# Silverlake Mastersam Industry Solutions Manufacturing

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This paper aims to explore how Privileged Access Management solutions from Silverlake MasterSAM can effectively address the Cyber threats faced by Manufacturing industry PAM for Manufacturing Industry

PAM for Manufacturing Industry

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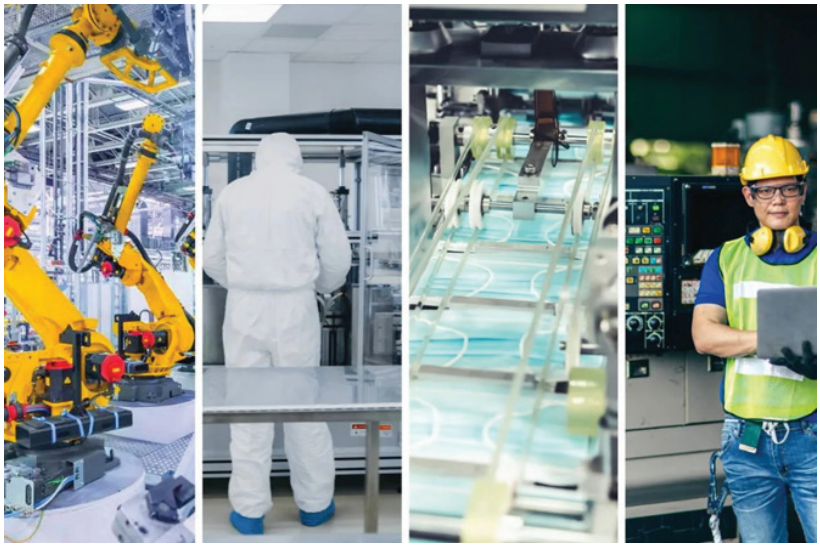
# The Importance of Privileged Access Management (PAM) in Manufacturing

## Manufacturing – the hardest hit sector in recent years

Before the manufacturing industry began to embrace digitalization, cybersecurity was simply not on their radar.

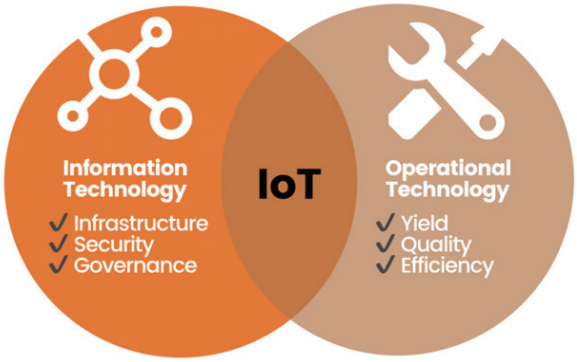
What was once an isolated industrial control system (ICS) is now exposed to the internet. Financially motivated cybercriminals will not hesitate to attack any security breach. All it takes is one compromised subsystem that can bring down an entire global manufacturing chain, with catastrophic consequences.

According to recent report from IBM, manufacturing overtook financial services and insurance as the most vulnerable sector in 2021. Various malware/ransomware attacks and supply chain issues continue to impact manufacturing organizations.



A major security challenge in manufacturing

- The attack surface has increased significantly due to the increase in the number of interconnected software systems and devices exposed to the internet
- Controls and monitors all access to the ICS/SCADA system and prevents unauthorized access to the control system
- The number of identities, keys, tokens, and certificates is exploding
- Protects manufacturing systems, equipment, processes, and entire operations
- Grant secure access to third parties and monitor their activities
- Prevention of internal exploitation
- Combat malware/ransomware spread through endpoints, devices
- Prevent supply chain attacks



# Strategy against Cyberattack in Manufacturing

It starts with employing basic security practices such as vulnerability monitoring and timely patching, securing identities, enforcing MFA at all levels, strengthening internal controls, and monitoring all access and activity.

MSAM helps manufacturing organizations' IT departments reduce the attack surface and implement internal controls and effective monitoring.

## Integrate, organize, and manage identities and credentials

With automation and Industry 4.0, managing large numbers of identities, credentials, digital certificates, and keys to establish smooth workflows becomes a challenge. The distributed nature of manufacturing assets further adds to the complexity. MSAM helps consolidate all types of identities into a central vault and establishes control over who has access to what.

## Implement and automate password management best practice

Assets with default or weak passwords, as well as assets that remain unchanged for a long time with reused/recycled passwords, are vulnerable to theft and attacks. Strong and unique passwords must be used, locked in encrypted vaults and rotated frequently. Not just passwords, but also SSH keys, DevOps secrets, certificates, and other identities distributed across the organization need to be properly managed. MSAM helps you automate your password security best practices.

## Secure and automate RPA/machine-to-machine communications

Robotic process automation (RPA) is taking the manufacturing industry by storm. Robots provide unprecedented precision and scalability when performing everyday tasks, increasing productivity. However, robots require privileged access to machine-to-machine communication and perform a variety of actions. Hard-coding privileged credentials in bot software applications is an open invitation to hackers. MSAM facilitates highly secure, automated, programmatic access to the credentials of such non-human communication through a rich set of APIs.

## Control and monitor remote access to third parties

The maintenance or management of various assets requires technicians, partners, and third-party experts to remotely access and log into the system. In many organizations, it's common to share administrative credentials and grant long-term privileges to third parties. MSAM helps eliminate all security risks when granting access to third parties. You can achieve controlled and monitored remote access to third parties and track all their activities.

## Just In Time and just enough access

When internal employees and external contractors require privileged access to critical IT assets, MSAM can help ensure timely access with sufficient privileges.

## Keep track of all activities with audit trails and session recordings

Keeping track of all privileged access-related activities across the organization, including field units, is critical to preventing cyberattacks. MSAM captures every activity as an audit trail, provides actionable reports and sends real-time alerts, in addition to logging the entire privileged session that can be replayed when needed.

## Manage workstation permissions and control application usage

End-user computers are often the weakest link in enterprise security. When local administrator privileges are granted, users tend to deploy unapproved software or click on random links that invite malware. On the other hand, eliminating local administrative privileges can lead to productivity issues. MSAM PAM helps eliminate local administrative privileges on workstations and establishes policy-based control over the use of applications/processes.

## Demonstrate compliance

Manufacturing organizations need to not only follow safety standards, but also demonstrate compliance with various industry/international regulations. Most regulations emphasize privileged access management. MSAM helps you generate audit-ready reports on privileged access scenarios.

# Measure the ROI of implementing PAM

Measuring the ROI of implementing a PAM solution can be challenging, but it's critical to understanding the value of your investment. A comprehensive PAM solution can provide tangible benefits such as improved security posture, simplified operations, reduced risk of insider threats, and reduced impact of cyberattacks. These benefits can translate into cost savings and efficiency gains, making PAM a valuable investment for manufacturing.