1Data Gateway

Installation Guide

Product Version: v 2.9.0

Document Version: v 2.01

Document Date: 28/03/2023

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Contents

1 Installation

This guide explains how to install 1Data Gateway. For information on installing 1Data Gateway as a service on Linux, please contact 1Spatial support.

The procedures contained within this document apply to both Windows and Linux environments, unless specifically indicated.

For more information about new features and changes in this release, and hardware and software requirements, refer to the *1Data Gateway Release Notes*.

Audience

This guide is intended for personnel responsible for the installation, configuration and administration of software.

The procedures detailed in the guide should be performed by a system administrator who is familiar with the environment of the organisation.

Licenses

1Data Gateway licenses will be issued via email.

1Spatial Product Support

If assistance is required while installing 1Data Gateway, please call 1Spatial support on +44 (0)1223 423069, or visit the support section of the 1Spatial website via the Services menu at www.1spatial.com.

2 Installation Prerequisites

Before installing 1Data Gateway, please ensure you have met all system requirements and installed all necessary prerequisite components:

1Integrate

As 1Data Gateway works alongside an existing installation of 1Integrate, a number of the prerequisites are shared:

- For information about installing 1Integrate, please refer to the 1Integrate installation guide.

- For versions of 1Integrate supported by 1Data Gateway, please refer to the 1Data Gateway release notes.

Datasource

Before installation, 1Data Gateway requires one of the following databases with at least one associated user with permissions to create, drop, and alter tables and sequences:

- PostgreSQL

- Oracle

- MS SQL Server

For information on setting up your chosen data database and other configuration, please refer to the documentation provided by your database vendor.

For supported version numbers, please refer to the 1Data Gateway release notes.

> ✏ Note: If your PostgreSQL database is created through the user interface, ensure that the privilege 'Can login' is set to 'Yes'.

Java

Please ensure the correct version of Java is installed for your release. For more information please refer to the release notes

The environment variable **JAVA_HOME** must be properly set, pointing to the home directory of your Java installation e.g:
`C:\Program Files\Java\java_[version_number]`

System Requirements

Please see the 1Data Gateway Release Notes for specific requirements for this release.

Recommended System Requirements

The following are recommended system requirements for a 1Data Gateway installation:

* 2 CPU cores minimum
* 1GB minimum RAM available for 1Data Gateway processes

Storage

1Data Gateway stores submission data locally, including any artefacts that are generated during the submission so disk space is required.

A media retention policy can be configured in the 1Data Gateway UI. This will define how long any uploads will remain on the system, from the following options:

* Never retain
* Retain for period
* Retain forever

For more information on defining a media retention policy, please see Specifications in the 1Data Gateway documentation.

3 Windows Installer

For Window's installations the 1Data Gateway download comes packaged with a Setup Wizard.

From here, you can carry out a number configuration tasks as you install the product.

For installation on a Linux machine, please refer to "Linux Installation" on page 7.

