Simple install of Sitecore V9

Overview

This document contains summary of steps to install Sitecore v9, quickly and relatively simply. Several folks in the community have created alternative approaches to install Sitecore V9. Those efforts were used here. When in doubt, always refer to the Sitecore Installation guide or the contributor sites.

These instructions may work well for build up on a new laptop/desktop or vm, to be used by a developer or for testing. This will be an XP0 configuration, everything on a single machine. Chose to provide all the steps from scratch. If your technology stack is already in place and updated, just check to see that you have everything.

Once I had my tech stack built, the installation of SIF, SIFless and Sitecore took just under an hour. Your mileage will vary depending on machine horsepower and internet bandwidth.

Starting Technology Stack

1. Install OS: **Windows Server 2016** was used here, but **Windows 10** would be fine. Just make sure you have done all the updates possible.

2. Install **SQL Server Express 2016 SP1**. For a real Sitecore install you would not use Express but it is fine for a developer. Here's the installer:
   https://download.microsoft.com/download/9/0/7/907AD35F-9F9C-43A5-9789-52470555DB90/ENU/SQLEXPR_x64_ENU.exe

3. Install **SQL Server Management Studio**. Not required but a really good idea. Get it here:
   https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms

4. Configure SQL Server for **Mixed Mode Authentication** and **enable** the **sa** account. Don't forget the sa password you set.

5. Enable **Contained Database Authentication** using this query

   ```
   sp_configure 'contained database authentication', 1;
   GO
   RECONFIGURE;
   GO
   ```

6. Install **Visual Studio 2017** Community edition will work fine (VS2015 us ok but newer is better). You may consider these settings:

Summary

- > Visual Studio core editor
- > Universal Windows Platform development
- ∨ ASP.NET and web development
  Included
  - ✓ .NET Framework 4.6.1 development tools
  - ✓ .NET Core 2.0 development tools
  - ✓ ASP.NET and web development tools

  Optional
  - ☑ .NET Framework 4 – 4.6 development tools
  - ☑ Cloud tools for web development
  - ☑ .NET profiling tools
  - ☑ Entity Framework 6 tools
  - ☑ Windows Communication Foundation
  - ☑ Advanced ASP.NET features
  - ☑ Developer Analytics tools
  - ☐ ASP.NET MVC 4
  - ☑ .NET Framework 4.6.2 development tools
  - ☑ .NET Framework 4.7 development tools
  - ☑ .NET Framework 4.7.1 development tools
 - ☐ .NET Core 1.0 - 1.1 development tools for Web

NOTE: if you install SQL Server after Visual Studio, you will probably have to reregister the .net framework using the regiis.exe. Google for details, it varies by version.

7. You will need **PowerShell 5.1** or better which is built into Windows 10 and Windows Server2016. Just mentioned here incase you are not using those OS's.

8. Install **Microsoft ODBC Driver 13 for SQL Server**, get it here: https://www.microsoft.com/en-us/download/details.aspx?id=50420

9. Install **Microsoft Command Line Utilities 13 for SQL Server**, get it here: https://www.microsoft.com/en-us/download/details.aspx?id=52680

10. Install **Web Platform Installer v5**, got it here: https://docs.microsoft.com/en-us/iis/install/web-platform-installer/web-platform-installer-direct-downloads

11. Install **URL Rewrite 2.1** via WPI

    steps: open IISMgr

    select the machine

    in right panel click "Get New Web Platform Components"

    likely nothing will be displayed

    in top corner, search for "URL"

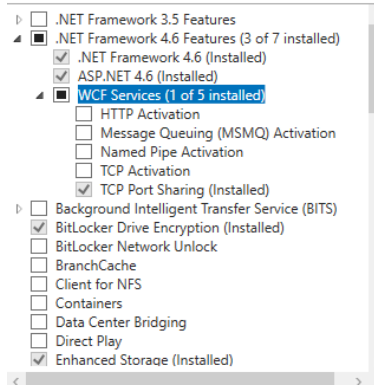   Add, then Install

exit

12. Install **SQLSysClrTypes** from here: http://go.microsoft.com/fwlink/?LinkID=849415&clcid=0x409
your system may already have a newer version

13. Install **Microsoft® SQL Server® Data-Tier Application Framework (June 30 2016)**. Our install guide said to install both 32 and 64 version. Get them here: https://www.microsoft.com/en-us/download/confirmation.aspx?id=53013

