

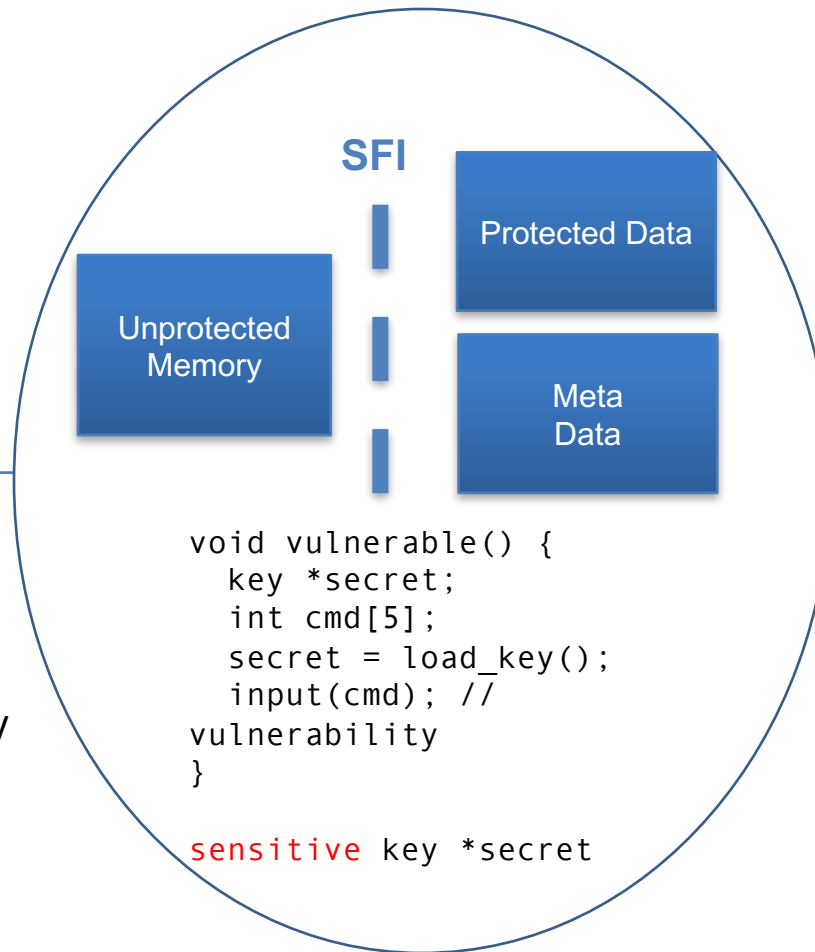
Data Confidentiality and Integrity

Challenge:

- Applications written in C/C++ are prone to memory corruption
- Existing solutions are incomplete or have high overhead

Solution:

- Key finding: only some data is security critical
- Provide strong integrity and confidentiality for sensitive data, coarse protection for all



Scientific Impact:

- Selective security policies allow tunable trade-off between performance and security
- Improve security of legacy and new C/C++ code

Broader Impact:

- DCI protect the integrity and confidentiality of people's system
- DCI is easy to use in practice: compiled software is protected
- DCI is being taught as part of a new software security course