INSTALLATION

1. First, launch the installer.

2. Next, you must define the directory in which to install 1Data Gateway, followed by the location for all of your log files and uploaded media.
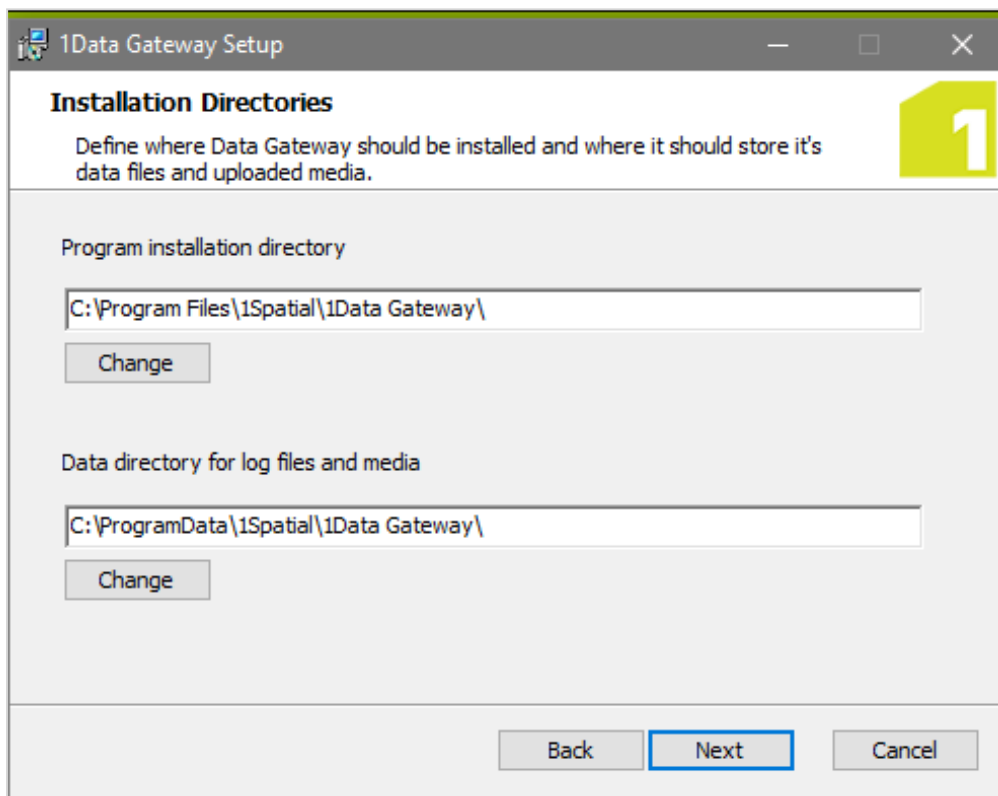
3. Once you have chosen an install and storage location you will need to define the SQL database that 1Data Gateway should be using:

Parameter	Description
JDBC URL	The URL for the database you have set up.

