



## Release Notes

---



## 1Workflow

---

Version 2.6.1

21 December 2020

---

Copyright © 2020, 1Spatial Plc All rights reserved.

1Spatial Group ▪ Registered in England No. 4785688

Registered Office Tennyson House, Cambridge Business Park, Cambridge, CB4 0WZ, UK

Telephone: +44 (0)1223 420414 Fax: +44 (0)1223 420044 [www.1spatial.com](http://www.1spatial.com)

# Contents

|       |   |    |
|-------|---|----|
| 1     | Introduction.....                       | 3  |
| 1.1   | Scope.....                              | 3  |
| 1.2   | Purpose of Release.....                 | 3  |
| 1.3   | System Requirements .....               | 3  |
| 1.3.1 | Operating System .....                  | 3  |
| 1.3.2 | Hardware .....                          | 3  |
| 1.3.3 | 3rd Party Software.....                 | 3  |
| 1.4   | 1SMS Components Compatibility .....     | 5  |
| 2     | Release Details.....                    | 6  |
| 2.1   | Special Instructions .....              | 6  |
| 2.1.1 | Workaround for GO Publisher Error ..... | 6  |
| 2.1.2 | Upgrading from 2.0.0 or lower .....     | 6  |
| 2.1.3 | Upgrading from 1.3.0 or lower .....     | 7  |
| 2.1.4 | Upgrading from 1.1.111 or lower .....   | 7  |
| 2.2   | New Functionality in this Release ..... | 7  |
| 2.3   | Bugs Fixed in this Release .....        | 9  |
| 2.4   | Known Issues and Unresolved Bugs.....   | 11 |
| 3     | Providing Feedback.....                 | 12 |

# 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

This is a full standard release that adds additional functionality to the previous release, see below for details.

## 1.3 System Requirements

### 1.3.1 Operating System

This version of 1Workflow is supported on the following operating systems:

- Microsoft Windows Server 2019
- Oracle Linux 7.8

### 1.3.2 Hardware

Minimum hardware configuration:

- Minimum of 4Gb RAM
- Minimum of 2 CPU cores
- Hardware is dependent on required response times and throughput. Heavily used multi-user systems will need higher server specifications, please contact 1Spatial support for guidance on server configurations.

### 1.3.3 3rd Party Software

#### 1.3.3.1 Database

- Oracle Database 19c Release 1

The Oracle database requires:

- Oracle Workspace Manager option
- Locator option, unless automatic job extent growing needs to be enabled, in which case an Oracle Spatial license is needed, which is usually an extra cost option. See this page for more information about growing job extents:

[https://1spatial.com/documentation/1SMS/Topics/1Exchange/1EXC\\_Managing\\_Policies.htm](https://1spatial.com/documentation/1SMS/Topics/1Exchange/1EXC_Managing_Policies.htm)

### 1.3.3.2 Application Server and Middleware

- Oracle WebLogic Server 12.2.1.3 either:
  - Standard edition
  - Enterprise edition (Enterprise Edition only needed if clustering multiple WebLogic servers for resilience and scalability)
  - WebLogic Suite Server 12.2.1.3 (WebLogic Suite only needed if clustering multiple WebLogic servers for resilience and scalability OR for more cost effective processor licensing of BPEL Process Manager)
- Oracle BPEL Process Manager.

Note that BPEL Process Manager can be purchased either standalone, or as an option to Oracle WebLogic Suite. It is usually more cost effective to purchase Oracle WebLogic Suite and add the BPEL process engine option, rather than to purchase WebLogic Standard or Enterprise and add a standalone BPEL Process Manager. Please speak to your Oracle license supplier for advice.

Other components controlled by 1Workflow can be installed on Wildfly, but 1Workflow must still be installed on the pre-requisites listed above.

### 1.3.3.3 Browser Support

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 87               |
| Mozilla Firefox 80             |

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

## 1.4 1SMS Components Compatibility

The following combinations of components have been tested for compatibility (on Windows Server 2019, Weblogic 12.2.1.3, Wildfly 18.0.1, Oracle 19c):

|   |  |  |
|---|--|--|
| <p><b>1SMS Weblogic Installer 2.2.6</b><br/>         1Workflow 2.6.1<br/>         1Workflow_Worklist 2.6<br/>         1Plan 2.4<br/>         1Exchange 2.2<br/>         1Transact 3.2.1<br/>         1Validate 2.1</p> <p><b>1SMS Wildfly Installer 2.2.6</b><br/>         1Plan 2.4<br/>         1Exchange 2.2<br/>         1Transact 3.2.1<br/>         1Validate 2.1</p> |  |  |
|---|--|--|

