

## WALLIX ACADEMY

Certified Training Courses



## SECURE YOUR DIGITAL FUTURE

## WALLIX ACADEMY

## Certified Training Courses

The WALLIX Academy is dedicated to training end-users and partners in using WALLIX solutions and creating and running a community of certified members of the WALLIX User Club.

WALLIX offers 3 levels of training, administrator, professional and expert, for all WALLIX customers and partners. Attending these trainings will allow your teams to master the different technical and functional aspects of WALLIX solutions

	PAM (P)	IDaaS (I)	EPM (E)
Available WALLIX training courses	WALLIX Bastion	WALLIX Trustelem	WALLIX BestSafe
Certification training WALLIX Certified Administrator - WCA	•		
Certification training WALLIX Certified Professional - WCP	•	•	•
Certification training WALLIX Certified Expert - WCE	•		

## Our training courses can be:

- In person training: inter or intra-company, handling a maximum of 6 trainees.
- **Remote training:** we require the use of Microsoft Teams. Please check the technical requirements according to training.

Find the dates of courses on

https://www.wallix.com/wallix-academy/

To register to a training course, send an email to:

academy@wallix.com

\*With your contact details and the dates of the chosen training course.

WALLIX is a training organization registered under number 11 75 51538 75. This registration does not imply approval of the State.





# WALLIX Bastion

- WALLIX CERTIFIED ADMINISTRATOR / WCA-P
- WALLIX CERTIFIED PROFESSIONAL / WCP-P
- WALLIX CERTIFIED EXPERT / WCE-P

## WALLIX CERTIFIED ADMINISTRATOR / WCA-P PAM - BASTION

This training is intended for engineers and technicians of WALLIX end-users and reseller partners who want to understand our WALLIX Bastion solution and to be in a position to manage it in day to day activities.

#### PREREQUISITES:

The trainee should be acquainted with SSH, RDP, proxy concepts, and Linux environments. Systems, networks and infrastructure skills will enable the trainee to acquire the WALLIX Bastion more quickly. This training focuses on the administration tasks of the Bastion solution and does not deal with its installation and deployment.

### **DESCRIPTION:**

This 1-day technical training allows you to understand WALLIX Bastion solution and to be in a position to manage it in day to day activities. It provides the necessary means to understand the basic concepts and functionalities for its maintenance and basic administration. It is based on an active participation of the trainee who will have the ability to interact with our experience trainer in the course of the training session. At the end of the training, the trainee will have to pass an MCQ test. An 70% score is required to get the WALLIX Certified Administrator - Bastion(WCA-P) certification.

### Program:

I. GENERALITIES	V. EXTENDED CONFIGURATION
• Introduce WALLIX & Portfolio	Connection policies
• Introduce PAM	Configuration options
II. WALLIX BASTION SOLUTION	- Disabling session probe
WALLIX Architecture in general (WALLIX Access Manager, Bastions, HA)	- Activating SSH scenarios
Possible integration (SNMP, SIEM)	Vault transformation
• Demo 1 simple use case with all components / Questions	Application Integration
III. WALLIX BASTION SESSION MANAGEMENT BASIC CONFIGURATION	VI. HOW TO MAINTAIN & SUPPORT
Admin menus	Log Files (wabsysinfo), detail of the logs
Auditors and approvers menus	Services - Admin users/logins
Basic configuration (adding/deleting resources / users)     provisionning GUI	Managing updates/upgrades
Basic configuration (adding/deleting resources / users)     CSV / API	- Find and go through the release notes (compatabilies and migration path, update procedure)
IV. WALLIX BASTION PASSWORD MANAGEMENT BASIC CONFIGURATION	- Presentation of the release logics (LTS, Intermediary, Hotfixes)
Pwd Management configuration	VII. TROUBLESHOOTING
Breaking glass procedure	• Examples
	WALLIX resources (support portal, knwoledge base, documentation and download)



## WALLIX CERTIFIED PROFESSIONAL / WCP-P PAM - BASTION

This training is intended for engineers and technicians of WALLIX end-users and reseller partners who want to master the configuration, the deployment and the administration of WALLIX Bastion solution.

