



e-MD® / MEDEFENSE™ Plus Insurance Renewal Application

THIS IS AN APPLICATION FOR A CLAIMS MADE AND REPORTED POLICY. THIS APPLICATION IS NOT A BINDER.

This application for e-MD® / MEDEFENSE™ Plus Insurance is intended to be used for the preliminary evaluation of a submission. When completed in its entirety, this application will enable the Underwriter to decide whether or not to authorize the binding of insurance. Please type or print clearly and answer all questions. If space is insufficient to answer any question fully, attach a separate sheet. Complete all required supplemental forms/applications. "You" and "Your", as used in this application, means the Applicant unless noted otherwise below.

Please refer to the attached Cyber Glossary for an explanation of the cyber security terms that appear in bold face type.

1. GENERAL INFORMATION			
Name of Applicant:			
Street Address:			
City, State, Zip:		Phone:	
Website:		Fax:	
Applicant is a(an): <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other: _____			
2. REQUIRED ADDITIONAL INFORMATION			
a. Applicant's medical professional liability carrier:		Policy number:	
b. Total full-time equivalent physicians:			
c. Total number of employees:			
d. Has the nature of the professional services performed by the Applicant changed in any way in the last twelve (12) months? If "Yes", provide details on a separate page.			<input type="checkbox"/> Yes <input type="checkbox"/> No
e. Has the name of the Applicant changed, or has any merger or consolidation taken place, in the past 12 months? If "Yes", provide details on a separate page.			<input type="checkbox"/> Yes <input type="checkbox"/> No
f. Have there been any material changes in the Applicant's security controls in the past 12 months? If "Yes", provide details on a separate page.			<input type="checkbox"/> Yes <input type="checkbox"/> No
g. Has the Applicant acquired any subsidiaries, affiliated companies or entities in the past 12 months? If "Yes", attach a list with a description of (1) the nature of operations of each such subsidiary, affiliated company or entity, (2) its relationship to the Applicant and (3) the percentage of ownership by the Applicant.			<input type="checkbox"/> Yes <input type="checkbox"/> No
3. REVENUES			
	<u>Current Fiscal Year</u> ending / (current projected)	<u>Last Fiscal Year</u> ending /	
Total gross revenues:	\$	\$	
4. RECORDS (Complete Section 4 only if e-MD (Cyber Liability) coverage is desired.			
a. Do you collect, store, host, process, control, use or share any private or sensitive information* in either paper or electronic form? If "Yes", provide the approximate number of unique records: Paper records: _____ Electronic records: _____ <small>*Private or sensitive information includes any information or data that can be used to uniquely identify a person, including, but not limited to, social security numbers or other government identification numbers, payment card information, drivers' license numbers, financial account numbers, personal identification numbers (PINs), usernames, passwords, healthcare records and email addresses.</small>			<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Do you collect, store, host, process, control, use or share any biometric information or data, such as fingerprints, voiceprints, facial, hand, iris or retinal scans, DNA, or any other biological, physical or behavioral characteristics that can be used to uniquely identify a person? If "Yes", have you reviewed your policies relating to the collection, storage and destruction of such information or data with a qualified attorney and confirmed compliance with applicable federal, state, local and foreign laws?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
c. Do you process, store or handle credit card transactions? If "Yes", are you PCI-DSS Compliant?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