The following combinations of components have been tested for compatibility (on Windows Server 2012, WebLogic 12.2.1.3, Wildfly 17.0.1, Oracle database 12c or 11g):

|   |  |   |
|---|--|---|
| <p><b>1SMS Weblogic Installer 2.2.1</b><br/>         1Workflow 2.5.1<br/>         1Workflow_Worklist 2.5.1<br/>         1Exchange 2.1.3<br/>         1Plan 2.3.1<br/>         1Transact 3.1.3<br/>         1Validate 2.0.3<br/>         1Integrate 2.5.1</p>  | <p><b>If using Wildfly, this version and older is supported on Wildfly 11</b></p> <p><b>1SMS Weblogic Installer 2.1.0</b><br/>         1Workflow 2.5<br/>         1Workflow_Worklist 2.5<br/>         1Exchange 2.1.2<br/>         1Plan 2.3.0<br/>         1Transact 3.1.2<br/>         1Validate 2.0.2<br/>         1Integrate 2.4</p> | <p><b>1SMS Weblogic Installer 2.1.0</b><br/>         1Workflow 2.4<br/>         1Workflow_Worklist 2.4<br/>         1Exchange 2.1<br/>         1Plan 2.2<br/>         1Transact 3.0<br/>         1Validate 2.0<br/>         1Integrate 2.3</p> <p><b>1SMS Wildfly Installer 2.0.2</b><br/>         1Exchange 2.1<br/>         1Plan 2.2<br/>         1Transact 3.0<br/>         1Validate 2.0<br/>         1Integrate 2.3</p> |
| <p><b>1SMS Weblogic Installer 2.0.1</b><br/>         1Workflow 2.0/2.1/2.2/2.3<br/>         1Workflow_Worklist 2.0/2.1/2.2/2.3<br/>         1Exchange 2.0/2.1<br/>         1Plan 2.0/2.1<br/>         1Transact 3.0.0<br/>         1Validate 2.0.0<br/>         1Integrate 2.3.3</p> <p><b>1SMS Wildfly Installer 2.0.0</b><br/>         1Exchange 2.0.0<br/>         1Plan 2.0.0/2.0.1<br/>         1Transact 3.0.0<br/>         1Validate 2.0.0<br/>         1Integrate 2.3.3</p> | <p><b>1SMS Weblogic Installer 2.0.0</b><br/>         1Workflow 2.0/2.1<br/>         1Workflow_Worklist 2.0.0/2.1.0</p> <p><b>1SMS Wildfly Installer 2.0.0</b><br/>         1Exchange 2.0.0<br/>         1Plan 2.0.0/2.0.1<br/>         1Transact 3.0.0<br/>         1Validate 2.0.0</p>  |   |

## 2 Release Details

---

The following sections provide a description of this release of 1Workflow.

### 2.1 Special Instructions

- **WARNING** –releases 2.1.0 and higher require a change for use of the downstream change listener (e.g. Ordnance Survey GB). The API to the listener has additional parameters and a generic namespace in the WSDL.
- 1Workflow must be installed on a WebLogic domain with SOA components installed
- If installing other components on WebLogic, 1Exchange must be installed on a domain without SOA components installed and all the other 1SMS family of products can be installed in either domain. We recommend installing them alongside Workflow on the domain with SOA components so that in future when 1Exchange is upgraded to run on any domain then only 1Exchange needs to be redeployed.
- 1Exchange, 1Plan, 1Transact and 1Validate/1Integrate can be installed on Wildfly, but will be controlled by 1Workflow running on WebLogic.
- While it is recommended that there are no in-progress jobs when performing an upgrade, it should be possible to upgrade when there are in-progress jobs. Before upgrading it is important to ensure that all in-progress jobs are in a static state and are not currently being processed by the system i.e. ensure that all activated jobs have moved to prepared or that all submitted jobs have moved to completed/invalid /quarantined/conflicted.

#### 2.1.1 Workaround for GO Publisher Error

There is a known problem (MSEXCHANGE-865) with 1Exchange in Weblogic 12.2 where GO Publisher occasionally encounters the following error:

```
java.sql.SQLRecoverableException: Closed Connection
```

In order to work around this, force the WebLogic instance running 1Exchange to use a previous JDBC driver version.

