# **1** System requirements and compatibility

## 1.1 baramundi Management Server and baramundi PXE Relay

- Supported platforms: see 1.8.17 (bMS column)
- .NET 4.7.2, as well as .NET Core Runtime 3.1. x64 is required.
- Supported languages are German and English.
- It is recommended to use a dedicated server for the baramundi Management Server.
- Certain ports must be available for the baramundi Management Server<sup>1</sup>.
- Integration into a Windows domain Windows Active Directory is recommended.
- Hardware requirements server/network:
  - Available RAM: at least 8 GB; 16 GB recommended
  - Processor: at least 2 cores
  - $\circ$  Disk space for installing the bMS: at least 5 GB
  - Network card: at least 1 Gigabit

#### **1.2 Database connection**

- Supported platforms:
  - o SQL Server 2019
  - o SQL Server 2017
  - SQL Server 2016 SP3
  - SQL Server 2014 SP3
  - o Oracle 19c
- At least 10 GB hard drive space for the baramundi database.
- The baramundi Management Server is a database-oriented system, so ensure sufficient database performance and a high-performance connection.
- For environments with up to 250 clients, the SQL Express Edition can be used.
- It is permissible to operate the database server and the baramundi Management Server on one system. For higher requirements and larger environments, an independent database server is recommended.

<sup>&</sup>lt;sup>1</sup> A list of ports used on the server is available in our online help <u>https://docs.baramundi.com</u>.

#### 1.3 baramundi Management Center

- Supported platforms for the baramundi Management Center, as well as the add-ons Automation Studio, License Management, Remote Control and ImageMount: see 1.8.17 (bMC column).
- .NET 4.7.2 is required.
- Screen resolution:
  - Minimum screen resolution 1024 x 768 pixels.
  - Recommended resolution is 1280 x 800 pixels or higher.
  - All resolutions refer to a font size display of 100%.

#### **1.4 baramundi OS-Customization Tool**

- This baramundi Management Center add-on for customizing Windows 10 images, provided via managed software, is supported on the platforms visible in MSW.
- .NET 4.7.2 is required.
- The Microsoft ADK for Windows 11 is required to customize the Windows images.

#### 1.5 baramundi DIP

- Supported platforms: see 1.8.17 (bDIP column).
- .NET 4.7.2 is required.
- Additional hard disk space is recommended:
  - 10 GB for applications
  - 90 GB for managed software (MSW)
  - 6 GB for each operating system to be distributed with the baramundi OS-Install module
  - $\circ$  400 GB for patch data if offline patch management is to be used.

## **1.6 baramundi Gateway**

- Supported platforms: see 1.8.17 (bGW column)
- .NET 4.7.2 is required.
- Operating the baramundi gateway with other services on the same system is not recommended.
- Integration into an Active Directory is not necessary.

Hardware requirements server/network:

- Available RAM: at least 4 GB; 8 GB recommended
- Disk space for installing the bMS: at least 1 GB
- Network card: at least 1 Gigabit

#### **1.7 baramundi OS-Install**

- The Microsoft ADK for Windows 11 is required to customize the Windows images.
- The ADK is available in Managed Software.

#### 1.8 baramundi License Management

- Storing license documents in the database can increase memory requirements on the database server.
- The MS-SQL Express database server is limited by Microsoft to 10 GB database size, therefore its use for baramundi License Management is not recommended.
- baramundi License Management supports the following browsers, each in the current version:
  - Microsoft Edge
  - o Google Chrome
  - o Mozilla Firefox

#### 1.9 baramundi Virtual

- Supported platforms:
  - VMware vSphere vCenter 6.0, 6.5
  - VMware vSphere Hypervisor 6.0, 6.5
- Note: bVirtual is not compatible with VMware vSphere v6.5 Update 1 or higher.
- The following components are required on the baramundi server:
  - PowerShell in Version 4, 5 or 5.1



o VMware PowerCLI 6.5 Release 1

## 1.10 baramundi APIs

- bConnect is available in version 1.1.
- Deprecated The bMOL (baramundi Management Object Language) interface is no longer in development. We recommend switching to and using our interface bConnect.
- Deprecated The httpMOC interface is no in development. We recommend to change and use our interface bConnect.
- Deprecated Direct access to the database (SQL/Oracle) is not supported. We recommend to change and use our interface bConnect.