### PREREQUISITES:

The trainee should be acquainted with SSH, RDP, proxy concepts, and Linux environments. Systems, networks and infrastructure skills will enable the trainee to acquire the Bastion more quickly.

## **DESCRIPTION:**

This 3-day technical training allows you to discover and take control of our WALLIX Bastion solution. It provides the necessary means to understand the basic concepts and functionalities for a deployment in a classical architecture. Alternating theory and practice, it is based on an active participation of the trainee who will have to configure and administer a Bastion into a LAB platform—to become completely autonomous. At the end of the training, the trainee will have to pass an MCQ test. An 70% score is required to get the WALLIX Certified Professional - Bastion (WCP-P) certification.

## Training content:

I. Training and certification courses	Updating the Bastion version
II. Company and products	Rollback to the previous bastion version
WALLIX company	• Install/uninstall a hotfix
WALLIX products	Monitoring and logs
Licensing information	Configuring an email server and enabling the notifications
III. Installing and Handling the WALLIX Bastion	Main components and services of the Bastion
Installing the WALLIX bastion appliance	IV. WALLIX Session Manager
The location on the network	• Global concepts
Initial configuration	Add user/primary account (local authentication)
First connection	Add a user/primary account group
Changing the admin password	• Add a device
Installing the license	Add secondary/target account (Device account)
Configuring the network	Add resource group
Configuring the time zone and NTP servers	• Add an authorization
Add A Bastion administrator	Connecting to a server using RDP
Backing up the configuration	Connecting to an SSH server
Restoring the configuration	Changing the disclaimer message
Backing up the bastion version	• Add an application



# WALLIX CERTIFIED PROFESSIONAL / WCP-P PAM - BASTION

Add an SSH startup scenario	Password change - administrator side
Add user/primary account (external authentication)	Breaking glass
Import user/primary account from LDAP/AD	Password manager audit
Add secondary/target account (Global Domain account)	Approval workflow for password Manager
Approval workflow for session manager	VII. WALLIX Access Manager
• User profiles	Global concepts
• Import/export	• Installing Mysql server
V. Session Audit	Installing the WALLIX Access Manager
Current session	• The default configuration
Session history	Add an organization
Approval history	Add a bastion to the organization
Account history	Add primary/user account to the organization
Authentication History	Password policy of the organization
Connection statistics	Customize the template of the organization
• Audit Logs	Connecting to the organization
Session recording parameters	Connecting to a server using RDP
Managing the session records	Connecting to an application
VI. WALLIX Password Manager	Connecting to a server using SSH
Global concepts	Accessing to the accounts password
Add a Checkout policy	Session Audit from the access manager
Configuring a Checkout policy on target/secondary account	Managing the WALLIX Access Manager
Add a password management account to the resource group	VIII. WALLIX High availability
Enable the password checkout on the authorization	WALLIX Bastion HA
Password Checkout - User side	WALLIX HA Replication
Add password change policy	IX. Wallix CUSTOMER support center
Password change plugins	Before opening a case
Enable password change on a target/secondary account	• Opening a case
Enabling password change and Configuring password policy and password plugin on local/global domain	
Enabling password change at check-in	



## WALLIX CERTIFIED EXPERT / WCE-P PAM - BASTION

This training is intended for engineers of WALLIX reseller partners and end-users who want to achieve advanced deployments of the WALLIX Bastion solution.

#### PREREQUISITES:

The trainee must be certified WCP-P (WALLIX CERTIFIED PROFESSIONAL - BASTION). He must also be acquainted with **the GNU/Linux command line**. Scripting knowledge will facilitate the follow-up of this training.

## **DESCRIPTION:**

This 2-day technical training introduces the advanced concepts of WALLIX solutions to achieve advanced deployments. Based on the setup of Bastion advanced configurations (active / active architecture, automatic provisioning, disaster recovery plan, etc.), training provides the knowledge and skills needed for specific and/or large-scale deployments in complex environments. At the end of the training, an MCQ test must be completed by the trainee and he must get an 70% score to get the WALLIX Certified Expert - Bastion (WCE-P) certification.

