

Ed-Fi ODS Installers

Overview

This solution contains executable installers for ODS Web Applications and ODS Databases. Make sure to read and prepare the requirements for each installer, in order to avoid unexpected issues during installation.

These scripts are provided as-is, but the Alliance welcomes feedback on additions or changes that would make these resources more user friendly. Feedback is best shared by raising a ticket on the Ed-Fi Tracker [Exchange Contributions Project](#).

NB: For production deployments, use the [Ed-Fi ODS Admin App](#) to setup vendor credentials.

Installer Execution Options

For a normal installation, double-click on the install executables if starting the installation from the GUI, or execute from the command line with no extra arguments. Additional logging can be enabled by running the installers with additional parameters. The following examples use Powershell for running the executables.

For the database installer:

```
> & '.\Ed-Fi_ODS_Database_{ods api version}.exe' /L*V '.\database_install.log'
```

For the web applications installer:

```
> & '.\Ed-Fi_ODS_Websites_{ods api version}.exe' /L*V '.\web_install.log'
```

Database Installer

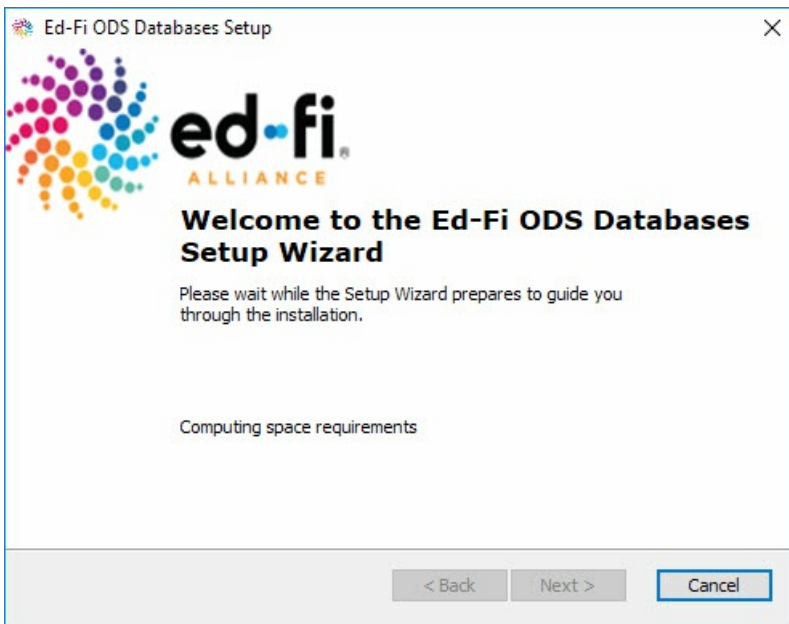
This application will install and configure the databases required to run the ODS set of applications.

Database Prerequisites

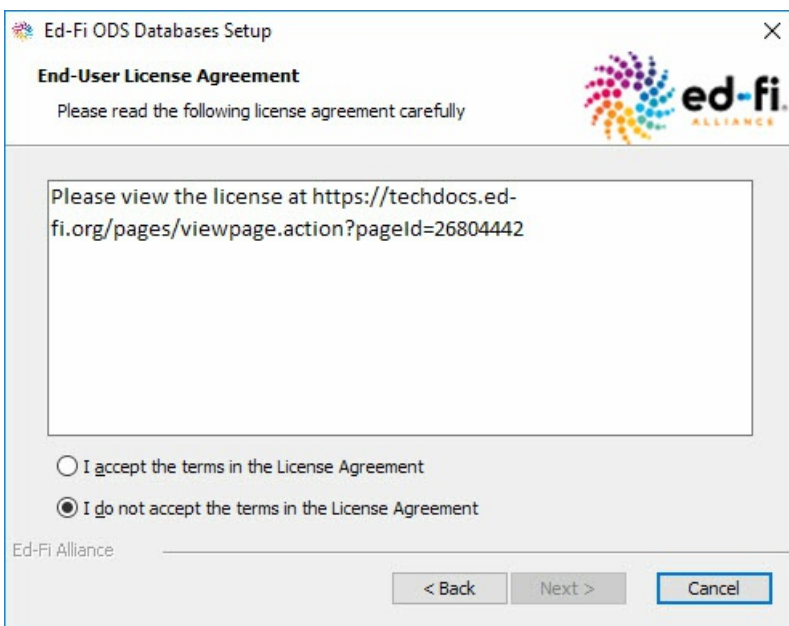
- Microsoft SQL Server 2016 or newer
- Recommended >= 32 GB RAM (installation may timeout if smaller due to inability to fully unpack the template databases)

Database Installation Steps

Step 1. Once you start the executable, the following screen will be displayed. Click Next to continue with the install process.