\*Deprecated: - Feature updates and bug fixes are no longer provided. Critical security updates will be provided for the current version.

## 1.11 baramundi Network Devices

- Network Scanner is an add-on to Windows bMA. It is available to all customers via Managed Software.
- .NET 4.7.2 is required.
- Supported platforms: see 1.8.17 (bND column)

#### **1.12 baramundi OT Devices**

- Data acquisition is done via SNMP version1, version2c, version3.
- Supported platforms: Siemens SIMATIC S7 1200 and 1500

#### 1.13 baramundi Kiosk

- Supported platforms: see 1.8.17 (bMA column)
- For user logon and job assignment on a per-user basis, a Windows Active Directory including configured baramundi AD-Sync is required.
- baramundi Kiosk supports the following browsers, each in the current version:
  - o Microsoft Edge
  - o Google Chrome
  - o Mozilla Firefox

#### 1.14 Support of Android

- Supported versions:
  - Android Enterprise 12
  - o Android Enterprise 11
  - Android Enterprise 10
  - Android Enterprise 9
  - Android Enterprise 8
  - o Android Enterprise 7
  - o Android Version 4.0.4. until version 9 with Legacy Agent
  - o Samsung KNOX on Android Version 4.0.4 until version 9 with Legacy Agent

#### 1.15 Support of iOS

- Supported Versions:
  - o iOS Version 15
  - o iOS Version 14
  - o iOS Version 13
  - o iOS Version 12
  - o iOS Version 11
  - o iOS Version 10
  - o iOS Version 9

#### 1.16 Support of macOS

- Supported Versions:
  - macOS 12.x (Monterey)
  - o macOS 11.x (Big Sur)
  - o macOS 10.15 (Catalina)
  - o macOS 10.14 (Mojave)
  - o macOS 10.13 (High Sierra)
  - o macOS 10.12 (Sierra)
  - Mac OS X 10.11 (El Capitan)
  - o Mac OS X 10.10 (Yosemite)
  - Mac OS X 10.9 (Mavericks) (64 Bit)
  - Mac OS X 10.8 (Mountain Lion) (64 Bit)
  - o Mac OS X 10.7 (Lion) (64 Bit)

## 1.17 Support of Windows

- bMS/R: baramundi Management Server, baramundi PXE Relay
- bMC: baramundi Management Console, inclusive bRemote, ImageMount and License Management AddOn
- bAS baramundi Automation Studio
- bGW: baramundi Gateway
- bDIP: baramundi DIP, bBT and DipSync Service
- bMA: baramundi Agent for Windows
- bND: baramundi Network Scanner as Add-On to Windows bMA
- X: Completely Supported:

Platform	bMS/R	bMC	bAS	bGW	bDIP	bMA	bND
Windows Server 2022	х	Х	х	х	x	х	х
Standard/Datacenter (Desktop display)							
Windows Server 2019	v	Х	х	х	х	х	х
Standard/Datacenter (Desktop display)	X						
Windows Server 2016	N	Х	х	х	х	х	х
Standard/Datacenter (Desktop display)	X						
Windows 11 Pro / Enterprise (N)		Х	х		х	х	х
Windows 10 Pro / Enterprise 21H2 (N) (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Pro / Enterprise 21H1 (N) (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Pro / Enterprise 20H2 (N) (32 Bit and 64 Bit)		х	х		х	x	х
Windows 10 Pro / Enterprise 2004 (N) (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Pro / Enterprise 1909 (N) (32 Bit and 64 Bit)		Х	х		х	x	х
Windows 10 Pro / Enterprise 1903 (N) (32 Bit and 64 Bit)		Х	х		х	x	х
Windows 10 Pro / Enterprise 1809 (N) (32 Bit and 64 Bit)		Х	х		х	x	х
Windows 10 Pro / Enterprise 1803 (N) (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Pro / Enterprise 1709 (N) (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Enterprise 2021 LTSC (32 Bit and 64 Bit)		Х	х		х	х	х
Windows 10 Enterprise 2019 LTSC (32 Bit and 64 Bit)		Х	х		Х	х	х



