How to run SimplifyScan on Small Business Server 2008 & 2011

By default, the SimplifyScan client cannot be used on the scan devices, because "503 Service unavailable" or "500.19 Internal Server Error" error appears. The main problem is that Small Business Server (SBS) 2008 and 2011 is a 64-bit operating system containing an Exchange server, and the 32-bit SimplifyScan application tries to run in this environment. More precisely the Internet Information Services (IIS) of the SBS server is preconfigured for the 64-bit Exchange, so the web application component ("QOsa") of SimplifyScan cannot work in this environment.

Anyway this is a general problem and other 32-bit web applications also cannot run on SBS 2008 and 2011 without a trick described here.

A step-by-step description included here to be able to run SimplifyScan application on SBS 2008 and 2011.

1. Fix the SBS server components

Unfortunately there is a bug in the SimplifyScan installer, so after its installation the Exchange and SharePoint servers of the SBS systems do not work. The reason of this is that the installer of SimplifyScan switches the whole IIS to 32-bit mode (see the application pools, the "**Enable 32-Bit Applications**" setting is "**True**" for all of them), but Exchange and SharePoint server are 64-bit applications. Here are the steps to fix this problem:

1. Open a **Command Prompt** with administrative privileges.
2. Changed the directory path to "**C:\inetpub\AdminScipts**".
3. Launch the "**adsutil.vbs SET W3SVC/AppPools/Enable32bitAppOnWin64 0**" command to switch all application pools to 64-bit.
   If CScipts is not enabled, a question dialog appears about it. Just enable CSripts.
   If the command above finishes successfully, the "**Enable32bitAppOnWin64: (BOOLEAN) False**" message appears.
4. Changed the directory path to "**C:\Windows\System32\inetsrv**".
5. Launch the "**appcmd.exe SET APPPOOL /apppool.name:SimplifyScan /enable32BitAppOnWin64:true**" command to switch the SimplifyScan application pool back to 32-bit.

2. See the SimplifyScan problem without a scan device

The problem can be reproduced and investigated without a scan device, which is an easier and faster way.

1. Open **IIS Manager**.
2. Make sure the "**SimplifyScan**" application pool is running.
3. Try to use the SimplifyScan related web application.
    a. Select the "**QOsa**" web application under the "**Default Web Site**" node.
    b. Switch to the "**Content View**".
    c. Navigate into the "**Browser**" subfolder and select "**Default.aspx**".
    d. Select the "**Browse**" item in the "**Actions**" pane.
    e. The default Internet browser (Internet Explorer by default) is started and an error message appears ("503 Service unavailable" or "500.19 Internal Server Error").

3. Change the IIS settings

It is recommended that the following steps are done by a system administrator, who is familiar with IIS.

2.1. Terminate the SimplifyScan web application

1. Stop all SimplifyScan services (Listener and Processor) and close the SimplifyScan Administration Tool.
2. Stop the "**SimplifyScan**" application pool in **IIS Manager**.
3. Remove the "**QOsa**" web application from the "**Default Web Site**".

2.2. Create a new web site for SimplifyScan

1. Create a new web site in **IIS Manager** with the following parameters:
   "**Site name**" can be "**SimplifyScan**". Note: This name can be anything, but "SimplifyScan" will be used in this document.
   Make sure the selected application pool is "**SimplifyScan**".
   Set the "**Physical path**" to the "**<Installation folder of SimplifyScan>**".
   Change the port number to an unused one. Note: In this document port 550 is used.
2. Change some settings of the new web site.
    a. Disable all kinds of authentication.
    b. Disable the default documents.
3. Create a new "**QOsa**" web application.
    a. Expand the newly created "**SimplifyScan**" web site and right click on the "**QOsa**" folder.
    b. Select the "**Convert to Application**" option and press "**OK**" on the "**Add Application**" dialog.
    c. On SBS 2008 change its application pool to "**SimplifyScan**".
    d. Make sure that the default documents feature is disabled.

2.3. Change the general IIS settings

The native modules in the “applicationhost.config” should be modified by defining a “preCondition bitness64” parameter for the “**PasswordExpiryModule**”, “**kerbauth**” and “**exppw**” native modules. Native modules are registered and un-registered at the web server level under the ”<globalModules>” section.

Before any modifications to the “applicationhost.config” take a backup of your current IIS configuration:

1. Launch a **Command Prompt** window with administrator privileges.
2. Changed the directory path to “**C:\Windows\System32\Inetsrv**”.
3. Type "**Appcmd.exe add BACKUP NameofBackup**"

After the successful backup the “applicationhost.config” file can be modified to add the “bitness64” precondition:

1. From within the same Command Prompt change the path to “**C:\Windows\System32\inetsrv\config**”
2. Type "**notepad applicationhost.config**".
3. Locate the “**<globalModules>**” section.
4. Modify the “**PasswordExpiryModule**” module to have a “bitness64” precondition so it should look as follows:
   <add name="PasswordExpiryModule" image="C:\Windows\system32\RpcProxy\RpcProxy.dll" preCondition="bitness64" />
   Note: “**preCondition**” is case sensitive, the "C" must be capitalized.
5. Modify the “**kerbauth**” module to have a “bitness64” precondition so it should look as follows:
   <add name="kerbauth" image="C:\Program Files\Microsoft\Exchange Server\v14\Bin\kerbauth.dll" preCondition="bitness64" />
   Note: It can happen that this section is missing on SBS 2008.
6. Modify the “**exppw**” module to have a “bitness64” precondition so it should look as follows:
   <add name="exppw" image="C:\Program Files\Microsoft\Exchange Server\v14\ClientAccess\Owa\auth\exppw.dll" preCondition="bitness64" />
   Note: It can happen that this section is missing on SBS 2008.
7. Save and close the “applicationhost.config” file.

The next step is to disable both the “**DynamicCompressionModule**” and the “**StaticCompressionModule**” for the SimplifyScan web site. For this perform the following steps:

1. From within the same Command Prompt change the directory path to “**C:\Windows\system32\inetsrv**”.
2. Type “**Appcmd.exe delete module dynamiccompressionmodule /site.name:SimplifyScan**”.
3. Do the same for the static compression module: “**Appcmd.exe delete module staticcompressionmodule /site.name:SimplifyScan**”.

When everything is done, you should reboot the system.

4. Using SimplifyScan again

Test whether the SimplifyScan web application with the new IIS settings can run.

1. Open **IIS Manager**.
2. Make sure the "**SimplifyScan**" application pool is running.
3. Try to use the SimplifyScan related web application.
    a. Select the "**QOsa**" web application under the new "**SimplifyScan**" web site.
    b. Switch to the "**Content View**".
    c. Navigate into the "**Browser**" subfolder and select "**Default.aspx**".
    d. Select the "**Browse**" item in the "**Actions**" pane.
    e. The SimplifyScan client with a loading dialog should appear in the default Internet browser application.

The next step is to change the device registration in the SimplifyScan Administration Tool, because the port number of the SimplifyScan client web application was changed (to 550 in this document).

1. Start SimplifyScan Administration Tool.
2. Do the following steps for every scan device or device group:
    a. Select the scan device or device group.
    b. Press the "**Edit**" button.
    c. Change the "**Port**" number to the port of the new web site (it is 550 in this document).
    d. Press "**OK**" to update the registration on the selected scan device or device group.