## **Training content:**

I. Advanced authentications	Add an Autolt application on the Bastion
Bastion - LDAP/AD explicit authentication	Secure the credentials used by Autoit applications
Bastion – Radius explicit authentication	WABIELogon script
Bastion – Kerberos explicit authentication	III. Proxies parameters
Bastion – Kerberos transparent authentication	Global concepts
Bastion – certificate X509 transparent authentication	RDP connection policy
Access Manager – LDAP explicit authentication	RDP Proxy Global parameters
Access Manager – X509 certificate transparent authentication	RDP Proxy sesman Global parameters
Access Manager – SAML (Security assertion markup language)     explicit authentication	Change the RDP proxy self-signed certificate
II. Advanced Applications	• SSH connection policy
Reminder: Applications in WALLIX session manager	SSH Proxy Global parameters
• Clusters	TELNET connection policy
Autolt Scripting Language	VNC connection policy
Download and install Autolt application	VNC Proxy Global parameters
Write an Autolt script *.au3	IV. Advanced Password Manager
Compile the script to generate the AutoIt application *.exe	Reminder: WALLIX Password Manager
Upload the Autolt application on the server	WAAPM : WALLIX Application to Application Password Manager



## WALLIX CERTIFIED EXPERT / WCE-P

## **PAM - BASTION**

Bastion as External vault (from V6.1)	The Bastion REST API methods
V. WALLIX Bastion REST API	The Bastion REST API Response codes
Global concept	Browse resources using REST API
WALLIX Bastion REST API	• ADD a resource using REST API
Authenticate to The Bastion REST API	Modify a resource using REST API
• Logout from the Bastion rest API	•Delete a resource using REST API

## **PAM Remote Training Courses technical prerequisites**

To succeed in flowing our remote training, we require the use of Microsoft Teams.

As part of WCP and WCE training there is a WALLIX Training LABs platform that allows you to do all training LABs independently. For that, the platform includes 4 preconfigured virtual machines: Domain controller (Windows 2016), 2016 Windows server, Linux server and WALLIX Bastion.

## Minimum Hardware requirements for WCP-P and WCE-P training:

- 8GB Ram or more
- I5 Processor
- 40GB harddrive space available
- In the first step of the training we will setup this Platform.
- The admin rights in your computer is mandatory to install and configure all these tools properly.

## Prepare the lab virtual machines:

Download and Install Virtual Box

https://www.virtualbox.org/wiki/Downloads

- Platform package
- Virtual Box Extension Package

Access to lab virtual machines will be communicated to you when you register

Our training courses are accessible to people with disabilities. For more information or in case of need of a particular adaptation of the training, please contact our handicap referent at the following address: academy@wallix.com



## **IDaaS**



# **WALLIX Trustelem**

• WALLIX CERTIFIED PROFESSIONAL / WCP-I

## WALLIX CERTIFIED PROFESSIONAL / WCP-I IDaaS - TRUSTELEM

This training is intended for engineers and technicians of WALLIX end-users and reseller partners who want to master the configuration, the deployment and the administration of WALLIX Trustelem solution.

### PREREQUISITES:

The trainee should be acquainted with **Active Directory Objects, Microsoft environments. Systems, networks and infrastructure skills** will enable the trainee to acquire the WALLIX Trustelem more quickly.

### **DESCRIPTION:**

This 1-day technical training allows you to discover and take control of our WALLIX Trustelem solution. It provides the necessary means to understand the basic concepts and functionalities for a deployment in a classical architecture. Alternating theory and practice, it is based on an active participation of the trainee who will have to configure and administer into a LAB platform to become completely autonomous. At the end of the training, the trainee will have to pass an MCQ test. An 70% score is required to get the WALLIX Trustelem Certified Professional (WCP-I) certification.