Platform	bMS/R	bMC	bAS	bGW	bDIP	bMA	bND
Windows 10 Enterprise 2016 LTSB		v	v		v	v	v
(32 Bit and 64 Bit)		^	^		^	^	^
Windows 10 Enterprise 2015 LTSB		v	v		v	v	v
(32 Bit and 64 Bit)	^	~		^	^	^	

#### **1.18 Windows support with some restrictions**

These operating systems are only supported by the baramundi components, including all barramundi Managed Software, to a limited extent. This may mean that new functions cannot be used on these operating systems or that functions can no longer be used as before. Due to the complexity and variety of legacy systems, baramundi cannot guarantee functionality on these systems. Due to the limitations, we recommend the use of more modern operating systems. We can no longer provide support for the baramundi server components on operating systems that are outside the mainstream support of Microsoft. (bMS/R, bMC, bAS, bGW, bDIP)

- (1): Is only supported to a limited extent since Microsoft has ended the (basic) product support.
- (2): Version 2021 R2 of the bMA must be used for this operating system. A more recent bMA cannot be run on this operating system. There will be no more security improvements for the bMA 2021 R2.

	bMS/R	bMC	bAS	bGW	bDIP	bMA	bND
Windows Server 2012 R2						1	1
Standard/Datacenter							
(Server with graphical user interface)							
Windows Server 2012						1	1
Standard/Datacenter							
(Server with graphical user interface)							
Windows Server 2008 R2 SP1						1	1
Standard/Enterprise/Datacenter							
Windows Server 2008 SP2							
Standard / Enterprise / Datacenter						1	1
(32 Bit / 64 Bit)							
Windows 7 SP1 Professional/Enter-			1			1	1
prise/Ultimate (N) (32 Bit and 64 Bit)							1
Windows 10 Pro / Enterprise 1703 and			1			1	1
older (N) (32 Bit and 64 Bit)							
Windows 8.1 Pro / Enterprise			1			1	1
(32 Bit / 64 Bit)							
Windows Vista SP2			1			1	1
(32 Bit / 64 Bit)							1
Windows XP SP3 (32 Bit)						2	

#### 1.19 Languages

The baramundi Management Center, baramundi License Management and Automation Studio are available in the following languages:

German, English

The bMA for Windows clients supports user messages in the following languages:

English, Bulgarian, Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Spanish, Swedish, Turkish

The baramundi Kiosk supports the following languages:

German, English, Polish

More languages can be added by the administration.

For all server-side services (i.e., baramundi Management Server, baramundi Gateway, DIP), the following languages are supported:

German, English

## **2 Known Limitations**

#### 2.1 Windows Agent (bMA) note on Windows XP

- Development of the bMA for Windows XP has been discontinued.
- It is possible to continue to operate Windows XP with the bMA version 2021 R2. The bMA 2021 R2 is approved for this purpose with the bMS 2022 R1 (and higher).
- The features OS-Install and automatic bMA deployment are no longer available. The bMA may have to be installed manually.
- Note: Since the current bMA can not be used on Windows XP, new security updates for the bMA are also not available.

## 2.2 Notes on Access bMA.log (since 2021 R2)

- Local administration rights are required to access the bMA.log file. Please also note the following comments.
- Existing rollover bMA\*.log files are not re-authorized.
- In the bMC, the Management Agent Log action under Custom Client Commands is no longer usable in most environments and should be removed. The bMA.log can be accessed from the bMC via the user-defined client command Explorer Drive C. Here the user with local administration rights required for the client can be specified.
- Since local users usually do not have local administration rights, the bMA menu item "View Log" should be disabled under bMC Settings Server Management Agent.
- If the access to the bMA.log should be adapted, the rights can be added via the bDS function Edit permissions - Add access rights.

