

# Multi-level Security Solutions

## The Security Challenge of Government Agencies

Government agencies have always had an urgent need for the capability to protect information and resources. As services grow more complex, agencies at all levels must address security challenges associated with widely distributed systems containing various levels of data classifications, all linked together across multiple networks and accessible by multiple users. These challenges include not just external threats, but also maintaining internal controls to prevent data leakage and inappropriate access and modification.

The demand to pursue improved data security, segregation, and mobility is compelling governments and their contractors to rethink information systems from the ground up with security as a top priority.



## Multi-level Security

Multi-level security (MLS) solutions employ trusted operating systems on top of optimized hardware, and strongly defined identification and authorization controls to greatly strengthen data confidentiality, while also freeing users to share and exchange data in accordance with strict security policies.

The fundamentals of MLS security have existed for many years, however best practices for MLS implementation are continuing to develop and are sometimes poorly disseminated outside the security and intelligence communities. At the same time, the number of IT solution providers in the U.S. with the expertise to properly configure MLS systems is limited, complicating the acquisition process.

Silicon Mechanics has the expertise to architect, build, and deploy an MLS-ready solution at your data center, helping you to reap its many benefits and putting you on a path to the certification you need.

## MLS Benefits

MLS solutions customized to your needs and environment can provide a number of important benefits.

The Mandatory Access Control (MAC) policies built into MLS solutions provide security administrators with the ability to set defined, configurable read/write permissions to control the flow of data between different security classifications. This configurability allows administrators to accelerate the speed of collaboration when necessary, while simplifying command and control and keeping sensitive data and applications rigidly compartmentalized for maximum confidentiality and security.

Data integrity, another key component of total system security, can also greatly benefit from MLS implementation. Because the data for all security classifications in an MLS solution is integrated in one appliance, the need for multiple copies of critical data is eliminated, minimizing the risk of it becoming compromised. Furthermore, this integration allows security administrators to significantly increase the ease and accuracy with which they monitor user behavior and conduct system audits, freeing them for other duties.

To ensure the maximum level of security in your MLS solution, Silicon Mechanics conducts a rigorous round of verifications to each system to identify system vulnerabilities that may be specific to the hardware or role-based authorizations made during the architecture phase. This process of review includes securing important system configuration files and directories, fine-tuning any additional software or system components, as well as addressing the checklist of requirements specific to your solution architecture.

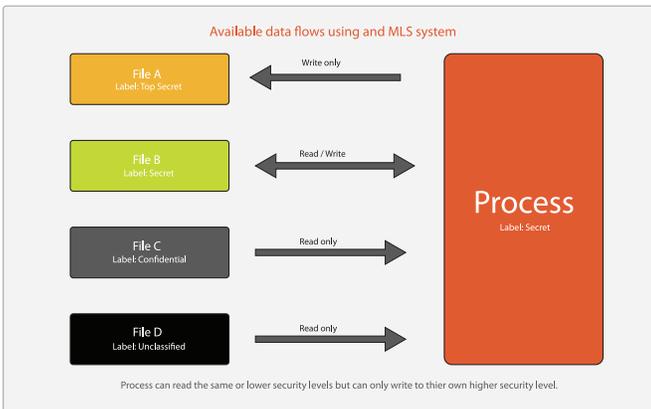
In addition to increased security, an MLS deployment can reduce capital expenditures by requiring fewer hardware purchases, while also streamlining other operational costs such as power and cooling, and administrative overhead.

## MLS Expert Included.

For over fifteen years Silicon Mechanics has been providing the federal government with storage, servers, and high-performance computing solutions that help them manage massive data volumes, stay compliant with strict security protocols, and meet budgetary targets. Our MLS teams provide the very same level of industry-recognized expertise and service.

All deployments begin with a thorough investigation of your security requirements and goals. After this initial evaluation is complete, Silicon Mechanics' engineers will guide you through a series of choices to determine which hardware and software best suits your environment and growth needs. When it comes time to deploy your MLS solutions, our experts will be there with you at every step of the way, guaranteeing full transparency and proper knowledge transfer. After it's installed, we're still there—whenever you need us.

Silicon Mechanics has built a reputation for deploying powerful HPC and general compute solutions to the world's most innovative organizations. We look forward to working with our public sector customers to help them reach new levels of security, power, and efficiency that benefit us all.



Expert included.