Parameter	Description
	✏ Note: For SQL servers please refer to external documentation on setting connection properties.
Username	The username for the database you have set up.
Password	The password that has been defined for the associated database.
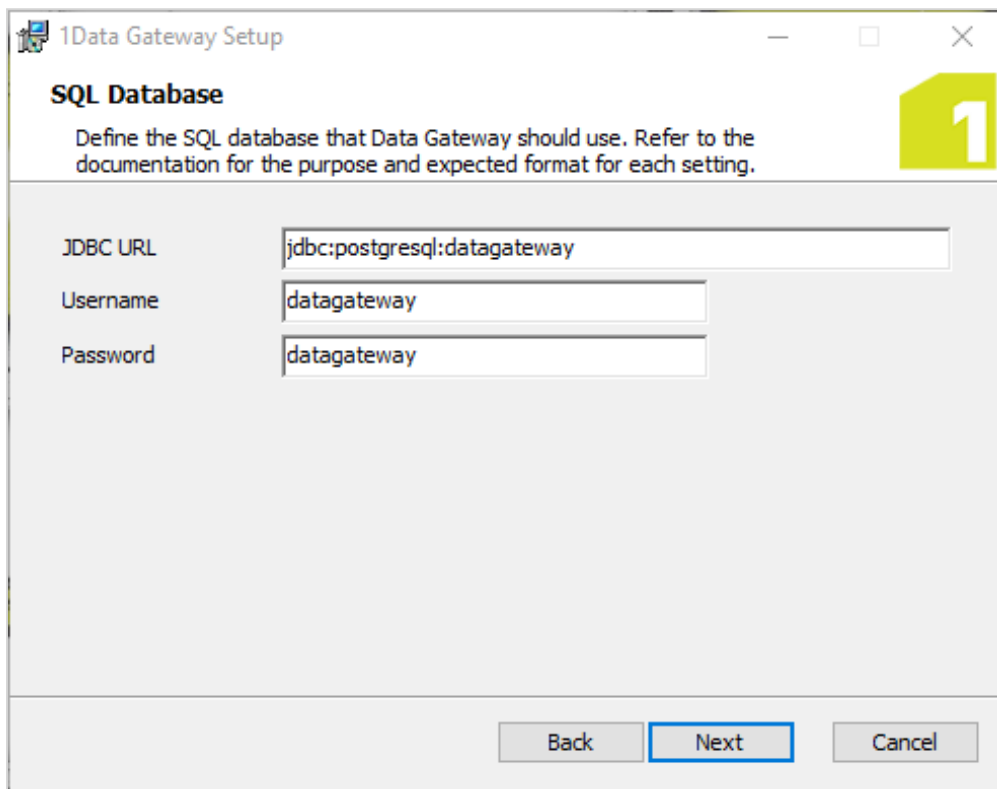
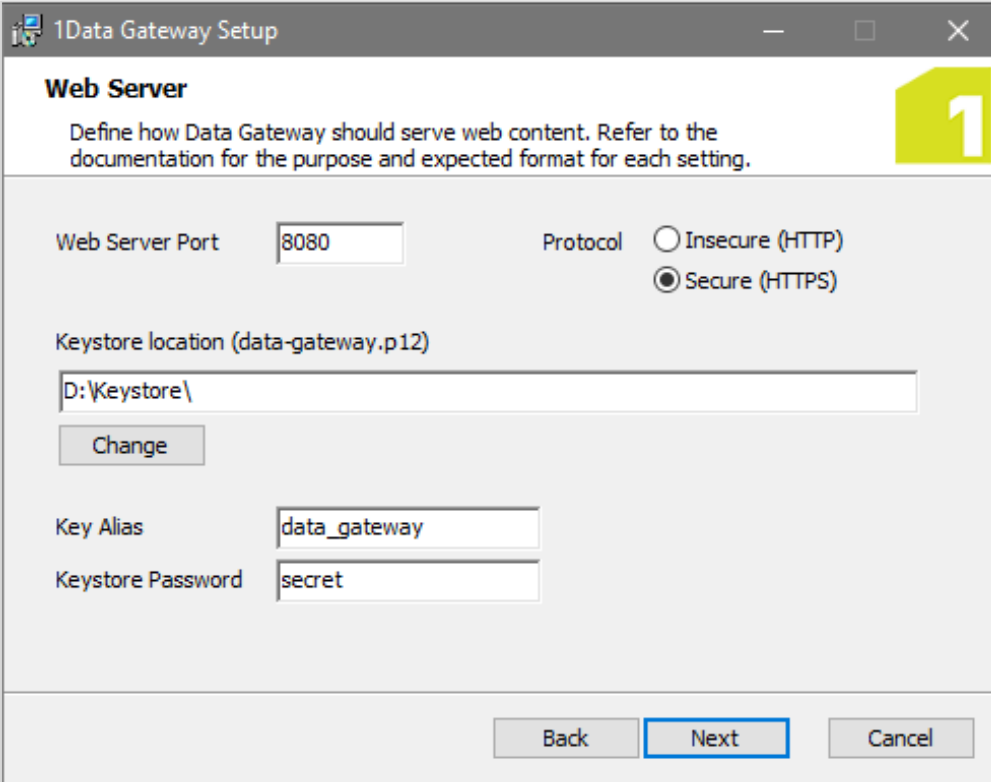4. After defining your database, you need to configure the Web Server for 1Data Gateway.

   If you select an Insecure connection you will not need to define the Keystore location, alias or password.

   For security purposes it is recommended that you use a Secure (HTTPS) connection.

SECURE CONNECTION DETAILS

> ✏ **Note**: 1Data Gateway requires a **PKCS12 keystore** with a non-blank key alias. For information on using a **keytool** to create your keystore and certificate, please refer to Oracle JavaSE documentation. If you have an existing keystore with a blank key alias, please also refer to Oracle JavaSE to see how to update the alias.

Parameter	Description
Keystore Location	The location of the directory containing your keystore. > ✏ **Note**: When installing on Windows, the Keystore in this location must be named `1data-gateway.p12`.
Key Alias	The alias of the certificate+private key within the keystore that should be used.
Keystore Password	The password associated with the keystore

5. Select Next and **Install** on the review dialog.

4 Linux Installation

If you are installing 1Data Gateway on Linux, it is released as an executable JAR package.