#### 2.3 General

- Note: Internet Explorer is no longer supported for Kiosk and bLM.
- Note: The bMS version 2020 R2 can no longer communicate with bMAs older than version 2019 R2.



- Note: Operating the bServer on Windows Server 2008 R2 is no longer supported.
- The bMA version must correspond to the bMS version. (Except Windows XP)
- If the default web server port for the baramundi server is changed, OS Install, OS Cloning and Imaging are no longer possible.

## 2.4 Management Center (bMC)

- Note: For security reasons it is recommended to authorize only trusted persons/groups on the bMC - Extensions - Reporting node. We recommend that you only authorize the Administration security profile here.
- In the custom commands the obsolete aliases KitsServer, Depot, BDPPath and BaramundiPath are no longer available.
- The information at the Windows endpoint about the servicing channel has not been displayed correctly since Windows 10 with Release ID 1903. Microsoft has reduced the possible configurations for the fields Servicing Channel, Delay of function updates and Function update version and has removed them completely since release ID 21H2. These fields therefore no longer have any added value and will be removed in an upcoming baramundi release.

## 2.5 Inventory

- Note: The old software inventory is no longer supported from version 2022 R2 on. If it is still in use, the bMC will display a note.
- The optional offline-inventory does not use the PreInvent.bds and therefore does not fully support MSW.

## 2.6 Server (bServer)

- The modules under Server Status Cloud Connector are only active if the Argus Cockpit is configured and the connectors have been installed.
- On the baramundi Server no other software that uses WIBU CodeMeter runtime must be installed.
- The AD synchronization is not supported in networks in which the primary DNS-Suffix is different to the domain name.



- If an endpoint switches from an IP network in which a job cannot be run into an IP Network in which the job can be run, the job start will be delayed by up to 60 minutes.
- If a client changes from an IP network, where jobs can be executed, to a network, where no job execution has been configured, a job execution can still take place, since the bServer may have already run the check for the IP network.
- The management server starts jobs simultaneously and uses lots of database connections to communicate with the database server. In particular with Oracle databases it is imperative to have a sufficient number of available sessions and processes configured.
- When using an Oracle database system a given Tablespace for indexes will not be considered for all tables. With newly created as well as updated data-bases, some indexes will be created within the regular user Tablespace.
- If the bServer service is stopped while it is still queuing messages, these messages will be dropped. This can result in job targets getting stuck in a certain state. Do not stop bServer service while running multiple jobs.
- In the case of job steps, which dynamically generate further job steps, e.g. Patch or MSW scans, "resume" or "re-schedule" does not work in the event of an error.

## 2.7 Argus Cloud Connectoren

- Note: To enable the baramundi Cloud Connector Dynamic Groups to synchronize the desired Universal Dynamic Groups (UDG) to Argus, the bConnect user stored under Configuration-Interface-Cloud Connection must have at least read access to the UDG.
- The proxy stored with the downloader is not taken into account. A proxy can be configured via the .config file.

#### 2.8 PXE Boot

- Use the ADK recommended by baramundi.
- When using the baramundi Syslinux bootloader (configurable from the PXE Support settings) some Windows device may get stuck when trying to boot from their hard drive. Please follow the instructions from this forum post to fix the problem: <u>https://forum.baramundi.de/index.php?threads/5339</u>

