MAVIS

Hybrid Multi-Cloud PAM

PNTL

Accelerated Deployment and Enhanced Security of Enterprise Identity and Privilege Management

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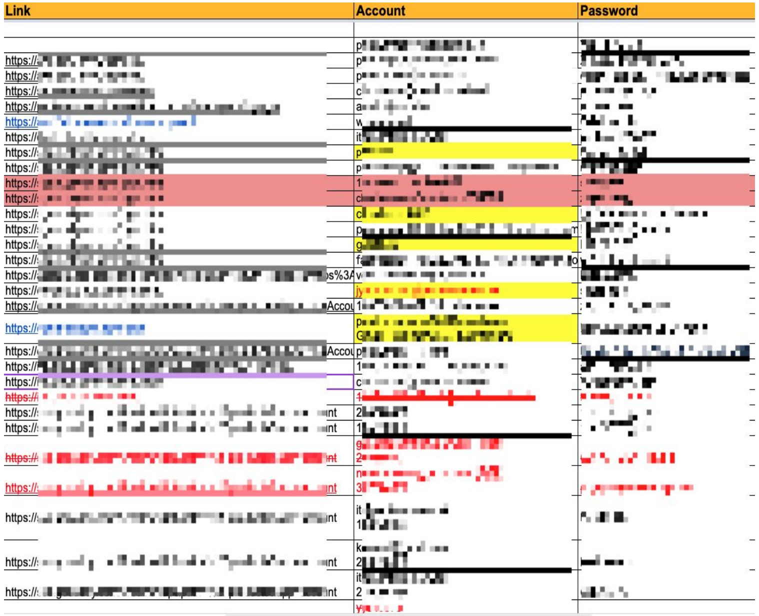
How do you authorize IT colleagues to operate company assets and services?

Record and share all company internal and external accounts and passwords through an Excel spreadsheet.



Link	Account	Password
https://[redacted]	[redacted]	[redacted]
https://[redacted]	[redacted]	[redacted]
https://[redacted]	[redacted]	[redacted]
https://[redacted]	[redacted]	[redacted]
https://[redacted]	[redacted]	[redacted]
https://[redacted]	[redacted]	[redacted]
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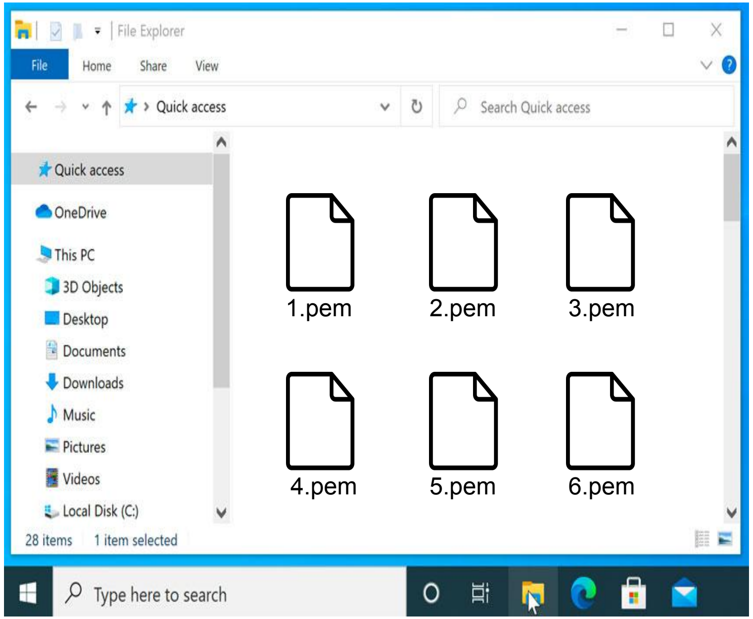
Manage all important company keys in a single folder.



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How do you authorize external vendors to operate company assets and services?

Use a physical camera to record the operator's actual operations behind them.

Someone needs to be present to monitor the computer at all times when entering information.

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Is your company currently in a hybrid cloud environment?