5. BILLING AND COMPLIANCE (Complete Section 5 only if MEDEFENSE™ Plus (Regulatory) coverage is desired.			
a. Your total annual projected billings:		\$	
b. Percentage of your annual projected billings attributable to Medicare patients:		%	
c. Percentage of your annual projected billings attributable to Medicaid patients:		%	
d. Has the Applicant's billing compliance or HIPAA compliance program changed since last year?			<input type="checkbox"/> Yes <input type="checkbox"/> No
e. Do you bill all services under the National Provider Identifier (NPI) of the individual who performed the service? If "No", in instances where a mid-level provider's services are billed under a physician's NPI, is that physician present when the services are being rendered?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
6. IT DEPARTMENT (Complete Section 6 only if e-MD (Cyber Liability) coverage is desired.			
<i>This section must be completed by the individual within the Applicant's organization who is responsible for network security. As used in this section only, "you" refers only to such individual.</i>			
a. Within the Applicant's organization, who is responsible for network security?			
Name:			
Title:			
Phone:		Email address:	
IT Security Designation(s):			
b. The Applicant's network security is: <input type="checkbox"/> Outsourced; provide the name of your network security provider: _____ <input type="checkbox"/> Managed internally/in-house			
c. If the Applicant's network security is outsourced, are you the main contact for the network security provider named in question b. above? If "No", provide the name and email address for the main contact: _____			<input type="checkbox"/> Yes <input type="checkbox"/> No
d. How many IT personnel are on your team?			
e. How many dedicated IT security personnel are on your team?			
By signing below, you confirm that you have reviewed all questions in Sections 7 through 9 of this application regarding the Applicant's security controls, and, to the best of your knowledge, all answers are complete and accurate. Additionally, you consent to 1) the Insurer conducting non-intrusive scans of your internet-facing systems / applications for common vulnerabilities, and 2) receiving direct communications from the Insurer and/or its representatives regarding the results of such scans and any potentially urgent security issues identified in relation to the Applicant's organization.			
Print/Type Name: _____			
Signature: _____			
7. EMAIL SECURITY CONTROLS (Complete Section 7 only if e-MD (Cyber Liability) coverage is desired.			
<i>If the answer to any question in this section is "No", please provide additional details in the "Additional Comments" section.</i>			
a. Do you tag external emails to alert employees that the message originated from outside the organization?			<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Do you pre-screen emails for potentially malicious attachments and links? If "Yes", (1) Select your email security provider: If "Other", provide the name of your email security provider: _____ (2) Do you have the capability to automatically detonate and evaluate attachments in a sandbox to determine if they are malicious prior to delivery to the end-user?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
c. Have you implemented any of the following to protect against phishing messages? (Check all that apply): <input type="checkbox"/> Sender Policy Framework (SPF) <input type="checkbox"/> DomainKeys Identified Mail (DKIM) <input type="checkbox"/> Domain-based Message Authentication, Reporting & Conformance (DMARC) <input type="checkbox"/> None of the above			
d. Can your users access email through a web application or a non-corporate device? If "Yes", do you enforce Multi-Factor Authentication (MFA)?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
e. Do you use Office 365 in your organization? If "Yes", do you use the Office 365 Advanced Threat Protection add-on?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
ADDITIONAL COMMENTS (Use this space to explain any "No" answers in the above section and/or to list other relevant IT security measures you are utilizing that are not listed here.)			