To tell WebLogic 12.2 to use the 12.1 driver, add it to the PRE\_CLASSPATH environment variable in your domain's setUserOverrides file (create if not present). For example:

```
set PRE_CLASSPATH=C:/oracle/weblogic122130/user_projects/domains/domain  
/drivers/ojdbc7.jar
```

It does not matter where on the file system the file is placed, so long as the location can be accessed via the user running the WebLogic process. However, it may be neater to keep it contained within the 1Exchange domain.

#### 2.1.2 Upgrading from 2.0.0 or lower

**WARNING** – this release requires a change for OSGB's use of the downstream change listener service. The API to the service has additional parameters and a now uses a generic namespace in the WSDL. Rebuild the custom listener service based on the new WSDL and configure it to use that service in the Workflow admin page.

### 2.1.3 Upgrading from 1.3.0 or lower

If you are upgrading a WebLogic domain from 1Workflow 1.3.0 or any of the following versions of other 1SMS components, you will need to manually replace a security provider JAR file within WebLogic:

- 1Exchange 1.3.0
  - 1Transact 2.2.0
  - 1Validate 1.7.0
  - 1Plan 1.7.0
  - 1Workflow\_Worklist 1.3.0
1. Locate the latest **ms-common-weblogic-security-provider.jar** file within your release package:  
<release package>\ms-workflow-flow-release-1.3.1-release.zip\ms-workflow-flow-release-1.3.1\install\dependencies
  2. Within WebLogic, shut down all servers (including the Admin Server).
  3. Repeat the following steps for each machine in the domain:
    - a. Navigate to <domain-dir>\lib
    - b. Replace the JAR file with the one from your release package.
  4. Re-start all servers.

### 2.1.4 Upgrading from 1.1.111 or lower

Note that the WebLogic Server requires WebLogic patch 17754607 applied (upgrade to JPA 2.1).

While it is recommended that there are no in-progress jobs when performing an upgrade, 1Spatial have successfully tested the upgrade from version 1.1.111 when there are in progress jobs in the system. Before upgrading it is important to ensure that all in-progress jobs are in a static state and are not currently being processed by the system i.e. ensure that all activated jobs have moved to prepared or that all submitted jobs have moved to completed (or invalid or quarantined or conflicted).

## 2.2 New Functionality in this Release

|                              |  |
|------------------------------|--|
| 2.6.0                        |  |
| MSWORKFLOW-648               | Extra logging available via DEBUG logging level  |
| MSWORKFLOW-949               | Configurable Error Handling: option to clean up uploaded files on submission error   |
| New platform support         | <ul style="list-style-type: none"> <li>- Oracle Database 19c (11g/12c no longer supported)</li> <li>- Java 8 JDK 1.8.0 update 271 (64-bit)</li> <li>- Wildfly 18.0.1</li> <li>- Windows Server 2019</li> <li>- Oracle Linux 7.8</li> </ul> |
| 2.5.1                        |  |
| MSCOMMON-892                 | Support Wildfly 17   |
| MSCOMMON-887<br>MSCOMMON-882 | Security: Various security improvements  |
| 2.5.0                        |  |
| MSWORKFLOW-566               | New admin tool to recover (trigger compensation for) stuck jobs  |

|                                |  |
|--------------------------------|--|
| 2.4.0                          |  |
| MSWORKFLOW-562                 | Include job metadata in notification emails  |
| MSWORKFLOW-615                 | Workspace merge upon quarantine approval   |
| MSWORKFLOW-626                 | Add and populate official reviewNumber and reviewTotal metadata fields for review jobs   |
| MSWORKFLOW-627                 | Allow filtering of jobs by LDAP company  |
| 2.3.0                          |  |
| MSWORKFLOW-610                 | Configure a downstream job type to be automatically created when a job completes.  |
| 2.2.0                          |  |
| MSWORKFLOW-550                 | Allow more than one quarantine reviewer  |
| MSWORKFLOW-546                 | Allow validation to be run and included in during data package preparation   |
| MSWORKFLOW-586                 | Define warning rules which are run and included in reports but don't prevent a job from completing.  |
| MSWORKFLOW-581                 | Workflow API can take the 'Conflicts Resolved' message as an alternative to uploading a package.   |
| MSWORKFLOW-606                 | Workflow API can take the 'Validation Errors Corrected' operation as an alternative to uploading a package.  |
| 2.1.1                          |  |
| MSWORKFLOW-521                 | Ability to define warning rules which do not stop a job but are included in validation reports.  |
| MSWORKFLOW-551                 | Ability to define that specific job types are embargoed and require approval before download.  |
| MSWORKFLOW-555                 | Ability to define the URL of custom tool to show in worklist   |
| MSWORKFLOW-591                 | Make definition of validation rules optional for each job type   |
| 2.1.0                          |  |
| MSWORKFLOW-589                 | Batch Workflow jobs: call a Configurable custom endpoint   |
| MSWORKFLOW-584                 | Configure a custom endpoint to called after a normal job is merged. Note that endpoints which are implemented in BPEL and not accessed via localhost may not work. |
| 2.0.0                          |  |
| New platform support           | Support for other 1SMS components on Wildfly 11.0.0  |
| 1.3.2                          |  |
| MSWORKFLOW-519, MSWORKFLOW-526 | Custom html can be added at the end of all generated emails  |
| MSWORKFLOW-522                 | Read-only attribute added for Job Types  |
| 1.3.0                          |  |
| New platform support           | <ul style="list-style-type: none"> <li>- Oracle WebLogic 12.2.1.3</li> <li>- Java 8 JDK 1.8.0 update 141 (64-bit)</li> </ul>                                       |
| 1.2.0                          |  |
| MSWORKFLOW-504                 | Pass validation report XML to outbound FME adaptor   |
| MSWORKFLOW-505                 | Pass job-metadata.xml to outbound FME adaptor  |
| 1.1.111 (1Worklist 1.1.112)    |  |
| MSWORKFLOW-497                 | New 1SMS online help accessible from all products, including release notes   |