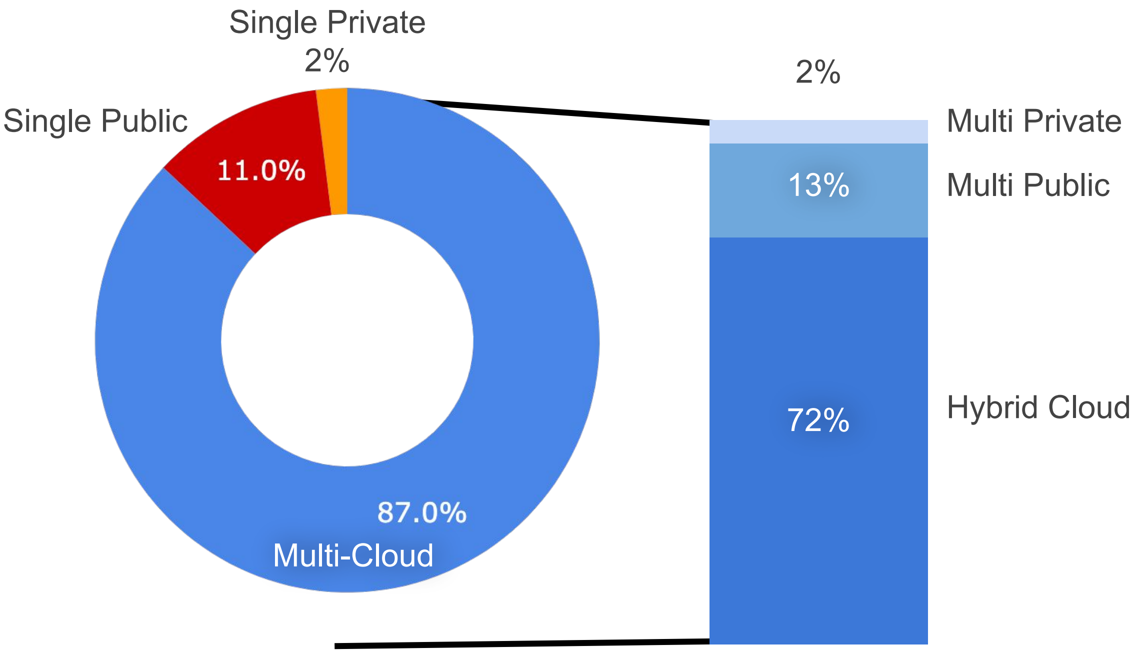
Changes and challenges in Hybrid Cloud environment in 2023

72%

Modern enterprise choices hybrid cloud architecture ratio

Combination of public cloud, private cloud, and on-premise resources

Support for rapid development of digital business transformation



Source: Flexera State of the Cloud Report 2023

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Companies face complex challenges in managing credentials and multi-cloud environments

1

Difficulty in managing credentials

Security incidents are rampant

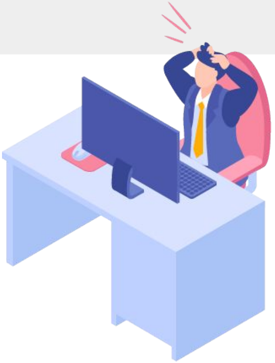
3

Companies face numerous complex challenges

2

Modern, cloud-based systems

Managing cloud assets is not easy



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“ THE GREATEST TRUTHS ARE THE SIMPLEST ”

LAOZI (400 b.c.) Ancient Chinese Philosapher

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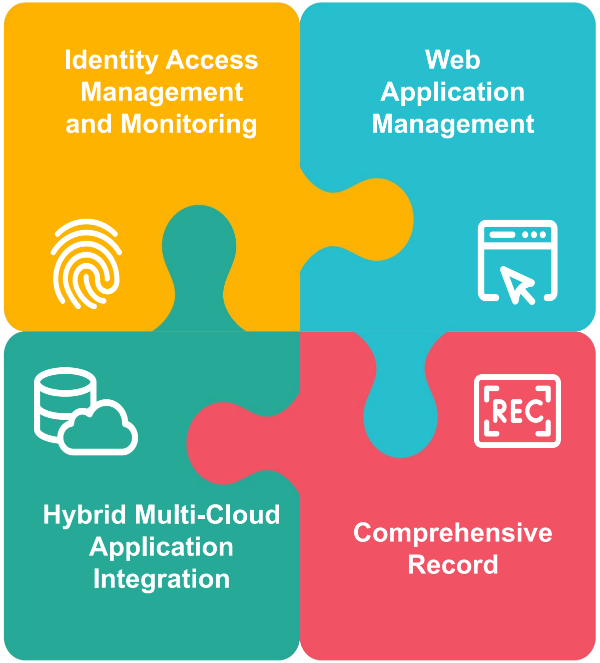
MAVIS Hybrid Multi-Cloud PAM

