



# **Sage Payment Solutions**

## Sage Exchange Desktop (SED) v2.0 Installation Guide

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# Contents

|  |           |
|--|-----------|
| <b>Revisions .....</b>   | <b>5</b>  |
| <b>Overview .....</b>  | <b>6</b>  |
| Upgrading from Sage Exchange Desktop (SED) v1.0 .....          | 6         |
| Key differences from SED 1.0 .....                             | 6         |
| Upgrading v1.0 SDK integrations to the v2.0 API .....          | 7         |
| Installation .....   | 7         |
| Sage application components .....                              | 7         |
| Dependencies .....   | 8         |
| Sage Payment Solutions (SPS) application deployment .....      | 8         |
| Installation path .....  | 8         |
| Sage Exchange Desktop API .....                                | 9         |
| Installation path .....  | 9         |
| Registry entries .....   | 9         |
| Sage Exchange Desktop application .....                        | 9         |
| Installer SED bootstrapper .....                               | 9         |
| Installation path .....  | 9         |
| Start menu shortcut .....                                      | 9         |
| Registry entries .....   | 9         |
| Updates .....  | 10        |
| Automated update .....   | 10        |
| External device components .....                               | 10        |
| Uninstalling .....   | 10        |
| Log files and troubleshooting .....                            | 10        |
| Installation logs .....  | 10        |
| Application logs .....   | 10        |
| Moneris QA server .....  | 11        |
| <b>Appendix A: Installing Sage Exchange Desktop v2.0 .....</b> | <b>12</b> |
| Download the installer and verify the digital signature .....  | 12        |
| Installation Sage Exchange Desktop v2.0 .....                  | 13        |
| <b>Appendix B: Managing Sage Exchange Desktop v2.0 .....</b>   | <b>15</b> |
| Automatic updates .....  | 15        |
| Using Sage Exchange Desktop .....                              | 15        |
| Sage Exchange Desktop menu .....                               | 16        |
| About Sage Exchange Desktop .....                              | 16        |
| Start menu .....   | 17        |

Uninstalling Sage Exchange Desktop.....17

# Revisions

| No.      | Date      | Reason   | Author           |
|----------|-----------|--|------------------|
| 1.00     | 1/27/2015 | Created document for new installation method   | Martin Henderson |
| 1.01     | 9/23/2015 | Updated .Net requirement to 4.6; added log locations; other misc. edits.                               | Majid Razvi      |
| 2.0.0.13 | 1/4/2016  | Synchronizing document version with SED release versions.<br>Updates per SED 2.0.0.13 initial release. | Eric Rasmussen   |
| 2.0.0.13 | 1/18/2016 | Added section – Upgrading 1.0 SDK integrations to SED 2.0 API  | Eric Rasmussen   |

# Overview

## Upgrading from Sage Exchange Desktop (SED) v1.0

The main Sage Exchange Desktop 1.0 components should be removed prior to installing SED 2.0, this includes Sage Exchange and the Module SDK. Sage Exchange device drivers for credit card terminals do not have to be uninstalled or re-installed, current SED 1.0 devices are also supported on SED 2.0. Within the Windows Control Panel, the Programs and Features utility can be used to uninstall the following two programs.

- Sage Exchange version 1.0.6.x (or earlier)
- Module SDK version 1.0.x

They will be listed with Publisher Sage Payment Solutions, sorting by publisher will help locating the currently installed Sage applications. Click the program in the list to select it and click Uninstall in the title banner of the list. Follow the prompts to uninstall and remove the existing 1.0 components.

### Key differences from SED 1.0

The Sage Exchange Desktop 2.0 application looks and functions much in the same way as the 1.0 version with some key differences worth noting for those familiar with the previous version. The Sage Exchange SDK has been superseded by the Sage Exchange Desktop API. The new API interface is essentially the same but does require a recompile and minor changes for existing third-party integrations. The SED 1.0 underlying Sage Exchange XML messaging formats and structures are forwards compatible.

