

Practice test 4

Thursday, October 12, 2023 5:21 PM

time-based login = log in for x amount
of time

time-of-day login = log in during certain
hours

User certs = AD

Email cert w/ S/MIME

Email addr used for CN or SAN

pivot - bypass net boundary and compromise
servers on net

remote access / tunneling protocols

persistence = maintain connection to host
as RAT or backdoor

CBC

protected distribution system PDS - wire
..... w/ safeguards

protected distribution system -
or fiber optic system w/ safeguards
for transmission of unencrypted
info through area of lesser
classification

Next-gen SWG + CASB = "wholly cloud
hosted platform for client access"

Next-gen SWG - proxy-based firewall, content
filter, IDS/IPS for access to internet
sites and services

Netskope - SWG w/ CASB

VPC endpoint - publishing service so
instances can access other instances
in other VPCs; using AWS internal
net and private IP

On-demand resources = cloud resources
on peaks

... -

for peaks

Containers allow for CI/CD

hypervisor - software that creates, runs, manages VM on physical system

allows JMS to share resources

VPC - pool of shared resources isolated from what hosted within public cloud

risk heat map - graphical table indicating likelihood and impact of risk factors identified for workflow, project, or dept for stakeholders

does not have counter-measures

MAC cloning - spoofing; changes hardware address configuration on adapter interface or asserts use of arbitrary MAC addr

... -

or asserts use of arbitrary ...

ARP poisoning - uses packet crafter like Ettercap to broadcast unsolicited ARP reply packets

update MAC:IP address cache table w/ spoofed address

embedded system may run firmware

located on **programmable logic**

controller PLC

PHI very popular on black market

blackmail/insurance fraud

Setup device w/

- WPS
- 8-digit PIN

activating WPS on router / adapter associates them with PIN

associates them with PIN
then associates adapter w/ access
point using WPA2
random SSID ; PSK generated

fog computing - decentralized local access
w/ fog nodes

analyze data on network edge to
avoid transfer unnecessary data
back to LAN
send data to LAN level and
process w/ IoT sensor

at net edge, closer to data sources
but not on the devices itself

edge computing - distributed model
accomplished at or near source

of data

enable prio

best for low latency

HSTS = force secure browsing

Content security policy CSP = header option
that mitigates clickjacking, script
injecting, client side attacks

cache-control = prevent caching

secure cookies = mitigate session hijacking
and data exposure

SetCookie

CHAP - handshake repeated w/ diff
challenge messages throughout session

Updates session timestamp and
guards against replay attacks

Usually only one-way auth
unless w/ 2 Cisco routers

Repeated challenges prevent replay

baseband update - modify firmware
of radio modem used for
cellular Wi-Fi, Bluetooth, NFC, GPS

nslookup - query name records for
given domain using DNS resolver

Windows
dig - test network on Linux to see
if DNS service is misconfigured

"newest wireless security tech available"

WPA3

- 4-way handshake auth mechanism
with proto based on Diffie-

SAE

- enterprise auth requires
192-bit AES, personal
can use 128 / 192-bit

File transfer protocol explicit secure **FTPS**
uses AUTH TLS to upgrade unsecure
connection

Secure sockets tunneling protocol **SSTP**
Microsoft protocol that tunnels
PPP layer 2 frames over
TLS for remote access over
VPN

No recon in white box

implied trust - any system that
is connected is authorized

token key - auto password that can
be used once

context-aware notification - 2FA method
uses multi means to auth: time
of day, type of device, loc...

ICS industrial control system

flow analyzers generate flow records
timestamp + IP

DNS servers have logs for all requests

throughput records - bandwidth monitors
or flow analyzers; but no file
generated

GDPR

sensitive = harm subject or make
prejudice decisions about them

prejudice decisions about them

private = id

Cybersecurity insurance - product offered
to protect from cyber incident
consequences

tags to help users search for incidents
later

- email
- office 365
- spear phishing (not sure how its not
whaling)
- fraud

Spoofing = pretending to be legit email
and website

"high level" = email campaign and fraud
site

Criminal syndicate = \$\$; even if
from another country

target regions = location of email account

maximum tolerable downtime MTD

how long business can go without
Unrecoverable failure

RPO - how much data loss org can
handle in time

if last backup = 12 hours ago

and RPO = 10 hours

then there is 2 hours of missing
data

Repairable assets = MTBF

$$\underline{\text{MTBF}} = \frac{\text{devices} \times \text{hours}}{\# \text{ of failures}}$$

ex: total devices = 3

failed devices = 2

$$\frac{3 \times 1000}{2} = 1500$$

"repairable" = server w/ failed hard drives

Non repairable assets = MTTF

$$\underline{\text{MTTF}} = \frac{\text{devices} \times \text{hours}}{\# \text{ of devices}}$$

ex: 8 devices

$$\frac{8 \times 1000}{8} = 1000$$

"non-repairable" = failed hard drives

MTTR = measure of time taken
to restore systems to full operation

RPO is not achievable based
on 2 hours of missing data

Last backup 12 hours

RPO = 10 hours

Work recovery time **WRT** - time to
get back to business

WRT + RTO < ? > MTD