

CCODA
AI-driven cyber risk insights

AI-Driven Managed Security Services for Managed Service Providers

Product Presentation

October 2020

The world as we know it

No. of Small to Medium Enterprises

No. of Large Enterprises

No. of Government institutions



MSSP

Cyber Security Focused

IT Operations Focused

MSP

The problem

In 2019, „around three-quarters of businesses say that cyber security is a high priority for their organisation’s senior management”

SMBs are the easiest targets for hackers.

SMB customers are not ready to pay enterprise-grade services & products.

Security requests

MSPs

The fastest channel to manage cyber security in the SMB space

ISSUE

Missing security headcount

Raising from 1.8M to 3.5M in 2021

&

Current products

Are designed for cyber experts



Due to the cyber skills gap

MSPs cannot deliver cyber security services to the large amount of existing and new customers.

Implementing enterprise cyber technology in the SMB market is not feasible.

Using enterprise technology to deliver managed security services to the SMB market is not financially sustainable.

MSPs require dedicated solutions to win this battle.

Introducing Footprint

Automating and Scaling Vulnerability Management Services for Managed Services Providers (MSP)



Increase Brand Awareness

Fully white labeled; running under your domain, your logo. Run your own sales campaigns.



Boost presales

Using Footprint you can access new customers through our Online Funnel (Self-Service Registration). Automated presales and lead generation. Preliminary Check-up



Our AI Engine leverages current staff into a Cyber Ops Team

Leverage security services using your existing team. You don't have to hire any ethical hacking experts. Natively integrated with all your sales and engineering platforms.



Increase Recurring Revenue

New revenue streams: compliance/cyber assurance, managed security services Boost sales of existing products & services through customer awareness



Increase Customer Retention

Showcase value to customers with Security Posture Monitoring, with recurrent automated reports. Provide Customers with real-time alerts, dashboards and relevant SLA, Risk Reports and Remediation Plans.

Footprint v6 **is Available Right Now through our Partner Program!**

Introducing Footprint

Automating and Scaling Vulnerability Management Services for Managed Services Providers (MSP)



Fully Multi-Tenant

Manage all Customers using the same UX for your engineers, finance, sales, presales and support teams.



Zero-Touch & Instant Provisioning

Easy installation and operation Platform is provisioned for MSPs in the next business day after signing the partnership agreement.



Comprehensive Scanning Engines

Agentless and Agent-Based Scan Engines. Decisions based on Machine Learning and Threat Intelligence Correlations. Flexible deployment models for Customers – internal & external scans.



Cloud Agnostic

Running in the MSPs cloud of choice: AWS, Azure, GCP, Oracle Cloud, your Private Cloud or CODA Cloud. MSPs own all data.



Native Integration

With MSP dedicated tools: PSM, RMM, SIEM, etc.

Footprint v6 is Available Right Now through our Partner Program!

MSP Delivery Models

MSPs can deliver services in 2 delivery models towards end users



Fully Managed

In a fully managed setup, the MSP performs all the heavy lifting and your customers only get the results. MSPs are receiving and responding to alerts in order to fix the vulnerabilities according to their Managed Services SLA with the End-Users.



Self Service

Under this delivery model end customers manage their cyber risk and decide how to fix them and when to involve MSPs in remediation by choosing to ask for help directly in the platform. MSPs can then assemble their action plan.

Drive more revenue with CODA Footprint

We enable multiple revenue streams for our MSPs



Generate New Business

Become one of our tiered partners and earn up to 40% margins on product sales.

Add your value-added services on-top of Footprint.

Get more customers online by using our demo and trial features to acquire new clients.



Generate Cloud Consumption

All cloud consumption will be reported under your name.

Be it AWS, Azure, GCP, Oracle Cloud or any other public or private cloud of your choice.

Run it in CODA's Cloud if you prefer a fully managed instance.



Deliver More Services

Footprint creates the business case for new .

Leverage Footprint to deliver fully managed VRM services to your Customers.

Smoothly upgrade your team's cyber skills with CODA as part of our Partner Enablement Program.



Upsell / Cross-Sell Security Products

Increase Customer awareness allows you to deliver more Professional and/or Managed services towards them.