| Component               | SED 2.0.n.x                 | SED 1.0.6.x               |
|-------------------------|-----------------------------|---------------------------|
| .Net Framework          | .Net 4.6                    | .Net 3.5                  |
| PA-DSS Compliance       | PA-DSS 3.1                  | PA-DSS 2.0                |
| Encryption Level        | TLS 1.2                     | TLS 1.0                   |
| Installation Framework  | Microsoft Installer (WiX)   | Microsoft ClickOnce       |
| Deployment Framework    | SPS App Deploy              | Microsoft ClickOnce       |
| Installation            | All Users (per machine)     | Current User              |
| Install Location        | Program Files               | User AppData Directory    |
| Installation Permission | Administrator               | Local User                |
| Auto Updates Permission | Administrator               | Local User                |
| Publisher Certificate   | CA Issued Code Signing Cert | Sage SPS Self-signed Cert |
| Integration Component   | Sage Exchange Desktop API   | SPS Module SDK            |

| Component               | SED 2.0.n.x       | SED 1.0.6.x           |
|-------------------------|-------------------|-----------------------|
| SDK/API – SED Detection | API Returns Error | SDK Initiates Install |

## Upgrading v1.0 SDK integrations to the v2.0 API

The Sage Exchange Desktop 2.0 API implements the same methods and the interface is the same as the SED 1.0 Module SDK. To upgrade your solution from SED 1.0 to SED 2.0 references will need to be changed to use the new SED 2.0 API. See the below table for the new identifiers and key values that will need to be used in your code.

| Component           | SED API v2.0                         | SED API v1.0                         |
|---------------------|--------------------------------------|--------------------------------------|
| .Net Framework      | .Net 4.6                             | .Net 3.5                             |
| Install Location    | Program Files\Sage Payment Solutions | Program Files\Sage Payment Solutions |
| Installation Folder | \Sage Exchange Desktop API           | \Sage Payment Module SDK             |
| Loadable DLL        | clSedApi.dll                         | SpsModuleSdkCL.dll                   |
| Client PROGID       | clSedApi.ModuleClient                | SpsModuleSdkCL.ModuleClient          |
| Response PROGID     | clSedApi.ModuleResponse              | SpsModuleSdkCL.ModuleResponse        |
| Client CLSID        | CF5D885D-7838-4807-A2BA-BB0D92D9B1EA | 89BB4535-5A89-43a0-89C5-19A4697E5C5C |
| Response CLSID      | AF364412-E730-4738-91BB-B73124B96633 | 41A449A9-EFA9-45e5-A6BD-9896A8194CD0 |
| COM Objects         | IModuleClient/IModuleResponse        | IModuleClient/IModuleResponse        |
| SED Not Detected    | API Returns Error                    | SDK Initiates SED 1.0 Install        |

## Installation

Sage Exchange Desktop requires the installation of 3 software components. The installation of SED 2.0 and all dependencies is automated by the Sage Exchange Desktop Bootstrapper. In addition to the 3 Sage components, it will detect installation of the Microsoft .Net 4.6 Framework and will update the machine if required. The installation process requires Administrator permissions, and will prompt for password and acknowledgement based on the current user's permission level and User Access Control (UAC) settings.

### Sage application components

| Component                  | Description   |
|----------------------------|---|
| Sage SED Bootstrapper      | Sage installer application that manages the initial installation of SED 2.0 and dependencies. |
| SPS Application Deployment | Sage application that manages the installation and updating of the Sage Exchange Desktop.     |

| Component                 | Description  |
|---------------------------|--|
| Sage Exchange Desktop API | Sage class library that exposes COM interfaces used for integrating payment processing into external applications. |
| Sage Exchange Desktop     | Sage application used for processing payments and Sage Exchange messaging.   |

### Dependencies

| Component             | Description   |
|-----------------------|---|
| MS .Net 4.6 Framework | Microsoft core .Net common application framework version 4.6. |

## Sage Payment Solutions (SPS) application deployment

The SPS application deployment is bundled with the SED installer.

### Installation path

[PROGRAM FILES]\Sage Payment Solutions\Application Deployment

Registry Entries

[LOCAL MACHINE]\Software\Sage Payment Solutions\Application Deployment\Path

[LOCAL MACHINE]\Software\Sage Payment Solutions\Application Deployment\Installation Directory

These registry entries are related the SPS application deployment application and can be used to detect a valid installation from external software. If these keys are not present in the registry then it is an indication that the installation of this component failed.

## Sage Exchange Desktop API

The Sage Exchange Desktop API is bundled with the Sage Exchange Desktop installer.

### Installation path

[PROGRAM FILES]\Sage Payment Solutions\Sage Exchange Desktop API

### Registry entries

[LOCAL MACHINE]\Software\Classes\CLSID\{CF5D885D-7838-4807-A2BA-BB0D92D9B1EA}

[LOCAL MACHINE]\Software\Classes\CLSID\{AF364412-E730-4738-91BB-B73124B96633}

[LOCAL MACHINE]\Software\Classes\clSedApi.ModuleClient

[LOCAL MACHINE]\Software\Classes\clSedApi.ModuleResponse

These registry entries are related to the COM classes/interfaces supported by the API and can be used to detect a valid installation from external software. If these keys are not present in the registry then it is an indication that the installation of this component failed.

