  |
| Mozilla Firefox 80 <b>No longer run through the automated tests so support cannot be guaranteed until a future release.</b> |

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

### Monitor Resolution

We recommend a minimum resolution of 1080p (1920×1080) for the best experience using the 1Integrate interface.

## 2 Release details

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### 2.1 Summary of Changes

#### Notable differences in 1Integrate 2.8.1

- WFS data store: New OGC Web Feature Service data store supporting GeoJSON and OAuth.
- Support for PostgreSQL 12.4 and PostGIS 12.4 (as both a repository and data store format).
  - o **Note:** Only this version is now officially supported and 1Integrate will not start when using PostgreSQL 9.4 or older repository.
- Remove PostGIS FME datastore (**Note: PostGIS support is now only via inbuilt PostGIS data store**)
- Support XYZM in SQL Server Data Store
- Configure security settings via settings.properties
  - o **Note:** Configuring HTTPS or LDAP or Securing cookies on WildFly is now made simpler by using settings.properties rather than modifying the WildFly files directly. If upgrading from a previous release then be sure to follow the new instructions in the Security Settings topic.
- New API call to get the number of engines, their availability and the queued jobs
- Can clone an entity via REST API
- Java version Support:
  - o Oracle Java 8 update 281 with WebLogic
  - o AdoptOpenJDK 8 update 282 with included WildFly
- **Note:** The structure of the settings.properties file has changed. When upgrading, do not replace the file in the new installation with the previous installation's settings.properties. Instead, open both settings.properties files and update the appropriate settings from the old installation to the new installation.
- **Note:** Due to recent updates, Firefox is no longer tested automatically so support cannot be guaranteed. The aim is to recontinue support in a future release.

#### Notable differences in 1Integrate 2.8.0

- **Support for MS SQL Server 2019 (as both a repository and data store format). Note: Only this version is now supported.**
- **Support for Microsoft Visual C++ 2019 64 bit Redistributable**
- **Support for Oracle Enterprise Linux 7.8**
- Added support for ArcGIS Portal and related tables in the Esri Feature Service Data Store
- Ability to temporarily disable a task within a session
- Ability to override the session extent for an open data task
- New "Singleton" system class (sys:singleton) for performing action or rule logic exactly once
- New "session" scoped temporary value, and renaming of existing "local" and "global" scope to "object" "task" respectively within the UI (API functionality is unchanged)
- Support for deploying 1Integrate as a service on WildFly, on Windows only. See installation guide for details.
- **Note: Backups taken from 1Integrate 2.8 onward may not work in older versions of 1Integrate if they use some of the new features**
- Other fixes, improvements

## Notable differences in 1Integrate 2.7

- Support for WildFly 20.0.1
- **Some references to Session Queues have been renamed to Engines, and this effects installation steps for WildFly. Please see 3.1** Special notes for upgrading to 1Integrate 2.8.0 or 2.8.1 on WildFly.
- Support for Windows Server 2019 (Windows Server 2012 no longer supported)
- Support for AdoptOpenJDK in addition to Oracle JDK (Please see System Requirements: Java JDK for details on version numbers and supported application servers)
- Updated database support for the 1Integrate repository (Please see System Requirements: Database Platforms)
- New datastore: Esri ArcGIS server (for Esri feature services)
- Ability to give tasks a custom label to more easily identify them within sessions (**Note: REST API updates have been made to enable this feature, please see the updated REST API guide**)
- Ability to toggle all indexes on/off when configuring a datastore
- Role-based authorization available in WebLogic installations
- Only available datastore types are listed (dependent on FME integration)
- Ability to include a custom banner on the login page
- Other fixes, improvements

## Notable differences in 1Integrate 2.6

- Support for Oracle Database 19c (Oracle Database 11 no longer supported)
- Ability to restrict open data task extent to that of previously opened data
- New built-in functions for schema checking (class\_get\_attribute\_type, class\_get\_attribute\_value, class\_get\_attributes, class\_is\_attribute\_null)
- New datastore support: Google BigQuery
- New landing page
- Ability to specify which ordinate to ignore when reading XYZM (measured, heighted) data
- **Note the following change to the SOAP API: the asynchronous endpoints and synchronous endpoints have been merged and the endpoint and namespace renamed from studio\* to integrate\***

