1Integrate

Release Notes
Version 4.2.0

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Introduction

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.

Release Notes for previous 1Integrate versions are available online.

For more information visit our WebHelp which includes Installation Guides, Quick Start Guides, worked examples and more.

Purpose of Release

A standard release of 1Integrate.

Migration Guidance

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 repository database
- Deploy the new version and test the release on your test platform

Please also pay attention to the Notable Differences section, which lists changes which may affect your existing processes or require changes to your configuration.

System Requirements

Operating Systems

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

OS	Notes/Caveats
Red Hat Enterprise Linux 8.9	
Windows Server 2022	Microsoft Visual C++ 2022 64 bit Redistributable packages Download from this link and pick vcredist_x64.exe https://support.microsoft.com/en-gb/help/2977003/the-latest-supported-visual-c-downloads

Application Servers

1Integrate requires an application server and the following are supported.

Application Server	Notes/Caveats
Oracle WebLogic Server 14.1.1	Any Edition, must be pre-installed
WildFly 26.1.3.Final	Delivered as part of the 1Integrate installation

Java JDK

The supported Java 11 (64-bit) JDK depends on which application server you are using.

Application Server	Java JDK
Oracle WebLogic Server 14.1.1	Oracle JDK (jdk-11.0.21)
WildFly 26.1.3.Final	Eclipse Temurin (jdk-11.0.21+9)

Repository Database Platforms

A database is required to act as the 1Integrate repository to store configuration. The following database platforms are supported with the following restrictions.

Database	Restrictions
Oracle Database 19c R1 (Any Edition)	None
Microsoft SQL Server 2019	Only supported on WildFly application server.
PostgreSQL 12.4	Only supported on WildFly application server.
H2 Database Engine	This is intended for local, development work and will enable you to get started quickly. Warning: Do not use the default H2 database in production environments.

FME Flow (formerly FME Server) Integration

The FME Flow Data Store enables the transforming of data from a format that 1Integrate does not natively support into one that it does.

Component	API Version	Software Version
FME Flow	FME Flow REST API V3	2023.1

Containerisation Support

The containerisation and orchestration technologies that are supported.

OS	Notes/Caveats
Docker	Please contact 1Spatial support for access to a docker image
Kubernetes 1.28.3	To streamline the deployment of 1Integrate on Kubernetes, there is a published official 1Integrate Helm chart. For the Helm chart and other information, please see here: https://github.com/1SpatialGroupLtd/helm-charts

Web Browsers

1Integrate works with most of the recent versions of Edge, Chrome and Firefox. The specific versions that have been tested for this release are.

Tested Browsers
Microsoft Edge 120
Google Chrome 120
Mozilla Firefox 120

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

Release Details

Notable Differences in 4.2.0

- New Data Stores for reading common CAD formats (WildFly only):
  - Autodesk DWG
  - Bentley MicroStation Design V8 DGN
- Withdrawal of the following Data Stores which required an FME Form (formerly Desktop) license:
  - Autodesk AutoCAD DWG
  - Bentley MicroStation Design (V8)
  - Esri Enterprise Geodatabase
- Updated Linux support to Red Hat Enterprise Linux 8.9
  - This is a breaking change upgrade and 1Integrate will not run on the previously supported version
- Updated Windows Server support to Windows Server 2022

- The Wildfly settings.properties file has been updated to only contain the minimum required settings
    - All the available settings are now listed in the WebHelp
- Ability to add colour to your Rule & Action Comments
- Ability to focus on a particular node in your Rules & Actions
- Ability to resize columns on some pages (Data Stores, Sessions and Task Results)

Future Withdrawal Notices
- From 1Integrate 5.0 WebLogic will be withdrawn as an application server option

New Features in 4.2.0

ID	Description
MSINT-1856	New Built-In to print date to Custom Date Formatted strings
MSINT-2391	Prevent the primary geometry from being unindexed via the API
MSINT-3904	Added a new parameter to the GML data store to read all geometries as 2D
MSINT-4148	Improve support for reading empty geometries with Esri File Geodatabase, Esri Shapefile, MapInfo Tab, Microsoft Access & OGC GeoPackage Data Stores
MSINT-4535	Improve the rendering of outlines on 3D polygons in the Map Viewer
MSINT-4571	2D features will now appear semi-transparent in the Map Viewer
MSINT-5503	New DWG Data Store called Autodesk DWG (WildFly only)
MSINT-5504	New DGN Data Store called Bentley MicroStation Design V8 DGN (WildFly only)
MSINT-5586	Rename the FME Server Data Store to FME Flow Data Store
MSINT-5625	Add hover colour and different cursor to resize handles
MSINT-5693	Ability to filter Sessions by their current status in the Navigation Pane
MSINT-5694	Simplify the default settings in the settings.properties file (WildFly only)
MSINT-5734	Do not remove entities from the 'Available' pick lists, show them as greyed out instead
MSINT-5736	Ability to change the colour of comments within a Rule/Action
MSINT-5749	Improve the presentation of Action Map task chips
MSINT-5758	Support inheritance on the Data Store screen including allowing the configuration of inheritance for schema only data stores
MSINT-5759	Attribute references are visible on the Data Store screen and can be manually removed
MSINT-5767	Data that is updated via a Transform Schema task should allow Commit
MSINT-5776	Improve the presentation and configuration of geometries in the Replay Viewer
MSINT-5777	Add tooltips to the move node up and down arrows in the Rule and Action builder
MSINT-5788	Ability to Resolve Subtypes in the Esri File Geodatabase Data Store