Ability to drive online sales through our Funnel uniquely positions you towards new potential Customers on your entire service portfolio.

Footprint enables 360° MSP AI-Driven SOC



Identify

Footprint automatically identifies software, hardware and business assets and correlates them using proprietary algorithms. The MSP Service Model provides end-users with appropriate capabilities in terms of Governance, Risk Analysis and Risk Management Strategy.



Protect

Footprint automatically identifies and recommends missing cyber security controls. The MSP Service Model covers Awareness & Training, Control Implementation & Maintenance, Processes & Procedures, etc.



Recover

Recovery planning, Improvements and Communications all fall under the MSP Service Model.



Detect

Footprint works with anomalies and events, provides continuous security monitoring and supports the detection process.



Respond

Footprint support its partners to provide response planning, analysis, mitigation, improvements and communication services to its customers under the MSP Service Model.

Footprint-enabled MSP operating under the NIST CyberSecurity Framework



Identify

- Asset Management
- Business Environment
- Governance
- Risk Assessment
- Risk Management Strategy



Protect

- Identity Management & Access Control
- Awareness & Training
- Data Security
- Information Protection Processes & Procedures
- Maintenance
- Protective Technology



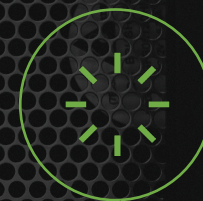
Recover

- Anomalies & Events
- Security Continuous Monitoring
- Detection Processes



Detect

- Response Planning
- Communications
- Analysis
- Mitigation
- Improvements



Respond

- Recovery Planning
- Improvements
- Communications

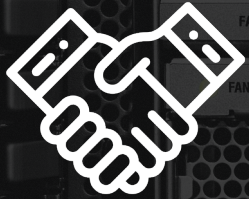
Legend

Footprint-Driven Function

Footprint Supported Function

MSP Consulting Function

Business Model



B2B Sales

MSP is our customer



SaaS

ARR-driven



Pay Per Use

Price per endpoint

Competitive environment

Major players in the market target the enterprise segment.

Their products are complex, hard to implement and maintain and require advanced cyber skills to work with.

Reports must be created by dedicated analysts. Alerts must be filtered and manually curated.

Their business model is not friendly for MSPs (single tenant, hosted by the vendor, lack of branding capabilities, etc.)