## Notable differences in 1Integrate 2.5

- Support for PostGIS (PostgreSQL 9.5) data out-of-the-box without the need for FME licenses
- Support for FME 2018.1 (**Note: Using FME 2018 via Data Stores on Linux when running on WebLogic can cause crashes which will be fixed in a later release**)
- PostGIS datastore using FME not supported on Linux
- Use more meaningful names when downloading backup files
- New copy\_attributes built-in operation
- Support for Java 1.8 update 211 (as well as update 141)
- Security improvements
- Other fixes, improvements

## 2.2 New functionality and bugs fixed in this release

### New functionality

| 2.8.1      |   |
|------------|---|
| MSINT-2046 | Introduce a system warning when approaching licence expiration date                       |
| MSINT-2416 | Allow users to choose between XYZ or XYM for XYZM data via SQL Server Data Store          |
| MSINT-2434 | Configure security settings via settings.properties                                       |
| MSINT-2476 | New API call to get the number of engines, their availability and the queued jobs         |
| MSINT-2569 | Show which tasks were disabled in the Cache Viewer session tasks tab.                     |
| MSINT-2585 | WFS data store: New OGC Web Feature Service data store supporting GeoJSON and OAuth.      |
| MSINT-2666 | Clone an entity via REST API  |
| MSINT-2623 | Remove PostGIS FME datastore (PostGIS support is now only via inbuilt PostGIS data store) |
| MSINT-2622 | Support PostgreSQL 12.4 and PostGIS 12.4  |
| MSINT-2639 | Java version Support: Oracle Java 8 update 281 with WebLogic                              |
| MSINT-2653 | Java version Support: AdoptOpenJDK 8 update 282 with included WildFly                     |

### Bugs fixed

| 2.8.1      |   |
|------------|---|
| MSINT-2799 | Unable to run a session with special characters in datastore password   |
| MSINT-1907 | copy_attributes builtin not locating class attributes when specifying attributes to exclude   |
| MSINT-2119 | The error details text on the Licence validation error page is almost invisible   |
| MSINT-2329 | Actions or rules referencing All Classes fails with UNKNOWN CLASS if run before any Open Data tasks   |
| MSINT-2350 | 00032528: Unable to backup Session with no classes selected in open data task   |
| MSINT-2385 | REST API doesn't return correct state for a partitioned session   |
| MSINT-2470 | Don't show the FME datastores if the environment's FME build number is below the minimum supported version                                      |
| MSINT-2525 | Do not load 1Spatial news on the landing page   |
| MSINT-2557 | CAD datastore unable to change attribute type mapping   |
| MSINT-2567 | Opening non-spatial File Geodatabase data using the inbuilt GDAL Data Store in a session with an extent restriction causes the engine to crash. |
| MSINT-2574 | 1Integrate ignores the temp.directory setting   |
| MSINT-2607 | Copying a file based datastore does not copy the uploaded file  |
| MSINT-2613 | 1Integrate REST API doesn't support CORS (cross-origin resource sharing) requests   |
| MSINT-2705 | Installation guide update to clarify SQL Server repository user creation  |
| MSINT-2709 | Large files between 500Mb and 1Gb fail upload to a data store when using a PostgreSQL repository.   |
| MSINT-2725 | ArcGIS Feature Service Data Store does not handle incorrect polygon ring direction  |



|            |   |
|------------|---|
| MSINT-2730 | 1Integrate status is incorrectly set to warning even with supported SQL server version  |
| MSINT-2731 | Datastore input mapping attribute indexes are unset on upgrade to 1Integrate v2.8.0 (workaround if already upgraded is to download and re-upload the data store through the UI or API). |
| MSINT-2735 | REST API - Data store GET request is not returning the correct value for whether input mapping attributes are set to "report"   |
| MSINT-2739 | ArcGIS Server Service that does not expose layer types can't be spatially filtered  |

