



Janusz Mierzejewski Commvault/Metallic

Metallic[®] Solution Overview Customer Presentation

Helping customers face today's challenges

Digital transformation accelerates as risks are rising...

Rising cybercrime

Cybercrime increased **400%** during the pandemic²

Constrained resources

45% of businesses say they lack the funds to prepare for ransomware; 61% believe they lack expertise³

Hybrid cloud data sprawl

80% of enterprises have a hybrid cloud strategy¹

State of the Cloud Report, Flexera, 2022
https://www.Entrepreneur.Com/article/349509
Cybersecurity in the Remote Work Era, Ponemon Institute, 2020

A Commyault Ventur

Safeguarding your data requires breadth, flexibility, and unmatched security

Mitigate your risk with <u>a simple, SaaS-delivered</u> solution



Comfortably meet SLA, retention and recovery requirements



Protect against ransomware and cyberthreats with layered security and early warning



Dynamically scale coverage, without egress charges



Deploy quickly and manage remotely

C	_	_	_	
L	С		כ	
L				
н				
1				

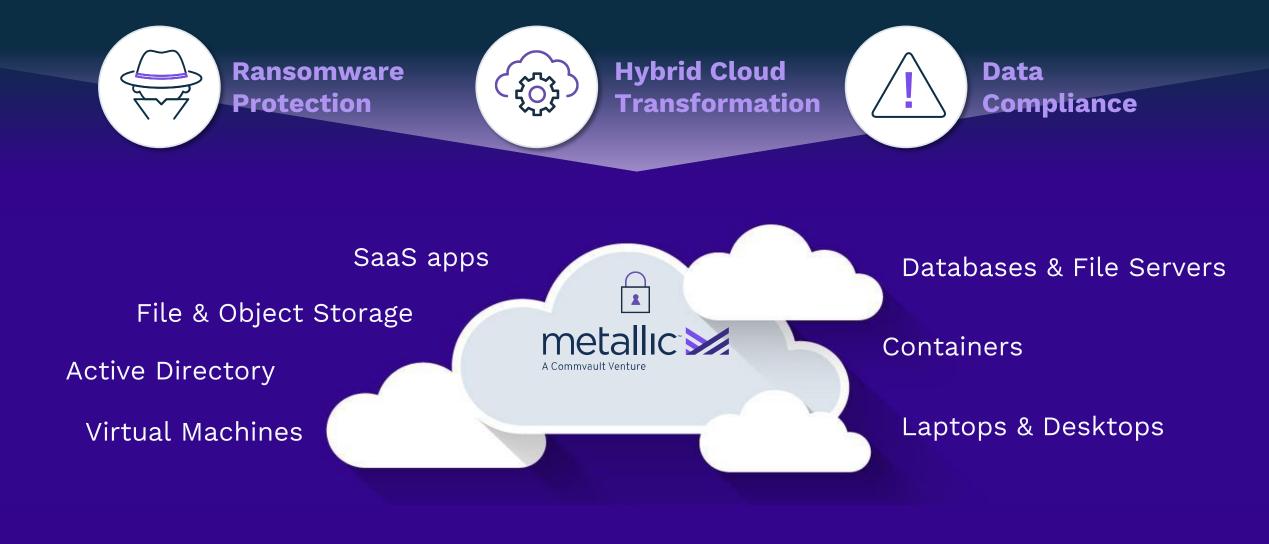
Remove capital, hardware, and infrastructure expenditures