## 2.9 Windows Agent (bMA)

- Energy options applied via Energy Management profiles may not be displayed correctly under Windows in the System settings Energy options. A query of the setting on the command line provides the correct values and these are also used by the system.
- If Do not disturb mode is active on the client, jobs that are to be executed during shutdown cannot be assigned correctly. The jobs will then not be executed during shutdown.
- If a job is already scheduled on the client for the shutdown time and the user then sets the Do not disturb mode, the job may only be executed after a waiting time during the shutdown. The waiting time then corresponds to the time set under bMC -Configuration - Server - Settings - Job execution.
- Note: Backup files created with Disaster Recovery of a bMS 8.5 or older cannot be restored from version 2020 R1.
- Note: Newly introduced job steps, such as Bitlocker Network Unlock or Inventory Microsoft updates, are not considered during job execution if an older bMA is installed on the target system.
- In version 2020 R1 there were changes to the bDS engine when using embedded scripting languages, which in very rare cases result in script abort with the error message "Use of an outdated syntax: The expression {=VBScript} is no longer supported". Conversion by Automation Studio is not sufficient, manual adaptation of the affected scripts is necessary. Further information can be found in the forum at: https://forum.baramundi.de/index.php?threads/10458
- If a manually modified bMA installation command is used, it must be updated to the new setup format. The default is "\\{Server}\BMS\$\Client\Setup\ManagementAgent\_setup.exe /Q SERVER={Server} SERVERKEY="{ServerKey}" OPTIONS={AgentOptions}".
- Windows 10 Virtual Desktop is detected as Server 2016.
- The HW inventory uses a SHA256 driver signature and is not executable on XP, Server 2008 and Vista. For Windows 7 KB3033929 is required.
- The keyboard and mouse lock can not lock touch input on operating systems lower than Windows 8.

- The keyboard and mouse lock fails to lock mouse orientated control options at the edge of the screen. Operation of the charm bar or the Apps is locked.
- A (patch-)job of the type Active with WakeOnLAN will not shut down as configured if a reboot was performed during job execution.
- The security context "Local Install User" cannot be used on systems with the role "Domain Controller".
- The file inventory shows files larger than 2GB with a file size of 2GB.

## 2.10 Automation Studio

- Notes on bDS files from version 2020 R1:
  - When a bDS file is opened, a message is displayed indicating that conversion to the new format is necessary. A converted script can only be executed by bMAs of version 2020 R1 or higher.
  - In environments with multiple baramundi servers, please take care that bDS scripts are not converted until all servers/clients are on version 2020 R1 or higher. If conversion to the new format is not yet desired, Automation Studio version 2019 R2 can still be used.
  - The bMA from 2020 R1 on will be able to run both the new bDS format and the previous format. A conversion of all bDS scripts is not necessary.

#### 2.11 Defense Control

- BitLocker cannot be paused for jobs that boot directly into WinPE
- Prerequisite is Windows 10 1511 or later.
- An activated TPM 2.0 is required.
- Connected iSCSI drives are also encrypted with drive encryption type "Full Encryption".
- The startup PIN function must be set via a group policy. GPO "Require additional authentication at startup".

#### 2.12 Mobile Devices

 Certificate deployment by SCEP using baramundi Mobile Devices profiles does not support profile certificate renewal. Repeat profile deployment to issue new certificates.

#### 2.13 Mobile Devices – Android Enterprise

- App installation and configuration jobs for mobile devices will perform a locking load operation in display mode for very large app configurations (e.g. Zebra OEMConfig).
- Devices with a set unlock code will not execute jobs after a restart of the device until the unlock code is entered correctly. This also applies if the unlock code is only set for the working profile and the working profile is reactivated from the pause mode.
- From Android 10 no inventory and no uninstallation of Wi-Fi is possible if the location access for the device or the work profile is deactivated.
- Work Profile: Starting with Android 9, sharing files in the work profile via Bluetooth does not work.
- The display lock on Android Enterprise only works with Android 9.
- It is not possible to assign a company with the baramundi Evaluation license. This requires a full bMS license.
- If the bServer/bGateway cannot be reached when enrolling the device, this process can only be left by "reset to factory settings".
- On Huawei devices, which do not fulfill password guidelines, apps cannot be reliably hidden/blocked.

#### 2.14 Mobile Devices – Android

- Starting with Android version 9, static IPs cannot be set in a Wifi profile.
- The user field in the WLAN configuration of TLS is not supported.
- The operations set/reset password no longer work with Android 7.
- The Samsung Knox Extension App must be deployed via deploy job to support Samsung Knox devices < Version 4.2.2. The App has been removed from the google PlayStore.



