



WHITEPAPER

## CHECKLIST

CREATE THE ULTIMATE IT HARDWARE BOM  
FOR A FLAWLESS NETWORK SECURITY PROJECT

RACKMOUNT.IT



## INTRO

A bill of materials (BOM) is critical for building a modern IT hardware ecosystem. Without an effective BOM, developing the ideal IT infrastructure and landscape for your network security project may come with a lot of hassle, including build, performance and licensing issues, security problems, and costly delays.

In this checklist, we're going to take a closer look at the common and important components of the ultimate IT hardware BOM. Which ones should always be included? And what are the most important questions that you have to ask yourself when you're drawing up a comprehensive IT hardware BOM? We provide you with the answers to these pressing questions!

# THE COMPONENTS OF AN IT HARDWARE BOM

A usable and comprehensive IT hardware BOM consists of many components that can be divided into several categories and subcategories. Using the now following checklist allows you to cover them all and create an excellent, structured and comprehensive IT hardware BOM that you can use to collect all relevant IT component data, verify compliance with security and data protection rules and regulations, and create a reliable blueprint for IT cost management.

## 1

### HARDWARE COMPONENTS

Servers are at the heart of your IT network. A good IT hardware BOM therefore specifies the type (web server, proxy server, file server, database server, application server), quantity and model of the servers that you use. And will you opt for one or more virtual servers or a physical server?

To get the best out of your servers and network, you'll also need the right network equipment. This includes routers, switches, firewalls, connectors, and the right network cables. A good hardware BOM contains all the details on make and model and takes the

dependencies (interchangeability, compatibility) between the different components and models into account. Without the right computers, IT and digital activities cannot proceed effectively. Choosing and correctly describing the right (amount and type of) desktops, laptops and appliances and their exact specifications, largely define the success of the networking project.

The last important set of hardware components that should be described in an IT hardware BOM are the storage devices. Which ones you are going to use, which sizes and which storage technologies (SSD, NAS, DAS or SAN).





## 2 SOFTWARE COMPONENTS

The software components that interact with your hardware are also vital parts of your IT hardware BOM. The first important consideration is the operating system (OS). A well-chosen OS that is optimized for your technological needs can significantly improve the performance of your computers and entire IT system. A proper IT

hardware BOM specifies the OS for servers, workstations, and other devices. Be sure to list all required applications in your BOM, including the licenses. Thorough license management maximizes software use and makes sure that you are abiding by the terms and conditions of each license.



## 3 NETWORKING COMPONENTS

Networking components facilitate data transmission and communication between devices and are therefore essential elements of a good IT hardware BOM. Be sure to specify the type and the length of the cables needed for networking, all the necessary details about network interface cards (NICs) for your network adapters, and all the specific access points and wireless controllers (wireless equipment).

# 4

## POWER AND COOLING

In today's digital day and age, uptime percentages of close to 100% are a must instead of a luxury. Power outages are a costly affair and negatively affect company productivity, service levels, and ultimately revenues. This means that you need an uninterruptible power supply (UPS), a continual power system that automatically provides electric backup power to a load when the primary source of power (temporarily) fails.

Additionally, ensuring optimal cooling for your servers and computing equipment is paramount. Our rackmount kits from Rackmount.IT feature custom cut-outs designed to facilitate efficient airflow and prevent overheating. By incorporating these specially designed rackmount kits into your setup, you can mitigate the risk of downtime caused by equipment overheating. Be sure to include details about these innovative cooling solutions in your IT hardware BOM to guarantee a flawless network security project.

Moreover, our racks can be equipped with fastening points for the power supply, reducing the risk of downtime further by securely attaching the power supply and minimizing the risk of detachment or falling.



# 5

## LICENSING AND SUBSCRIPTIONS

Without careful management, licensing and subscription can run up your IT costs. A bill of materials offers you the opportunity to specify the number of licenses required for each software component.

This allows you to skip the costs of licenses and resources that you don't need or barely use. You should also include details about any cloud services or subscriptions in your IT hardware BOM. What is necessary to run your day-to-day business processes? Do you choose perpetual (buying a license or service for a one-time fee) or subscription-based licensing?

# 6

## DOCUMENTATION AND MANUALS

IT management is all about exhaustive and meticulous documentation. That's why your BOM should also include user manuals, technical documentation, and any other relevant guides that help you get the best out of your IT appliances and components.