14. Install **Java Runtime Environment** (jre). 8u181 was used, get it here:
http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html
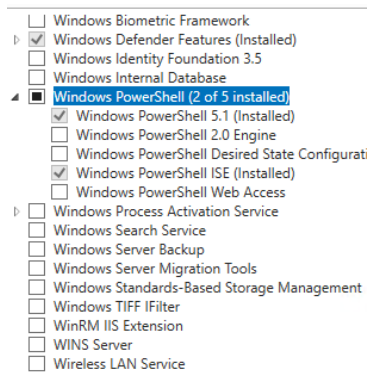
15. Windows Features etc

For Windows 10 go to Windows Features and Internet Information Services making sure the following settings are enabled. (screenshots of Windows Server setting are next)
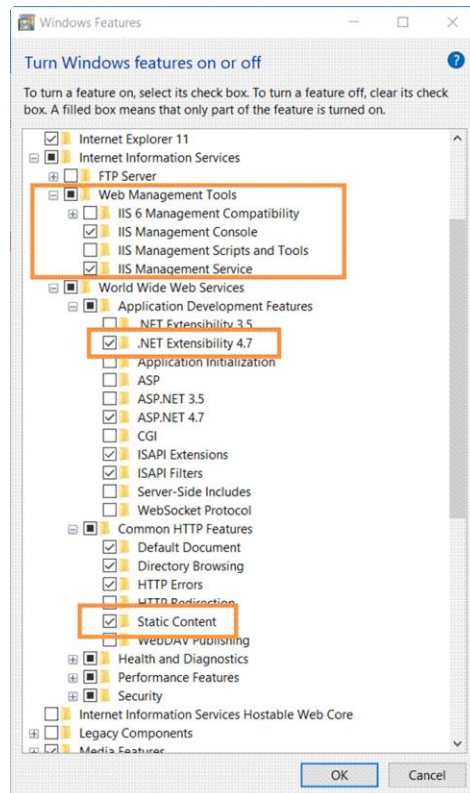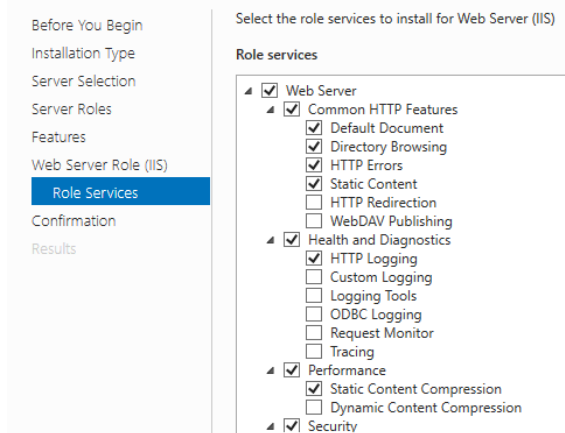

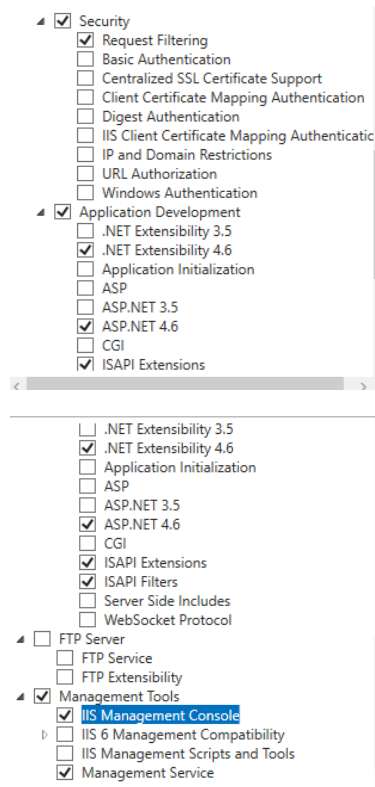For Windows Server need to add server roles for Web Server and .net 4.6

Note: also turn on .NET Framework 3.5 Features

Select role services

Before You Begin	Select the role services to install for Web Server (IIS)
Installation Type	
Server Selection	**Role services**
Server Roles	
Features	
Web Server Role (IIS)	
Role Services	
Confirmation	
Results	

- ▲ ☑ Web Server
  - ▲ ☑ Common HTTP Features
    - ☑ Default Document
    - ☑ Directory Browsing
    - ☑ HTTP Errors
    - ☑ Static Content
    - ☐ HTTP Redirection
    - ☐ WebDAV Publishing
  - ▲ ☑ Health and Diagnostics
    - ☑ HTTP Logging
    - ☐ Custom Logging
    - ☐ Logging Tools
    - ☐ ODBC Logging
    - ☐ Request Monitor
    - ☐ Tracing
  - ▲ ☑ Performance
    - ☑ Static Content Compression
    - ☐ Dynamic Content Compression
  - ▲ ☑ Security

16. Install **Solr** using this script (link to Jeremy's site is below) :
    https://gist.githubusercontent.com/jermdavis/8d8a79f680505f1074153f02f70b9105/raw/f70b0
    73d02dda4fb1fd3804c583f8352a46560b9/Install-Solr.ps1

    You will likely have to change the *$JREVesion* in the above script to match the jre you installed.
    You can check that at **c:\Program Files\Java**.