- When first installing baramundi Apps on a Samsung device running Android 4.2 or newer users will see an additional dialog. Here, they have to agree to the ELM Service usage conditions. Without approval no jobs will be executed on such a device.
- Deploying Enterprise WiFi configurations using client certificates requires a configured display lock (PIN, pattern) on Android devices.
- Deploying Enterprise WiFi configurations to Samsung devices running Android versions older than 5.0 (Lollipop) requires an additional certificate configuration block in the same profile. As the device only accepts the WiFi connection if it has a complete trust chain for the access points certificate, make sure to deploy all necessary CA certificates as well. If it is missing no specific error message is given.
- When removing a profile containing a WiFi configuration with TLS from a Samsung device running Android 4.3 the client certificate is not completely removed. The remains are non-functional.
- Note: Deploying a client certificate via SCEP to an Android device without a corresponding WiFi or exchange configuration block is only supported for Samsung Knox compatible devices. For other Android devices running at least version 4.3, SCEP is supported for deployment of Enterprise WiFi (TLS) configurations.
- Enrollment links from emails may fail to work correctly from the Android default mail app if the option "Activate verification of the server identity on the first connection" is disabled.

#### 2.15 Mobile Devices - iOS

- The "Migrate from device to device" option in Apple DEP does not work correctly.
- Note: The automatic VPP app update is not possible with iOS14. This bug has been fixed by Apple in iOS 14.2.
- The bServer must run on a Windows Server 2016 or higher to manage iOS devices.
- The following restrictions are only usable in supervised mode from iOS 13: "Disallow camera", "Disallow iCloud backup", "Disallow explicit content", "Disallow safari automatic fill", "Disallow safari".
- From iOS 13, devices are always supervised, regardless of the configuration in the enrollment profile.

- Starting with iOS 13, profile installation on devices is always mandatory, regardless of the configuration in the enrollment profile.
- After enrolling an iOS device it can take several minutes until the Agent on the bMD device recognises the enrollment.
- Using iOS App Push requires each iOS device to register their Push Token with the bMS server. To do this, the user has to start bMA manually, once. After restoring a device backup it can be necessary to repeat the registration. Older devices (like iPad 2) may still reconnect only once within several days, even with regular push signals being sent.
- Because of restrictions for iOS background updates, compliance information generated by bMA may be delayed. To ensure regular updates users have to start the bMA from time to time. Alternatively, enable the new iOS App Push service.
- The Apple Device Enrollment Program (DEP) is supported with iOS versions 8.3 and later.
- As of iOS version 8.0 an MDM software inventory will not recognize if an app had been installed correctly. The App is registered as managed and installed after the confirmation of the installation by the end user, however if for example the download aborts after the user confirmation and the App cannot be used, it will still be shown as correctly installed in the Inventory data.

#### 2.16 Mobile Devices – Windows Phone

• Will no longer be supported from Release 2020 R1.

## 2.17 Management Center (bMC)

- On English systems the sorting in the bulletin selection of a patch job (classic) does not work as expected.
- If UniCode characters are used in the name or comment in Inventory Network Scan - Profiles, this leads to errors in the display during job creation or bDX import/export.
- Crystal Reports version 13.0.8 is required to view reports. A newer version is not supported.
- The help system shows only limited content when used offline.