Keep compliant with regulatory and eDiscovery controls



IDC projects DPaaS will surpass traditional DRP in 2021 or 2022¹

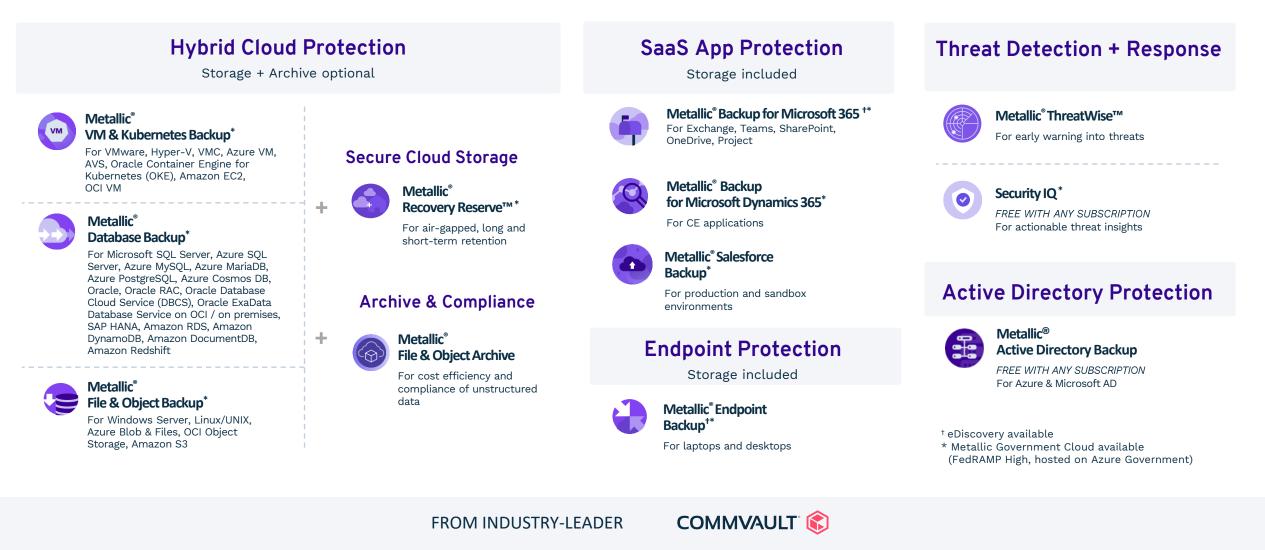


Industry-leading DMaaS from the minds of Commvault



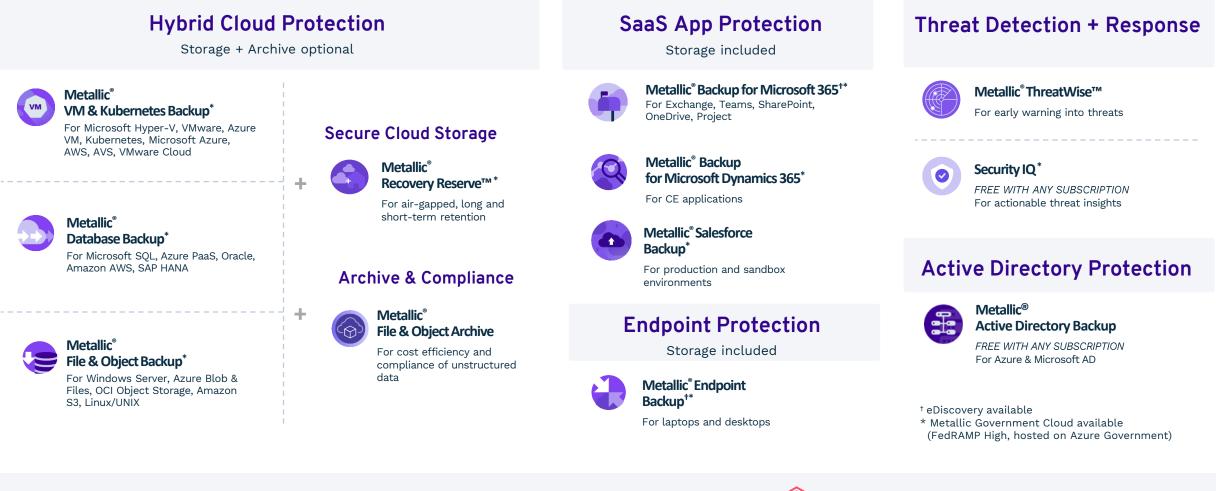
Metallic® SaaS Solutions

Data Protection as a Service (DPaaS) for your entire data estate