8. INTERNAL SECURITY CONTROLS (Complete Section 8 only if e-MD (Cyber Liability) coverage is desired.)	
<i>If the answer to any question in this section is "No", please provide additional details in the "Additional Comments" section.</i>	
<p>a. Do you use a cloud provider to store data or host applications? If "Yes", provide the name of the cloud provider: _____</p> <p>If you use more than one cloud provider to store data, specify the cloud provider storing the largest quantity of sensitive customer and/or employee records (e.g., including medical records, personal health information, social security numbers, bank account details and credit card numbers) for you.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>b. Do you use MFA to secure all cloud provider services that you utilize (e.g. Amazon Web Services (AWS), Microsoft Azure, Google Cloud)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>c. Do you encrypt all sensitive and confidential information stored on your organization's systems and networks? If "No", are the following compensating controls in place:</p> <p>(1) Segregation of servers that store sensitive and confidential information? (2) Access control with role-based assignments?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<p>d. Do you allow remote access to your network? If "Yes", do you use MFA to secure all remote access to your network, including any remote desktop protocol (RDP) connections? If MFA is used, complete the following:</p> <p>(1) Select your MFA provider: If "Other", provide the name of your MFA provider: _____</p> <p>(2) Select your MFA type: If "Other", describe your MFA type: _____</p> <p>(3) Does your MFA configuration ensure that the compromise of a single device will only compromise a single authenticator?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<p>e. Do you use a next-generation antivirus (NGAV) product to protect all endpoints across your enterprise? If "Yes", select your NGAV provider: If "Other", provide the name of your NGAV provider: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>f. Do you use an endpoint detection and response (EDR) tool that includes centralized monitoring and logging of all endpoint activity across your enterprise? If "Yes", complete the following:</p> <p>(1) Select your EDR provider: If "Other", provide the name of your EDR provider: _____</p> <p>(2) Do you enforce application whitelisting/blacklisting? (3) Is EDR deployed on 100% of endpoints? If "No", please use the Additional Comments section to outline which assets do not have EDR, and whether any mitigating safeguards are in place for such assets.</p> <p>(4) Can users access the network with their own device ("Bring Your Own Device")? If "Yes", is EDR required to be installed on these devices?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<p>g. Do you use MFA to protect all local and remote access to privileged user accounts? If "Yes", select your MFA type: If "Other", describe your MFA type: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>h. Do you manage privileged accounts using privileged account management software (PAM) (e.g., CyberArk, BeyondTrust, etc.)? If "Yes", complete the following:</p> <p>(1) Provide the name of your software provider: _____ (2) Is access protected by MFA?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<p>i. Do you actively monitor all administrator access for unusual behavior patterns? If "Yes", provide the name of your monitoring tool: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>j. Do you roll out a hardened baseline configuration across servers, laptops, desktops and managed mobile devices?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>k. Do you record and track all software and hardware assets deployed across your organization? If "Yes", provide the name of the tool used for this purpose (if any): _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>l. Do non-IT users have local administration rights on their laptop / desktop?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>m. How frequently do you install critical and high severity patches across your enterprise? <input type="checkbox"/> 1-3 days <input type="checkbox"/> 4-7 days <input type="checkbox"/> 8-30 days <input type="checkbox"/> One month or longer</p>	
<p>n. Do you have any end of life or end of support software? If "Yes", is it segregated from the rest of your network?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

<p>o. Do you use a protective DNS service (PDNS) (e.g. ZScaler, Quad9, OpenDNS or the public sector PDNS) to block access to known malicious websites? If “Yes”, provide the name of your DNS provider: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>p. Do you use endpoint application isolation and containment technology on all endpoints? If “Yes”, select your provider: If “Other”, provide the name of your provider: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>q. Can users run Microsoft Office Macro enabled documents on their system by default?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>r. Do you implement PowerShell best practices as outlined in the Environment Recommendations by Microsoft?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>s. Do you utilize a Security Information and Event Management system (SIEM)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>t. Do you utilize a Security Operations Center (SOC)? If “Yes”, complete the following: (1) Is your SOC monitored 24 hours a day, 7 days a week? (2) Your SOC is: <input type="checkbox"/> Outsourced; provide the name of your provider: _____ <input type="checkbox"/> Managed internally/in-house</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<p>u. Do you use a vulnerability management tool? If “Yes”, complete the following: (1) Select your provider: If “Other”, provide the name of your provider: _____ (2) What is your patching cadence? <input type="checkbox"/> 1-3 days <input type="checkbox"/> 4-7 days <input type="checkbox"/> 8-30 days <input type="checkbox"/> 1 month or longer</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>ADDITIONAL COMMENTS (Use this space to explain any “No” answers in the above section and/or to list other relevant IT security measures you are utilizing that are not listed here.)</p>	
<p>9. BACKUP AND RECOVERY POLICIES (Complete Section 9 only if e-MD (Cyber Liability) coverage is desired.)</p>	
<p><i>If the answer to the question in this section is “No”, please provide additional details in the “Additional Comments” section.</i></p>	
<p>Do you use a data backup solution? If “Yes”: a. Which best describes your data backup solution? <input type="checkbox"/> Backups are kept locally but separate from your network (offline/air-gapped backup solution). <input type="checkbox"/> Backups are kept in a dedicated cloud backup service. <input type="checkbox"/> You use a cloud-syncing service (e.g. Dropbox, OneDrive, SharePoint, Google Drive). <input type="checkbox"/> Other (<i>describe your data backup solution</i>): _____ b. Check all that apply: <input type="checkbox"/> Your backups are encrypted. <input type="checkbox"/> You have immutable backups. <input type="checkbox"/> Your backups are secured with different access credentials from other administrator credentials. <input type="checkbox"/> You utilize MFA for both internal and external access to your backups. <input type="checkbox"/> You have tested the successful restoration and recovery of key server configurations and data from backups in the last 6 months. <input type="checkbox"/> You are able to test the integrity of backups prior to restoration to ensure that they are free of malware. c. How frequently are backups run? <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly d. Estimated amount of time it will take to restore essential functions using backups in the event of a widespread malware or ransomware attack within your network? <input type="checkbox"/> 0-24 hours <input type="checkbox"/> 1-3 days <input type="checkbox"/> 4-6 days <input type="checkbox"/> 1 week or longer</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>ADDITIONAL COMMENTS (Use this space to explain any “No” answers in the above section and/or to list other relevant IT security measures you are utilizing that are not listed here.)</p>	