- Under "Configuration License configuration", "No data available" is displayed if the new licensing is not used.
- The Universal Dynamic Groups cannot be used in reports.
- bMC users without the setting "Display endpoint user identities" can view the users of the endpoints on clients via the properties dialog if they have write access to the endpoint.
- bMC users and end user names are partly visible in log files or certain status messages and cannot be suppressed there.
- Import/Export (bDX) does not support jobs with backups, restore data from backup, deploy energy policies, manage virtual machine.
- Correct or higher rights are required for all import actions that access BMS\$. To import SSA or OS Install scripts, it is useful to start the bMC in the administrative context.
- The bMC supports only the languages German and English. On servers in other languages, the English language pack must be installed.
- The report "List SNMP Devices" does not work correctly on Oracle databases.
- Permissions on Mac OS X or mobile devices are always inherited from their parent logical group. Setting individual permissions is currently not supported.
- Using the integrated reports requires enabled remote authentication for the backend SQL server system.
- Using the Store Search feature with a network proxy only works with proxies without authentication, or by using a logged on AD user.
- New Edit dialogs do not lock objects. When editing objects simultaneously the first user can save his changes. Other user will see the error message "Can't save stale data object" when trying to save changes.
- When using bMC in a time zone different to the Management server, time values may differ.
- The Revision log does not recognize the following activities: "Defer Job", "Start/Resume/Cancel/Delete Job Target", "Set Job OK", "Move Group", "Move Device", "Create/Edit/Delete Static Group", "Delete Pending Downloads for MSW and Patch Management" and "Delete File and Registry Entries from Inventory".

## 2.18 macOS devices

- Automatic device registration methods may create new Windows device objects for macOS-devices, even if they already exist in the database. This cannot be prevented. Disable such Windows devices.
- Compliance rules for jailbreaks and last agent contact will be ignored for macOS-devices.
- If a variable used in a shell script contains shell commands, such commands will get executed during a job execution (Command Injection). This behaviour is intended for use by users with advanced scripting know how.

## 2.19 Compliance

- No bMS variables can be used in the user defined compliance bDS scripts.
- A dynamic group using CVE filters will also refer to disabled rules.
- When using an Oracle database system the "Vulnerable Products" view on logical groups may encounter errors while loading a detail pane. This problem occurs when a high number of devices or vulnerabilities is present.

## 2.20 Remote

• Connecting to the desktop session of the Local Install User is not supported.

## 2.21 Update Management (Patch Management)

- Job steps Distribute Microsoft Updates with Update Profile lead to an error, if the client has not assigned an update profile. If a job retry is configured in case of an error, this error pattern is not always immediately apparent.
- After reinstalling a client the Client-Microsoft Updates view continues to show the data before the reinstallation.
- A new class of Microsoft updates named "Upgrades" has been introduced to bMS. Usage of this term is inconsistent between WSUS and online update services. Currently, we advise against using this for patch deployment.

## 2.22 Virtual

- Controlling and creating virtual machines requires a VMware license containing the "vSphere API" feature. This feature is not a part of the free ESXi license. Therefore with the free ESXi Version only inventory is possible.
- When running an inventory of a hypervisor, data on a virtual machine operating system is only available if that machine is turned on and has the VMware tools installed and running.

## 2.23 OS Install

- In some cases it may not be possible to boot older systems with ADK 10. In this event a separate boot image can be created with WAIK 8.1. We recommend saving this in the path "WAIKPE"
- The Windows 10 Inplace-Upgrade first runs a system check and then stops with warning messages, if these messages should be ignored the script InPlaceUp-grade.bds can be edited accordingly.
- Jobs with Inplace-Upgrade steps that also contain patch steps may abort with the error "The operating system installation of job [...] is not allowed for client [...]".

## 2.24 Clients in Internet Mode / Dynamic Mode

- Automatic update of agents in the jobs is not possible.
- If a CEM endpoint is returned to LAN mode, the bMA needs to be reinstalled.
- The client announcement can not be disabled for clients in dynamic mode. In this case, the default value is 30 minutes.

## 2.25 Network Devices (bND)

- If a context is specified in the SNMPv3 scan, some devices (e.g. Cisco Catalyst switch) are not detected.
- Devices with more than one IP address at a MAC address might be detected and created as independent devices.
- During scans HUAWEI switches are sometimes not responding to multiple SNMP requests.



- In order to determine an ideal IT map STP (Spanning Tree Protocol) should be activated.
- Note: The data determined by the scans are used to display the IT map. It is not a live view of the network environment.

## 2.26 Comparex Miss Marple

- The Report names are in German on English operating systems.
- The reporting server has to be able to support authentication via negotiate.
- As of Windows 2008 R2 SQL Server Reporting Services are supported in native mode.