# 7

## RACK SPACE AND CABINETS

Rack space and cabinets are pivotal elements of your IT infrastructure, providing the cornerstone for housing and safeguarding your valuable equipment. In today's fast-paced digital landscape, ensuring the reliability, cleanliness, and efficiency of your rack solutions is paramount. This is where Rackmount.IT shines. Rackmount.IT offers distinct advantages over standard vendor racks, making it the superior choice for your network security project.

### CLEAN SOLUTIONS

At Rackmount.IT, we prioritize cleanliness and reliability in our rack designs. Each rack is custom-tailored to perfectly fit your specific appliance, ensuring a secure fit. Our racks feature custom cut-outs, allowing you to easily assemble your firewall or switch using existing appliance screws. Furthermore, all appliance connections are conveniently brought to the front for effortless access, resulting in a tidy and organized appearance.

### OPTIMIZED AIRFLOW

Maintaining optimal operating temperatures for your appliances is crucial for their longevity and performance. Placing appliances on shelves or atop other equipment can lead to overheating issues. With Rackmount.IT, you can trust that your appliances receive the airflow they need to stay cool and reliable. Our racks feature custom, model-specific airflow cut-outs, providing ample breathing room for your appliances and preventing overheating concerns.

### RELIABILITY

A reliable power supply is essential for uninterrupted operation. Improperly secured appliances or power supplies can lead to disconnections and potential downtime.

With Rackmount.IT, reliability is built-in. Our racks feature fixed power supplies, eliminating the risk of shifting or falling appliances causing power disruptions. This ensures continuous operation and peace of mind for your network security project.

# 8

## LICENSING AND SUBSCRIPTIONS

An extensive IT hardware BOM also includes detailed information about warranties for hardware components and support agreements for software. It's crucial to ensure that all hardware components come with warranties that provide adequate coverage for the expected lifespan of the equipment. Additionally, comprehensive support agreements for software are essential to guarantee timely assistance in case of technical issues or software updates.

When compiling your BOM, make sure to include specifics such as warranty durations, terms of coverage, and support service levels for each component and software solution. This ensures that your network security project remains resilient and well-supported throughout its lifecycle.



# 10

## COST, BUDGETING AND VENDOR INFORMATION

Last but not least: your IT hardware BOM should also present insight into the money that goes into building and maintaining your IT landscape. Provide cost estimates for each component and the overall project and make sure the spendings fit your budget. Also include details about vendors, contacts and purchase information. Cyberattacks are continuously expanding by becoming more sophisticated, targeted and widespread. This means that security components are an important part of your IT landscape and IT hardware BOM. Specify your antivirus solutions and licenses, as well as all the details about your secure devices, such as firewalls and security appliances. Which security technologies (SIEM, secure SD-WAN, intrusion detection, SOC, SOAR) are you going to use? And how do you want to implement and integrate them?

# 9

## SECURITY COMPONENTS

Cyberattacks are continuously expanding by becoming more sophisticated, targeted and widespread. This means that security components are an important part of your IT landscape and IT hardware BOM. Specify your antivirus solutions and licenses, as well as all the details about your secure devices, such as firewalls and security appliances. Which security technologies (SIEM, secure SD-WAN, intrusion detection, SOC, SOAR) are you going to use? And how do you want to implement and integrate them?



click here  
to visit our  
website!

## HOW WE HELP

**Using our checklist allows you to draw up a comprehensive IT hardware BOM that builds a strong digital foundation for improving your productivity and IT maturity.**

Rackmount. IT helps you by providing high-quality rack mount kits for all major desktop appliance manufacturers (Apple, Palo Alto, Fortinet, Aruba, Barracuda, Check Point, Ubiquiti, and many more). Our rack mount kits offer high value, at an affordable price! Front connections give you easy access to all the

ports of your appliance, a secured power supply makes sure you never lose power again, and custom cut-outs preserve the airflow and deliver a perfect fit for your specific desktop appliance.

Would you like to learn more about Rackmount. IT and explore our solutions? We are always happy to help from our EMEA office, US office or from our office in Australia. Feel free to send an email to [sales@rackmount.it](mailto:sales@rackmount.it), or fill out the [contact form](#) on our website, and we'll get in touch with you.



EMEA

+31 76 200 3740  
[sales@rackmount.it](mailto:sales@rackmount.it)

USA

+1 512 521 0333  
[sales-us@rackmount.it](mailto:sales-us@rackmount.it)

APAC

+61 2 7908 1052  
[sales-aus@rackmount.it](mailto:sales-aus@rackmount.it)

**RACKMOUNT**