10. PHISHING CONTROLS (Complete Section 10 only if e-MD (Cyber Liability) coverage is desired.)

<p>a. Do all employees with financial or accounting responsibilities at your company complete social engineering training? If "Yes", does such training include phishing simulation?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>b. Does your organization send and/or receive wire transfers? If "Yes", does your wire transfer authorization process include the following: (1) A wire request documentation form? (2) A protocol for obtaining proper written authorization for wire transfers? (3) A separation of authority protocol? (4) A protocol for confirming all payment or funds transfer instructions/requests from a new vendor, client or customer via direct call to that vendor, client or customer using only the telephone number provided by the vendor, client or customer <u>before</u> the payment or funds transfer instruction/request was received? (5) A protocol for confirming any vendor, client or customer account information change requests (including requests to change bank account numbers, contact information or mailing addresses) via direct call to that vendor, client or customer using only the telephone number provided by the vendor, client or customer <u>before</u> the change request was received?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

11. REGULATORY LOSS HISTORY (Complete Section 11 only if MEDEFENSE™ Plus (Regulatory) coverage is desired.)

If the answer to question 11.a or 11.b below is "Yes", please complete a Claim Supplemental Form for each claim, allegation or incident.

<p>a. In the past 12 months, has the Applicant, any staff member, any other person or organization proposed for this insurance, any consultant, or any person or entity for whom the Applicant performs billing services had to refund amounts to any government (public) or commercial (private) payer? (1) If "Yes", provide refund amounts: Public: \$ _____ Private: \$ _____ (2) If "Yes", were these refunds due to an audit, allegation of improper billing or voluntary self-disclosure?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>b. In the past 12 months, has the Applicant or any other person or organization proposed for this insurance received any billing errors proceeding, demand for restitution or notice of any regulatory investigation, inquiry or action involving actual or potential billing errors or HIPAA, EMTALA or Stark violations?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>c. Has the Applicant notified Tokio Marine HCC of all claims, suits, demands, investigations or inquiries received in the past 12 months? If "No", forward complete details to Tokio Marine HCC immediately.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None to Report</p>

12. CYBER/PRIVACY LOSS HISTORY (Complete Section 12 only if e-MD (Cyber Liability) coverage is desired.)

If the answer to question 12.a or 12.b below is "Yes", please complete a Claim Supplemental Form for each claim, allegation or incident.