Core Features

Identity Access Management and Monitoring

- Comprehensive ABAC with Real-time Monitoring in Zero Trust Architecture
- Effective access control to mitigate security risks


Identity Access Management and Monitoring
Web Application Management
Hybrid Multi-Cloud Application Integration
REC
Comprehensive Record

Web Applications Integration

- Single interface for managing all common applications
- Enterprises no longer need to share a single set of credentials among multiple users

Hybrid Multi-Cloud Resources Integration

- Hybrid Multi-cloud System and Web Applications Integration Management
- Streamline operations, reduce manual errors

Comprehensive Record

- All Operation and behaviors recorded
- Rapidly trace the source of events for quick identification of causes.

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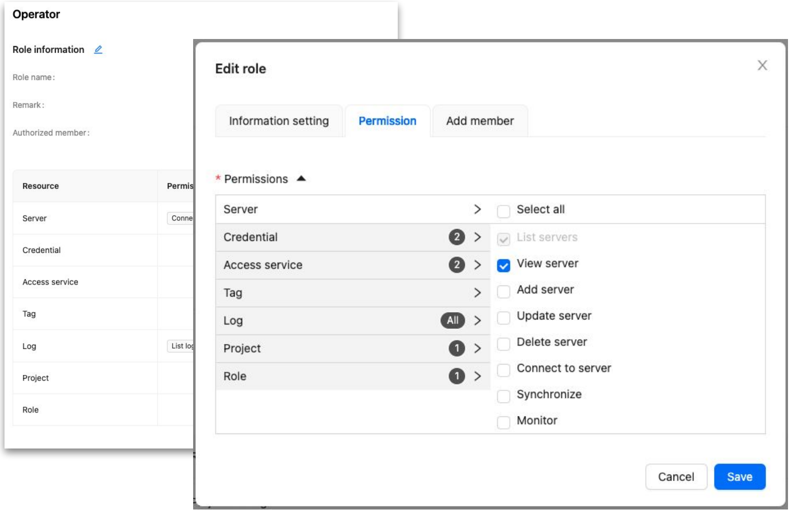
MAVIS Hybrid Multi-Cloud PAM

Identity Access Management and Monitoring
Say goodbye to shared accounts and password sheets

Minimum Pre-Authorization ABAC
Project-Based Authorization Management



Role name:

Remark:

Authorized member:

Resource	Permis
Server	Conne
Credential	
Access service	
Tag	
Log	List log
Project	
Role	

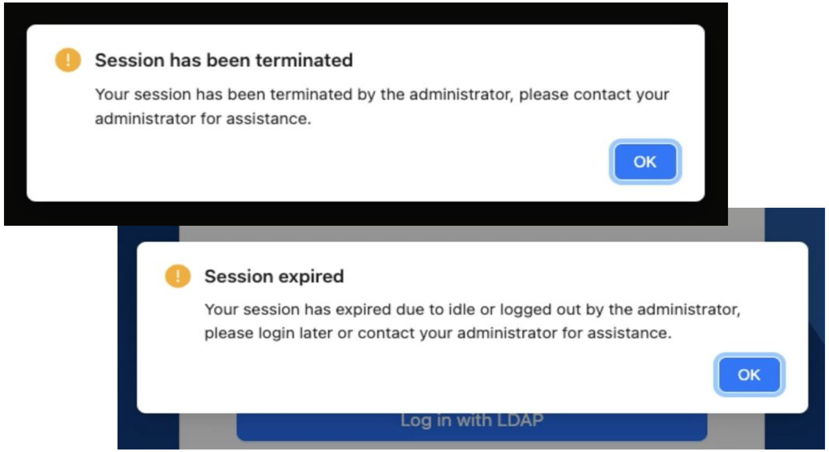
Edit role

* Permissions

Server	
Credential	2
Access service	2
Tag	
Log	All
Project	1
Role	1

- □ Select all
- ☑ List servers
- ☑ View server
- □ Add server
- □ Update server
- □ Delete server
- □ Connect to server
- □ Synchronize
- □ Monitor

Real-time monitoring
and management for risk



Session has been terminated

Your session has been terminated by the administrator, please contact your administrator for assistance.

Session expired

Your session has expired due to idle or logged out by the administrator, please login later or contact your administrator for assistance.

