



baramundi Management Suite as a Service

Guide



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1 Advantages

The baramundi Management Suite as a Service is a hosted solution of the Management Suite from baramundi. This cloud-based variant enables companies to manage their devices more efficiently without having to host servers themselves. Here are the most important facts about baramundi Management Suite as a Service:

Easy access via the browser: The baramundi Management Suite as a Service can be conveniently accessed via the web browser. Administrators can access and manage the endpoints from anywhere.

No own server infrastructure required: By using the baramundi Management Suite as a Service, there is no need to operate your own servers to provide the Management Suite. This reduces administrative effort and costs.

Full range of functions: The baramundi Management Suite as a Service offers the functions of the conventional Suite, including OS installation, AD synchronization and other features. The connection of a site-to-site VPN is required for the full range of functions.

1.1 Operational advantages

- Fast commissioning of the baramundi Management Suite
- Always the latest version of the baramundi Management Suite
- No Capex costs for the end customer or partner for infrastructure
- Monthly billing per client means cost transparency

1.2 Security advantages

- Client separation
- Multi Factor Authentication (MFA)
- Instances are hosted in the ISO 27001 certified data center
- Security Operation Center 24/7 security monitoring of the servers
- Maintenance by baramundi

1.3 technical parameters

- 1-10 Gbit bandwith per customer
- 500 GB fast storage for deployment packages



2 Scope

With baramundi Management Suite as a Service, baramundi takes over the entire hosting. No server is required in your own infrastructure to operate the baramundi Management Suite. All necessary services are provided, scaled, and always kept up to date.

baramundi Management Server:

The baramundi Management Server is available to you on a high-performance server. This means you benefit from optimal performance and fast response times.

Gateway-Server:

The gateway server increases security and enables the administration of end devices on the Internet. It is provided fully configured.

SQL-Server:

You no longer have to worry about scaling and licensing the SQL server. It is hosted by baramundi and scaled to suit the environment. It is also secured to the highest standards to ensure that all data is safe.

Distributed Installation Point:

The central storage location for scripts, files and applications required to manage the endpoints is provided by the cloud solution. This eliminates the need to provide the necessary storage capacity in the local environment.

baramundi Management Center:

The baramundi Management Center is the central tool for managing endpoints. It can be accessed directly via the browser.

baramundi Automation Studio:

The baramundi Automation Studio is the best assistant for automating processes and saving time in everyday life. To get an overview of all scripts and their functions, the Automation Studio is also available in the browser to view the existing scripts.



2.1 Internet Enabled Management Only variant:

This version of our baramundi Management Suite is a comprehensive tool and offers the following functions:

- Inventory: A complete summary of all hardware and software.
- **IT-Management**: Centralized license management, energy management and remote maintenance on all clients for efficient administration.
- Software distribution: For automating and deploying any software.
- Security: Comprehensively protects endpoints for increased IT security by centrally managing and distributing operating system and software updates and scanning devices for vulnerabilities.
- Defense Control: Manage additional security measures to ward off threats.

2.2 VPN-variant

This variant adds the following functions to the Internet Enabled Management Only variant:

- Mobile Device Management (MDM): Managing mobile devices, including macOS.
- **OS Install**: Install and configure your operating system.
- Remote Control: Remote maintenance for Windows devices