<p>a. In the past 12 months, has the Applicant or any other person or organization proposed for this insurance: (1) Received any complaints or written demands or been a subject in litigation involving matters of privacy injury, breach of private information, network security, defamation, content infringement, identity theft, denial of service attacks, computer virus infections, theft of information, damage to third party networks or the ability of third parties to rely on the Applicant's network? (2) Been the subject of any government action, investigation or other proceedings regarding any alleged violation of privacy law or regulation? (3) Notified customers, clients or any third party of any security breach or privacy breach? (4) Received any cyber extortion demand or threat? (5) Sustained any unscheduled network outage or interruption for any reason? (6) Sustained any property damage or business interruption losses as a result of a cyber-attack? (7) Sustained any losses due to wire transfer fraud, telecommunications fraud or phishing fraud?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>b. In the past 12 months, has any IT service provider that the Applicant relies on sustained an unscheduled network outage or interruption lasting longer than 4 hours? If "Yes", did the Applicant experience an interruption in business due to such outage or interruption?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>c. Has the Applicant notified Tokio Marine HCC of all incidents or losses occurring, or claims, suits or demands received, in the past 12 months? If "No", forward complete details to Tokio Marine HCC immediately.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None to Report</p>

NOTICE TO APPLICANT

NOTICE TO NEW YORK APPLICANTS: ANY PERSON WHO KNOWINGLY AND WITH INTENT TO DEFRAUD ANY INSURANCE COMPANY OR OTHER PERSON FILES AN APPLICATION FOR INSURANCE CONTAINING ANY FALSE INFORMATION, OR CONCEALS FOR THE PURPOSE OF MISLEADING, INFORMATION CONCERNING ANY FACT MATERIAL THERETO, COMMITS A FRAUDULENT INSURANCE ACT, WHICH IS A CRIME.
The Applicant hereby acknowledges that he/she/it is aware that the limit of liability shall be reduced, and may be completely

exhausted, by claim expenses and, in such event, the Insurer shall not be liable for claim expenses or any judgment or settlement that exceed the limit of liability.

I HEREBY DECLARE that, after inquiry, the above statements and particulars are true and I have not suppressed or misstated any material fact, and that I agree that this application shall be the basis of the contract with the Underwriters.

CERTIFICATION, CONSENT AND SIGNATURE

The Applicant has read the foregoing and understands that completion of this application does not bind the Underwriter or the Broker to provide coverage. It is agreed, however, that this application is complete and correct to the best of the Applicant's knowledge and belief, and that all particulars which may have a bearing upon acceptability as an e-MD® / MEDEFENSE™ Plus Insurance risk have been revealed.

By signing below, the Applicant consents to the Insurer conducting non-intrusive scans of the Applicant's internet-facing systems / applications for common vulnerabilities.

It is understood that this application shall form the basis of the contract should the Underwriter approve coverage, and should the Applicant be satisfied with the Underwriter's quotation. It is further agreed that, if in the time between submission of this application and the requested date for coverage to be effective, the Applicant becomes aware of any information which would change the answers furnished in response to any question of this application, such information shall be revealed immediately in writing to the Underwriter.

This application shall be deemed attached to and form a part of the Policy should coverage be bound.

Must be signed by an officer of the company.

Print or Type Applicant's Name	Title of Applicant
Signature of Applicant	Date Signed by Applicant

California Fraud Warning

For your protection, California law requires the following to appear on this form: Any person who knowingly presents false or fraudulent information to obtain or amend insurance coverage or to make a claim for the payment of a loss is guilty of a crime and may be subject to fines and confinement in state prison.

The following Cyber Glossary is provided to assist you in completing your application correctly and completely.

DomainKeys Identified Mail (DKIM) is an email authentication method that allows senders to associate a domain name with an email message, thus vouching for its authenticity. A sender creates the DKIM by “signing” the email with a digital signature. This “signature” is located in the message's header.

Domain-based Message Authentication, Reporting & Conformance (DMARC) is an email authentication protocol that uses Sender Policy Framework (SPF) and DKIM to determine the authenticity of an email message.

Endpoint application isolation and containment technology is a form of zero-trust endpoint security. Instead of detecting or reacting to threats, it enforces controls that block and restrain harmful actions to prevent compromise. Application containment is used to block harmful file and memory actions to other apps and the endpoint. Application isolation is used to prevent other endpoint processes from altering or stealing from an isolated app or resources.