## Program:

I. GENERALITIES	VI. WALLIX TRUSTELEM ACCESS MANAGEMENT	
Introduce WALLIX & Products	Access Management Interface	
Introduce Trustelem	Access Rules Definition	
II. WALLIX TRUSTELEM SOLUTION	VII. WALLIX TRUSTELEM ADVANCED USER EXPERIENCE	
• Identity and access management	Integrated Windows Authentication	
User Accesses	Authentication with Certificates	
III. WALLIX TRUSTELEM ADMINISTRATION	• Reset password	
INTERFACE PRESENTATION	Active Directory by User	
• Three major steps	VIII. WALLIX TRUSTELEM FOLLOW-UP OPERATIONS	
Presentation of the different tabs	• Log	
IV. WALLIX TRUSTELEM	• Alerts	
USERS MANAGEMENT		
Users created on WALLIX Trustelem	• Sessions	
• Users from Azure AD	Dashboard	
• Users from GSuite	IX. QUICK INTRODUCTION TO APIS	
Users from Active Directory	Presentation of the main functions	
V. WALLIX TRUSTELEM	X. PLANNING	
APPLICATIONS MANAGEMENT	AN SSO PROJECT	
Generic Models	Presentation of the main steps to follow	
Pre-integrated Applications		

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# WALLIX Bestsafe

• WALLIX CERTIFIED PROFESSIONAL / WCP-E

## WALLIX CERTIFIED PROFESSIONAL / WCP-E EPM - BESTSAFE

This training is intended for engineers and technicians of WALLIX end-users and reseller partners who want to master the configuration, the deployment and the administration of WALLIX BestSafe solution.

### PREREQUISITES:

The trainee should be acquainted with Active Directory Objects, MMC Tools, Microsoft environments. Systems, networks and infrastructure skills will enable the trainee to acquire the WALLIX BestSafe more quickly.

### **DESCRIPTION:**

This 2-days technical training allows you to discover and take control of our WALLIX BestSafe solution. It provides the necessary means to understand the basic concepts and functionalities for a deployment in a classical architecture. Alternating theory and practice, it is based on an active participation of the trainee who will have to configure and administer into a LAB platform to become completely autonomous. At the end of the training, the trainee will have to pass an MCQ test. An 70% score is required to get the WALLIX BestSafe Certified Professional (WCP-E) certification.

## Program:

I. COMPANY AND PRODUCTS	• Rules Flags
Introduce WALLIX & Products	Rules Inheritance
How can BestSafe help you to reduce your surface attack?	V. WALLIX BESTSAFE EXTENDED CONFIGURATION
Active Directory Main Concepts Reminders	• General Tab
Windows Process Security Context Reminders	End Point Security
II. WALLIX BESTSAFE SOLUTION	Emergency Actions
POLP (Principle of Least Privilege)	• Analytics
WALLIX BestSafe Architecture	• Forbidden Rules
WALLIX BestSafe Networking	Rules Admins
III. WALLIX BESTSAFE INSTALLATION	VI. MAINTENANCE & SUPPORT
AD requirements and changes	BestSafe Logs Analysis
Install / Reinstall / Update Admin Console	Rules Verifying
Install / Reinstall / Update Client	VII. WALLIX BESTSAFE SECURITY RULES
	& RANSOMWARE RULES CONFIGURATION
License Activation	• Local privileged group membership management – Security Rules
IV. WALLIX BESTSAFE PRIVILEGE RULES CONFIGURATION	Enabling Security Rules
Manage windows process security context –	Managing Security Rules
Privilege Rules	
Privilege Rules - Restricted / Blocked / Administrator / Com-	• Ransomware Rules
mand Line / Filtering by Groups /	
Just in Time - Rules Validity / Rules Filtering by OS	
Privileges Management / Parent Processes	Local Accounts Password Management

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## about WALLIX

A software company providing cybersecurity solutions, WALLIX Group is a European specialist in privileged account governance. In response to recent regulatory change (NIS/GDPR in Europe and OVIs in France) and the cyber security threats affecting all companies today, Bastion helps users protect their critical IT assets: data, servers, terminals and connected objects