Footprint vs. Enterprise Scanners

Business Model

Designed for the Enterprise

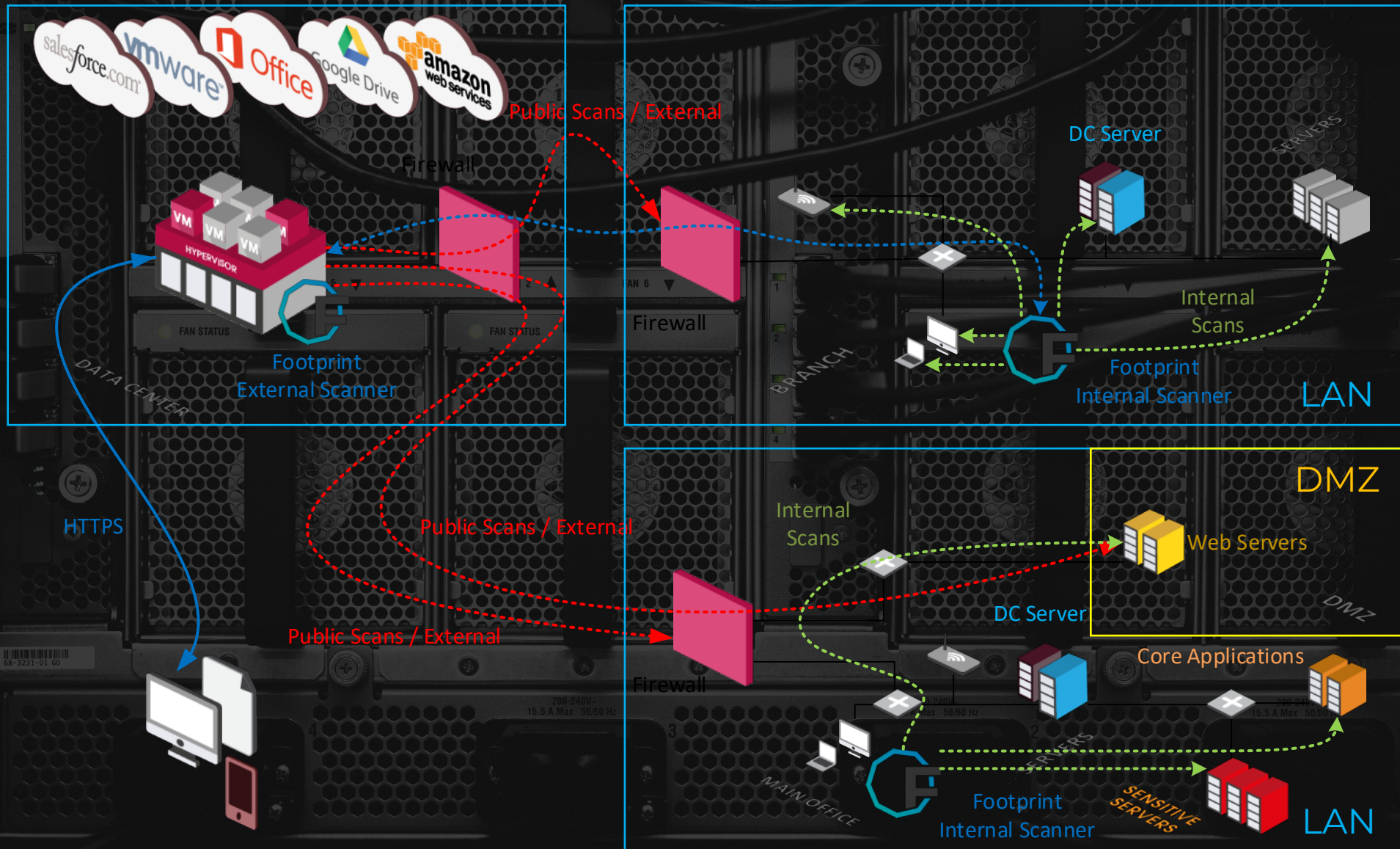
- Qualys always hosts it
- No branding allowed
- Increased cost & complexity: large suite of products for full coverage (QVM, QAM, QPCI, QWAS, QPM, QCAS, QPM)
- Single-tenant

Product Design

Designed for SecOps

- Complex initial setup
- Scan policies
- Scan schedules
- Manual translation to business risk
- Manual prioritization
- Lack of cross-functional collaboration (IT, Business, Security)

Footprint High Level Design



Product Roadmap

Footprint v5 RELEASED

- ② 🖥️ Agent-based & Agentless scan engine
- ② 🖥️ Uncredentialed Remote Scanning
- ② 🖥️ Webapp Scan
-] Online Trial Available
- ⊗ Threat Intelligence
- ⊗ Business Impact
- ⊗ Business View
- ⊗ Technical Context

Footprint v6 Q4 2020

- ② SSL Checks
- 🔍 Integration with 3rd Party Vulnerability Scanners
-] MSP Partner Portal
-] M365 SSO
- 🔍 Instant Provisioning for MSPs

Footprint v7 Q1 2021

- ↗ Credentialed Remote Scanning
- ② 🖥️ Advanced Webapp Scanning
- ② 🖥️ Linux Agent
- ⊗ Attack Replay
- 🔍 Online Identity Profiling

Footprint v8 Q2 2021

- 🔍 Integrations with Service Desk
- 🔍 Integrations with Log Management
- 🔍 Integrations with CMDB
- ② Active Directory Checks
- ↗ VRM Report for Compliance and 3rd parties
- ② 🖥️ macOS Agent
- 🔍 Vulnerability Evolution

Footprint v9 Q3 2021

- ② 🖥️ Native Cloud Integrations
- ② 🖥️ Native Virtualization Check
- ② 🖥️ Assess Containers
- ⊗ What-If Scenarios
- ⊗ Most painful/probable attack
- ② 🖥️ Assess Apps under development
-] Open API
-] Footprint Mobile App
- ② 🖥️ Browser Checks
- ② 🖥️ IPv6 Coverage
- ② 🖥️ Spear Phishing

We're also working on

- ② 🖥️ Network Config assessment
- ⊗ Zero-day Risk Analyzer
- ↗ Vulnerability Predictions
- 🔍 Integrations with NAC
- 🔍 Virtual Patching
- 🔍 Community Checks
-] SSO
-] Data Scanning

Legend ② 🖥️ Vulnerability Enumeration & Asset Management ⊗ Patch Prioritization ↗ Reporting Capabilities 🔍 SOC Integration →] Solution Usage

Q&A

Why are we disrupting the VRM

What do companies do in terms of VRM?

