| Reconnaissance                    | Development                  | Initial Access           | Execution                          | Persistence                          | Escalation                           | Defense Evasion                         | Credential Access                     | Discovery                      | Lateral Movement                    | Collection              | Control                         | Exfiltration                      | Impact                  |
|-----------------------------------|------------------------------|--------------------------|------------------------------------|--------------------------------------|--------------------------------------|---|---------------------------------------|--------------------------------|-------------------------------------|-------------------------|---------------------------------|-----------------------------------|-------------------------|
| 10 techniques                     | 8 techniques                 | 10 techniques            | 14 techniques                      | 20 techniques                        | 14 techniques                        | 43 techniques                           | 17 techniques                         | 32 techniques                  | 9 techniques                        | 17 techniques           | 17 techniques                   | 9 techniques                      | 14 techniques           |
| Active Scanning                   | Acquire Access               | Content Injection        | Cloud Administration               | Account                              | Abuse Elevation                      | Abuse Elevation Control                 | Adversary-in-the-                     | Account Discovery              | Exploitation of                     | Adversary-in-the-       | Application Layer               | Automated                         | Account Access          |
| 5                                 |                              |                          | Command                            | Manipulation                         | Control Mechanism                    | Mechanism                               | Middle                                |                                | Remote Services                     | Middle                  | Protocol                        | Exfiltration                      | Removal                 |
| Gather Victim Host                | Acquire                      | Drive-by                 |                                    |                                      |                                      |   |                                       | Application Window             |                                     |                         |                                 |                                   |                         |
| Information                       | Infrastructure               | Compromise               | Command and Scripting Interpreter  | BITS Jobs                            | Access Token  Manipulation           | Access Token Manipulation               | Brute Force                           | Discovery                      | Internal<br>Spearphishing           | Archive Collected  Data | Communication Through Removable | Data Transfer Size<br>Limits      | Data Destruction        |
| Gather Victim Identity            | Compromise                   | Exploit Public-          | Scripting interpreter              | Boot or Logon                        | Wallipulation                        | BITS Jobs                               | Credentials from                      | Browser Information            | Spearphishing                       | Data                    | Media                           | Littits                           | Data Encrypted for      |
| Information                       | Accounts                     | Facing Application       | Container                          | Autostart Execution                  | Account                              |   | Password Stores                       | Discovery                      | Lateral Tool Transfer               | Audio Capture           |                                 | Exfiltration Over                 | Impact                  |
|                                   |                              |                          | Administration                     |                                      | Manipulation                         | Build Image on Host                     |                                       |                                |                                     |                         | Content Injection               | Alternative                       |                         |
| Gather Victim Network Information | Compromise<br>Infrastructure | External Remote Services | Command                            | Boot or Logon Initialization Scripts | Boot or Logon                        | Debugger Evasion                        | Exploitation for<br>Credential Access | Cloud Infrastructure Discovery | Remote Service<br>Session Hijacking | Automated Collection    | Data Encoding                   | Protocol                          | Data Manipulation       |
|                                   | astractare                   | Services                 | Deploy Container                   | midalization Scripts                 | Autostart Execution                  | Debugger Evasion                        | Credential Access                     | Discovery                      | Session rijuening                   | Concentration           | Data Encouning                  | Exfiltration Over                 | Defacement              |
| Gather Victim Org                 | Develop Capabilities         | Hardware                 |                                    | Browser Extensions                   |                                      | Deobfuscate/Decode Files or             | Forced                                | Cloud Service Dashboard        | Remote Services                     | Browser Session         | Data Obfuscation                | C2 Channel                        |                         |
| Information                       | Establish Accounts           | Additions                | Exploitation for Client  Execution | Compromise Client                    | Boot or Logon Initialization Scripts | Information                             | Authentication                        | Cloud Service Discovery        | Replication Through                 | Hijacking               | Dynamic Resolution              | Exfiltration Over                 | Disk Wipe               |
| Phishing for Information          | Establish Accounts           | Phishing                 | Execution                          | Software Binary                      | initialization Scripts               | Deploy Container                        | Forge Web                             | Cloud Service Discovery        | Removable Media                     | Clipboard Data          | Dynamic Resolution              | Other Network                     | Endpoint Denial of      |
|                                   | Obtain Capabilities          |                          | Inter-Process                      | ,                                    | Create or Modify                     | ., .,                                   | Credentials                           | Cloud Storage Object           |                                     |                         | Encrypted Channel               | Medium                            | Service                 |
| Search Closed Sources             |                              | Replication              | Communication                      | Create Account                       | System Process                       | Direct Volume Access                    |                                       | Discovery                      | Software                            | Data from Cloud         |                                 |                                   |                         |
