



Workflow for SharePoint  
**Installation Guide**  
for SharePoint 2013, 2016, 2019 and SE



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## I. System Minimum Requirements

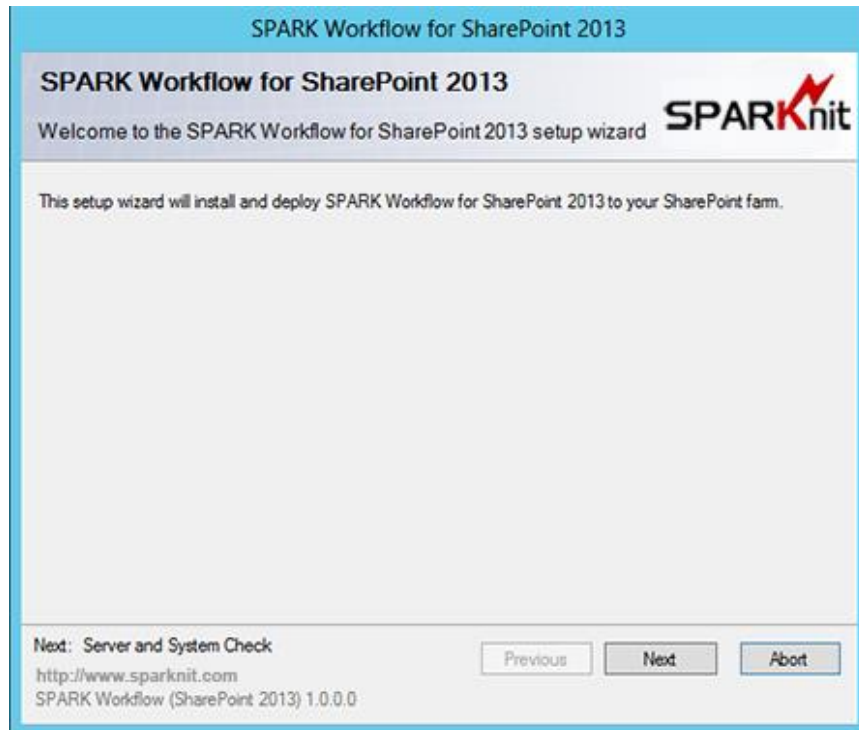
Following are the system requirements for **SPARK Workflow** for SharePoint.

Type	SPARK Workflow for SharePoint 2013
Operating system	Microsoft Windows Server 2008 R2 or Microsoft Windows Server 2012 (R2 is supported) system
Browser	To design workflows, use the following browser versions. <ol style="list-style-type: none"> <li>1. Minimum required: Microsoft Internet Explorer 9.x</li> <li>2. Recommended: Microsoft Internet Explorer 10 or greater, Google Chrome (latest released version), Mozilla Firefox (latest released version), Apple Safari (latest released version)</li> </ol>
Software	<ul style="list-style-type: none"> <li>• Microsoft SQL Server 2008 R2 SP1, SQL Server 2012, or SQL Server 2014</li> <li>• Microsoft SharePoint Foundation 2013 or Microsoft SharePoint Server 2013 (SP1 is supported)</li> </ul>
Type	SPARK Workflow for SharePoint 2016
Operating system	Microsoft Windows Server 2012 R2 Standard or Datacenter
Browser	To design workflows, use the following browser versions. <ol style="list-style-type: none"> <li>3. Minimum required: Microsoft Internet Explorer 9.x</li> <li>4. Recommended: Microsoft Internet Explorer 10 or greater, Google Chrome (latest released version), Mozilla Firefox (latest released version), Apple Safari (latest released version)</li> </ol>
Software	<ul style="list-style-type: none"> <li>• Microsoft SQL Server 2014 with SP1</li> <li>• Microsoft SharePoint Server 2016</li> </ul>
Type	SPARK Workflow for SharePoint 2019
Operating system	Windows Server 2016 Standard or Datacenter
Browser	To design workflows, use the following browser versions. <ol style="list-style-type: none"> <li>5. Minimum required: Microsoft Internet Explorer 9.x</li> <li>6. Recommended: Microsoft Internet Explorer 10 or greater, Google Chrome (latest released version), Mozilla Firefox (latest released version), Apple Safari (latest released version)</li> </ol>
Software	<ul style="list-style-type: none"> <li>• Microsoft SQL Server 2016</li> <li>• Microsoft SharePoint Server 2019</li> </ul>
Type	SPARK Workflow for SharePoint Subscription Edition
Operating system	Windows Server 2019/2022 Standard or Datacenter
Browser	To design workflows, use the following browser versions. <ol style="list-style-type: none"> <li>7. Minimum required: Microsoft Internet Explorer 10.x</li> <li>8. Recommended: Microsoft Edge, Google Chrome (latest released version), Mozilla Firefox (latest released version), Apple Safari (latest released version)</li> </ol>
Software	<ul style="list-style-type: none"> <li>• Microsoft SQL Server 2019 with Cum 5+</li> <li>• Microsoft SharePoint Server Subscription Edition</li> </ul>

## II. Install SPARK Workflow on your environment

1. To install SPARK Workflow for SharePoint, the installer must run on the front-end server.
2. Download the installer package (SPARK Workflow.exe).  
(The Installation Package contains no viruses or malwares, and was produced in a safe environment and secured network).