Why?

There is a difference between a VA and a meaningful VA.

Just like anybody can pretend to be an ethical hacker these days because they're using a scanner



It's also a big data problem

SecurityCenter SC™

Executive Summary

The Severity Levels by Count table provides a count of vulnerabilities by severity level. The severity levels are: low, medium, high, and critical. The last column in purple shows exploitability but makes no reference to severity level.

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January 2024

Port Vulnerability Details

The Top 100 Vulnerable Ports table provides the vulnerability count for the most vulnerable ports discovered.

Port	Count
FTP/21	445
SSH/22	22
Telnet/23	80
SMTP/25	443
DNS/53	8000
HTTP/80	8080
RPC/111	3389
NetBOS/137	161
HTTP/443	3306
SMB/445	8098
	8088
	8082
	79
	25
	8834
	5000
	53
	354
	389
	3128
	139
	8181
	9080
	8081
	3339
	1434
	8555
	1243
	2222
	587
	6667

The Counting Hosts by Common Ports matrix contains six columns that enumerate the number of hosts with vulnerabilities on a specific port. The columns provide a count of vulnerable hosts based on the severity level. The last column provides a percentage of hosts with an exploitable vulnerability on that port. The colors used in this matrix have a transparent background and change the color based on the severity level. The color green represents low severity, yellow for medium severity, high severity vulnerabilities are orange, and critical severities are red. The last column in purple shows exploitability but makes no reference to severity level.

Port	Low	Medium	High	Critical	Exploitable
FTP/21	12	3	3	0	
SSH/22	2137	2190	2444	11	
Telnet/23	49	76	0	1	
SMTP/25	30	57	9	0	
DNS/53	5	102	0	2	
HTTP/80	38	104	275	131	
RPC/111	0	3	0	0	
NetBOS/137	0	0	0	0	
HTTP/443	599	421	82	38	
SMB/445	112	7472	158	119	

The Port and Protocol matrix provides a count of vulnerabilities by severity level, TCP port, and vulnerability type. The first two rows use active detection, while the bottom two use passive detection. For each detection method, there is a row for TCP and UDP. Port ranges from 0-1024, along with severity levels of low, medium, high, and critical, are used for each column. The last column provides a percentage of exploitable vulnerabilities. The raw results are displayed based on the severity level. The colors used are green (low), yellow (medium), orange (high), and red (critical). The last column in purple shows exploitability but makes no reference to severity level.

Port and Protocol	Low 0-1024	Medium 0-1024	High 0-1024	Critical 0-1024	Exploitable
Active TCP	698	4258	8034	1143	
Active UDP	1	15	27	5	
Passive TCP	5285	10885	8497	890	
Passive UDP	3	100	134	2	

tenable

Vulnerability Reporting by Common Ports

Executive Summary

3

- 10K vulns on 600 assets
- Patch management is failing
- Average MTTP is between 60 and 150 days.
- Large disconnect between teams