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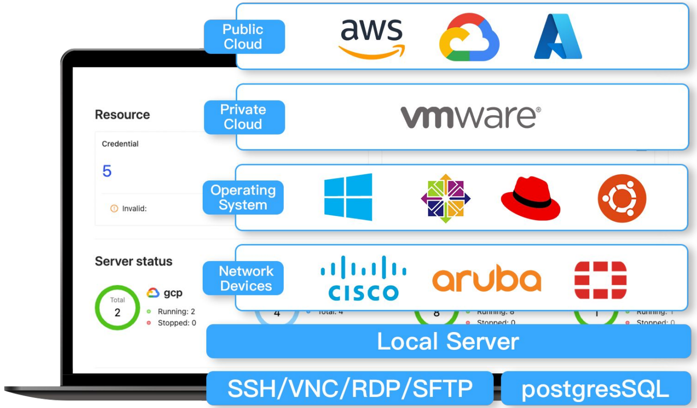
MAVIS Hybrid Multi-Cloud PAM

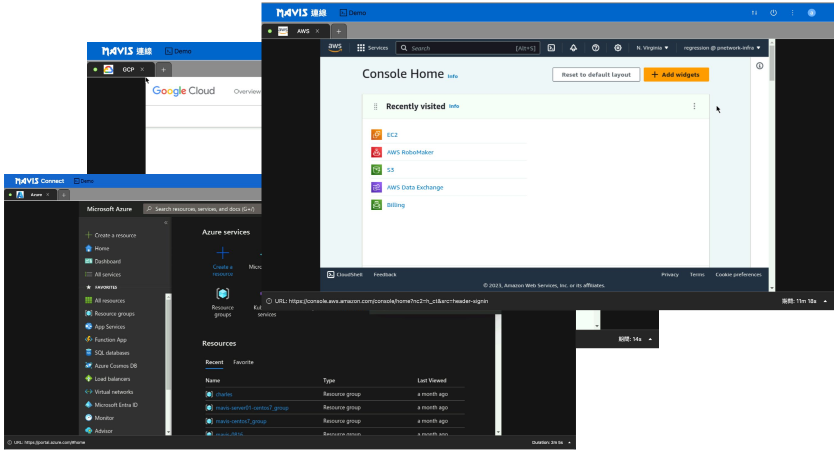
Hybrid Multi-Cloud Resources/Web Applications Integration
Completely resolve the issue of shared responsibilities and account usage

Centralized Integration of On-premise Resources and Public Cloud Resources



Easily manage cloud management consoles and Other web applications

AWS Management Console, Google Cloud Console, Azure Portal, VMware Cloud Services Console, Github, FortiGate, PHPMyAdmin, and others



Name	Type	Last Viewed
charles	Resource group	a month ago
mavis-server01-centos7_group	Resource group	a month ago
mavis-centos7_group	Resource group	a month ago
mavis-0816	Resource group	a month ago

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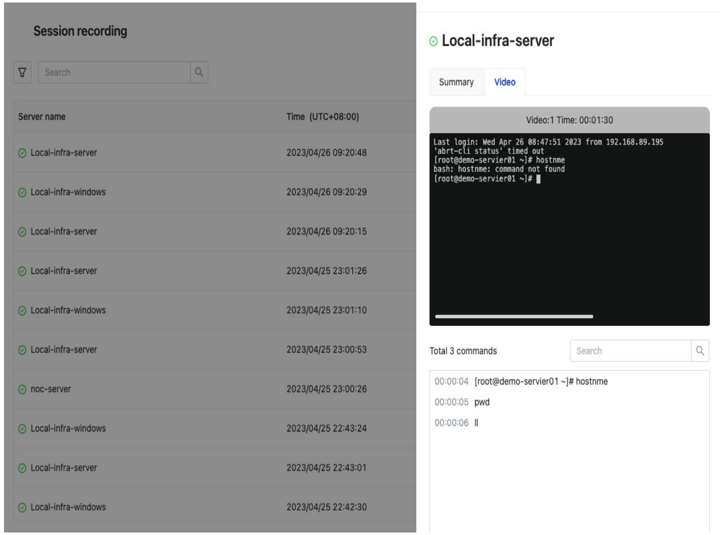
Comprehensive Record
Easily meet international certification and compliance audit requirements

