NIST CSF 2.0-PR.IR-01-Ex2

PROTECT (PR): Safeguards to manage the organization's cybersecurity risks are used

Technology Infrastructure Resilience (PR.IR)

 Security architectures are managed with the organization's risk strategy to protect asset confidentiality, integrity, and availability, and organizational resilience

PR.IR-01

 Networks and environments are protected from unauthorized logical access and usage

Ex2

 Logically segment organization networks from external networks, and permit only necessary communications to enter the organization's networks from the external networks

Compliance Framework References:

CCMv4.0: AIS-04
CCMv4.0: AIS-06
CCMv4.0: DCS-12
CCMv4.0: DSP-10
CCMv4.0: DSP-15
CCMv4.0: IVS-03
CCMv4.0: IVS-05
CCMv4.0: IVS-06
CCMv4.0: IVS-09
CCMv4.0: UEM-05
CCMv4.0: UEM-14
CIS Controls v8.0: 3.12
CIS Controls v8.0: 12.2
CRI Profile v2.0: PR.IR-01
CRI Profile v2.0: PR.IR-01.01
CRI Profile v2.0: PR.IR-01.02
CRI Profile v2.0: PR.IR-01.03
CRI Profile v2.0: PR.IR-01.04
CRI Profile v2.0: PR.IR-01.05
CRI Profile v2.0: PR.IR-01.06
CRI Profile v2.0: PR.IR-01.07
CRI Profile v2.0: PR.IR-01.08
CSF v1.1: PR.AC-3
CSF v1.1: PR.AC-5
CSF v1.1: PR.DS-7
CSF v1.1: PR.PT-4
SP 800-218: PO.5.1
SP 800-53 Rev 5.1.1: AC-03
SP 800-53 Rev 5.1.1: AC-04
SP 800-53 Rev 5.1.1: SC-04
SP 800-53 Rev 5.1.1: SC-05
SP 800-53 Rev 5.1.1: SC-07

Vendor: Agnostic

Comments: Like in PR.IR-1 Ex1, firewall, netflow, and other communications between internal subnets can be demonstrated via log analysis. However, this Example also demonstrates the need to show that only permitted communication is allowed. This can only be done by configuration review.

UDM Search Query:

```
$e.metadata.log_type IN %firewall_log_types
$sourceIP = $e.principal.ip

$e.principal.ip IN cidr %private_network_IP_ranges
$e.target.ip in cidr %private_network_IP_ranges

$e.security_result.action = "ALLOW"

match:
    $sourceIP

outcome:
    $destinationIP = array_distinct($e.target.ip)
```

10-20-2024

hostname	destip	count
calm-orion-8112	207.3.50.185	7088
loud-blaze-4706	37.198.57.90	875
eager-glyph-3607	41.249.102.22	3152
tough-zephyr-6801	162.195.41.129	8183
keen-bear-2972	18.240.44.191	9823
warm-fox-0927	42.28.42.216	9220
lively-lion-7689	191.95.195.233	5858
calm-glyph-5246	178.93.96.212	8215
nifty-meteor-5590	112.40.225.248	4566
rich-ember-2213	129.112.53.246	1836

09-20-2024

hostname	destip	count
calm-orion-8112	207.3.50.185	7088
loud-blaze-4706	37.198.57.90	875
eager-glyph-3607	41.249.102.22	3152
tough-zephyr-6801	162.195.41.129	8183
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08-20-2024

hostname	destip	count
calm-orion-8112	207.3.50.185	7088
loud-blaze-4706	37.198.57.90	875
eager-glyph-3607	41.249.102.22	3152
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