|                      |   |
|----------------------|---|
| 1.1.110              |   |
| MSCOMMON-497         | Authentication Provider Setup is failing to connect to a SSL enabled Admin Server because is not possible to specify the protocol to t3s. (Note, the SSL trust certificate must be installed in JDK or WebLogic trust store before installing the authentication providers or the connection to WebLogic will hang indefinitely with no feedback) |
| 1.1.108              |   |
| MSCOMMON-540         | Support Oracle Linux 6.7  |
| MSWORKFLOW-476       | Add REST endpoint to read whether quarantine is enabled   |
| 1.1.106              |   |
| MSWORKFLOW-443       | Support quarantine jobs   |
| MSCOMMON-444         | Improve resilience by removing the dependency on having a constantly running AdminServer  |
| MSINT-169            | Support Java 1.7 update 80  |
| 1.1                  |   |
| New platform support | Oracle Weblogic 12.1.3<br>Oracle Database 12c Release 1<br>Windows Server 2012<br>64 bit Java 1.7.0_76  |

## 2.3 Bugs Fixed in this Release

|                |   |
|----------------|---|
| 2.6.0          |   |
| MSWORKFLOW-643 | Email notifications reflecting old state (e.g. DOWNLOADED to UPLOADED rather than DOWNLOADED to DOWNLOADED) |
| 2.4.1          |   |
| MSCOMMON-869   | 1SMS on WildFly doesn't support changing the LDAP username attribute from CN                                |
| 2.3.0          |   |
| MSWORKFLOW-623 | Clean up exchange packages when compensating jobs   |
| MSWORKFLOW-630 | Abandoning conflict child jobs does not revert the parent to DOWNLOADED                                     |
| 2.2.0          |   |
| MSWORKFLOW-592 | Read Only jobs do not delete their workspace on completion.   |
| MSWORKFLOW-603 | Downstream change listener should only be invoked for parent jobs.  |
| MSWORKFLOW-607 | Jobs get stuck when sending embargo reviewer notifications.   |
| MSWORKFLOW-516 | Worklist should use the job state aliases defined by administrators.  |
| MSWORKFLOW-593 | Read Only jobs not working via the API.   |
| 1.3.1          |   |
| MSCOMMON-707   | Log files not being populated for WebLogic 12.2.1.3   |
| MSWORKFLOW-545 | Recovery from failed activation does not always delete workspace in WebLogic 12.2                           |
| OSIGMS-146     | SOAP API client handling can cause services to fail intermittently.   |
| 1.2.1          |   |
| MSWORKFLOW-491 | Misconfigured Workflow WSDL during installation can result in stuck jobs                                    |
| 1.2.0          |   |