    The beauty of the above script is it creates your self-signed certificates and sets solr to run as a
    service. No need for nssm (Non Sucking Service Manager).

    Test the solr install by opening the Solr Admin panel with https://solr:8983/solr/. This works in
    IE and Chrome but FireFox throws a security error. Let me know if you figure out how to fix that:
    mir@sitecore.net

    The following blog post details the nice way to script your solr installation which was used
    above. https://jermdavis.wordpress.com/2017/10/30/low-effort-solr-installs/

17. Check .net framework versions on your machine, execute this in an admin cmd window (may
    take a couple of minutes to run)

    ```
    wmic /namespace:\\root\cimv2 path win32_product where "name like
    '%%.NET%%'" get version
    ```

Done with the Technology Stack

Everything is in place, you are ready to install Sitecore.

Install Sitecore Installation Framework (SIF)

Yes, we still need SIF, but will be using it indirectly via a custom generated script.

1. Install npm/node.js got it here: https://nodejs.org/dist/v8.11.3/node-v8.11.3-x64.msi

2. Need to register the **SitecoreGallery** repository. Do this in PowerShell :

    ```
    Register-PSRepository -Name SitecoreGallery -SourceLocation
    https://sitecore.myget.org/F/sc-powershell/api/v2
    ```

    The above step may require a new provider be installed, do so. You will get no feedback that anything happened when you do.

3. Do this in PowerShell:

    ```
    Install-Module SitecoreInstallFramework
    ```

    You can validate by doing this in PowerShell:

    ```
    Get-Module SitecoreInstallFramework -ListAvailable
    ```


4. Do this in PowerShell:

    ```
    Install-Module SitecoreFundamentals
    ```

SIF Installation Complete

Believe me, this PowerShell approach is way easier then manually unzipping files and moving things around.

Time to Install Sitecore Using SIFless

I recommend reading Kam Figy's blog post to understand why the remaining approach was used for installation using the SIFless tool: https://kamsar.net/index.php/2017/11/The-lazy-way-to-install-Sitecore-9/

Steps to Get Ready

I chose this approach to allow for other versions of Sitecore and Configurations to be noticeably separated to support multiple instances to be installed. You can use any naming approach you wish.

Note: the release packages are for v9 Update 2. If you are installing for the developer class baseline, you will need to use the V9 Initial release packages.

1. Put **license.xml** in **C:\Sitecore**
2. Create folder for Sitecore version packages - **C:\Sitecore\9.0.2**
3. Create configuration folder - **C:\Sitecore 9.0.2\XP0**
4. put the Sitecore release packages in **XP0** (whichever version you are installing)
   a. Sitecore 9.0.2 rev. 180604 (OnPrem)_single.scwdp.zip
   b. Sitecore 9.0.2 rev. 180604 (OnPrem)_xp0xconnect.scwdp.zip
5. unzip the contents of XP0 **Configuration files 9.0.2 rev. 180604.zip** into the XP0 folder

Now it's time to use the SIFless tool

1. Go to Rob's site to read about using the SIFless gui here:
   http://www.rockpapersitecore.com/2018/05/welcome-to-sif-less-2-beta-edition/

2. I used the latest: v2 update 3 you can get here: http://www.rockpapersitecore.com/wp-content/uploads/sifless.zip

3. Unzip it and follow the directions on his home page

4. When doing profiles, use "**Set**", do not type paths directly

5. Doing the Sitecore Profile is kind of funky, play with it

6. I created a new Solr profile

7. I created a new Connection profile for SQL

8. Then name your prefix, I used **sc9**

   a. Note the tool sets the site to **sc9.sc**, you may want to edit that

9. Click generate scripts, I put mine in XP0 since its version specific

10. Open the generated script with Notepad++ and check the variable settings near the top of the file

Now Let's Install Sitecore

1. Copy the script and paste into PowerShell window and go for it. Takes about 15 minutes or so to run

You Are Done!