

## System

Report date	Mon, 09 Oct 2023 11:29:27
Cluster name	mkvfat
Kubernetes Cluster domain	mkvfat.labs.werum.net
Kubernetes API endpoint	10.78.159.111:6443

All listed nodes were set up with the following OpenStack parameters:

Property	Value
Tenant	MKV
Networking (Standard Network Interface)	flat

## Kubernetes Cluster Nodes

These are the individual nodes in the Kubernetes cluster:

mfat-lan-1-72w3

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### System Properties

Property	Value
Description	mfat-lan-1-72w3
Availability zone	cube-1
IP Address	10.78.154.126
Flavour	8.16.default
No. of processors (vCPU)	8
RAM / Memory	16397052Ki
Boot volume size	100
Boot source name	Ubuntu-Focal-Fossa-20.04.3-LTS-V1.01
Creation time	2023-10-09T11:14:44Z

### Installed Software


Property \_\_\_\_\_ Value PAS-X MES

# System Requirements

System manual



**PAS-X MES**  
**System manual**

Körber Pharma Software  
PAS-X MES Standard  
Valid as of software version V3.3.2/00  
Document version 1.3  
Modification date: 25 May 2023



ASPOSE  
Your File Format APIs

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# ASPOSE

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## Document history

Version	Date	Name	Change
			Kubelet version v1.24.3
1.0	19 Aug 2022	C. Dröscher	Initial document for software version PAS-X MES V3.3.2/00.
1.0	19 Aug 2022	A. Kröger	Updated sections "PAS-X runtime configuration / Server" and "PDF/A conversion / Ghostscript" regarding Ghostscript version.
1.0	07 Oct 2022	K. Hinz	Updated section "Service users" regarding usage of ssh socket connection for traefik.
1.0	07 Oct 2022	K. Hinz	Updated section 'Docker Remote API Access' regarding a secure API access over ssh.
1.0	02 Nov 2022	G. Kirck	Updated section "Password encryption", refer to "System Manager" system manual.
1.0	21 Dec 2022	G. Kirck	Added section "RabbitMQ node labels" and updated section "Host bound PAS-X Services" regarding RabbitMQ deployment and requirements in the Swarm configuration.
1.0	23 Jan 2023	N. Haffke	Editorial changes.
1.0	09 Feb 2023	C. Friedrich	Updated section "PAS-X runtime configuration": Corrected browser & XenApp version for client runtime and Helm & kubectl version for server runtime.
1.0	23 Feb 2023	T. Burlatis	Updated section "PAS-X runtime configuration": Corrected browser version. Corrected PostgreSQL requirements.
1.0	24 Feb 2023	B. Tiernan	Editorial changes.
1.1	27 Feb 2023	T. Burlatis	Corrected Kubectl version.
1.2	11 Apr 2023	T. Burlatis	Updated section "PAS-X runtime configuration": allow applying Citrix CU packages.
1.3	25 May 2023	T. Burlatis	Updated section "PAS-X runtime configuration": added Bash V5 as requirement for deployment host.

## Document Creation and Review

Creation and review of this document is typically a joint activity performed by several project team members. This signature confirming creation and review of this document indicates that it has been created and reviewed by the person signing.

It is confirmed that the content of this document fits the purpose described in the respective "Purpose" section in the document.

It is also confirmed that this document is created in a manner that an administrator is able to understand it.

Created and reviewed by

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Name / date / signature

### **Document Review and Approval**

Review and approval signatures for this document act as confirmation by the persons signing that this document has been created in the way indicated above.

Reviewed and approved by

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Name / date / signature



# 1 General

## 1.1 Purpose

This section describes the requirements for systems utilizing PAS-X.



The hardware structure of PAS-X systems

varies:



System Properties

Property	Value
Description	mfat-lan-2-72w3
Availability zone	cube-1
IP Address	10.78.159.118
Flavour	8.16.default
No. of processors (vCPU)	8
RAM / Memory	16397052Ki
Boot volume size	100
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Installed Software

- Property \_\_\_\_\_ Value from complete systems on a single computer, e.g. for demo systems
- to distributed system components on several computers (productive systems).

The mentioned system requirements do NOT include requirements for redundant hardware; this means that **requirements for systems employing redundancy concepts are not considered in this document.** It is assumed that ONLY the PAS-X **productive** system runs on the hardware. **Additional loads caused by other systems, such as testing and/or training systems running on the same hardware are not considered in this document.** It is common to have the following systems installed at the customer:



- Development or sandbox system to e.g. perform testing of a prototype
- Training system to train end users, e.g. operators or supervisors
- Qualification system used for validation
- Productive system

1.2 Target audience

This document is aimed for administrators. Prerequisites:

- Technical knowledge relating to the system infrastructure.
- Good command of the functions of the PAS-X user interface.

1.3 Symbols and typographical conventions

Symbol	Description /
<b>Example</b>	Kubelet version
v1.24.3	<div><div></div><div>This document was truncated here because it was created in the Evaluation Mode.</div></div>
	<div><div></div></div>