For installation the following steps must be followed:

1. Un-zip the file `1Data_Gateway_[version_number].zip` to a directory on the machine you are installing on.

2. Edit the **application.yml** file to configure the location of basic configuration parameters:

Parameter	Description	Value
spring	N/A	N/A
datasource	Fill the following to configure which datasource 1Data Gateway will use.	N/A
jdbc url	The URL for the database you have set up for 1Data Gateway. ✎ Note: For SQL servers please refer to external documentation on setting connection properties.	URL
username	The username for the database you have set up.	String
password	The password that has been defined for the database.	String
port	The port number through which the mail server is accessible.	Integer
app	N/A	N/A
mediaManager	Configure media storage below.	N/A
mediaRoot	The root address location for media storage. ✎ Note: If performing an upgrade, do not delete the Media storage directory.	File path

Parameter	Description	Value
server	Enter the following to define the server port for 1Data Gateway.	N/A
port	The server port on which 1Data Gateway is located. ✏ **Note**: The default port is 9090.	Integer
SSL	Configure the following to improve security with SSL. You will need to have prepared a keystore which has been loaded with an SSL certificate from a Certificate Authority.	
enabled	Set to enable SSL.	Boolean: True or False
key-store-type	✏ **Note**: 1Data Gateway requires a **PKCS12 keystore** with a non-blank key alias. For security purposes, we recommend the use of a **PKCS12 keystore**. For information on using a **keytool** to create your keystore and certificate, please refer to Oracle JavaSE documentation. If you have an existing keystore with a blank key alias, please also refer to Oracle JavaSE to see how to update the alias.	PKCS12
key-store	The location of the key store.	URI
key-store-password	The password for your keystore.	string
key-alias	The alias of the certificate+private key within the keystore that should be used.	Unique string

Once the configuration file as been defined, perform the following steps:

1. Execute **1datagateway.sh**

2. In your chosen browser, proceed to the address `http://[machine name]:[port number]`

3. Log in to 1Data Gateway using the following credentials:

Login	admin@1spatial.com
Password	admin1

> ✎ Note: Once logged in, for security purposes, it is recommended that you change the Admin User's email and password in the My Account section of the User Interface.

Connecting to 1Integrate

Once you have installed 1Data Gateway, a default connection to 1Integrate is established at:

baseUri	http://localhost:8080/1Integrate/rest/
username	INTWService
password	integrate103

If your 1Integrate installation is different to the default, an administrative user of 1Data Gateway can change them.

To do this, navigate to the **1Integrate Connection** tab of the **System** settings in the 1Data Gateway user interface and change the details as required.

5 Uninstall and Repair

Depending on your operating system you will have to carry out different steps when installing or repairing an installation.

Windows

Running the installer again will allow you to:

- Uninstall the application, removing it completely. This will not remove the contents of the database and media directories which contain user data.

- Perform a 'repair' installation which reruns the installation to ensure files, directories, and the Windows service exist in their correct form.

You can also uninstall 1Data Gateway from Windows by using the **Add or Remove Programs** feature.

Linux

Linux users can uninstall 1Data Gateway by:

1. Stop the Java process associated with your installation.

2. Delete the directory 1Data Gateway was extracted to.

> ✎ Note: If you are performing an upgrade, ensure you do not delete the media directory, the location of which is defined by the `mediaRoot` parameter set in the configuration file.

6 Upgrading 1Data Gateway

> ✏ **Note**: Before performing an upgrade to an existing installation, ensure no submissions are in progress and that 1Data Gateway is shut down.

PERFORMING A BACKUP

When upgrading 1Data Gateway, it is strongly recommended that you perform backups of the following:

- Media Directory (within the 1Data Gateway package)

- Database. For best practise with backing up, please refer to the documentation for your chosen Database.

> ✏ **Note**: 1Data Gateway makes use of Clob files, please ensure that any database backup you take includes these.

Performing the Upgrade

Complete the following to upgrade 1Data Gateway.

Windows

UPGRADING VERSION 2.1 OR BEFORE

1. Uninstall your 1Data Gateway (see "Uninstall and Repair" on page 10 for more)

2. Using the installer packaged with the latest product release, install 1Data Gateway following the steps outlined in the "Windows Installer" on page 4 section.

UPGRADING VERSION 2.2 OR AFTER

To upgrade from version 2.2 or after, run the new installer that is packaged with the release.

Linux

1. Uninstall your 1Data Gateway (see "Uninstall and Repair" on page 10 for more)

> ✎ **Note**: Ensure you do not delete the media directory, the location of which is defined by the `mediaRoot` parameter set in the configuration file.

2. Install 1Data Gateway following the steps outlined in this guide.

> ✎ **Note**: As above, when configuring the `mediaRoot` for your upgrade, ensure this is set to the location of the media directory from before.