What you need for a real VRM

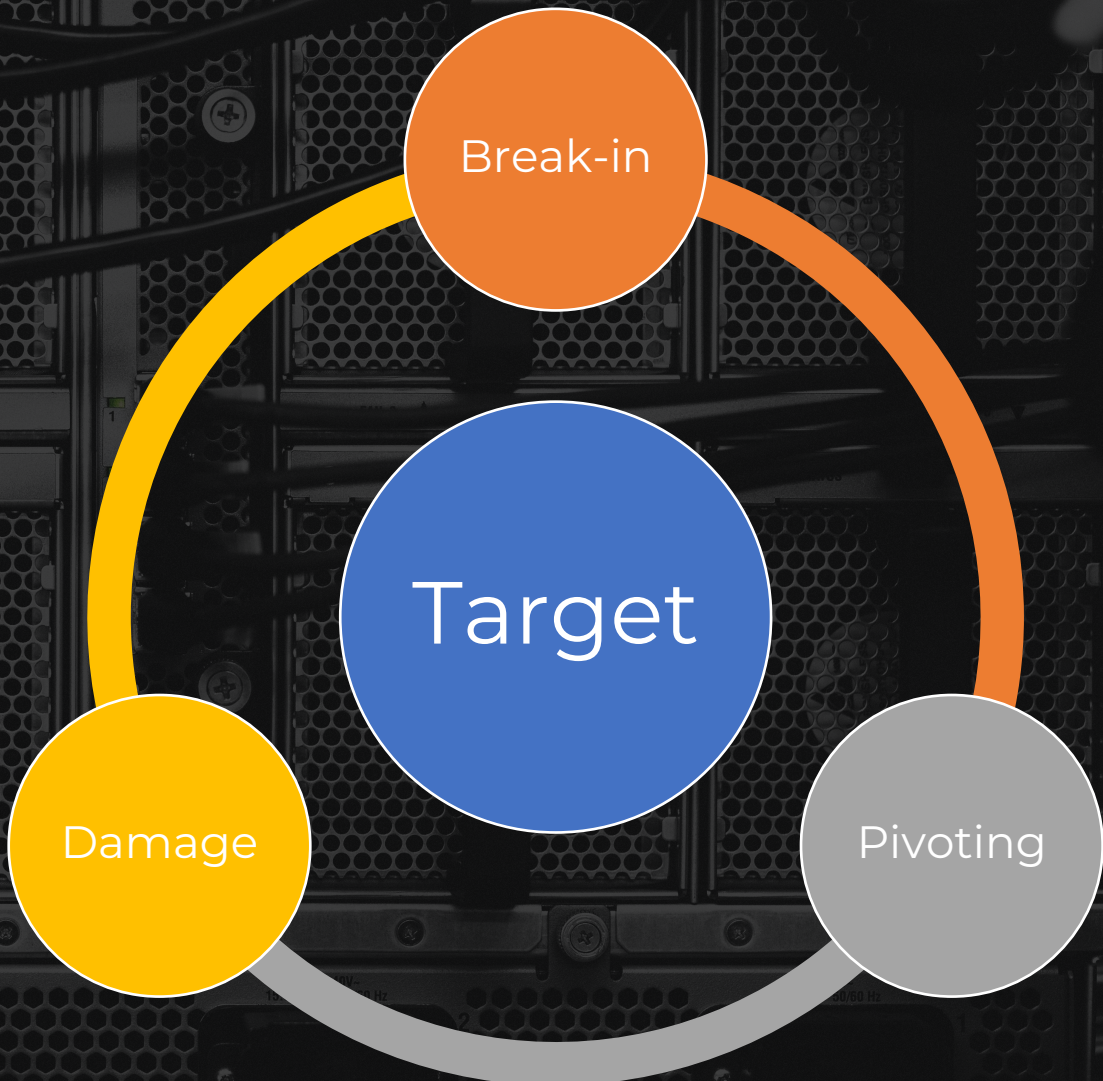
1. Complete visibility
2. Business context
3. Technical context
4. Cyber context
5. Actionable results

Demo time

The anatomy of an attack



Even a simple ransomware exploits at least 3 vulns.



The anatomy of an attack (detailed)