| Search Open Technical             | Stage Capabilities           | Through Removable Media  | Native API                         | Create or Modify                     | Domain Policy                        | Domain Policy Modification              | Input Capture                         | Container and Resource         | Deployment Tools                    | Storage                 | Fallback Channels               | Exfiltration Over Physical Medium | Financial Theft         |
| Databases                         |                              | Kelilovable Media        | Ivative AFI                        | System Process                       | Modification                         | Domain Folicy Woullication              | Modify                                | Discovery                      | Taint Shared Content                | Data from               | Ingress Tool Transfer           | Filysical Medidili                | Firmware Corruption     |
|                                   |                              | Supply Chain             | Scheduled Task/Job                 |                                      |                                      | Execution Guardrails                    | Authentication                        |                                |                                     | Configuration           |                                 | Exfiltration Over                 |                         |
| Search Open                       |                              | Compromise               | San day 5 and day                  | Event Triggered                      | Escape to Host                       | Endothering for Bufferen                | Process                               | Debugger Evasion               | Use Alternate                       | Repository              | Multi-Stage Channels            | Web Service                       | Inhibit System Recovery |
| Websites/Domains                  |                              | Trusted                  | Serverless Execution               | Execution                            | Event Triggered                      | Exploitation for Defense Evasion        | Multi-Factor                          | Device Driver Discovery        | Authentication<br>Material          | Data from               | Non-Application                 | Scheduled                         | Network Denial of       |
| Search Victim-Owned               |                              | Relationship             | Shared Modules                     | External Remote                      | Execution                            |   | Authentication                        |                                |                                     | Information             | Layer Protocol                  | Transfer                          | Service                 |
| Websites                          |                              |                          |                                    | Services                             |                                      | File and Directory                      | Interception                          | Domain Trust Discovery         |                                     | Repositories            |                                 |                                   |                         |
|                                   |                              | Valid Accounts           | Software Deployment                | Hijada Evanstina                     | Exploitation for                     | Permissions Modification                | Multi Fastas                          | File and Discrete Discrete     |                                     | Data from Land          | Non-Standard Port               | Transfer Data to                  | Resource Hijacking      |
|                                   |                              |                          | Tools                              | Hijack Execution<br>Flow             | Privilege Escalation                 | Hide Artifacts                          | Multi-Factor Authentication           | File and Directory Discovery   |                                     | Data from Local System  | Protocol Tunneling              | Cloud Account                     | Service Stop            |
|                                   |                              |                          | System Services                    |                                      | Hijack Execution                     |   | Request Generation                    | Group Policy Discovery         |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | Implant Internal                     | Flow                                 | Hijack Execution Flow                   |                                       |                                |                                     | Data from Network       | Proxy                           |                                   | System                  |
|                                   |                              |                          | User Execution                     | Image                                | Process Intent                       | Impair Deferrer                         | Network Sniffing                      | Log Enumeration                |                                     | Shared Drive            | Pomoto A                        |                                   | Shutdown/Reboot         |
|                                   |                              |                          | Windows                            | Modify                               | Process Injection                    | Impair Defenses                         | OS Credential                         | Network Service Discovery      |                                     | Data from               | Remote Access<br>Software       |                                   |                         |
|                                   |                              |                          | Management                         | Authentication                       | Scheduled                            | Impersonation                           | Dumping                               |                                |                                     | Removable Media         |                                 |                                   |                         |
|                                   |                              |                          | Instrumentation                    | Process                              | Task/Job                             |   |                                       | Network Share Discovery        |                                     | _                       | Traffic Signaling               |                                   |                         |
|                                   |                              |                          |                                    | Office Application                   | Valid Accounts                       | Indicator Removal                       | Steal Application Access Token        | Network Sniffing               |                                     | Data Staged             | Web Service                     |                                   |                         |
|                                   |                              |                          |                                    | Office Application Startup           | valid Accounts                       | Indirect Command Execution              | Access (UKEI)                         | .vetwork silling               |                                     | Email Collection        | Web Service                     |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Steal or Forge                        | Password Policy Discovery      |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | Power Settings                       |                                      | Masquerading                            | Authentication                        | B. (1. 15 )                    |                                     | Input Capture           |                                 |                                   |                         |