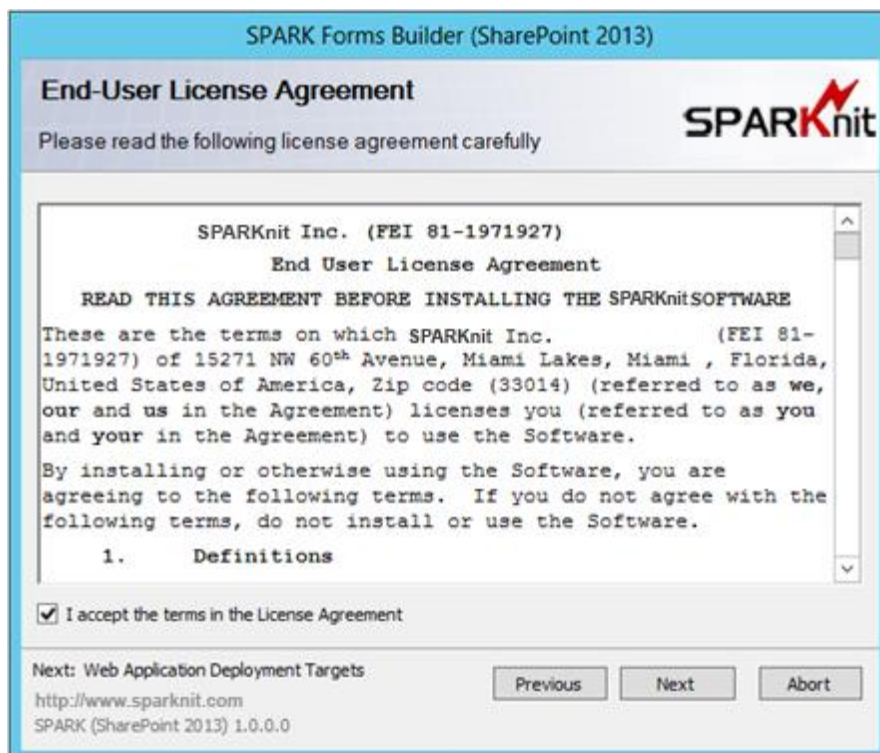
3. Double-click the installer to display the installation dialog box.  
**Note:** In order to run the installation package successfully you need to login with a high privileges account. To run the installer with a user account other than the logged-in user account, press and hold SHIFT, right-click the installer file, select Run as different user, and then enter the credentials for the account.
4. On the Welcome to the Installation Wizard dialog, click **Next**.



5. The (Server and System Check) dialog appears and start checking the system, if there is any problem in the checklist, then you have to fix that issue and try running the installer again, if all check list points are OK then click **Next**.

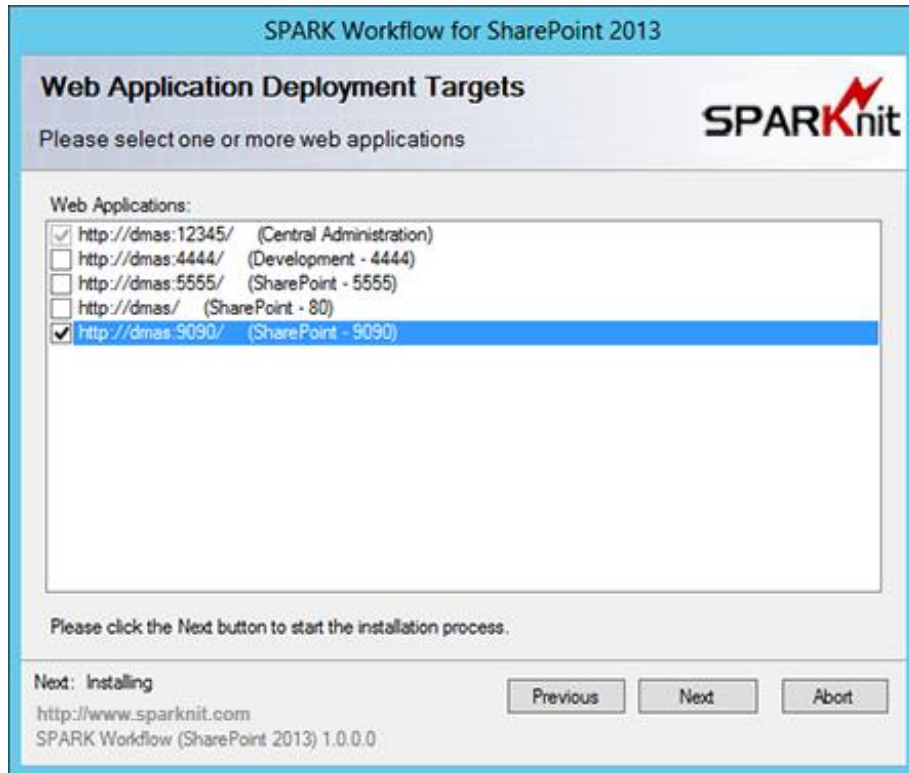


6. On the End-User License Agreement dialog, review the license, check the “I accept the terms in the license agreement”, then click **Next**.