## Sage Exchange Desktop application

### Installer SED bootstrapper

The following ZIP file is provided for download. Extract the contents preserving the paths. Execute the extracted “SageExchangeDesktopBootstrapper.exe” in the root folder to start the installation process.

<https://www.sageexchange.com/install/sageexchangedesktopbootstrapper.zip>

### Installation path

[PROGRAM FILES]\Sage Payment Solutions\Sage Exchange Desktop

The installation folder contains just the deployment reference file. The actual Sage Exchange Desktop application files are managed by the SPS Application Deployment and can be found under its installation path.

### Start menu shortcut

[PROGRAM DATA]\Microsoft\Windows\Start Menu\Programs\Sage Payment Solutions\Sage Exchange Desktop

### Registry entries

[LOCAL MACHINE]\Software\Sage Payment Solutions\Sage Exchange Desktop\Path

These registry entries are related the Sage Exchange Desktop application and can be used to detect a valid installation from external software. If these keys are not present in the registry then it is an indication that the installation of this component failed.

## Updates

The Sage Exchange Desktop application is updated via published patches made available on the install web site.

### Automated update

The SPS Application Deployment application will check for updates when the Sage Exchange Desktop is started. If an update is found the application will prompt to download and install the update. Administrator permissions are required to perform the update. A mandatory update will require the user to download and install the update. Canceling a mandatory update will prevent the Sage Exchange Desktop from starting. Optional updates can be installed when desired, however the prompt for update notifications will continue until the update is installed.

## External device components

The Sage Exchange supports additional peripheral hardware devices. Some of these devices require that additional components be installed in order to function properly. Since the hardware devices are optional these components are separate from the Sage Exchange Desktop installation. It is recommended you review your application requirements to determine which, if any, hardware devices you will be supporting in order to properly deploy the Sage Exchange to your end users.

You can find a listing of supported devices and their install packages at the following URL:

<https://www.sageexchange.com/install>

### Uninstalling

Sage Exchange Desktop can be removed by using the Control Panel and Programs and Features to remove installed programs.

## Log files and troubleshooting

In the event a Sage Exchange Desktop installation fails please check to insure the installing user has the proper permissions to install an application. These paths may vary slightly between different computers. Some folders (e.g., AppData) may be hidden by default.

### Installation logs

Installation Logging is automatically enabled; the logs can be found in the following directory.

C:\Users\[USER]\AppData\Local\Sage Payment Solutions\Application Deployment

### Application logs

Application Logging must be enabled by turning on "Tracing" in the SED 2.0 menu, and the logs can be found in the following location or by launching from the "View Log" option in the SED 2.0 Main Menu.

C:\Users\[USER]\AppData\Local\Sage Payment Solutions\Sage Exchange Desktop

## Moneris QA server

There is a configuration variable that will allow you to point SED towards the Moneris QA server. This only applies when using the Moneris iPP320.

1. Close SED.
2. Run Notepad (or your preferred text editor) as an administrator.
3. Open [PROGRAM FILES]\Sage Payment Solutions\Application Deployment\Applications\[GUID]\[VERSION]\SageExchange.exe.config.
4. Look for UseMonerisQAHost and set it to either True or False as desired.
5. Save the file.
6. Close Notepad.
7. Open SED.

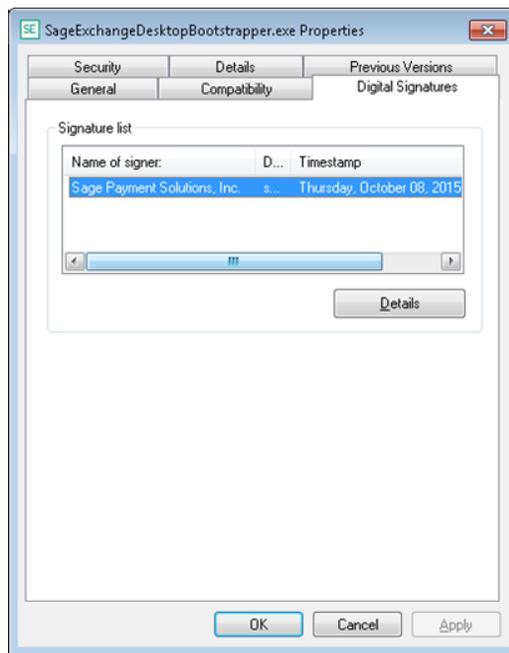
The application log will indicate whether or not it is attempting to use the QA server.