MSINT-5795	1Integrate will no longer startup against a newer repository version
MSINT-5796	Use the blue colour for disabled tasks in a Session Task Template
MSINT-5811	Ability to focus parts of the subtree in the Rule and Action builder
MSINT-5814	Reintroduce "Any" to Loop over Collection
MSINT-5815	Improve support for the "Any" class
MSINT-5816	Remove the empty 'Else' from 'If...Then...Else' node title
MSINT-5820	Rule Builder: Change optional link colour when filled
MSINT-5823	Rule Builder: Disable collapsing of links
MSINT-5860	Rule Builder: Hide any/one char fields when using perl matching
MSINT-5862	Rule Builder: add option to disable new node auto focus
MSINT-5863	Avoid confusing downstream failures by throwing an error when setting a geometry to null in an action
MSINT-5868	Update the presentation of disabled tasks that have been skipped
MSINT-5882	Allow some table columns on the session and data store pages to be resizable
MSINT-5883	Make transitions in the Rule/Action builder smooth
MSINT-5884	Add buttons for Rule/Action builder controls such as zoom in and out
MSINT-5932	Allow 1Integrate repository connection pool tuning on WildFly to allow for more performance tuning options
MSINT-5940	Disable interactions with optional nodes inside imported templates
MSINT-5959	Update Linux support to Red Hat Enterprise Linux 8.9
MSINT-5960	Drop the FME Desktop-based Data Stores: Autodesk AutoCAD DWG/DXF, Esri Enterprise Geodatabase & Bentley MicroStation Design (V8)
MSINT-5995	Contextual Data Store now provided as a product extension
MSINT-5996	Update Windows Server support to Windows Server 2022
MSINT-5998	Add indication for which attributes are indexed to the Attribute Value dropdown in the Rule/Action builder
MSINT-6010	Improve Map Viewer tile generation performance for larger datasets
MSINT-6011	The Map Viewer enable all layer button now take all visible layers into account
MSINT-6015	Allow 1Integrate to be configured to allow users to login to the 1Integrate UI using OpenID Connect (OIDC) authentication with the Keycloak OIDC provider
MSINT-6023	Fix superclass name presentation in node titles in the Rule/Action builder
MSINT-6027	Improve Map Viewer compatibility with data that does not provide a CRS by updating the default Map Viewer CRS to Web Mercator (EPSG:3857)
MSINT-6031	Update FME Flow (formerly Server) support to 2023.1
MSINT-6034	Remove the tooltip on attribute type on the schema mapping screen to avoid it obscuring the type selection drop down
MSINT-6035	Custom attributes added to a Data Store class default to string
MSINT-6036	New context menu options for inserting nodes above and below a node

MSINT-6037	Ensure resource names work as expected throughout the UI no matter the characters they contain
MSINT-6054	Add padding to the right of add buttons on the Navigation Pane
MSINT-6061	Improve readability by renaming division, product, difference and sum nodes
MSINT-6064	Static values in the Rule/Action builder consistently now display their value in the title
MSINT-6100	When running a folder of Actions or Rules, Action and Rule Templates are now correctly skipped
MSINT-6125	Add a "Collapse All" folders option to the Navigation Pane