Operation & Behavior logs combined with session recording and playback



Session recording

Server name	Time (UTC+08:00)
Local-infra-server	2023/04/26 09:20:48
Local-infra-windows	2023/04/26 09:20:29
Local-infra-server	2023/04/26 09:20:15
Local-infra-server	2023/04/25 23:01:26
Local-infra-windows	2023/04/25 23:01:10
Local-infra-server	2023/04/25 23:00:53
noc-server	2023/04/25 23:00:26
Local-infra-windows	2023/04/25 22:43:24
Local-infra-server	2023/04/25 22:43:01
Local-infra-windows	2023/04/25 22:42:30

Local-infra-server

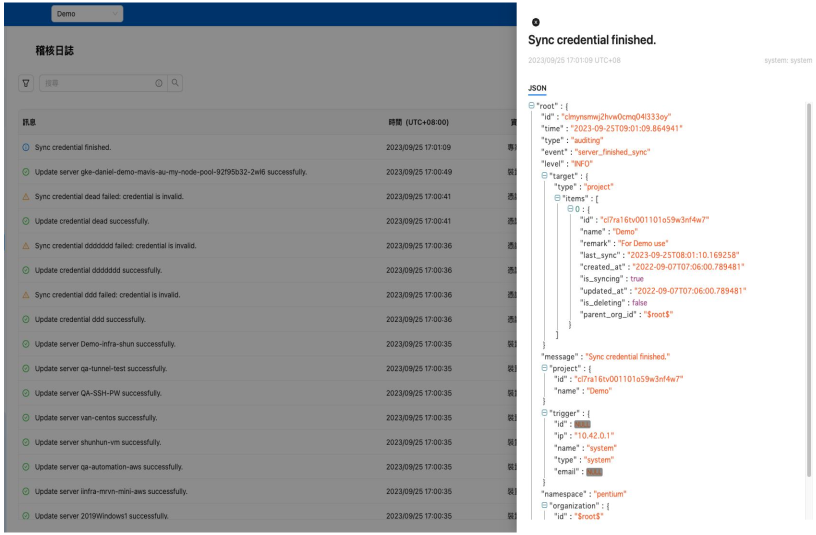
Video:1 Time: 00:01:30

```
Last login: Wed Apr 26 08:47:51 2023 from 192.168.89.195
'abrt-cli status' timed out
[root@demo-servier01 ~]# hostnme
bash: hostnme: command not found
[root@demo-servier01 ~]# █
```

Total 3 commands

```
00:00:04 [root@demo-servier01 ~]# hostnme
00:00:05 pwd
00:00:06 ll
```

Quickly search for Root Cause
Digital evidence that cannot be tampered with



稽核日誌

訊息	時間 (UTC+08:00)	資
Sync credential finished.	2023/09/25 17:01:09	專
Update server gke-daniel-demo-mavis-au-my-node-pool-92f95b32-2wl6 successfully.	2023/09/25 17:00:49	裝
Sync credential dead failed: credential is invalid.	2023/09/25 17:00:41	憑
Update credential dead successfully.	2023/09/25 17:00:41	憑
Sync credential ddddddd failed: credential is invalid.	2023/09/25 17:00:36	憑
Update credential ddddddd successfully.	2023/09/25 17:00:36	憑
Sync credential ddd failed: credential is invalid.	2023/09/25 17:00:36	憑
Update credential ddd successfully.	2023/09/25 17:00:36	憑
Update server Demo-infra-shun successfully.	2023/09/25 17:00:35	裝
Update server qa-tunnel-test successfully.	2023/09/25 17:00:35	裝
Update server QA-SSH-PW successfully.	2023/09/25 17:00:35	裝
Update server van-centos successfully.	2023/09/25 17:00:35	裝
Update server shunhun-vm successfully.	2023/09/25 17:00:35	裝
Update server qa-automation-aws successfully.	2023/09/25 17:00:35	裝
Update server iinfra-mrvn-mini-aws successfully.	2023/09/25 17:00:35	裝
Update server 2019Windows1 successfully.	2023/09/25 17:00:35	裝

Sync credential finished.