7. The Web Application Deployment Targets dialog appears, showing a list of your SharePoint environment available web applications, the central administration web application will be selected by default and it will be disabled as this web application is mandatory for deploying SPARK Workflow. At

At this point, you have to specify at least one web application to install SPARK Workflow on. Check the web application then click **Next**.



8. Installation status is indicated by messages and a progress bar.



9. When installation is complete, click **Next** to view the installation results page.



10. In the results page, you can view all the information about the installation process, and verify that everything have been successfully installed; you can click **Close** to close the installation dialog box.



Note: The installer installs SPARK Workflow-named assemblies, resource files and SharePoint features locally. At this point, the solutions licensing system and SPARK Workflow features are now available for

activation on your SharePoint farm.

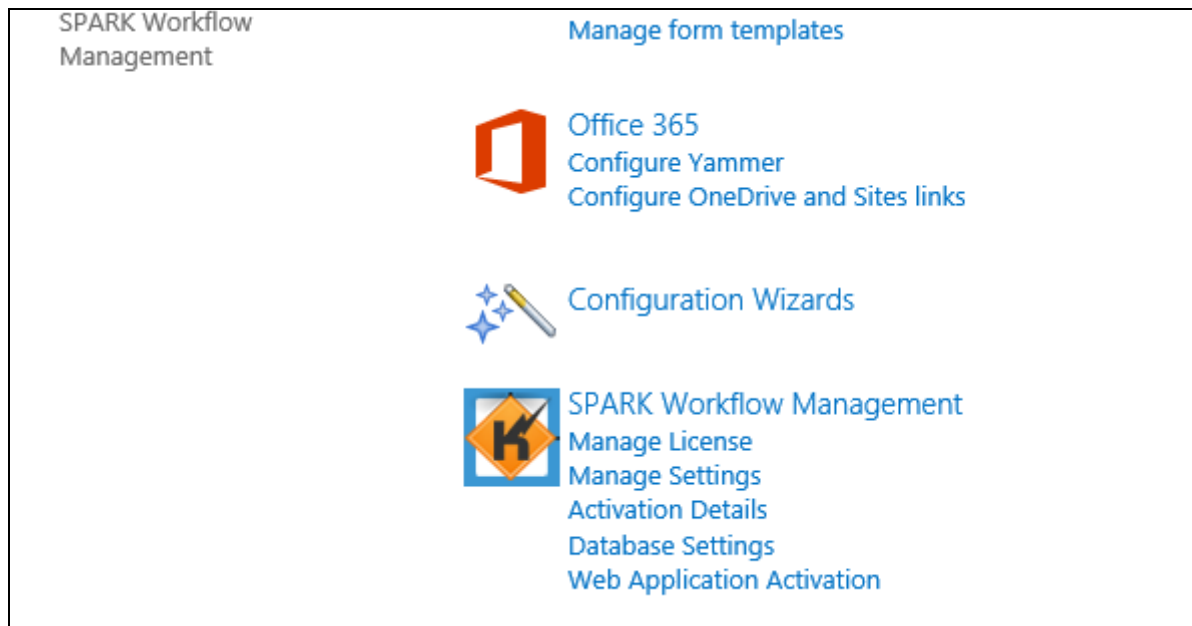
### III. Obtain SPARK Workflow License

Always make sure that your SPARK Workflow license key file is up to date. Make sure that the product license is explicitly activated for the functionality that you want, such as Enterprise Edition.

If you have questions about your license file, contact us at [license@sparknit.com](mailto:license@sparknit.com)

#### Steps to obtain your license:

1. Open your SharePoint central administration web application.
2. In the central administration main page, locate “SPARK Workflow Management” and click on the “Activation Details” link.



#### SPARK Workflow Management



SPARK Workflow Management

[Manage License](#) | [License Activation Details](#) | [Manage Email Settings](#) | [Manage Database Settings](#) | [Web Application Activation](#)