Common Providers: Authentic8 Silo; BitDefender™ Browser Isolation; CylancePROTECT; Menlo Security Isolation Platform; Symantec Web Security Service

Endpoint Detection and Response (EDR), also known as endpoint *threat* detection and response, centrally collects and analyzes comprehensive endpoint data across your entire organization to provide a full picture of potential threats.

Common Providers: Carbon Black Cloud; CrowdStrike Falcon Insight; SentinelOne; Windows Defender Endpoint

Immutable backups are backup files that are fixed, unchangeable, and can be deployed to production servers immediately in case of ransomware attacks or other data loss.

Multi-Factor Authentication (MFA) is an electronic authentication method in which a computer user is granted access to a website or application only after successfully presenting two or more pieces of evidence to an authentication mechanism: knowledge (e.g., password), possession (e.g., phone or key), and inherence (e.g., FaceID or hand print). MFA for remote email access can be enabled through most email providers.

Common MFA providers for remote network access: Okta; Duo; LastPass; OneLogin; and Auth0.

Next-Generation Anti-Virus (NGAV) is software that uses predictive analytics driven by machine learning and artificial intelligence and combines with threat intelligence to detect and prevent malware and fileless non-malware attacks, identify malicious behavior, and respond to new and emerging threats that previously went undetected. For purposes of completing this application, NGAV refers to anti-virus protection that focuses on detecting and preventing malware on each individual endpoint. If your organization has a NGAV solution **AND** you are centrally monitoring and analyzing all endpoint activity, please indicate that you have NGAV & EDR on the application.

Common Providers: BitDefender™; Carbon Black; CrowdStrike Falcon Prevent; SentinelOne; Sophos; Symantec

Offline/Air-gapped backup solution refers to a backup and recovery solution in which one copy of your organization's data is offline (i.e., disconnected) and cannot be accessed. If a file or system of files has no connection to the internet or a LAN, it can't be remotely hacked or corrupted.

Powershell is a cross-platform task automation and configuration management framework from Microsoft, consisting of a command-line shell and scripting language. It is used by IT departments to run tasks on multiple computers in an efficient manner. For example, Powershell can be used to install a new application across your organization.

Privileged Account Management Software (PAM) is software that allows you to secure your privileged credentials in a centralized, secure vault (i.e., a password safe). To qualify as PAM, a product must allow administrators to create privileged access accounts; offer a secure vault to store privileged credentials; and monitor and log user actions while using privileged accounts.

Common Providers: CyberArk and BeyondTrust.

Protective DNS Service (PDNS) refers to a service that provides Domain Name Service (DNS) protection (also known as DNS filtering) by blacklisting dangerous sites and filtering out unwanted content. It can also help to detect & prevent malware that uses DNS tunneling to communicate with a command and control server.

Common Providers: Zscaler; Quad9; OpenDNS; and public sector PDNS.

Remote Desktop Protocol (RDP) connections is a proprietary protocol developed by Microsoft which provides a user with a graphical interface to connect to another computer over a network connection. The Microsoft RDP provides remote display and input capabilities over network connections for Windows-based applications running on a server.

Security Information and Event Management system (SIEM) is a subsection within the field of computer security, wherein software products and services combine security information management and security event management. SIEM provides real-time analysis of security alerts generated by applications and network hardware.



Security Operations Center (SOC) is a centralized unit that deals with security issues on an organizational and technical level.

Sender Policy Framework (SPF) is an email authentication technique used to prevent spammers from sending messages on behalf of your domain. With SPF, your organization can publish authorized mail servers.

Vulnerability management tool is a cloud service that gives you instantaneous, global visibility into where your IT systems might be vulnerable to the latest internet threats and how to protect against them. The tool is an ongoing process that includes proactive asset discovery, continuous monitoring, mitigation, remediation and defense tactics to protect your organization's modern IT attack surface from cyber threats.

Common Providers: Qualys; InsightVM by Rapid7; and Nessus® by Tenable™