Metallic[®] SaaS Solutions

Data Protection as a Service (DPaaS) for your entire data estate

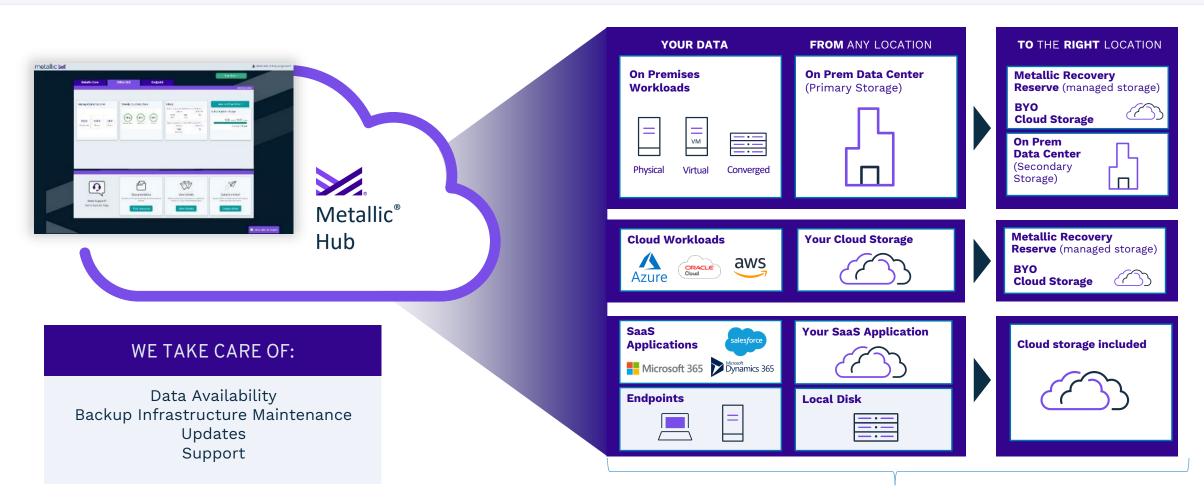


FROM INDUSTRY-LEADER

COMMVAULT[®]

Metallic: How It Works

The end user logs into Metallic for fast deployment and guided setup



Unique flexibility to protect and recover data close to the source for ultimate performance

