CSC 1

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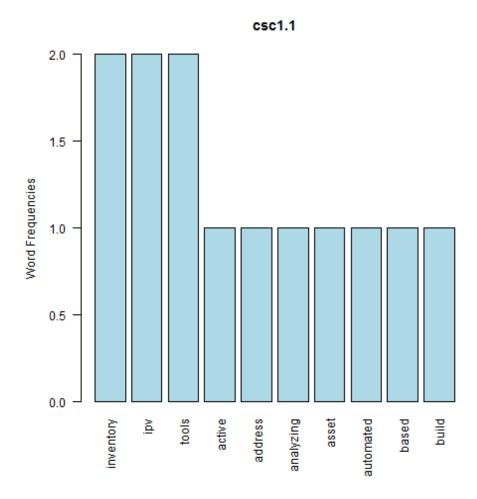
CSC 1.0

[1] "Critical Security Control #1: Inventory of Authorized and Unauthorized Devices"

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[1] "inventory + ipv"

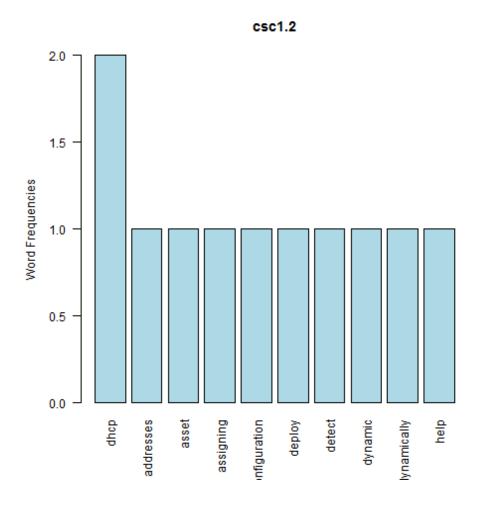




null device 1 [1] "Deploy an automated asset inventory discovery tool and use it to build a preliminary inventory of systems connected to an organizationâ s public and private network(s). Both active tools that scan through IPv4 or IPv6 network address ranges and passive tools that identify hosts based on analyzing their traffic should be employed."

[1] "dhcp + addresses"

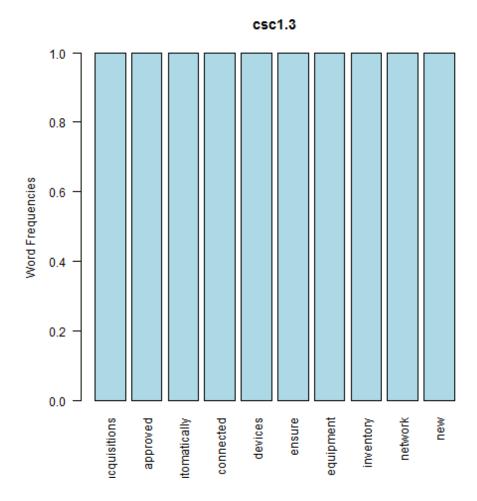




null device 1 [1] "If the organization is dynamically assigning addresses using DHCP, then deploy dynamic host configuration protocol \hat{A} (DHCP) server logging, and use this information to improve the asset inventory and help detect unknown systems."

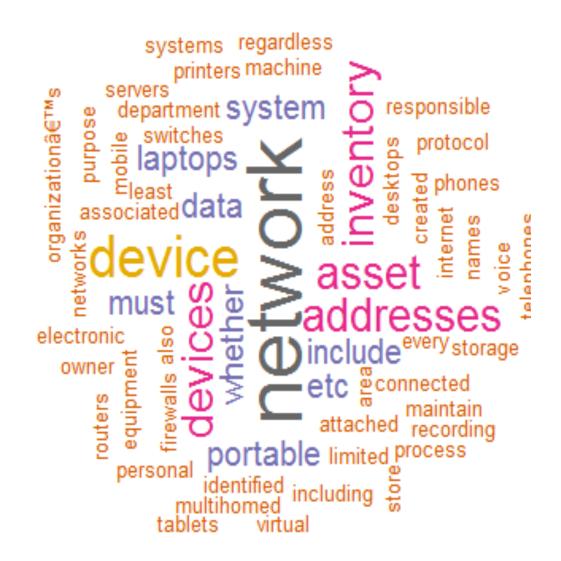
[1] "acquisitions + approved"