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command and Control	Exfiltration	Impact
9 techniques Drive-by Compromise Exploit Public-Facing Applications External Remote Services Hardware Additions Phishing (3) Replication Through Remote Execution Supply Chain Compromise Trusted Relationship Valid Accounts (4)	10 techniques Command and Scripting Interactions Exploitation for Client Execution Inter-Process Communications Native API Scheduled Task/Job (5) Shared Modules Software Deployment Tools System Services (2) User Execution (2) Windows Management Instrumentation	18 techniques Account Manipulation (4) BITS Jobs Boot or Logon Autostart Execution Boot or Logon Initialization Execution Browser Extensions Compromise Client Software Create Account (3) Create or Modify System Process Event Triggered Execution External Remote Services Hijack Execution Flow (11) Implant Container Image Office Application Startup (6) Pre-OS Boot (3) Scheduled Task/Job (5) Server Software Component (3) Traffic Signaling (1) Valid Accounts (4)	12 techniques Abuse Elevation Control Mechanisms Access Token Manipulation Boot or Logon Autostart Execution Boot or Logon Initialization Execution Create or Modify System Process Event Triggered Execution Exploitation for Privilege Escalation Group Policy Modification Hijack Execution Flow (11) Process Injection (11) Scheduled Task/Job (5) Valid Accounts (4)	34 techniques Abuse Elevation Control Mechanisms Access Token Manipulation BITS Jobs Deobfuscate/Decode Files or Data Direct Volume Access Execution Guardrails (1) Exploitation for Defense Evasion File and Directory Permissions Manipulation Group Policy Modification Hide Artifacts (6) Hijack Execution Flow (11) Impair Defenses (6) Indicator Removal on Host Indirect Command Execution Masquerading (6) Modify Authentication Process (3) Modify Cloud Compute Infrastructure (4) Modify Registry Obfuscated Files or Information (5) Pre-OS Boot (3) Process Injection (11) Rogue Domain Controller Rootkit Signed Binary Proxy Execution (10) Signed Script Proxy Execution (1) Subvert Trust Controls (4) Template Injection Traffic Signaling (1) Trusted Developer Utilities Proxy Execution (1) Unused/Unsupported Cloud Regions Use Alternate Authentication Material (4) Valid Accounts (4) Virtualization/Sandbox Evasion (3) XSL Script Processing	14 techniques Brute Force (4) Credentials from Password Stores Exploitation for Credential Access Forced Authentication Input Capture (4) Man-in-the-Middle (1) Modify Authentication Process Network Sniffing OS Credential Dumping (8) Steal Application Access Tokens Steal or Forge Kerberos Tickets Steal Web Session Cookies Two-Factor Authentication Unsecured Credentials (6)	24 techniques Account Discovery (4) Application Window Discovery Browser Bookmark Discovery Cloud Service Dashboard Cloud Service Discovery Domain Trust Discovery File and Directory Discovery Network Service Scanning Network Share Discovery Network Sniffing Password Policy Discovery Peripheral Device Discovery Permission Groups Discovery (3) Process Discovery Query Registry Remote System Discovery Software Discovery (1) System Information Discovery System Network Configuration Discovery System Network Connections Discovery System Owner/User Discovery System Service Discovery System Time Discovery Virtualization/Sandbox Evasion (3)	9 techniques Exploitation of Remote Services Internal Spearphishing Lateral Tool Transfer Remote Service Session Hijacking Remote Services (6) Replication Through Remote Execution Software Deployment Tools Taint Shared Content Use Alternate Authentication Material	16 techniques Archive Collected Data (3) Audio Capture Automated Collection Clipboard Data Data from Cloud Storage Objects Data from Information Repositories Data from Local System Data from Network Shares Data from Removable Media Data Staged (2) Email Collection (3) Input Capture (4) Man in the Browser Man-in-the-Middle (1) Screen Capture Video Capture	16 techniques Application Layer Protocol Tunneling Communication Through Remote Execution Data Encoding (2) Data Obfuscation (3) Dynamic Resolution (3) Encrypted Channel (2) Fallback Channels Ingress Tool Transfer Multi-Stage Channels Non-Application Layer Protocol Tunneling Non-Standard Port Tunneling Proxy (4) Remote Access Software Traffic Signaling (1) Web Service (3)	9 techniques Automated Exfiltration Data Transfer Size Limits Exfiltration Over Alternative Protocols Exfiltration Over Cloud Services Exfiltration Over Other Network Services Exfiltration Over Physical Media Exfiltration Over Web Services Scheduled Transfer Transfer Data to Cloud Accounts	13 techniques Account Access Removal Data Destruction Data Encrypted for Impact Data Manipulation (3) Defacement (2) Disk Wipe (2) Endpoint Denial of Service Firmware Corruption Inhibit System Recovery Network Denial of Service Resource Hijacking Service Stop System Shutdown/Reboot