Step 2. The next step is reading and accepted the End-User License Agreement. Make sure to read the license terms before accepting and continuing with the install process.



Step 3. After accepting the license terms, the next screen will prompt you to connect to the target database server. You can connect either by a trusted connection (Windows Authentication) or SQL authentication.

NOTE: The account you use to connect *must* be able to create databases, logins and database users.

Ed-Fi ODS Databases Setup

SQL Database
Configure SQL Connection...

Server: (local)

Trusted Connection (Windows integrated authentication)

Username:

Password:

Test Sql Connection

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< Back Next > Cancel

Step 4. On the next screen, select whether you want to deploy a Sandbox or Production environment.

This will determine which databases get installed to your target server. If you are deploying a new ODS into Production use by your organization, choose *Production*. Otherwise, choose *Sandbox*.

NOTE: Your choice of install environment *must* match the environment chosen for your website installation.

Ed-Fi ODS Databases Setup

Select Environment
Choose between Sandbox or Production

Sandbox

Production

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< Back Next > Cancel

Step 5. Next, you are prompted for the Windows user that will be given permissions to the database.

NOTE: This user must match the user you enter in the web applications installer in order for the installed web applications to successfully access the ODS databases.

The Domain value should be your existing Active Directory domain such as "MYSCHOOLDOMAIN" (if deploying to a Windows network); otherwise, enter the name of the computer if the user is a local user (ie "MYCOMPUTER").

Step 6. Finally, the last configuration screen will allow s you to select the directories for the SQL Server data and log files, respectively. Typical best practices for SQL Server dictate that these directories should be on separate physical disks.

Step 7. Click on Next to proceed w ith the installation.

Web Applications Installer

This installer will install the Ed-Fi ODS Web Applications:

Web Prerequisites

- Windows 10 or Windows Server 2016.
- Existing ODS databases (can be installed using ODS Databases Installer)
- .Net 4.5 Framework
- MSMQ
- A Windows user group (either in Active Directory or on the local machine for a local install) that will have access to the Security Configuration tool. This cannot be the builtin group "Administrators"
- IIS 8.0 or newer
 - ASPNET 3.5, .NET Extensibility 3.5, ISAPI Extensions, & ISAPI filters enabled

See appendix below for a script that can help configure Windows by installing IIS-related features and the URL rewrite module.

Web Installation Steps

The first part of the setup is identical to the database installer. Please follow **Step 1** and **Step 2** from the previous section and click Next.

Step 3. By default, the applications will be installed in `C:\Ed-Fi\`. On this screen you have the option of installing to a different directory. A security best practice is to install on something other than the primary system drive if possible.



Step 4. Choose whether to deploy a Sandbox or a Production environment.

If you are deploying a new ODS into Production use by your organization, choose *Production*. Otherwise, choose *Sandbox*.

The Production environment will include

- Ed-Fi ODS API
- Bulk Load Services

The Sandbox environment will include

- Ed-Fi ODS API
- Swagger Documentation UI
- Sandbox Administration UI
- Bulk Load services

NOTE: Your choice of install environment *must* match the environment chosen for your database installation.

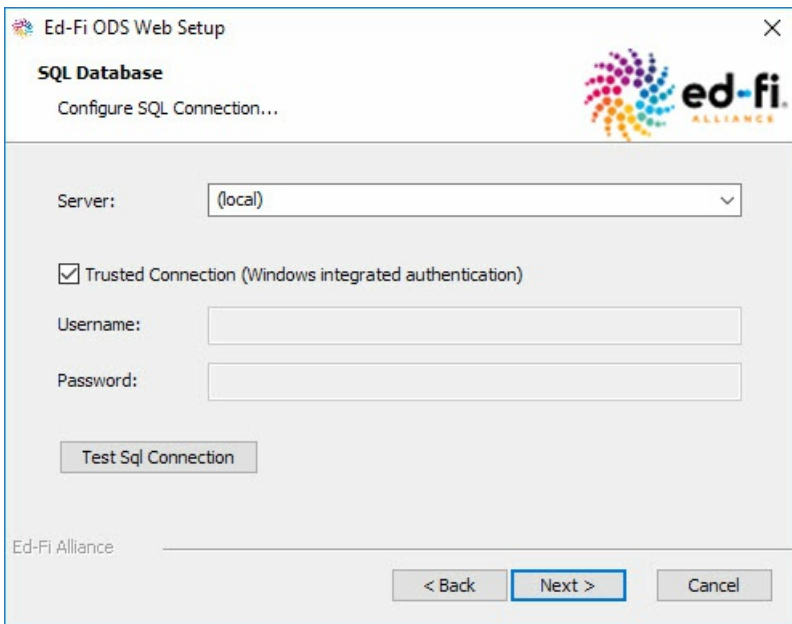


Step 5. This screen will prompt you for the user account under which you want to run the IIS applications. This can be a user on the local machine or on an existing Active Directory domain. This user should match the user you specified in the database installer (**Step 5**). Example:

- User Name: Test User
- Domain: MYCOMPUTERNAME
- Password: !!passw@rd\$\$



Step 6. After configuring the user credentials, the next screen will prompt you to select the database server to which the deployed applications should connect. You can connect either by a trusted connection (Windows Authentication) or SQL authentication. Security best practices recommend Windows Authentication.