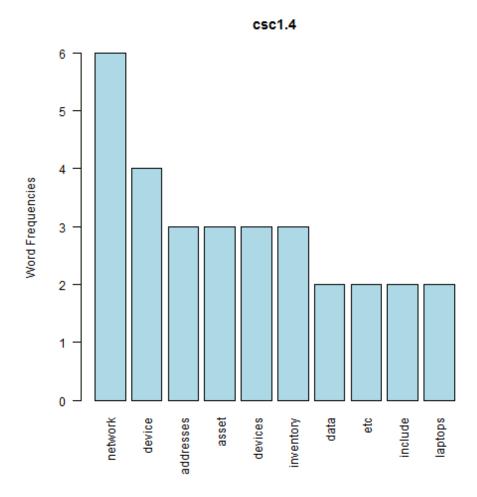
system automatical network ≥



null device 1 [1] "Ensure that all equipment acquisitions automatically update the inventory system as new, approved devices are connected to the network."

[1] "network + device"

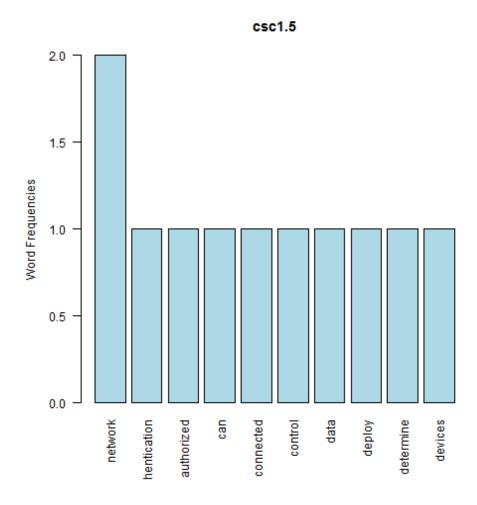




null device 1 [1] "Maintain an asset inventory of all systems connected to the network and the network devices themselves, recording at least the network addresses, machine name(s), purpose of each system, an asset owner responsible for each device, and the department associated with each device. The inventory should include every system that has an Internet protocol (IP) address on the network, including but not limited to desktops, laptops, servers, network equipment (routers, switches, firewalls, etc.), printers, storage area networks, Voice Over-IP telephones, multi-homed addresses, virtual addresses, etc. The asset inventory created must also include data on whether the device is a portable and/or personal device. Devices such as mobile phones, tablets, laptops, and other portable electronic devices that store or process data must be identified, regardless of whether they are attached to the organizationâ s network."

[1] "network + authentication"

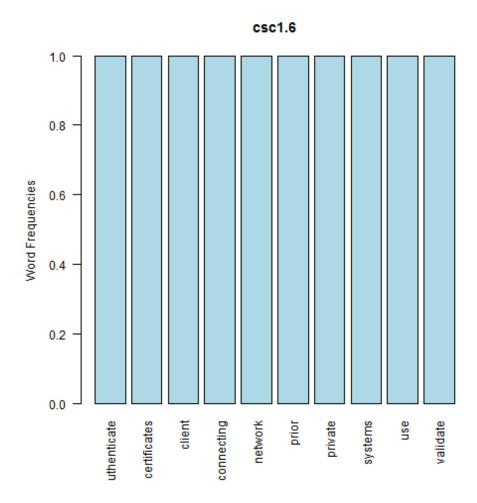




null device 1 [1] "Deploy network level authentication via 802.1x to limit and control which devices can be connected to the network. The 802.1x must be tied into the inventory data to determine authorized versus unauthorized systems."

[1] "authenticate + certificates"

systems



 $\ null\ device\ 1\ [1]\ "Use\ client\ certificates\ to\ validate\ and\ authenticate\ systems\ prior\ to\ connecting\ to\ the\ private\ network."$