Computer and Network Security Lecture Notes

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Abstract

Computer and network security, from CS155 Stanford University.

1 Control Hijacking

bufferoverflow, integer overflow, use after free, mainly in C/C++ audit softwares: coverity, pre-fast/prefix or rewrite in type safe lang DEP controls in windows Run time checking: StackGuard Summary: Canaries are not full proof Canaries are an important defense tool, but do not prevent all control hijacking attacks: Heap-based attacks still possible Integer overflow attacks still possible /GS by itself does not prevent Exception Handling attacks (also need SAFESEH and SEHOP

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