Step 7. Click Next and the installation process will begin.

Step 8. Sandbox only. On the final screen you will be given an option to launch the Sandbox Admin and Swagger websites. On initial load of Sandbox Admin through the browser, sample sandboxes will be created and Swagger will be setup with a key and secret. The username and password for the Sandbox Admin tool are available inside the `<initialization>` section of the `EdFi.Ods.Admin.Web Web.config`.

Output

Sandbox Databases

- EdFi_Admin
- EdFi_Bulk
- EdFi_Ods_Bulk1
- EdFi_Ods_Empty_Template
- EdFi_Ods_Minimal_Template
- EdFi_Ods_Populated_Template
- EdFi_Security

Production Databases

- EdFi_Admin
- EdFi_Bulk
- EdFi_Ods_Bulk1
- EdFi_Ods
- EdFi_Security

Sandbox Applications

```
| Application | URL |
|---|
Web Api | https:// {computer_name} :444/EdFi.Ods.WebApi
Admin | https:// {computer_name} :444/EdFi.Ods.Admin.Web
Swagger UI | https:// {computer_name} :444/EdFi.Ods.SwaggerUI
BulkWorker Service ||
CommitWorker Service ||
```

Production Applications

```
| Application | URL |
|---|
Web Api | https:// {computer_name} :444/EdFi.Ods.WebApi
BulkWorker Service ||
```

CommitWorker Service ||

Uninstall

At this time, the uninstall feature will remove the Ed-Fi website but does not remove the two Windows services or the installed files on the hard drive. To remove the services manually, start an administrative command prompt and run these two commands:

```
sc.exe delete EdFi.Ods.CommitUploadService
sc.exe delete EdFi.Ods.BulkLoadService
```

Appendix - Windows Configuration Script

(!) Review carefully before running this. This will install IIS, URL Rewrite, and MSMQ if needed. Run PowerShell 64 bit as Administrator.

```
function Enable-Feature ($feature) {
    if ("Enabled" -ne (Get-WindowsOptionalFeature -Online -FeatureName "$feature"
        | Select-Object -ExpandProperty State)) {
        Enable-WindowsOptionalFeature -Online -FeatureName $feature
    }
}

Enable-Feature IIS-WebServerRole
Enable-Feature IIS-WebServer
Enable-Feature IIS-CommonHttpFeatures
Enable-Feature IIS-HttpErrors
Enable-Feature IIS-HttpRedirect
Enable-Feature IIS-ApplicationDevelopment
Enable-Feature IIS-HealthAndDiagnostics
Enable-Feature IIS-HttpLogging
Enable-Feature IIS-LoggingLibraries
Enable-Feature IIS-RequestMonitor
Enable-Feature IIS-HttpTracing
Enable-Feature IIS-Security
Enable-Feature IIS-RequestFiltering
Enable-Feature IIS-Performance
Enable-Feature IIS-WebServerManagementTools
Enable-Feature IIS-IIS6ManagementCompatibility
Enable-Feature IIS-Metabase
Enable-Feature IIS-ManagementConsole
Enable-Feature IIS-BasicAuthentication
Enable-Feature IIS-WindowsAuthentication
Enable-Feature IIS-StaticContent
Enable-Feature IIS-DefaultDocument
Enable-Feature IIS-WebSockets
Enable-Feature IIS-ApplicationInit
Enable-Feature IIS-ISAPIExtensions
Enable-Feature IIS-ISAPIFilter
Enable-Feature IIS-HttpCompressionStatic
Enable-Feature NetFx4Extended-ASPNET45
Enable-Feature IIS-NetFxExtensibility45
Enable-Feature IIS-ASPNET45
Enable-Feature MSMQ

$urlrewrite = "https://download.microsoft.com/download/C/9/E/C9E8180D-4E51-40A6-A9BF-776990D8BCA9/rewrite_amd64.msi"
$output = "$env:TEMP\rewrite_amd64.msi"
(New-Object System.Net.WebClient).DownloadFile($urlrewrite, $output)

msiexec /i $output /qn /norestart
```