## 2.3 New functionality in previous releases

Note that not all releases add new functionality - bug fixes are listed in a separate table.

| <b>2.8.0</b>  |  |
|---|--|
| MSINT-453   | New "Singleton" system class (sys:singleton) for performing action or rule logic exactly once  |
| MSINT-1400  | Support for Microsoft Visual C++ 2019 64 bit Redistributable   |
| MSINT-1570  | Support for Oracle databases that have no locator or spatial module installed  |
| MSINT-2103  | Ability to temporarily disable a task within a session   |
| MSINT-2132  | Support for MS SQL Server 2019   |
| MSINT-2200  | Support for deploying 1Integrate as a service on WildFly, on Windows only. See installation guide for details.   |
| MSINT-2262  | New "session" scoped temporary value, and renaming of existing "local" and "global" scope to "object" "task" respectively within the UI (API functionality is unchanged) |
| MSINT-2454  | Esri Feature Service Data Store: Authentication via Portal   |
| MSINT-2481,<br>MSINT-1569                               | Scripts and documentation for installing 1Integrate as a service on WildFly, on Windows.   |
| MSINT-2512  | Ability to override the session extent for an open data task, to open all data.  |
| MSINT-2520  | Latest Java patch support  |
| MSINT-2529  | Esri Feature Service Datastore: Related Non Spatial Objects  |
| -   | Support for Oracle Enterprise Linux 7.8  |
| <b>2.7.1</b>  |  |
| MSINT-2334  | Improved information if data store is unavailable (e.g. FME is disabled or custom data store removed)  |
| MSINT-2389  | Support AdoptOpenJDK 8 update 265  |
| <b>2.7.0</b>  |  |
| MSINT-1463  | Toggle all Indexes On/Off within datastore input mapping   |
| MSINT-1664  | Ability to include a custom banner on the login page   |
| MSINT-1853  | Support role-based authorisation when deployed to WebLogic   |
| MSINT-2007,<br>MSINT-2283,<br>MSINT-2304,<br>MSINT-2322 | Upgrade to WildFly version 20  |
| MSINT-2087,<br>MSINT-2158,<br>MSINT-2256                | Users can add custom names to tasks within a session, for improved readability   |
| MSINT-2113,<br>MSINT-2139,                              | New datastore: Allow read and write to Esri ArcGIS server feature services   |

|  |  |
|--|--|
| MSINT-2140,<br>MSINT-2144  |  |
| MSINT-2128   | Support Java 8 update 251  |
| MSINT-2129   | Support Windows Server 2019  |
| MSINT-2130   | Support AdoptOpenJDK 8 update 252  |
| MSINT-2137   | Only available datastore types are listed (dependent on FME integration)   |
| MSINT-2203   | Reduce verbose error logs  |
| <b>2.6.1</b>   |  |
| MSINT-2026   | Consolidated SOAP API endpoints  |
| <b>2.6.0</b>   |  |
| MSINT-1430   | Show which session queue is running a session  |
| MSINT-1461   | Support Oracle Database 19c R1 (Database 11g no longer supported)  |
| MSINT-1564   | Support for measures for GDAL data stores  |
| MSINT-1994   | New built-in functions (class_get_attribute_type, class_get_attribute_value, class_get_attributes, class_is_attribute_null)                                    |
| MSINT-1922   | Data Store setting to specify whether to read M or Z when reading XYZM data  |
| MSINT-1834   | Enable Windows Authentication for the FME SQL Server Data Store  |
| MSINT-2001<br>MSINT-2002<br>MSINT-2003<br>MSINT-2004               | New datastore type: Google BigQuery  |
| MSINT-2029   | Restrict Open Data Task's extent to that of convex hull of already loaded data   |
| MSINT-2034   | New landing page and menu bar  |
| <b>2.5.1</b>   |  |
| MSINT-1987<br>MSINT-1970<br>MSINT-1965<br>MSINT-1964<br>MSINT-1948 | Security: Various security improvements  |
| MSINT-1947   | Update to latest JQuery  |
| <b>2.5.0</b>   |  |
| MSINT-1643   | Out-of-the-box ability to read and write PostGIS data from PostgreSQL 9.5 without the need for FME (PostGIS via FME on Linux no longer supported)              |
| MSINT-1997   | Support Java 1.8 Update 211  |
| MSINT-1465   | Upgrade to FME 2018 ( <b>Note: Using FME 2018 via Data Stores on Linux when running on WebLogic can cause crashes which will be fixed in a later release</b> ) |
| MSINT-1839   | New copy_attributes Built-in operation to copy matching attributes from one object to another  |
| MSINT-485  | Use more meaningful names for files created by downloading entities  |
| MSINT-1567   | Improve data upload form to be the same as rules upload form   |
| MSINT-1508   | Allow rs_data_loaders role to upload files   |
| MSINT-1985   | WebLogic, default users changed to match WildFly   |