2.3 Function Overview

Funktion	Feature	Availability	Modus
Inventory	Network Devices		VPN & IEM
Inventory	Application Usage Tracking		VPN & IEM
Inventory	OT Inventory		VPN & IEM
OS Install	OS-Install		VPN only
OS Install	OS Install Customization	Ø	VPN only
OS Install	OS Install Boot Media Wizard	(VPN only
Software distribution	Deploy		VPN & IEM
Software distribution	Automate	(VPN & IEM
MDM	Mobile Devices		VPN & IEM
MDM	Mobile Devices Premium	~	VPN
IT-Management	Remote Control		VPN
IT-Management	Remote Desk		VPN & IEM
IT-Management	Energy Management		VPN & IEM
IT-Management	License Management		VPN & IEM
Security	Vulnerability Scanner		VPN & IEM
Security	Patch Management	~	VPN & IEM
Security	MSW		VPN & IEM
Defense Control	Bitlocker Network Unlock	*	VPN only
Defense Control	Bitlocker Management		VPN & IEM
Defense Control	Defender Management		VPN & IEM
Monitoring	Connection of the Argus Cockpit		VPN & IEM
ITSM	Ticketing System	*	VPN & IEM
Misc	baramundi User Permissions	*	VPN & IEM
Misc	AD-Synchronisation		VPN only
Misc	Management Agent Windows Kiosk		VPN only

[✓] fully supported ✓ per Companion application ♥ not available □ Limitation

^{*}Available on request.



3 Companion Applications & Limitations

3.1 Companion Applications

Companion applications are applications that are part of our baramundi modules in order to use or supplement them. Some of these applications require direct access to the baramundi infrastructure, which is why they are not available in the IEM version, but in the VPN version. In addition, some companion applications have the requirement to be run administratively in the modules on the baramundi server itself. In this case, baramundi offers this as an additional service.

Companion Applikation	Internet Enabled Endpoint	VPN	
Management Agent (Windows)	Fat-Client	Fat-Client	
Management Center	Webbrowser	Webbrowser	
		Fat-Client	
Application Wizard	Webbrowser ¹	Webbrowser ¹	
		Fat-Client	
Automation Studio	Webbrowser (read only)	Webbrowser (read-only)	
	Fat-Client	Fat-Client	
OS Customization Wizard	[not applicable]	(optional) Service by	
		baramundi	
		Fat-Client	
Boot Media Wizard	[not applicable]	1x free request per month as	
		Service by baramundi	
Relay-Server	[not applicable]	Fat-Client	

¹ – Only for setup types with parameters (e.g. MSI)

[&]quot;Service by baramundi" means that after creating a ticket at supportbmsaas@baramundi.com, an appointment is made with baramundi. During this appointment, the adjustments are made together with an experienced baramundi specialist.



3.2 Limitations

OS Install:

The **OS Customization Tool** can be run on a local device after installing the baramundi Management Center and the tool.

The **OS Install Boot Media Wizard** can only be run by baramundi. The required drivers can be stored on the DIP and then integrated by opening a ticket.

Software distribution:

The **baramundi Automation Studio** is available in the browser for viewing scripts. To edit and test scripts, it must be installed on a client.

MDM:

The use of MDM is possible in both variants but differs as follows: MDM requires a VPN when using the enrollment programs from Apple and Android, DEP and Zero Touch, as user-based authentication takes place here, which must be stored in the baramundi Management Center via AD sync. The use of "normal" management through the installation of the agent from the App/Play Store and enrollment with token/QR is possible without a VPN.

Security:

The **Bitlocker Network Unlock** function cannot be used with the baramundi Management Suite from the cloud by default. This feature can be implemented on request.

Misc:

The **baramundi user permissions** for adjusting the permissions within the baramundi Management Center can be adjusted by baramundi once a month free of charge.

The **baramundi Management Agent Windows Kiosk** can only be used via client authentication. Logging in with a user is not possible.

User management: Creating new users is possible upon request via the ticket system.

File Upload: The web interface allows you to upload files up to 2GB in size. In the VPN version, larger files can be uploaded via SMB.



4 VPN

For the Advance and Premium edition, setting up a VPN is necessary. With an IPsec-IKEv2 VPN, baramundi offers a secure way to exchange data between companies and the baramundi Management Suite as a Service. Since this is a site-to-site connection, it is possible to disconnect and reinitialize the connection at any time. The connection does not require NAT, so the networks can be routed directly via the VPN connection and IPs can be addressed directly.

IPsec enables secure transmission of information in IP-based data networks, whereby the confidentiality, integrity and authenticity of the information transmitted using the IP protocol can be guaranteed.