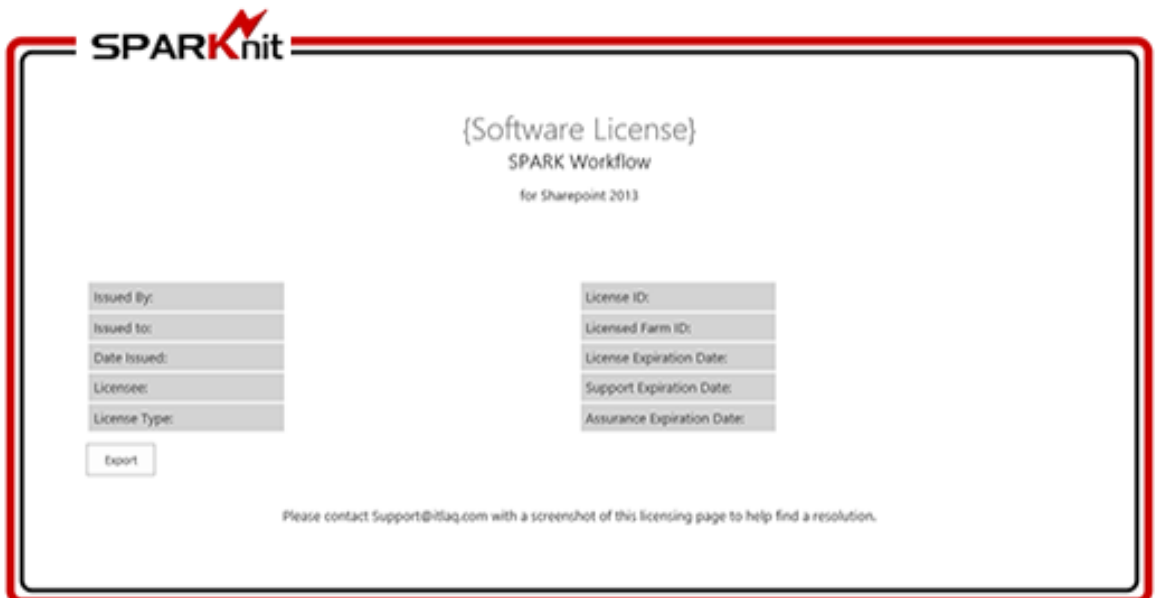


3. In the “Activation Details” page locate the “FARM ID” field, copy the ID and send it to [license@sparknit.com](mailto:license@sparknit.com) in order to obtain your license key file.



4. The Licensing Department will send you a license key file by email. Upload this file by opening the “Manage License” page in “SPARK Workflow Management” section then activate the license by clicking on the “Activate” button.

Import License File:



5. Now and as you have licensed SPARK Workflow, you can activate its feature on the desired sites. In case you face any problem in your license, contact **SPARKnit** through the following emails: [license@sparknit.com](mailto:license@sparknit.com) or [support@sparknit.com](mailto:support@sparknit.com)

**Note:** If you couldn't find "SPARK Workflow Management" section in the central administration page after installing SPARK Workflow then go to "System Settings" and open "Manage Farm Solutions" page, locate SPARKWorkflow.wsp solution and make sure it has been deployed on the correct Central Administration web application, (if not) then deploy it manually and check again if SPARK Workflow has been activated on the central administration web application and that "SPARK Workflow" section appears on the Quick launch menu.

sparkworkflow.wsp	Deployed	http://dmas9090/
tabcenter.wsp	Deployed	http://dmas/
tasksrecursive.wsp	Deployed	http://dmas/

## IV. Activate SPARK Workflow feature on SharePoint sites

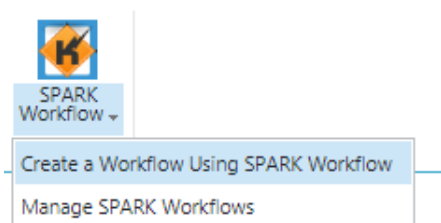
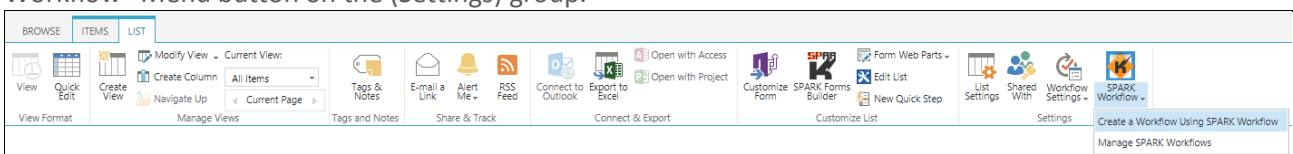
"SPARK Workflow" must be activated on relevant sites.

### Steps to activate features on each relevant site in your SharePoint

1. From your site home page, access Site Settings (on SharePoint site click the gear icon).
2. In the Site Administration section, click "Manage Site features".
3. Locate "SPARK Workflow 2013", "SPARK Workflow 2016", "SPARK Workflow 2019" or "SPARK Workflow (SharePoint Subscription Edition)" and click "Activate" to activate the feature on your site.

## V. Confirm SPARK Workflow installation

To confirm that SPARK Workflow has been installed and activated properly, go to any list or library in the site you have activated the feature on, click on the list tab on the top ribbon, you must see now "SPARK Workflow" Menu button on the (Settings) group.



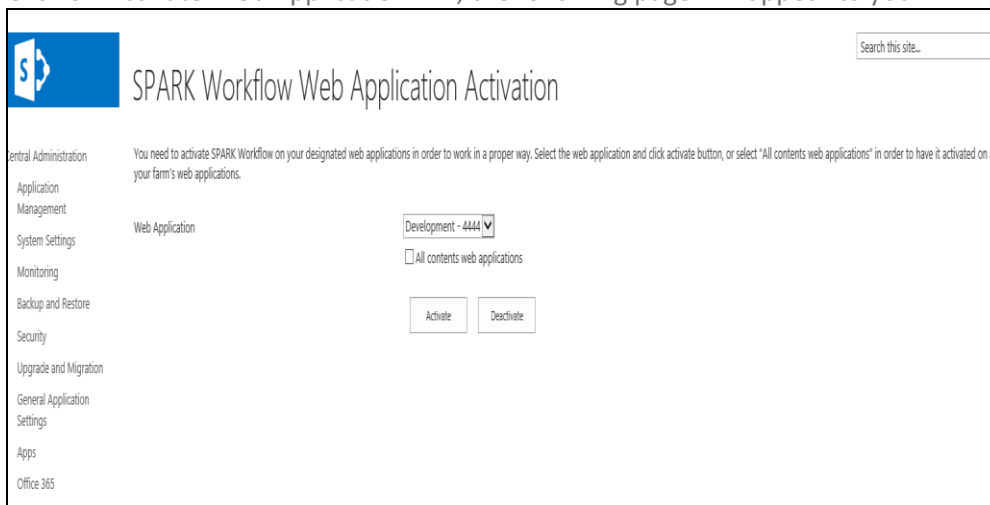
## VI. Configure SPARK Workflow To Work on your Farm.