Bugs Fixed in 4.2.0

ID	Description
MSINT-4805	Updated the report_invalid Built-in Function to handle null geometries
MSINT-5450	Force all primary key attributes to be enabled if the class is enabled
MSINT-5477	Fixed users occasionally getting "invalid username or password" on login for valid credentials due to their browser sending an expired token along with the login request
MSINT-5491	Add ellipsis to long Session Parameters in the Session Parameter preview window
MSINT-5506	Fix "Expand All" expanding custom classes on a Data Store
MSINT-5769	Fix Non-Spatial Filters using Session Parameters not being run as a Database Query
MSINT-5774	FGDB Data Store: Fix deriving attributes for Classes with no objects
MSINT-5784	FGDB Data Store: Fix Copy To creating a layer for each object when a class name contains a space
MSINT-5852	Fix If...Then...Else not displaying error messages even when its in an invalid state on the Rule and Action builder
MSINT-5856	Fix Reference nodes so they correctly display the Ref Name field
MSINT-5872	Fixed error handling for the Map Viewer layer style processing so that uploading an invalid layer style file does not white-out the whole UI
MSINT-5916	Allow replacing nodes that have variable child counts so long as they are within bounds
MSINT-5941	Map Viewer: Fixed the hover cursor for 'Render as wireframe'
MSINT-5944	Fixed the Single Predefined Region restriction on Open Data tasks
MSINT-5990	Fixed disabled tasks altering the session space details so disabled tasks cannot trigger "Invalid combination of spaces" errors
MSINT-6004	Fixed a race condition starting interface and engine simultaneously can result in some data stores failing to load properly
MSINT-6005	Fixed '&' character handling in session names
MSINT-6029	Fixed cases where using the singleton class as a root class incorrectly excludes the singleton class which can result in the observed behaviour that actions grouped into a single task getting different results than if run individually

MSINT-6030	Fix cases where renaming a session can make it not runnable, e.g. it contained a rule folder reference
MSINT-6041	Fix having an empty folder open in the Navigation Pane repeatedly sending API requests
MSINT-6062	Fix certain errors occurring during Map Viewer load preventing session re-run
MSINT-6067	Fix disabling Commit tasks in Sessions
MSINT-6073	Improve Class Name value preview to allow these nodes to be distinguished from others more easily
MSINT-6077	Fixed the Map Viewer layer colour picker having scroll bars when it should not
MSINT-6079	Fix regular expression not showing correctly in 1Integrate UI
MSINT-6089	Improve the reporting of Values in reports, e.g. making Session Parameter Value reporting consistent with Temporary Value reporting and improving data type reporting
MSINT-6103	Fix empty metadata files being included in backups for folders that lack metadata
MSINT-6105	Fix dragging and dropping resources into folders that start with the name of the resource being dragged
MSINT-6112	Disabling attributes in the UI also disables any associated foreign keys
MSINT-6115	Improve the handling of Templates that contain parameters when being added into a Rule or Action
MSINT-6120	Improve the handling of Templates that contain 2 or more parameters
MSINT-6124	Fix the handling of Data Stores whose parameter values include XML reserved characters so they do not fail their Open Data tasks
MSINT-6134	Non Spatial Filtering: Treat empty class filters the same as if there were no filter defined at all instead of throwing data away
MSINT-6135	Improved SRID lookup for datasets that contain some CRS information but not the SRID itself, e.g. MapInfo
MSINT-6142	Fixed large numbers of entities crashing the UI due to browser storage limits being exceeded
MSINT-6152	Data Store Editor: allow previously entered password values to be cleared
MSINT-6168	Fixed accented characters not being able to be used within Data Store schemas or parameter values
MSINT-6203	Session comments don't take tasks imported by Session Task Template tasks into account leading to comments appearing offset from where they should (often at the bottom for large templates)
MSINT-6205	Object iteration with null value condition
MSINT-6209	Unable to change the name or correctly map primary geometry fields on Copy To mapping screen

Known Issues and Unresolved Bugs

ID	Description

MSINT-2628	Esri ArcGIS Server feature service returns GeoJSON in WGS84 regardless of data or 1Integrate SRS
MSINT-2681	ArcGIS WFS service returns error if non-spatial data is included
	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.
	Since 4.0.0 the Google BigQuery Data Store is no longer part of core 1Integrate. It is available as an extension. Contact 1Spatial if you need it.
	Since 4.2.0 the Contextual Data Store is no longer part of core 1Integrate. It is available as an extension. Contact 1Spatial if you need it.

Installation

Follow the instructions in the [Installation Guide](#) for your application server.

For most upgrades, 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 (as a database schema and from the Repository Administration tab in the Dashboard), as that repository will not be usable by older versions of 1Integrate once it has been upgraded.

Follow the installation guide to install the new release 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. 4.0, 3.1, and 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.

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 v3.4.1 with 1Integrate v4.0, your steps will be:

1. Uninstall 1Integrate v3.4.1 with the installer packaged in the v3.4.1 release
2. Install 1Integrate v4.0 with the installer packaged in the v4.0 release

NOTE: For WildFly installations of 1Integrate, before going live in a production environment or exposing your environment externally, you should change/remove the default passwords defined within the users.properties file.

Product Documentation and Support

Documentation

To review product documentation such as Installation Guides, WebHelp and other release notes, please visit our website: https://1spatial.com/documentation/1Integrate/

Support

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

To contact 1Spatial Support, please visit our website: https://1spatial.com/support-services/support/

Training

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