2023/09/25 17:01:09 UTC+08 system: system

JSON

```
"root" : {
  "id" : "clmynsmwj2hvw0cmq04l333oy"
  "time" : "2023-09-25T09:01:09.864941"
  "type" : "auditing"
  "event" : "server_finished_sync"
  "level" : "INFO"
  "target" : {
    "type" : "project"
    "items" : [
      0 : {
        "id" : "cl7ra16tv001101o59w3nf4w7"
        "name" : "Demo"
        "remark" : "For Demo use"
        "last_sync" : "2023-09-25T08:01:10.169258"
        "created_at" : "2022-09-07T07:06:00.789481"
        "is_syncing" : true
        "updated_at" : "2022-09-07T07:06:00.789481"
        "is_deleting" : false
        "parent_org_id" : "$root$"
      }
    ]
  }
  "message" : "Sync credential finished."
  "project" : {
    "id" : "cl7ra16tv001101o59w3nf4w7"
    "name" : "Demo"
  }
  "trigger" : {
    "id" : NULL
    "ip" : "10.42.0.1"
    "name" : "system"
    "type" : "system"
    "email" : NULL
  }
  "namespace" : "pentium"
  "organization" : {
    "id" : "$root$"
```

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Case Study

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An Industry leading AI media broadcasting company in Taiwan

Businesses face a number of challenges in cloud development operations, which were significantly improved after implementing MAVIS

Operational commands and behaviors are not recorded, making it difficult to determine the root cause of problems if they occur.	▶	**All operation sessions are recorded and can be easily traced back.**	Operational commands are easily traceable, making it easier to determine the cause of problems. Even if errors are discovered, they can be quickly restored.
Developers share multiple accounts, making it difficult to track who is responsible for errors.	▶	**Identity Access Management and Monitoring**	Developers can easily track individuals connected, even when sharing privileged accounts.
Multiple public and hybrid cloud environments are complex, making it time-consuming and labor-intensive to switch and operate between them.	▶	**Multiple public and hybrid cloud environments are integrated into a single platform, making it easy to manage and operate.**	Major public cloud environments highly integrated, making it easier and faster to switch between them through a single platform.

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One More Thing…

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Comply with ISO 27001

PAM

A.9.2.1 USER REGISTRATION AND DE-REGISTRATION

Complete formal registration and de-registration must be enabled for the assignment of access rights. The least access is the key to success while implementing this clause. Access should be only given to those as per the requirements and the responsibility of the individual’s role.

A.9.2.2 USER ACCESS PROVISIONING

The access control policy must have a set of procedures where the access could be revoked or restricted where the threat of information loss. There should be formal provisioning while accessing the information.

A.9.4.1 INFORMATION ACCESS RESTRICTION

Access to information and application system functions shall be restricted in accordance with the access control policy. There should be a complete description of the restriction applied to certain authorities under control access policies.

A.9.4.2 SECURE LOG-ON PROCEDURES

This clause defines having multi-factor authentication. Where required by the access control policy, access to systems and applications shall be controlled by a secure log-on procedure. The passwords must be ket and confidential all the time.

Operation Log & Session Recording

A.12.4.1 Event Logging

Event logs recording user activities, exceptions, faults and information security events need to be produced, kept and reviewed regularly. Logging and monitoring mechanisms form an important part of a “defence-in-depth” strategy for security management by providing both detective and investigation capabilities.

A.12.4.2 Protection of Log Information

Logging facilities and log information must be protected against tampering and unauthorised access. It is also critical to ensure logs are stored in a secure and tamper-proof manner so that any evidence derived from them can be evidenced in a provable manner. This is especially important in any form of legal proceedings relating to evidence from the log.

A.12.4.3 Administrator & Operator Logs

A good control describes how any system administrator and system operator activities need to be logged and the logs protected and regularly reviewed.

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MAVIS helps you easily achieve international standard certification requirements

ISO 27001

The information security management system complies with two major audit control items, A.9 Access Control and A.12 Logging.

A.9.2.1, A.9.2.2, A.9.4.1, A.9.4.2, A12.4.1, A12.4.2, A12.4.3

NIST CSF

The network security architecture complies with two functions under PROTECT, which are authentication and access control (PR.AC) and data protection (PR.DS).

PR_AC-1, PR_AC-4, PR_AC-6, PR_AC-7, PR_DS-5

PCI DSS

Compliance with three major domain requirements and four major item specifications, which are 2, 7, 8, and 10

IEC 62443

Compliance with multiple specifications including IEC 62443-2-1 and IEC 62443-3-3.

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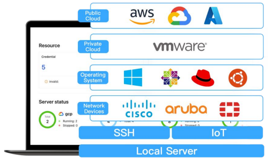

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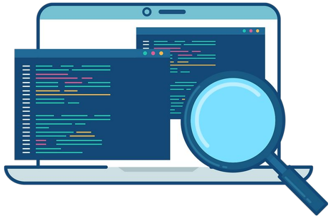

Comprehensive Record

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Thank you

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