## 2.4 Bugs Fixed in previous releases

|              |   |
|--------------|---|
| <b>2.8.0</b> |   |
| MSINT-1912   | Error message "unexpected geometry type: 12" when dealing with multisurface feature |

|                           |   |
|---------------------------|---|
| MSINT-2328                | Accented characters corrupted in xml backups  |
| MSINT-2401                | Cache viewer not always finding the feature for a non-conformance, when stepping through non-conformance report     |
| MSINT-2437                | Unable to dismiss large error pop-ups   |
| MSINT-2515                | The order object reports are retrieved from the database is not always the same order with which they were inserted |
| <b>2.7.1</b>              |   |
| MSINT-2418                | Unable to load FME PostGIS data store after loading cache viewer  |
| MSINT-2388                | Error message persists when encountering an upload/restore error  |
| MSINT-2276                | Correction to XOR condition description in UI   |
| MSINT-2351                | "Hide stack traces" mode causes repeated error messages   |
| MSINT-2361                | Indexing appears checked at class level when attributes are un-checked  |
| MSINT-2384                | Features failing to write out to Shape via GDAL   |
| MSINT-2390                | APIs not reporting correct indexing state of primary geometry attribute   |
| MSINT-2440                | Unable to deselect base classes within Inheritance based schemas  |
| <b>2.7.0</b>              |   |
| MSINT-1498                | Error in UI when running a session with a multi-polygon extent  |
| MSINT-1796                | Validation Report ignores descriptions of rules when running a folder   |
| MSINT-1852                | Action Map output message corrected (from "fixed" to "applied")   |
| MSINT-1949                | Unable to write out file based datastores via FME   |
| MSINT-2109                | Action Map does not return detailed counts in REST API  |
| MSINT-2166                | Ensure the GDAL writer can write classes that contain a colon   |
| MSINT-2176,<br>MSINT-2181 | Risk of data loss when writing shape files through GDAL   |
| MSINT-2194                | GDAL datastore unable to write out points and multipoints in the same layer   |
| MSINT-2320                | Cache viewer broken in IE 11  |
| MSINT-2321                | Broken feature selection in the cache viewer  |
| MSINT-2325                | Inconsistent session results via REST API   |
| MSINT-2326                | Failing WMS request parsing   |
| MSINT-2337                | Broken XML report download button on the Rule Conformance Results page  |
| MSINT-2340                | Session stuck on polygon WKT open data restriction  |
| MSINT-2347                | When hiding stack traces, errors for sessions not currently selected are lost                                       |
| <b>2.6.2</b>              |   |
| MSINT-2165                | OGC simple built-in function can stop session with 'Error in nesting of rings in polygon' for some invalid polygons |
| MSINT-2157                | Generating the non-conformance hotspot can cause 'CLRGEOM: Geometry contains no coordinate data' errors             |
| <b>2.6.1</b>              |   |
| MSINT-2136                | Google BigQuery performance and query size fix  |
| MSINT-1600                | FME FileGDB output not respecting character length  |
| <b>2.6.0</b>              |   |
| MSINT-1603                | PostgreSQL repository: Error when uploading large files   |
| MSINT-2078                | Height built-in function throws exception for non-heighted geometries   |
| MSINT-2008                | Remove WildFly library classpath warning in logs  |
| MSINT-1851<br>MSINT-1911  | rule_hotspot_geometry built-in function isn't restorable from a 1Integrate for ArcGIS .rules backup                 |