|                                   |  |
|-----------------------------------|--|
| MSWORKFLOW-503                    | Notification of abandon and relinquish should use name of user not original planner  |
| MSWORKFLOW-503                    | Notification of abandon and relinquish should use name of user not original planner  |
| 1.1.112                           |  |
| MSWORKFLOW-490                    | If Planner A plans a Job and Planner B revokes the same job the email notification indicates Planner A revoked the Job   |
| 1.1.110                           |  |
| MSCOMMON-497                      | Remove redundant JDK selection from installer and warn users when installing into a domain having an unsupported Java version  |
| MSCOMMON-566                      | Installing workflow fails silently if soa_server is not accessible   |
| MSCOMMON-567                      | Cannot install/uninstall Workflow via HTTPS  |
| MSCOMMON-571                      | Fixes to installer for secure AdminServer connection   |
| 1.1.109<br>(1Worklist 1.1.111)    |  |
| MSCOMMON-546                      | Installer obscures error message when trying to select it  |
| MSCOMMON-529                      | 1Integrate and 1Validate installer allows custom extension jar files to be added more than once  |
| MSWORKFLOW-483                    | Excessive memory usage by Workflow prevents users from logging into worklist after throwing an Out Of MemoryError  |
| MSWORKFLOW-482                    | Workflow admin page: Cannot set the default conflict child job status to 'Proposed' because it reverts back to 'Allocated To The Worker Group From The Conflicted Job' |
| 1.1.108                           |  |
| MSWORKFLOW-475                    | Admin user ca not log in to Admin Page   |
| MSWORKFLOW-479                    | SOA server address is hard coded in batch workflow   |
| MSWORKFLOW-478                    | Batch workflow not passing security context properly   |
| 1.1.107                           |  |
| MSWORKFLOW-350                    | Email Notifications for revoked jobs should include the Planner details  |
| MSWORKFLOW-462                    | Changing certain options in the Workflow admin does not enable the save button   |
| MSWORKFLOW-465                    | 1Worklist cannot upload zip files on Internet Explorer 11  |
| 1.1.106                           |  |
| MSWORKFLOW-425                    | Revoking or relinquishing a job must remove the feature and package URLs   |
| MSWORKFLOW-448                    | The "Help" page is not being shown   |
| 1.1.105                           |  |
| MSWORKFLOW-430                    | Notifications are not working for Revoke, Relinquish and Abandon scenarios   |
| MSWORKFLOW-429                    | Auto Conflict resolution not Working when there are conflicts in refreshing the workspace prior to the validation  |
| 1.1.104                           |  |
| MSWORKFLOW-428                    | Child jobs incorrectly try to grow their parent's job extents  |
| 1.1.103                           |  |
| MSCOMMON-389                      | Conflicts found in refreshing workspace before validation need to be handled by creating conflict resolution job   |
| MSWORKFLOW-401,<br>MSWORKFLOW-402 | Failures in workspace manager operations are ignored by workflow   |

|                |   |
|----------------|---|
| MSWORKFLOW-406 | Workflow fails to compensate after activation errors    |
| 1.0.108        |   |
| MSWORKFLOW-386 | Populate the Reason for Failure field on failed jobs    |
| MSWORKFLOW-383 | Email notifications for FAILED jobs seems to be missing |
| 1.0.104        |   |
| MSWORKFLOW-337 | Allow jobs to be abandoned                              |

## 2.4 Known Issues and Unresolved Bugs

| ID             | Description and work around  |
|----------------|--|
| MSPLAN-1015    | Worklist can show too many jobs if they are in a sub group or belong to a user with a very similar name.   |
| MSWORKFLOW-584 | Calling a downstream custom endpoints which is implemented in BPEL and not accessed via localhost may not work in some cases: Accessing non-BPEL endpoints or accessing BPEL endpoints via localhost works ok.   |
| MSCOMMON-819   | If a server is restarted on a clustered environment ensure no jobs are in a transitional state (e.g. ACTIVATING, UPLOADING) but have proceeded to the next waiting state (e.g. prepared, downloaded) before the restart of the second server. Otherwise the server start will provoke compensation on those job instances as well and they will be stepped back to their previous state. |
| MSWORKFLOW-542 | Thousands of jobs assigned to one user cause 1Worklist to Run out of heap space.   |
| MSWORKFLOW-541 | GrowExtents callback is called twice on failure.   |
| MSWORKFLOW-215 | Performance issue in Worklist service looking up a user's group name.  |
| MSWORKFLOW-334 | Edited child job extents are not applied for validation of ancestor jobs.  |
| MSWORKFLOW-340 | Parent job rolled back to 'Downloaded', but child jobs left as 'Completed'.  |

## 3 Providing Feedback

---

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

1Spatial Support is a dedicated support channel to users of the software to raise bugs and ask questions specific to 1SMS.

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

Maximise the value of this release with 1Spatial training courses. For training enquiries please contact your Account Manager or email: [training@1spatial.com](mailto:training@1spatial.com).