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<https://wiki.wdf.sap.corp/wiki/x/d4EVbQ>

Feedback

BWSC Check

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BIO Windows Server Compliance Check (BWSC Check)

The check is based of a internal work document, called QA check list, for Windows BIO SM colleagues.

Please don't publish this QA check list outside of BIO Server Management.

Current QA check list is stored on \\bssfile3\scb_sm_win\Server_Quality_Checklist\Templates

The check is in two versions as powershell script available.

*** One day everything will be well, that is our hope: Everything's fine today, that is our illusion. -Voltaire, French.
Philosopher- ***

1 - Save/copy the result html-file

- toLocation: \\bssfile3\scb_sm_win\Server_Quality_Checklist\BWSC.Checks
- fromLocation: c:\tools\qa.log

2 - If you check the server for a open JIRA workflow then attach the result html-file to the workflow.

3 - The check is available in two versions...

- check.only
 - Server system will be checked of BIO compliance
 - Minimal output result html-file for a quick check, JIRA workflow or something similar
- check.and.change
 - Server system will be checked of BIO compliance and it will be install/update needed components e.g. .net, powershell, nagios++
 - Some server reboots are needed - depend on the installed components
 - Extended output result html-file with more informations

4 - The check result can be...

- **GREEN** - **Server is BIO/BSS compliant.**
- **YELLOW** - **Server is with restrictions BIO compliant.**
- **RED** - **Server is not BIO compliant and only limited supported by Windows BIO SM Team.**

Remark: If any checks are not BIO compliant then you must solve the issues...

How i can start the BWSC -Script ?

- The scripts are located on the BIO SM Fileserver bssfile3. The prefered start option is the bio web server page. This page is available different networkzones (INT, DMZ, MOO).
- Start via Webserver <http://swa-repo:1082> > ServerManagement > 01_Windows > 04_Tools > QACheck > ...
- Webserver access for DMZ <http://bsswrepo.dmz.wdf.sap.corp:1080> > ServerManagement > 01_Windows > 04_Tools > QACheck > ...
- The check location on the fileserver is
...\\bssfile3\software_automation\ServerManagement\01_Windows\04_Tools\QACheck\...

- The check location on the dmz files server share is
...\\bssfile3(bsswrepo).dmzwdf.sap.corp\\ServerManagement\\ServerManagement\\01_Windows\\04_Tools\\QACheck\\...
- Use the _cmd file for starting the qa check task. Alternative you can download the ps1 script...
- The "check.only" version is running out-of-the-box > that means you can copy the script to a server and run it locally.

The script will be check/install/update the following point's.

Check-00: OS, Hardware Vendor, Hostname, Networkzone, CPU, RAM

1. DNS Hostname
2. OS Version
 - a. GREEN W2k8R2, W2k12, W2k12R2, W2k16
 - b. RED W2k8 SP2 and lower
3. Platform Manufacturer
4. Hyperthreading
 - a. GREEN Off
 - b. RED On
5. Installed RAM

Check-01: Reboot pending?

1. Pending System Reboot ?
 - a. GREEN \$False
 - b. RED \$True
2. Server uptime.
 - a. GREEN -lt 32 days
 - b. YELLOW -gr 32 days
3. Cluster system ?
 - a. GREEN check.only version
 - b. RED check.and.change version

Check-02: OS, Powershell and .net Versions are passed?

1. .NET Framework Core 3.5 (includes .NET 2.0 and 3.0)
 - a. GREEN - Installed
 - b. RED - Not installed > will be try to install in check.and.change version > dedicated reboot needed after install
2. .NET Framework Core 4.5 Feature
 - a. GREEN - Installed
 - b. RED - Not installed > will be try to install in check.and.change version > dedicated reboot needed after install
3. .NET Framework 4.6.2
 - a. GREEN - Installed
 - b. RED - Not installed > will be try to install in check.and.change version > dedicated reboot needed after install
4. Powershell version
 - a. GREEN Version 5.1
 - b. YELLOW Version 3 to Version 4 > will be try to install in check.and.change version > dedicated reboot needed after install
 - c. RED lower version 3 > will be try to install in check.and.change version > dedicated reboot needed after install

Check-03: Network configurations > will be try to configure in both script versions