4.1 Ports

The VPN itself uses the following ports:

UDP 500 and 4500

Within the VPN, all ports that the baramundi Management Suite uses in the internal network must be enabled. An overview of this can be found in our docs: baramundi Management Suite (baramundi.com)

4.2 Encryption

A pre-shared key is used to encrypt and authenticate the connection. The encryption methods are based on the BSI (<u>Federal Bureau for Security in Information Technology</u>) recommendation in the Technical Guideline TR-02102-3 (Version 2023-01).

4.3 Routing

For the clients to be able to communicate with the baramundi Management Suite, the internal IP of the baramundi Management Server must be routed via the VPN. It must be ensured that all networks that contain managed clients know a suitable route via the VPN connection.

baramundi handles the routing from the baramundi Management Server to the client networks; for this, all existing networks, as well as any new networks added in the future, must be passed on to the baramundi contact.



5 Technical requirements

Network and internet connectivity

- min. 250 Mbits / recommended 500 Mbits internet connection
- Setting up a VPN is necessary for the Advance and Premium versions. An IPsec-IKEv2 VPNcapable gateway is required for this and NAT must be deactivated.
- Direct HTML-5 capable browser on a PC (no mobile browsers)
 - Supported: Edge, Chrome, Firefox

Ports

- TCP 443 (When using VPN: UDP 500 and 4500)
- Within the VPN, all ports that the bMS uses in the internal network must be enabled. Please
 note the specifications in the system requirements, which can be viewed on our homepage.
 (https://www.baramundi.com/sys-req-de)

Encryption

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- The encryption methods are based on the BSI's recommendation in the technical guideline TR-02102-3 (version 2023-01).

Routing

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- baramundi handles the routing from the baramundi Management Server to your network; for this, all existing networks, as well as any newly added networks in the future, must be passed on to your contact person.

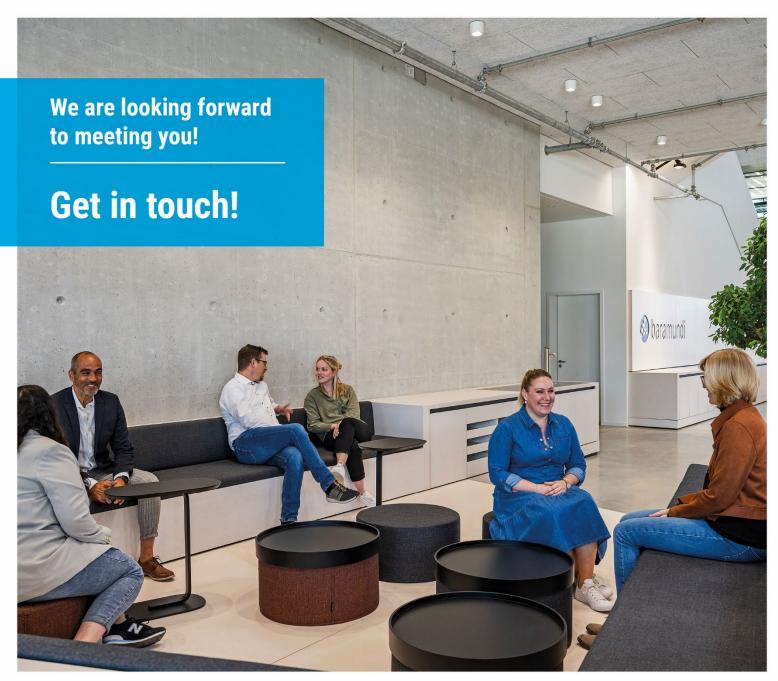
Authorizations

- An administrative account is required for the initial installation of some companion applications (e.g. the baramundi Management Agent (Windows)).
- For the automated distribution of the baramundi Management Agent, a domain account must be entered in the baramundi Management Center, which has local administrative rights on the endpoints to install software.

DHCP

 To provide Windows PE images via PXE in the VPN variant, it is necessary to configure DHCP options in the range of end devices.





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