|              |   |
|--------------|---|
| MSINT-1769   |   |
| MSINT-2024   | Two dots in a FGDB data store name gets blocked by security check   |
| MSINT-2027   | Job graphs don't work consistently across all browsers  |
| MSINT-2052   | PostGIS data stores: Cannot set 'Output Mapping' to a different target table to source                    |
| MSINT-2061   | GDAL data stores leave file handles open, leaking resources   |
| MSINT-2067   | WebLogic startup errors related to classes implementing the Java EE spec                                  |
| MSINT-2019   | Data store names inconsistently referenced in file upload errors  |
| MSINT-1827   | NullPointerException when generating hotspot for spatial relationships in certain conditions              |
| MSINT-1315   | nearest_point built-in function default value for third parameter (return single point) should be 'true'  |
| <b>2.5.0</b> |   |
| MSINT-1860   | Open data tasks error when opening two tables into the same class   |
| MSINT-1869   | Loading a large ontology to a data store takes several minutes to upload/select data store/use as context |
| MSINT-1296   | When reporting missing built-in function, report the rule that contains it                                |
| MSINT-1524   | Cache viewer not showing multi-part geometries  |
| MSINT-1927   | Cache Viewer rendering wrong for Geodetic data with reversed axis ordering                                |
| MSINT-1935   | Cache viewer doesn't display Advanced Style page correctly  |
| MSINT-1879   | Ontology is not backed up with the data store   |
| MSINT-1881   | Type error starting session when ontology changes type  |
| MSINT-1923   | Data Gateway: Enable definition of user-defined classes through API to prevent validating report objects. |
| MSINT-1931   | ORA-00054: resource busy and acquire with NOWAIT specified sometimes seen at startup                      |
| MSINT-1976   | FME PostGIS Data store: Datatype int is read as fme_varchar   |

## 2.5 Known Issues and Unresolved Bugs

| ID         | Description   |
|------------|---|
| MSINT-1465 | Using FME 2018 via Data Stores on Linux when running on WebLogic can cause crashes which will be fixed in a later release   |
| MSINT-1865 | <p>Upgrading to version 2.3.4 from a previous release may cause the following error when running a session "gothic.main.GothicException: load of native library C:\Windows\TEMP\gothic-w64-5.61\gothic_w64.dll failed"</p> <p>Workaround is to shut down 1Integrate services and delete the folder named above e.g. 'C:\Windows\TEMP\gothic-w64-5.61\', then restart 1Integrate and continue.</p> |
| MSINT-1605 | <p>'javax.naming.NameNotFoundException: Name "PersistenceUnit"' errors occasionally seen in the logs when running on Linux.</p> <p>This can be avoided by using a different random number generator or by adding a start server argument to 1Integrate by adding the following startup parameter on the application server:</p> <pre>-Djava.security.egd=file:/dev/./urandom</pre>                |
| MSINT-859  | <p>Uploading very large files (several Gb) to a data store may result in timeout errors. To increase the timeouts:</p> <p><b>On Wildfly:</b> go to ..\wildfly-9.0.1.Final\standalone\configuration and edit stanadalone.xml</p>   |