You need to configure the following settings on your SharePoint farm's Central Administration, these configurations are mandatory for SPARK Workflow functionality.

### Activate SPARK Workflow on Web Applications

After you successfully install and deploy SPARK Workflow on your SharePoint Farm, you need to activate it on your Web Applications; this procedure will authorize its components to work on that designated web applications without any limitation or security issues. Follow the next steps in order to activate it on your farm's web applications:

1. Open the Central Administration page and click on SPARK Workflow Management.
2. Click on Activate Web Application link, the following page will appear to you:



3. Select your web application from the drop down list, or check "All contents web applications" then click on "Activate" button .  
**Note:** In order to deactivate SPARK Workflow on your web application and return it to the state it was before SPARK's got activated on it; just repeat the above points except you have to click the "Deactivate" button instead.

### Create and Configure SPARK Workflow Database

When installing SPARK Workflow for the first time, you need to create its special internal instances tracking database. Follow the next steps in order to create a new database:

1. Open the Central Administration page and click on SPARK Workflow Management.
2. Click on Manage Database Settings link, the following page will appear to you:

SPARK Database Settings

SPARK Workflow Tracking Database Settings

SPARK needs to create and configure tracking database in order to track workflows instances data. Use the following setting to configure the database and create it on your database server.

Server Name: DMAS

Database Name: SPARKWFDB

Authentication:  Windows Authentication,  SQL Authentication

Account: [text box]

Password: [text box]

Create a new DB:

Buttons: Create, Cancel

3. By Default your SharePoint farm’s default server’s database name will appear in the “Server Name” field, and the default database name will appear in “Database Name” field as will, we do recommend keeping the default values; however you could change them the way you want according to your environment specifications and configurations.
4. On the Authentication section you could choose either “Windows Authentication” which is the default choice or “SQL Authentication” in case you have a special SQL Account to access your database server, if you select “SQL Authentication” then you need to fill the Account and the Password fields.
5. Select “Create a new DB” checkbox in order to create a new database.
6. Click on “Create” button to initiate the database creation process.

**Note:** In order to modify any of the above settings you could get back to page again and modify any value, SPARK Workflow will support the new values and ignore the old ones.

## Configure SPARK Workflow Email Settings

SPARK Workflow depends on a special configuration to send emails to internal and external users; you need to follow the following steps in order to be able to send emails through workflows:

1. Open the Central Administration page and click on SPARK Workflow Management.
2. Click on Manage Email Settings link, the following page will appear to you:

## Manage Settings

**Email Settings**

The outgoing SMTP Server settings details, which will be used to send emails and notifications to users

Outgoing SMTP Server:

SMTP server requires authentication

Username:

Password:

From Email Address:

Reply To Email Address:

