



**SILVERLAKE** master **SAM**

# Silverlake Intel Appliance (SIA) Universal Secure Access Management (USAM) X Series

Solution Overview

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## SIA USAM X SERIES – AN OVERVIEW

Silverlake Intel Appliance (SIA) Universal Secure Access Management (USAM) X Series is a jointly-developed appliance set, based on Intel® Software Guard Extensions (Intel® SGX) and Intel® Active Management Technology (AMT). SIA USAM X Series serves as an end-to-end comprehensive solution that acts as a formidable shield for the very sensitive layer of IT security that protects data, infrastructure and assets across an enterprise.

*Designed to deliver unprecedented level of security in the cyber security space, SIA USAM X Series delivers Silverlake's cyber security products, services, support and maintenance - All in One.*



*SIA USAM X Series (for illustration purpose only)*

The solution provides hardened security for its Secure Access Management technology stack to help protect against cyber threats while providing more consistent service performance.

Powered by advanced Intel Xeon Scalable platform and Intel Software Guard Extensions (Intel SGX) technology that can fully automate provisioning and de-provisioning process, SIA USAM X Series gives IT full power over the access rights of employees, partners, contractors, vendors, and guests. This not only speeds up the enforcement process but helps eliminate human error. The scalable and modular architecture of SIA USAM X Series ensures businesses can mitigate cyber threats with more deterministic performance and efficient cost containment. It also reduces the trusted computing base (TCB) to the smallest possible footprint, prevents memory bus snooping, memory tampering, and “cold boot” attacks against memory images in RAM; thereby, providing hardware-based attestation capabilities to measure and verify valid code, data signatures, and the TCB.

With the introduction of 2nd-Gen Intel Xeon Scalable processors comes Intel SGX which was designed to help create more secure environments without having to trust the integrity of all the layers of the system. The technology isolates specific application code and data to run in private regions of memory, or enclaves. ***It ensures security at every layer.***

It provides a safe place for code and data in the application. With this, undetected malicious software cannot access secrets. It utilizes a small amount of CPU memory to protect sensitive application information and ensures physical attack protection (via Application isolation).

Combining SGX with another technology called Intel® Active Management Technology, SIA USAM X Series delivers an unprecedented edge-to-cloud security for mission critical used cases in industrial banking, retail and other sectors.

*“The appliance creates a hardware protected container for apps to protect secrets at run time and at rest. This means secrets remain protected even when attackers have full control of the platform. So even if an attack happens, our customers’ data remains safe. It can be tailored to the customers’ needs and features flexible simplified configuration and maintenance”*

Below are some elaborated details on key features of the Intel technology that is an intrinsic part of the solution series.

### **Intel SGX**

Intel® Software Guard Extensions (Intel® SGX) is a set of instructions that increases the security of application code and data, giving them more protection from disclosure or modification. Developers can partition sensitive information into enclaves, which are areas of execution in memory with more security protection.

To help address the reality of widespread security holes and compromised systems, Intel set out to design a hardware assisted trusted execution environment to help minimize the attack surface. Intel SGX delivers new Intel® Architecture instructions that can be used by applications to set aside regions that are more private and are for select code and data that can help prevent direct attacks on executing code or data stored in memory.

SGX protects selected code and data from disclosure or modification. Applications are partitioned into enclaves in memory that increase security. Enclaves have hardware-assisted confidentiality and integrity-added protections to help prevent access from processes at higher privilege levels. Through attestation services, a relying party can receive some verification on the identity of an application enclave before launch. With these capabilities, applications are prepared for more security.

*“Intel® SGX offers such a granular level of control and protection”*

## Intel AMT

Intel® Active Management Technology, included as part of the Intel vPro® platform, which spans Intel® Core™ vPro® processors and Intel® Xeon® processors, helps reduce overall PC maintenance and administrative costs. With features to remotely discover, repair, and help protect networked computing assets, Intel® Active Management Technology allows IT Ops to support a mobile workforce. Hardware-based Intel® Active Management Technology provides persistent out-of-band connectivity that operates independently of the OS allowing remote support for appliance issues.

*“With Intel AMT, one benefits from Remote Manageability at the Edge”*

Combining best of both technologies, SIA USAM X Series bring unprecedented level of “edge-to-cloud” and datacentre security for its customers. The solution set comprises three different models that is meticulously designed to cater to specific needs of an enterprise, regardless of the nature, size or complexity of the enterprise.

The primary SKUs of X Series, comprises of the X3 Series, X5 Series and X7 Series, which aim to be the right solution fit for a small, mid-sized and large-sized enterprise, operating in multiple industry verticals.



