How to run Smart Office Scan on Small Business Server 2008 & 2011

By default, the Smart Office Scan OXPd 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 Smart Office Scan 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 ("QOXPd") of Smart Office Scan 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 Smart Office Scan application on SBS 2008 and 2011.

1. See the Smart Office Scan 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 "**SmartOfficeScan**" application pool is running.
3. Try to use the Smart Office Scan related web application.
    a. Select the "**QOXPd**" web application under the "**Default Web Site**" node.
    b. Switch to the "**Content View**".
    c. Select "**OXPdService.asmx**".
    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").

2. 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 Smart Office Scan web application

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

2.2. Create a new web site for Smart Office Scan

1. Change the account of the "**SmartOfficeScan**" application pool to an administrator account (the default "NetworkService" is not enough).
2. Create a new web site in **IIS Manager** with the following parameters:
   "**Site name**" can be "**SmartOfficeScan**". Note: This name can be anything, but "SmartOfficeScan" will be used in this document.
   The selected application pool must be "**SmartOfficeScan**".
   Set the "**Physical path**" to the "**<Installation folder of Smart Office Scan >**".
   Change the port number to an unused one. Note: In this document port 550 is used.
3. Change some settings of the new web site.
   a. Disable the default documents.
4. Create a new "**QOXPd**" web application.
   a. Expand the newly created "**SmartOfficeScan**" web site and right click on the "**QOXPd**" folder.
   b. Select the "**Convert to Application**" option and press "**OK**" on the "**Add Application**" dialog.
   c. Change its application pool to "**SmartOfficeScan**".
   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.
   Note: On some systems the “bitness64” precondition is already set.
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 Smart Office Scan 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:SmartOfficeScan**”.
3. Do the same for the static compression module: “**Appcmd.exe delete module staticcompressionmodule /site.name:SmartOfficeScan**”.

When everything is done, you should reboot the system.

3. Using Smart Office Scan again

Test whether the Smart Office Scan web application with the new IIS settings can run.

1. Open **IIS Manager**.
2. Make sure the "**SmartOfficeScan**" application pool is running.
3. Try to use the Smart Office Scan related web application.
    a. Select the "**QOXPd**" web application under the new "**SmartOfficeScan**" web site.
    b. Switch to the "**Content View**".
    c. Select "**OXPdService.asmx**".
    d. Select the "**Browse**" item in the "**Actions**" pane.
    e. Web methods of the QOXPdService web service should be listed.

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

1. Start Smart Office Scan Administration Tool.
2. Do the following steps for every scan device or device group, which uses the OXPd client:
    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.