Enable the SSL to secure the connection

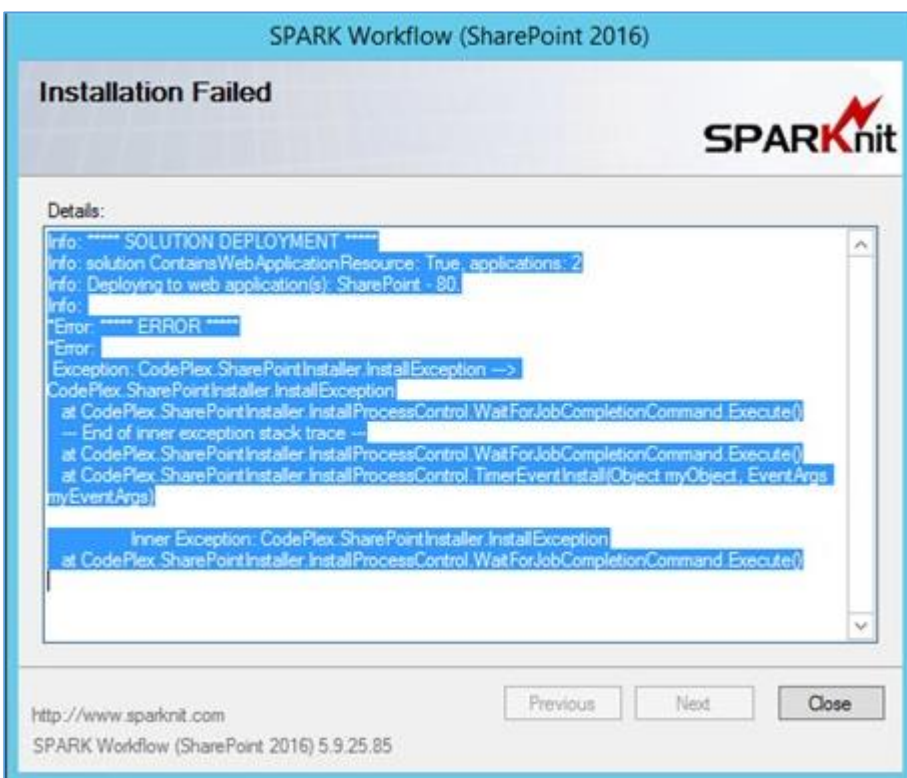
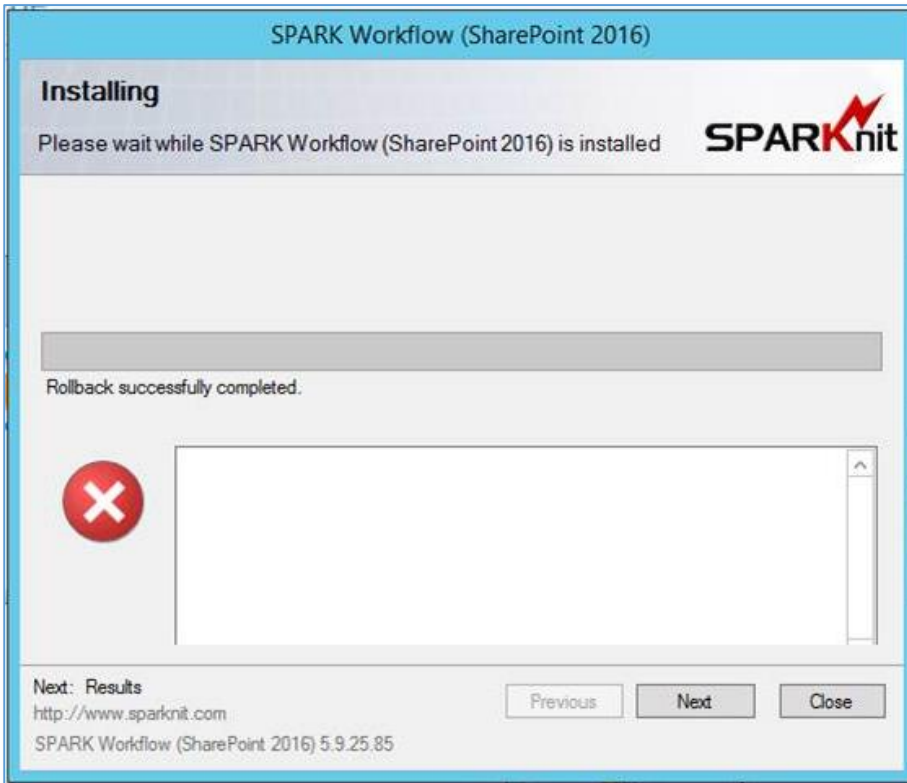
SMTP Port Number:

3. Fill all the fields with your email environment's specifications settings then click OK.

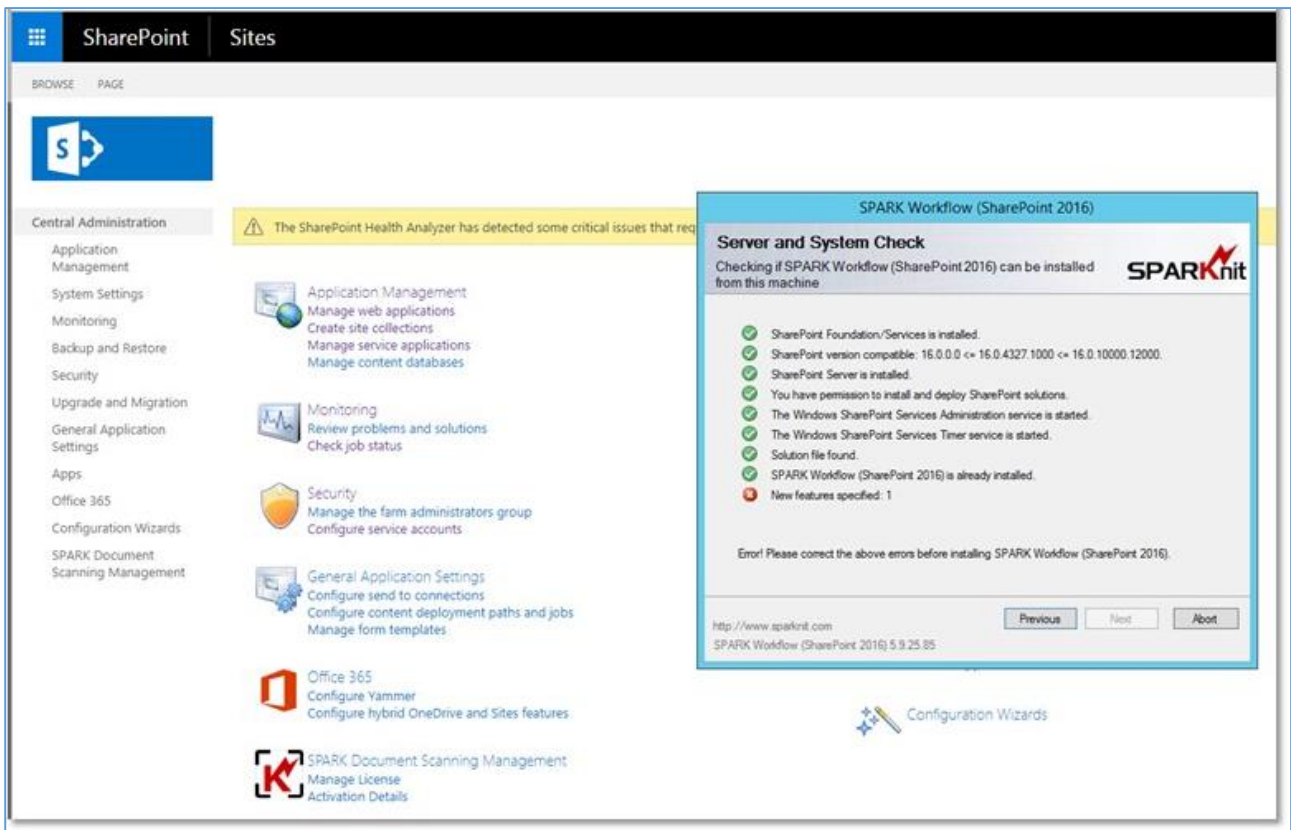
**Note:** In case you didn't configure SPARK Workflow Email Settings, you will still be able to create and publish workflows on your web applications sites; however you will get error logs regarding sending emails in your workflows instances history, these errors will not interrupt your workflows from completing their processes though.