# SIA USAM X7 SERIES

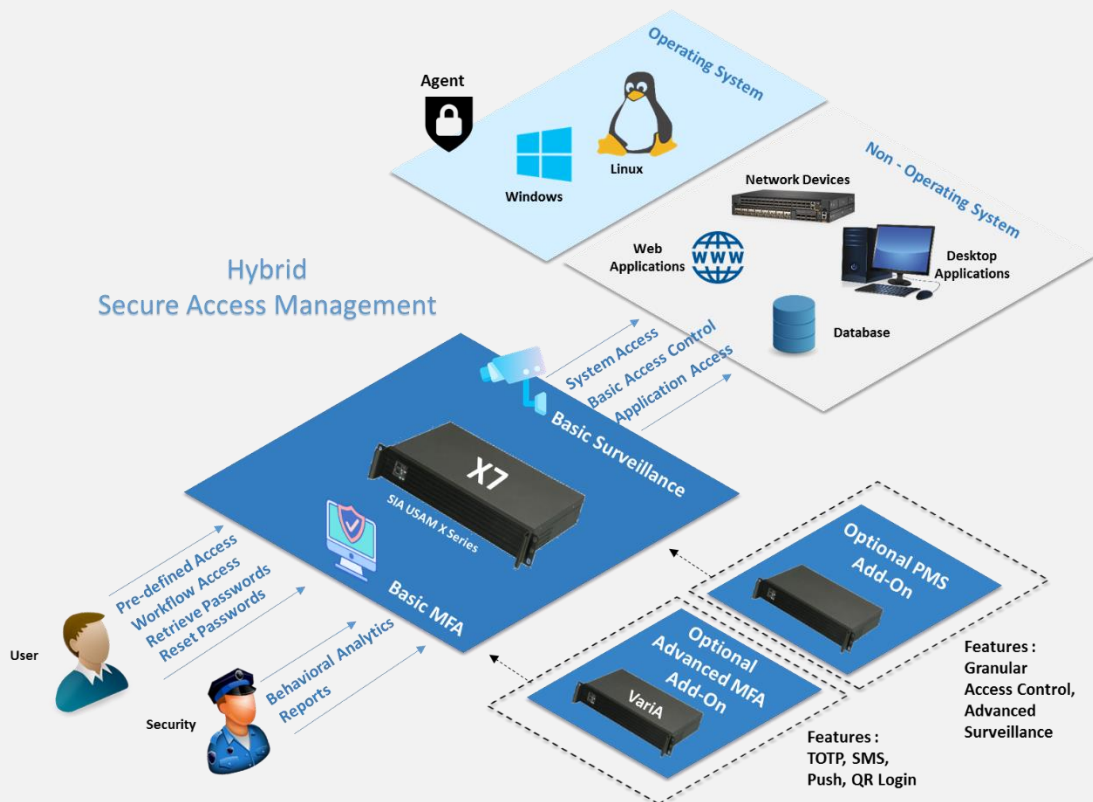
As enterprises move from a reactive to a proactive secure access management strategy, the enterprises now need advanced end-to-end cyber security solution, well-equipped with superior and holistic features that ensure security is never compromised and it can meet all audit compliance mandates.

Compliance may become a tall order with changes in existing regulations and increase in new regulations are creating compliance challenges and cross-boundary regulatory needs may be causing the organizations to rethink compliance strategies.

In addition, the management would increasingly see a need to manage user accounts and passwords centrally to reduce operational overheads and organizations have issues with respect to provisioning access to users in a timely fashion to increase productivity.

*As an adaptive intelligent solution set for larger enterprises, protecting all key data assets, while meeting international compliance mandates becomes manageable with all-encompassing SIA USAM X7 Series*

This high-end X7 Series model supports high-end deployments with up to 1500 resources. It provides power redundancy and RAID 1. Similar to the X5 Series, this model also offers add-on feature of Privilege Management System, thus enabling a hybrid style of deployment method, as illustrated in following diagram.



Silverlake MasterSAM's Granular Access Control module offers whitelist and blacklist capability to flexibly control privileged access over system objects such as file/folder, service, command, shared folder, registry, etc. It allows one to go beyond the system native limits and apply stringent enforcement control, for example, deny admin to shutdown server or perform user management function despite having privileged access, allow operator to start/stop specific service without requesting for admin credential and deny SHELL access, etc. Centralised facility allows quick enforcement of policies and ensure administrative access is always restricted. With this capability, the preventive measure and role segregation stipulated in most compliance audit are now enforceable.

***Advanced Surveillance functionality imbibed in our solution provides complete smart 360° surveillance to capture every user activity***

***with the option of colour/grayscale in screenshot and text, and real time transmission to centralised log repository server, which allows real-time remote monitoring and playback.***

With advanced features in X7 Series, supplemented with options of granular access control and advanced surveillance features, users of X7 Series can benefit from the real power of visibility and accountability in the organisation.

For a complete overview of features offered by SIA USAM X3, X5, and X7 Series, please refer to the SIA USAM X Series Features List.

For general enquiries on this solution set, please write to [sheaf\\_sales@silverglobe.com](mailto:sheaf_sales@silverglobe.com) or [info@mastersam.com](mailto:info@mastersam.com)

#### About Silverlake

Silverlake is a leading Technology Innovations, Banking, Financial and Cyber Security solutions provider in the ASIA Pacific region. Silverlake's business transformation itself is fueled by its relentless desire to delight its customers. Executing parallel efforts in pursuing technology innovations as well as keeping its more than three-decade legacy of deploying core banking at 100% success rate is paramount to the company's strategy.

It's subsidiary business, Silverlake MasterSAM, is one of the global market players in Privilege Access Management and cyber security domain. Recognized as Top 25 APAC Compliance solutions providers, Silverlake MasterSAM, headquartered in Singapore, has offices in the Malaysia, Thailand, Philippines, Vietnam and India. Silverlake Sheaf, acts as authorized reseller for all solutions of Silverlake MasterSAM. For more information, please visit [www.silverlakegroup.com](http://www.silverlakegroup.com) and [www.mastersam.com](http://www.mastersam.com)

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