1. The network card for the primary access LAN is rename to 'Prod'
2. The network card for the backup LAN is rename to 'Backup'
3. 'NetBios over TCP/IP' and 'Full DNS Registration' is disable on all adapters
4. IPv4 bindings is disable
5. IPv6 bindings is disable
6. IPv6 connections for all adapters is disable
7. Compliant DNS servers for networkzone INT, DMZ and Metric's (1 for Prod, 2 for Backup) was set.
8. The 'registerdns' option is disable
9. Compliant DNS Suffix Search Order is set
10. Network Auth Level is disable
11. Current hostname "xxx" is validate by DNS
 - a. GREEN - \$True
 - b. RED - \$False
12. All IPv4 addresses are validate by DNS for current hostname "xxx"
 - a. GREEN - \$True

- a. GREEN - \$True
 b. RED - \$False

Check-04: Power Scheme

1. OS Power Scheme is 'High Performance'
 a. GREEN - \$True
 b. RED - \$False > will be try to configure in both script versions

Check-05: Best Desktop Performance

1. HKLM value 'Falt Menus' = 'False' was set as default
 2. HKLM value 'Drop Shadow' = 'False' was set as default
 3. The desktop 'basic.theme' is set for all user profiles
 4. 'Volume Icon' was hidden for all user profiles
 5. 'Action Center Icon' was hidden for all user profiles
 6. 'Best Desktop Performance Options' is set now for all available profiles...
 ...for point 1 to 6 > the script will be try to configure this in both script versions

- a. GREEN - \$True
 b. YELLOW - \$False

Check-06: IE Version / IE Proxy settings

1. IE version supported via MS Support Matrix
 a. GREEN - \$True
 b. RED - \$False
 2. Proxy settings > disable proxy server settings
 a. Will be set for all profiles and users.
 b. Proxy settings are no more changeable via GUI after the configuration
 • Reg Value 'ProxyPerMachineLockProxy' was set.('0' proxy settings changeable via GUI / '1' GUI locked)

Check-07: Services configurations / McAfee Check

The service configurations will be try to change to the BIO default in both script versions

1. 'SAPHostControl' > Failure Actions are replace to 'Take no actions'.
 a. YELLOW - Service if not available, installed
 2. 'Firewall' service configuration.
 a. GREEN - W2k8+ Disable / W2k12+ Auto, Manual
 b. RED - W2k8+ Auto, Manual / W2k12+ Disable
 3. 'Base Filtering Engine' service configuration Enable.
 a. GREEN - W2k8+ Disable / W2k12+ Auto, Manual
 b. RED - W2k8+ Auto, Manual / W2k12+ Disable
 4. 'OfflineFlash' (only FSC platform server).
 a. GREEN - Disable
 b. RED - Auto, Manual
 5. 'DHCP' service configuration
 a. GREEN - Enable
 b. RED - Disable
 6. 'InternetConnectionSharing' service configuration
 a. GREEN - Disable
 b. RED - Auto, Manual
 7. 'WindowsUpdate' service configuration
 a. GREEN - Manual
 b. RED - Auto, Disable
 8. 'Blade Logic' service configuration
 a. GREEN - Auto
 b. RED - Not available, installed. Disable, Manual
 9. 'HP Enterprise Discovery Agent(cmdb agent)'
 a. GREEN - Auto
 b. RED - Not available, installed. Disable, Manual
 10. 'SNMPTRAP' service configuration
 a. GREEN - Manual
 b. RED - Disable
 11. 'SNMP' service / feature configuration (based on "qa excel")
 a. GREEN - Installed. Auto
 b. RED - Not Installed, Not correctly configured .Disable.
 12. 'McAfee' services configurations
 a. GREEN - Auto, Manual
 h. RED - Disable

- e. - AV DAT Version Built date (> 5 days).

Check-08: User/Groups settings

Both script versions try to set the users, administrator group members to the BIO default (based of bio user wiki)

1. **Check Result: Local user 'ntadmin' is 'Built-In' administrator**
 - a. - \$True
 - b. - \$False
2. **Local 'Administrators' group members**
 - a. - \$True
 - b. - \$False

Check-09: Default BIO/BSS pagefile settings

1. **An drive with letter P: for the default BIO pagefile configuration would be available...**
 - a. - \$True
 - b. - \$False
2. **c:\pagefile.sys 256 256**
 - a. - \$True
 - b. - \$False
3. **Other pagefile.sys files with correct (depend on RAM) size**
 - a. - \$True
 - b. - \$False

Check-10: Check/Update Nagios ++

1. **Nagios++ installed and 'Running' with TCP Port 5667**
 - a. - \$True
 - b. - \$False
2. **Nagios Client is installed in the right location ...**
 - a. - \$True
 - b. - \$False

Check-11: Windows Activation

1. **KMS(kmsatsap) via network available**
 - a. - \$True
 - b. - \$False
2. **KMS(kmsatsap) via Port 1688 available**
 - a. - \$True
 - b. - \$False

Check-12: Time Zone and NTP Server settings

The change.and,check script will be try to change the time zone and time server settings. If an database running then no changes are made...