|           |   |
|-----------|---|
|           | <p>line 381 to increase from 300s (5 mins) to a larger value e.g. 1200s (20 mins):</p> <pre>&lt;subsystem xmlns="urn:jboss:domain:transactions:2.0"&gt;     ...     &lt;coordinator-environment default-timeout="300"/&gt;</pre> <p><b>On WebLogic</b> Increase TransactionTimeout property in Configuration tab of DataStoreController in the WebLogic admin server</p>  |
|           | FGDB data cannot be downloaded from a data store containing non-standard characters in its name, or with a name longer than 145 characters.   |
| MSINT-688 | The Session Description fails on CheckRules and ApplyAction tasks containing a mixture of folders and single entities.  |
|           | The Microsoft SQL Server Spatial data store does not support reading or writing tables that contain multiple geometry columns.  |
|           | 1Integrate allows spatial columns to contain a mixture of geometry types – many formats force a geometry column to contain only points, lines or areas. When such data is written to Shapefile format via FME, there will be a shapefile for each geometry type whose name will have the geometry type appended, e.g. "Road_line."  |
|           | <p>It is not possible to create any geometry properties when importing data through the Comma Separated Values data store. Contact 1Spatial Customer Support for information about how to create geometry using 1Integrate actions. In order to be able to create the geometry, the schema for a CSV data store always includes a geometry attribute.</p> <p>If a geometry attribute is to be created later, the Allow Invalid Geometries option must be selected when importing data to allow them to be temporarily null. If no geometry is to be created, the geometry attribute should be deselected from the schema.</p>   |
|           | Unzipping the main 1Integrate zip file can fail using the built-in Windows "Extract All" facility due to a "Path too long error". Use a third party zip program such as 7-Zip or extract the release to the top level directory of a drive and move it afterwards to the desired location.  |
| RST-4774  | After a file has been uploaded through the web service, the name of the file is blank in the Input Details of the data store in the UI. Test Connection, Get Schema and opening data from the data store will work, but it may be confusing.  |
| RST-4779  | When an object fails to import through FME, the co-ordinates of the MBR of the feature are reported when known. However, the values for maxX and minY are transposed.   |
| RST-4781  | <p>1Integrate may fail to load the FME Objects DLL, with an error message similar to:</p> <pre>java.lang.UnsatisfiedLinkError: C:\Program Files (x86)\FME_2013_b13450\fmeobj_java.dll: The specified procedure could not be found</pre> <p>and /or</p> <pre>java.lang.NoClassDefFoundError: Could not initialize class COM.safe.fmeobjects.FMEObject</pre> <p>The most common cause of the error is a problem with the configuration of the PATH environment variable.</p> <p>If FME is installed on Windows to a location where the path to the file includes spaces – for example C:\Program Files (x86)\FME, it must appear in the PATH environment variable in the shortened 8.3 name, e.g. C:\Progra~2\FME. It may be necessary for the FME entry to be the first entry in PATH to avoid an error similar to the one described above.</p> <p>On Linux, a similar error may be reported if the &lt;FME_HOME&gt;/fmeobject directory has not been added to LD_LIBRARY_PATH as described in the Installation Guide.</p> |

|           |   |
|-----------|---|
|           | <p>When loading MapInfo TAB data on Linux environments, the Data Store does not automatically identify the Coordinate Reference System (CRS). Users can work around this by specifying the CRS in the 'Coordinate Reference System' field on the 'Input Details' tab of the Data Store. The string required starts 'FME=' followed by the required FME CRS. For example if WGS84 is required, enter the following:</p> <p>FME=LL-WGS84</p> <p>Or</p> <p>FME=EPSG:4326</p> |
| MSINT-155 | <p>The Gothic native library could not be initialised (Linux only) – often caused by the ICU libraries needing to be relinked after a machine reboot</p>  |
| MSINT-381 | <p>Sessions will not run if a networked drive is set in the PATH Environment Variable on an Server that is offline</p>  |

## 3 Installation

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Follow the instructions in the Installation Guide for your application server.

1Integrate will automatically upgrade the repository from the existing release on initial startup. Ensure that all running and paused sessions are stopped before upgrading, and we recommend creating a backup of the repository database first.

Follow the installation guide to install the new release in alongside the existing version and use the same database connection details for the repository. For WildFly installations the easiest way to configure is usually to copy the files from the SETTINGS folder from the old installation folder to the new installation folder, however **check the release notes as some versions (e.g. 2.8.0 or 2.8.1) contain changes to the structure of the settings file and so cannot be replaced by the older settings file.**

When the new version is started it will automatically upgrade the repository if necessary.