|                                   |                              |                          |                                    | Pre-OS Boot                          |                                      | Modify Authentication                   | Certificates                          | Peripheral Device Discovery    |                                     | Screen Capture          |                                 |                                   |                         |
|                                   |                              |                          |                                    | F16-03 BOOT                          |                                      | Process                                 | Steal or Forge                        | Permission Groups Discovery    |                                     | Screen Capture          |                                 |                                   |                         |
|                                   |                              |                          |                                    | Scheduled Task/Job                   |                                      |   | Kerberos Tickets                      |                                |                                     | Video Capture           |                                 |                                   |                         |
|                                   |                              |                          |                                    | Samuel Saftware                      |                                      | Modify Cloud Compute                    | Steal Web Session                     | Process Discovery              |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | Server Software Component            |                                      | Infrastructure                          | Cookie                                | Query Registry                 |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Modify Registry                         |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | Traffic Signaling                    |                                      |   | Unsecured                             | Remote System Discovery        |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | Valid Accounts                       |                                      | Modify System Image                     | Credentials                           | Software Discovery             |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    | valid Accounts                       |                                      | Network Boundary Bridging               |                                       | Software Discovery             |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       | System Information             |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Obfuscated Files or                     |                                       | Discovery                      |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Information                             |                                       | System Location Discovery      |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Plist File Modification                 |                                       | System Education Discovery     |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       | System Network                 |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Pre-OS Boot                             |                                       | Configuration Discovery        |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Process Injection                       |                                       | System Network                 |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Trocess injection                       |                                       | Connections Discovery          |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Reflective Code Loading                 |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Rogue Domain Controller                 |                                       | System Owner/User Discovery    |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | rogue Bornain Controller                |                                       | Discovery                      |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Rootkit                                 |                                       | System Service Discovery       |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Subvert Trust Casteria                  |                                       | System Time Discours           |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Subvert Trust Controls                  |                                       | System Time Discovery          |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | System Binary Proxy                     |                                       | Virtualization/Sandbox         |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Execution                               |                                       | Evasion                        |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | System Script Proxy                     |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Execution                               |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Template Injection                      |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Traffic Signaling                       |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Trusted Developer Utilities             |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Proxy Execution                         |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Unused/Unsupported Cloud                |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Regions                                 |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Lise Alternate Authorities              |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Use Alternate Authentication Material   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Valid Accounts                          |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Virtualization/Sandbox                  |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      | Evasion Evasion                         |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
| 4                                 |                              |                          |                                    |                                      |                                      | Weaken Encryption                       |                                       |                                |                                     |                         |                                 |                                   |                         |
| 4                                 |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   | <b>&gt;</b>             |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |
|                                   |                              |                          |                                    |                                      |                                      |   |                                       |                                |                                     |                         |                                 |                                   |                         |

Privilege

Escalation

**Defense Evasion** 

**Credential Access** 

Discovery

**Lateral Movement** 

Command and

Control

Exfiltration

Impact

Resource

Development

Initial Access