

SECURING ADDITIVE MANUFACTURING



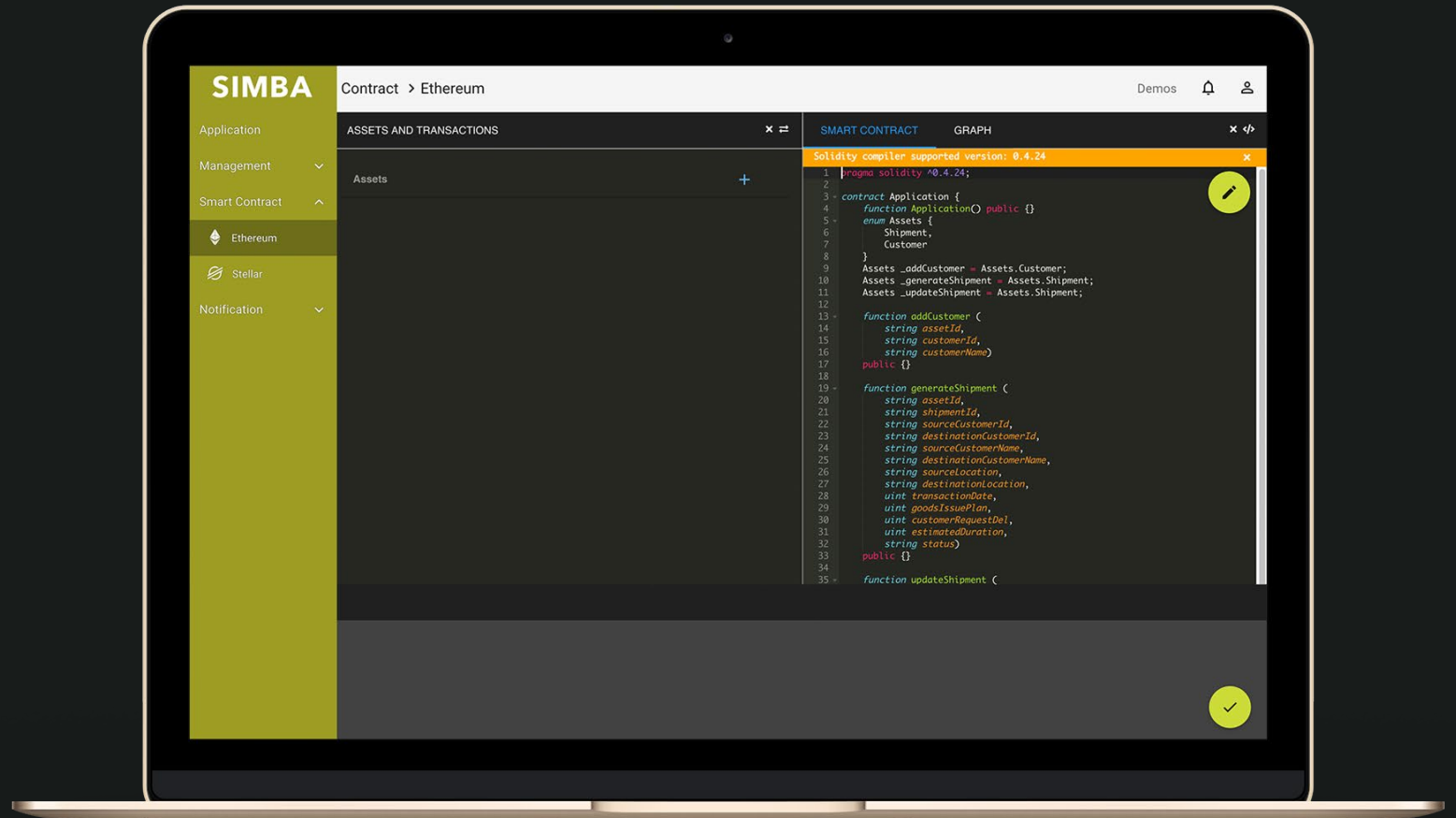
U.S. AIR FORCE





SIMBA stands for Simpler Blockchain Applications.

The SIMBA Platform makes it easy to build, deploy and interface with Blockchain applications, democratizing the Blockchain. It enables everyone to quickly create decentralized applications (dapps). No blockchain experience necessary.