1. **Current Time Zone: W. Europe Standard Time**
 - a. - \$True
 - b. - \$False
2. **Current Offset: 60 min**
 - a. - \$True
 - b. - \$False
3. **Current Support Daylight Saving Time Option**
 - a. - \$True
 - b. - \$False
4. **Current Time Service**
 - a. - MS W32Time, NTP Mainberg
 - b. - No Time Service active.
5. **Timeserver configuration (for both differnt time servises)**
 - a. - Timeserver: timehostx.xxx.sap.corp, Type:NTP
 - b. - wrong or no NTP server
6. **Timeservers available via port 123**
 - a. - \$True
 - b. - \$False

Check-13: DisableRecycleBin

- d. RED - \$False
2. 'RecycleBin' will be deleted

Check-14: Ensure = 'Present' WindowsFeature TelnetClient / Ensure = 'Absent' WindowsFeature FileServer

1. Telnet Client enabled
- a. GREEN - \$True
- b. RED - \$False, the script try to install the feature
2. FS-FileServer feature enabled
- a. GREEN - \$False
- b. RED - \$True, the script try to install the feature

Check-15: Domain Membership

1. Server joined
- a. GREEN - \$True, saphosting.sap.corp (D_WDFBSS), ad.dmzwdf.sap.corp
- b. RED - \$False, also if member in domain global.corp.sap

Check-16: Legato Backup Client

1. Networker service available
- a. GREEN - \$True
- b. RED - \$False
2. Test backup via save.exe possible
- a. GREEN - \$True
- b. RED - \$False

Check-17: Installed Software

- a. GREEN - installed software, programs available in software 'WHITLIST'
- b. RED - some installed software, programs available in software 'BLACKLIST'
- c. YELLOW - some installed software, programs not available in software 'WHITELIST' but not in the 'BLACKLIST'

Check-19: Hardware driver check (Device Manager)

1. Error Codes and their resolutions are on <https://support.microsoft.com/en-us/help/310123/error-codes-in-device-manager-in-windows...>
- a. GREEN - Depend on device and error code
- b. YELLOW - Depend on device and error code
- c. RED - Depend on device and error code

Check-20: Disk Layout / SAN Check

1. Disk drive letter c:\ (System Root)
- a. GREEN - Disk size 60 GB
- b. YELLOW - Disk size < 60 GB or > 60 GB
2. Disk drive letter p:\ (Pagefile)
- a. GREEN - Disk size 100 GB
- b. YELLOW - Disk size < 100 GB or > 100 GB
3. All Disks online?
- a. GREEN - \$True
- b. RED - \$False
4. HBA check (WWN, PowerPath configuration)
- a. GREEN - \$True
- b. RED - \$False

Check-21: Last Patch Day

1. BIO Patch Package is on server available
- a. GREEN - \$True
- b. RED - \$False
2. BIO Patch Package has the correct date
- a. GREEN - \$True
- b. RED - \$False
3. Last Patch process
- a. GREEN - \$True, within the last 4 weeks

Check-22: Event Log Entries

- a. YELLOW - Event System Log entries within the last 24 hours available
- b. YELLOW - Event Application Log entries within the last 24 hours available
- c. YELLOW - Event Security System Log entries within the last 24 hours available

Check-91: Last config step: Change of local 'ntadmin' password

The last step is the password change for the local 'ntadmin' user. No passwords are automatically set during the script run.



REVIEW

- Powershell-Scripts are stored under: bssfile3\software_automation\...\tools\qacheck\
- Powershell-Scripts are available via <http://swa-repo.wdf.sap.corp:1082> and <http://bsswrepo.dmzwdf.sap.corp:1080>
- Powershell-Scripts are tested with w2k8 (some problems because the bad powershell version), w2k8r2, w2k12, w2k12r2, w2k16
- Powershell-Scripts are tested in bio network zones INT, DMZ, MOO
- Powershell-Scripts are located on local server in c:\tools\misc\qa (ps1) and c:\tools\qa.log (html and log)

No labels