**Note that for some upgrades (these should be noted in the release notes) this can be a one-way upgrade, once you have started the new version then the repository is upgraded and can no longer be used by the older version, or easily downgraded. For this reason, it is recommended that the repository schema is backed up first.**

When performing an upgrade of 1Integrate on WebLogic (an uninstallation of an old version followed by the installation of a newer version) it is important to uninstall the existing version of 1Integrate using the installer that was packaged with that release. Using a newer, incompatible version of the installer will result in errors.

For example, if you are replacing 1Integrate v2.6.2 with 1Integrate v2.7.1, your steps will be:

1. Uninstall 1Integrate v2.6.2 with the installer packaged in the v2.6.2 release
2. Install 1Integrate v2.7.1 with the installer packaged in the v2.7.1 release

### 3.1 Special notes for upgrading to 1Integrate 2.8.0 or 2.8.1 on WildFly

From **2.8.0** the **start-SessionQueue.cmd** and **start-SessionQueue.sh** scripts have been renamed to **start-Engine.cmd** and **start-Engine.sh**.

From **2.8.0** some properties in the **settings.properties** file have been renamed (e.g. engine.http.port) and from **2.8.1** some new properties were added, so you cannot copy across an old **settings.properties** file from a previous version of 1Integrate. Instead open the old and new settings.properties files and copy across the appropriate settings.

From **2.8.1**, Configuration of HTTPS or LDAP is now easier and done from the settings.properties file. Follow the updated Security Settings topic in the 1Integrate online documentation.

### 3.2 Special notes for upgrading from 1Integrate 2.3.3

Upgrading to version 2.3.4 from a previous release may cause the following error when running a session  
“gothic.main.GothicException: load of native library C:\Windows\TEMP\gothic-w64-5.61\gothic\_w64.dll failed”

A workaround is to shut down 1Integrate services and delete the gothic-\* folder named in the error message above e.g. 'C:\Windows\TEMP\gothic-w64-5.61\'', then restart 1Integrate and continue. Note that the location of this Temp folder is defined by the current user's TEMP environment variable and so it might point to a different location, such as %userprofile%\AppData\Local\Temp

### 3.3 NIC/Network Adaptor Configurations

For servers with multiple network adaptors, you must specify which adaptor/network to use for grid communication between the components. The Grid discovery used to find session queues by default uses the first found non-loopback address, for example a machine with Ethernet adaptors 'eth0' & 'eth1' and Local Loopback 'lo' will likely use 'eth0'.

#### For Servers with multiple Networked Adaptors

The following properties must be set to specify the adaptor to use:

- **grid.local.address** - specifies the IP address of the network adaptor used for grid communication.
- **grid.communication.tcp.port** and **grid.discovery.tcp.port** - allows environments to specify known ports (for example, when using a firewall).

The communication port must be a minimum of 100 greater than the discovery port, in order to avoid conflict.

If there is only one adaptor and you do not need to modify the adaptor behaviour, then the properties can be omitted to provide the default behaviour.

For WildFly, the following properties must be included in the **settings.properties** file:

```
grid.local.address=[NIC Address]
grid.discovery.tcp.port=[default: 51300]
grid.communication.tcp.port=[default: 51401]
```

For WebLogic, include the following in the Server Start Arguments (within the WebLogic Server Administration Console):

```
-Dgrid.local.address=[NIC Address]
-Dgrid.discovery.tcp.port=[default: 51300]
-Dgrid.communication.tcp.port=[default: 51401]
```

#### Standalone off-network environment

For non-networked standalone environments where there is not an active NIC/Network Adaptor, the loopback localhost can be used:

```
(-D)grid.local.address=127.0.0.1
```



## 4 1Spatial Product Assistance

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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](mailto:training@1spatial.com)

## 5 Oracle JDBC Driver Distribution License Terms

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