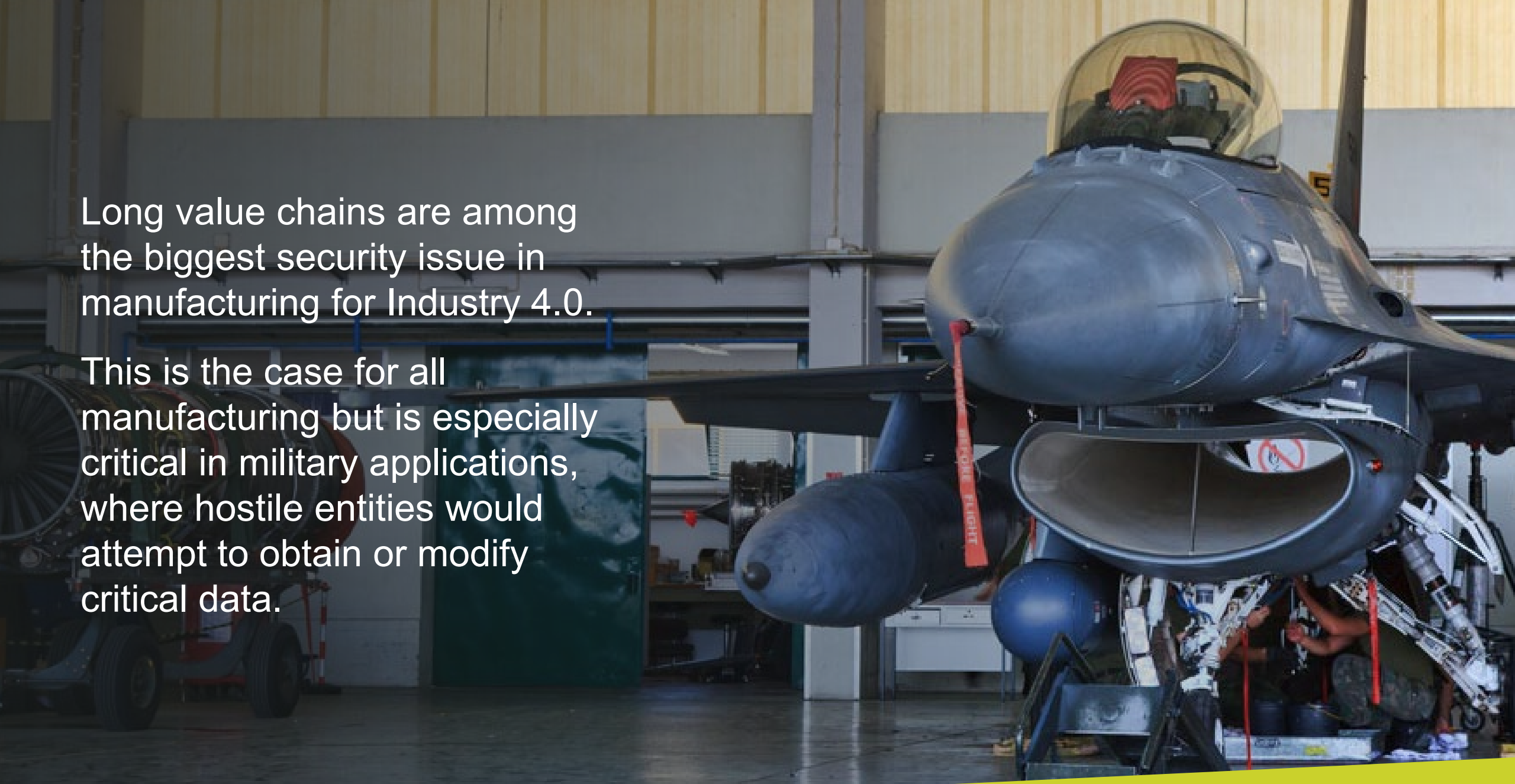
EQUIPPING AND REPAIRING FORWARD-DEPLOYED FORCES

The Air Force has a complex supply chain to equip and repair forward-deployed forces. SIMBA Chain will play a key role in securing that chain.



Long value chains are among the biggest security issue in manufacturing for Industry 4.0.

This is the case for all manufacturing but is especially critical in military applications, where hostile entities would attempt to obtain or modify critical data.





BASECAMP

To close security loopholes, the Air Force launched the Blockchain Approach for Supply Chain Additive Manufacturing Parts (BASECAMP) project to coordinate distributed manufacturing in the battlefield.

DECENTRALIZING ADDITIVE MANUFACTURING

SIMBA Chain used to decentralize additive manufacturing while maintaining the integrity of data.

Ability to dictate who has access to each part of the system

The Air Force created a blockchain prototype for registering and tracking 3D printed components.

Requires unique signature to be entered at each step, so the Air Force knows who and when changes to parts were made



SIMBA Chain uses Microsoft Azure for trust and reliability, key factors when providing support on the battlefield.

Video Break
Video Available [Here](#)

The future of blockchain enabled additive manufacturing

Blockchain as a digital rights management enhancement

Use of designs without accessing them

Credibility and trust between partners and counterparties on usage agreements

- Blockchain as a trusted collaboration layer
- Predefined ordering agreements
- Tracking design provenance

“Our challenges with implementing 3-D printing was driven more by issues of IP access between the government and the vendors than the physical act required to do the print ”

- Jeffrey Curtis, Senior Executive (Ret) at the Defense Logistics Agency