# Appendix A: Installing Sage Exchange Desktop v2.0

## Download the installer and verify the digital signature

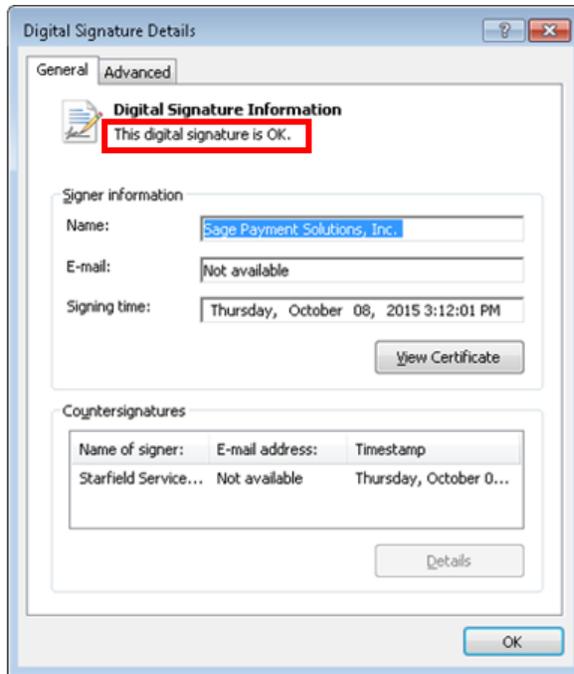
Follow the steps below to download the installer and to verify the digital signature.

1. Download the zipped installation file folder from the Sage Exchange Installation portal hyperlink:  
<https://www.sageexchange.com/install/sageexchangedesktopbootstrapper.zip>
2. Extract the folder on your local machine.
3. Right-click **SageExchangeDesktopBootstrapper.exe** and then select **Properties** to open the **SageExchangeDesktopBootstrapper.exe Properties** window.
4. To ensure the source and integrity of the installation program, verify that it is signed by **Sage Payment Solutions, Inc.**



5. Click **Details** to open the **General** tab of the **Digital Signature Details** window.

- Under **Digital Signature Information**, verify that the status is **OK**.

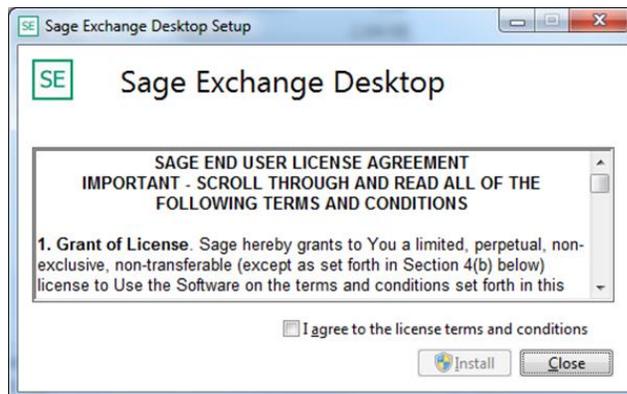


- Click **OK** to close the **Digital Signature Details** window.
- Click **OK** to close the **SageExchangeDesktopBootstrapper.exe Properties** window.

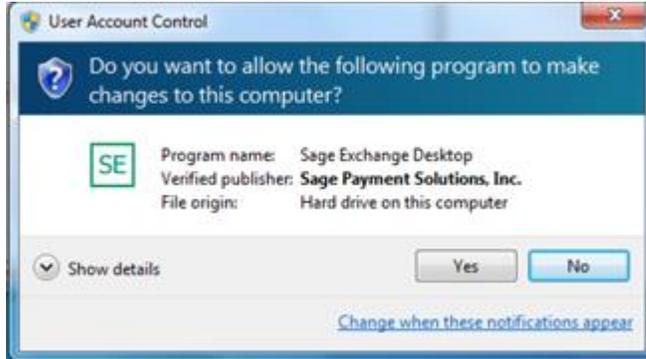
## Installation Sage Exchange Desktop v2.0

Follow the steps below to install Sage Exchange Desktop v2.0.

- Right-click **SageExchangeDesktopBootstrapper.exe** and then select **Run as administrator**.
- Enter your administrator credentials and then click **OK** to continue.
- Review the Sage End User License Agreement (EULA) and then click **I agree to the license terms and conditions**.
- Click **Install** to start the installation.