## VII. Installation Troubleshooting

Sometimes you may see the following installation error dialogs when installing SPARK Workflow, due to a SharePoint timer job timeout for any reason.



In addition, if you tried to reinstall it again you will see the following issue in the “Server and System Check” dialog.

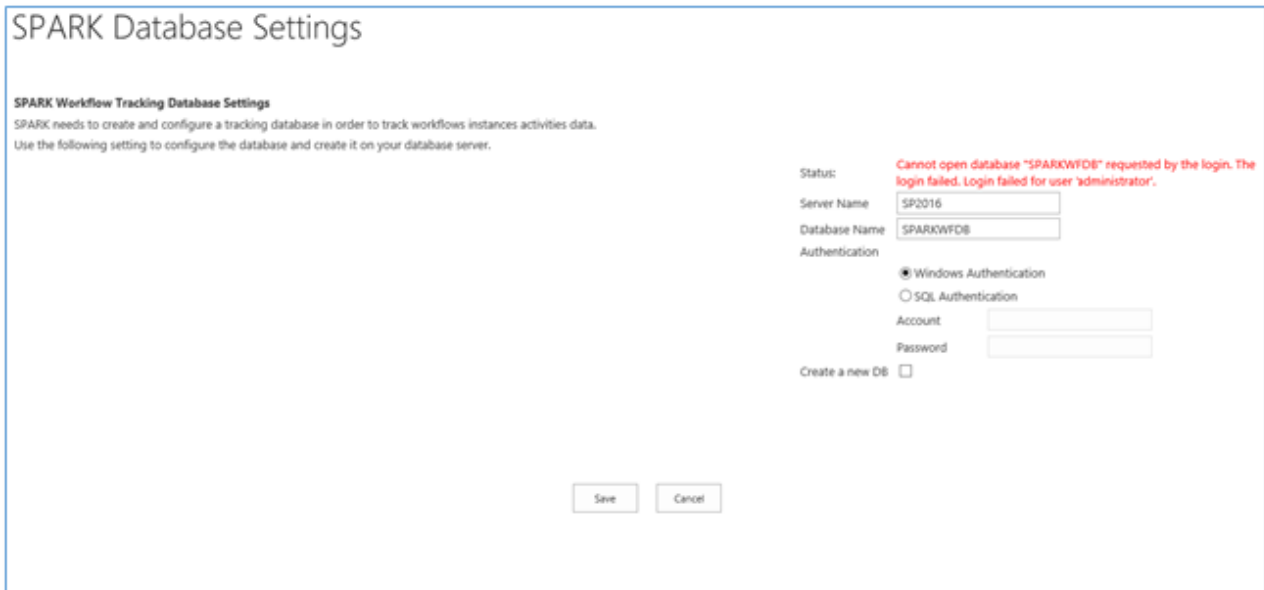


In order to solve this issue you need to follow these steps:

1. Open your SP Central Administration web application page.
2. Click on System Settings.
3. Click on Farm Solutions.
4. Locate SPARKWorkflow.wsp Solution, and click on it.
5. Retract the solution from all of your web applications.
6. Remove the solution entirely (it must be fully removed from the farm).
7. Once you do that, run the setup again and install on your farm.

## VIII. Database Troubleshooting

Sometimes you may see the following database errors after installing and configuring SPARK Workflow.



**SPARK Database Settings**

**SPARK Workflow Tracking Database Settings**  
SPARK needs to create and configure a tracking database in order to track workflows instances activities data.  
Use the following setting to configure the database and create it on your database server.