5. Click **Yes** on the **User Account Control** window to allow the installer to make changes to the computer.



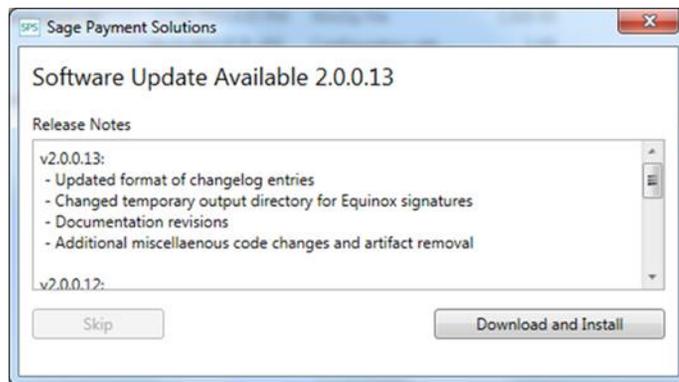
6. Click **Close** to close the **Sage Exchange Desktop Setup** window, indicating successful installation.

# Appendix B: Managing Sage Exchange Desktop v2.0

## Automatic updates

The SED 2.0 application automatically checks for application updates before startup and periodically while running. While unlikely if the installer was just downloaded, it is possible that upon first launch after initial install a new update will be available. The first part of the launch process of SED 2.0 is to check for software updates.

When an update is available, the update process will launch automatically. Additionally, the update check can be initiated from the SED menu manually. If a new release of SED is available, the update process will launch with the following window displaying the new version and release notes. The release notes are cumulative and can be reviewed by scrolling the window.



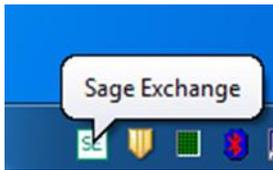
If the update is mandatory, it must be applied before SED can be started. Click the **Download and Install** to continue (**Skip** will be disabled). If the update is optional, you can click **Skip** to update at a later time. Optional updates are recommended to be applied as soon as possible, and the update check will continue to display the available update until it is installed.

After launching the update process, the Windows UAC prompts for Administrator level changes must be acknowledged to continue.

## Using Sage Exchange Desktop

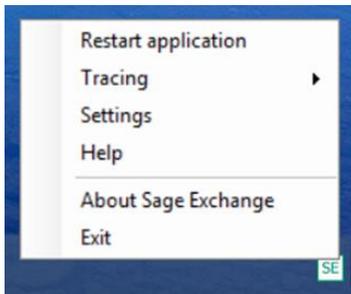
Upon startup of the current user's Window session or successful install, the SED 2.0 application will automatically launch. During startup the animated taskbar icon will display a rotating double-arrow icon as it loads and checks various startup parameters.

Once successfully running and ready for use, the SED taskbar icon will change to a green and white SE text box and a Sage Exchange dialog bubble will be displayed for a few seconds indicating successful startup.



### Sage Exchange Desktop menu

Once startup is complete, the SED 2.0 menu may be accessed via a right-click on the taskbar icon. To verify the version of SED that is currently installed and running, click **About Sage Exchange** on the menu.



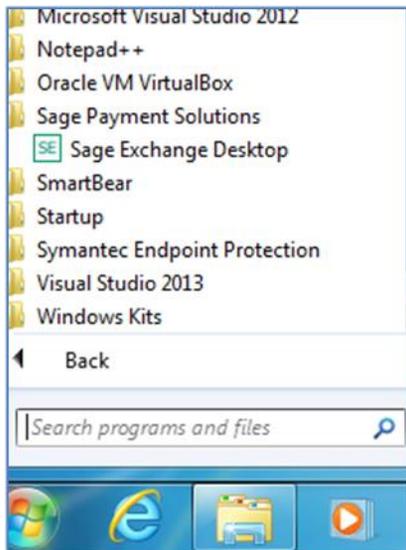
### About Sage Exchange Desktop

The version number is displayed just below the Sage Exchange title on the screen. Other information on the screen includes the Copyright and the main Sage Payments support page URL and phone number for reference.



## Start menu

As part of the installation process, the setup program installs a shortcut to start the application named Sage Exchange Desktop both in the Windows start menu under the program group Sage Payment Solutions and on the user desktop.



## Uninstalling Sage Exchange Desktop

The Sage Exchange programs installed will be displayed in the Windows programs and features list. To uninstall, the SPS Application Deployment and Sage Exchange Desktop programs should be removed.

Select the program from the list and click **Uninstall**, on the following window.