Status: **Cannot open database "SPARKWFDB" requested by the login. The login failed. Login failed for user 'administrator'.**

Server Name: SP0216

Database Name: SPARKWFDB

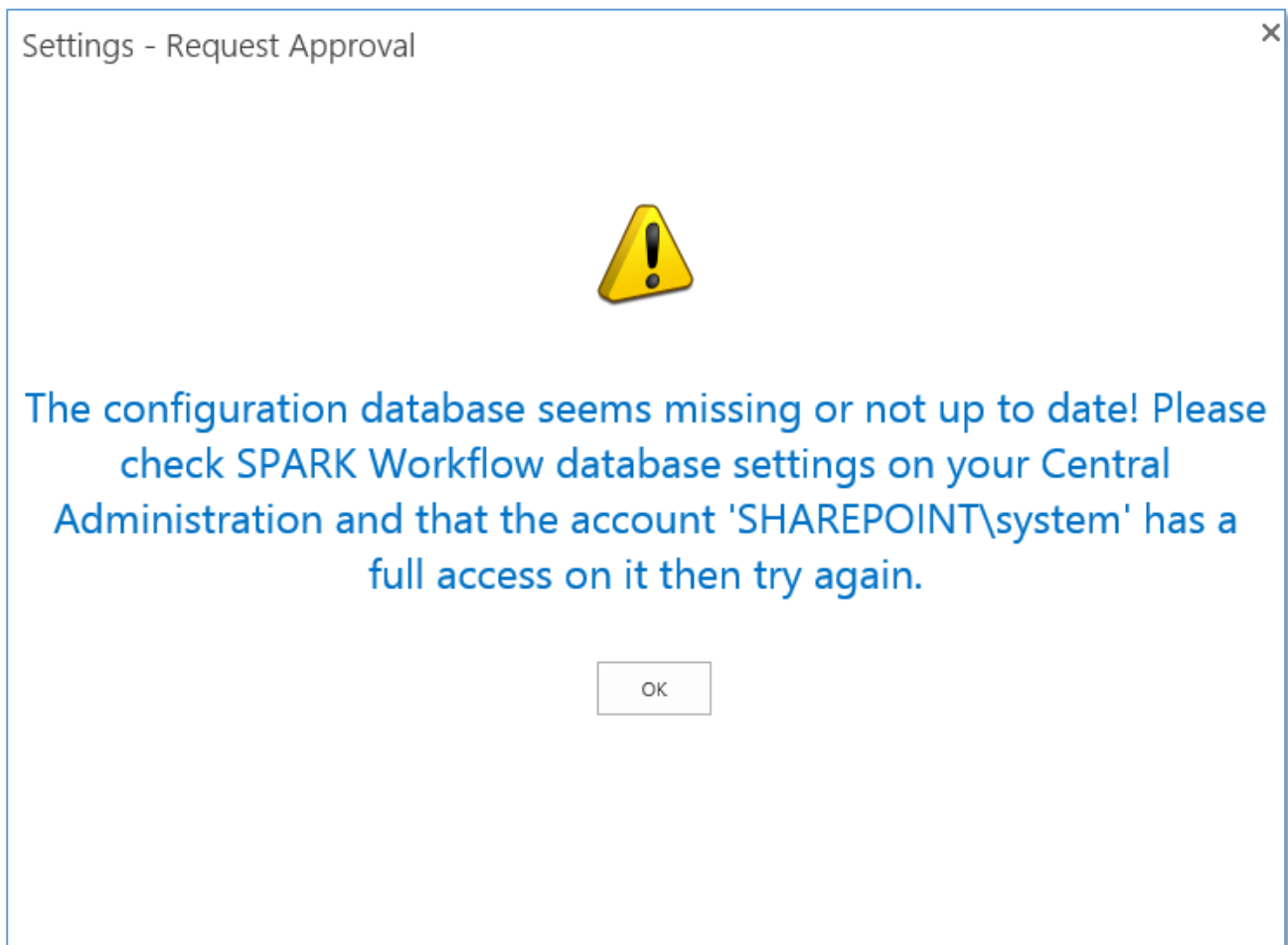
Authentication:  
 Windows Authentication  
 SQL Authentication

Account:

Password:

Create a new DB:

Save Cancel



This means that SPARK Workflow is unable to connect to SPARKWFDB database in your SQL server.



Follow the following steps In order to resolve this issue:

1. Make sure you have created and configured the workflow database properly.
2. Make sure that the Central Administration web application's service account has [connect, select, update, insert, delete and alter] permissions on the database.
3. Make sure that the site's web application's service account where you want to run SPARK Workflow on has [connect, select, update, insert, delete and alter] permissions on the database.
4. Another way to solve this especially if you have multi-tiers SharePoint farm structure, with separate SQL Server is to create a database user account on the SQL server, grant it [connect, select, update, insert, delete and alter] permissions on the database, and configure it in SPARK Workflow database management page like the below figure.

The screenshot shows a configuration form for the SPARK Workflow database. It includes fields for Server Name (SP2016) and Database Name (SPARKWFDB). Under the Authentication section, the 'SQL Authentication' radio button is selected. Three red arrows with numbers 1, 2, and 3 point to the 'SQL Authentication' radio button, the 'Account' field (containing 'SQLUSER'), and the 'Password' field (containing masked characters) respectively.

Status:

Server Name

Database Name

Authentication

Windows Authentication

**1**  SQL Authentication

**2** Account

**3** Password