Our Multi-Layered Security Approach

A new and differentiated approach to Data Protection



The Metallic[®] Difference

Cloud-based data backup from industry-leader Commvault

Safeguard your data and comfortably meet SLAs

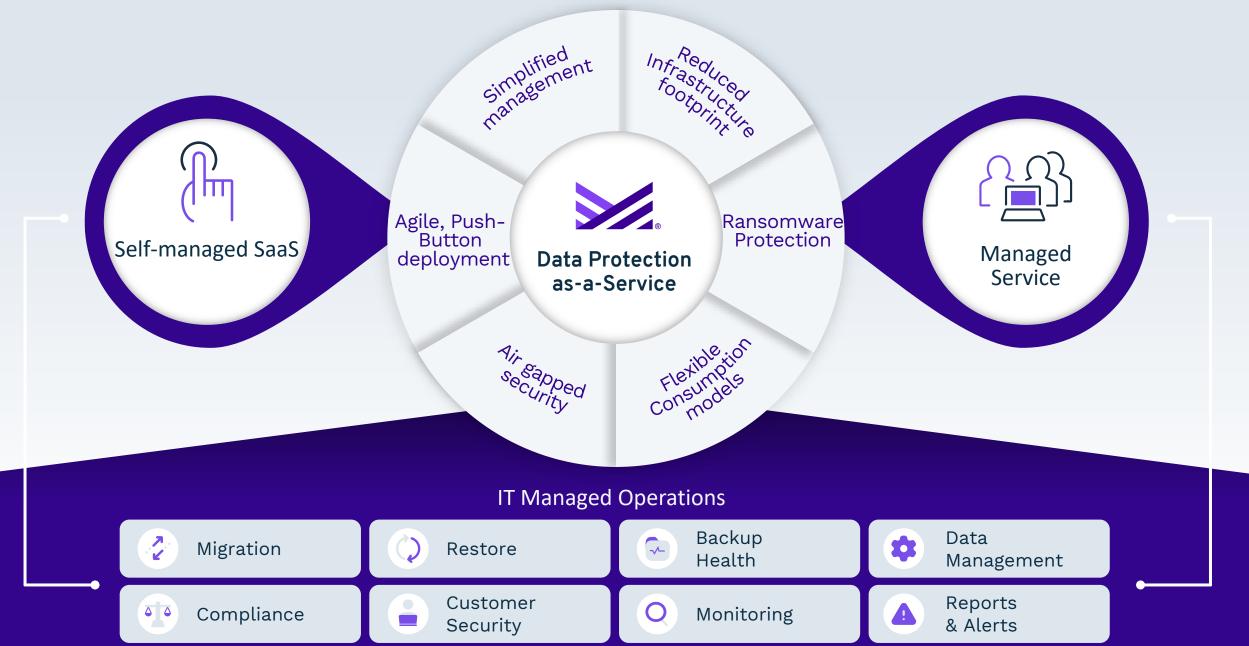








Protect your data, your way...



Recent Innovations: A Year in Review



New Offerings for SaaS App Protection

Comprehensive offerings including <u>Salesforce Backup</u>, <u>Dynamics 365 Backup</u>, and <u>Active Directory Backup</u>.

Δ		
	=	

New Enterprise and Multi-cloud Support

Continued addition of <u>multi-</u> <u>cloud support</u> across Microsoft, OCI and AWS from databases to VMs and storage.



Expanded Storage Offerings

Flexible tiers for <u>Metallic</u> <u>Recovery Reserve</u> on Azure or OCI, plus <u>Commvault</u> <u>HyperScale X</u> for managing data at the edge



Geo expansion

<u>APJ and EMEA</u> expansion now available in more than 30 countries and growing.



FedRAMP High Ready

for protection of <u>GCC High</u> <u>environments</u> – the only vendor in our space to achieve this stats

\bigcap	_
2	

Security Innovations

ThreatWise <u>early detection</u> <u>and warning</u> through cyber deception technology SecurityIQ for simple <u>security insights</u>

Γ	•	•	•
L	-	V	~

Enhanced Experience and Support

Support portal with <u>Knowledge Hub</u> <u>24x7 hotline</u> and <u>chat</u> support Customer Community



And More!

Continued product innovations, features and enhancements



Supported Platforms and Applications

File System Backup

- Linux/UNIX
- Windows Server

Hypervisors

- VMware
- Hyper-V

Application Databases

- Microsoft SQL Server
- Azure SQL Server
- Azure MySQL
- Azure MariaDB
- Azure PostgreSQL
- Azure Cosmos DB
- Oracle
- Oracle RAC
- Oracle Database Cloud Service (DBCS)
- Oracle Exadata Database Service on OCI / on premises
- SAP HANA
- Amazon RDS
- Amazon DynamoDB
- Amazon DocumentDB
- Amazon Redshift

Active Database

Microsoft ADAzure AD

Cloud Environments

- Microsoft Azure
- Amazon Elastic Compute Cloud (EC2)
- Amazon Elastic Block Store (EBS)
- Azure VMs
- Azure VMware Solution
- VMC
- OCI VMs

Containers

- Azure Kubernetes Service (AKS)
- Amazon Elastic Kubernetes Service (EKS)
- Oracle Container Engine for Kubernetes (OKE)
- Commvault Distributed Storage
- Any CNCF-certified Kubernetes Distribution, e.g.: RedHat OpenShift, VMware Tanzu, Rancher

Microsoft Dynamics 365

- Field Service
- Marketing
- Sales
- Customer Service

Microsoft 365

- Exchange Online
- SharePoint Online
- OneDrive
- Microsoft Teams
- Groups
- Project Online

eDiscovery

- Exchange Online
- SharePoint Online
- OneDrive
- Endpoints

Endpoints

- Linux
- MacOS
- Windows clients

- Amazon S3
- Microsoft Azure Blob
- Microsoft Azure Files

Cloud Storage

- Metallic Cloud Storage
- Microsoft Azure Storage
- Amazon S3
- HPE Cloud Volumes Backup

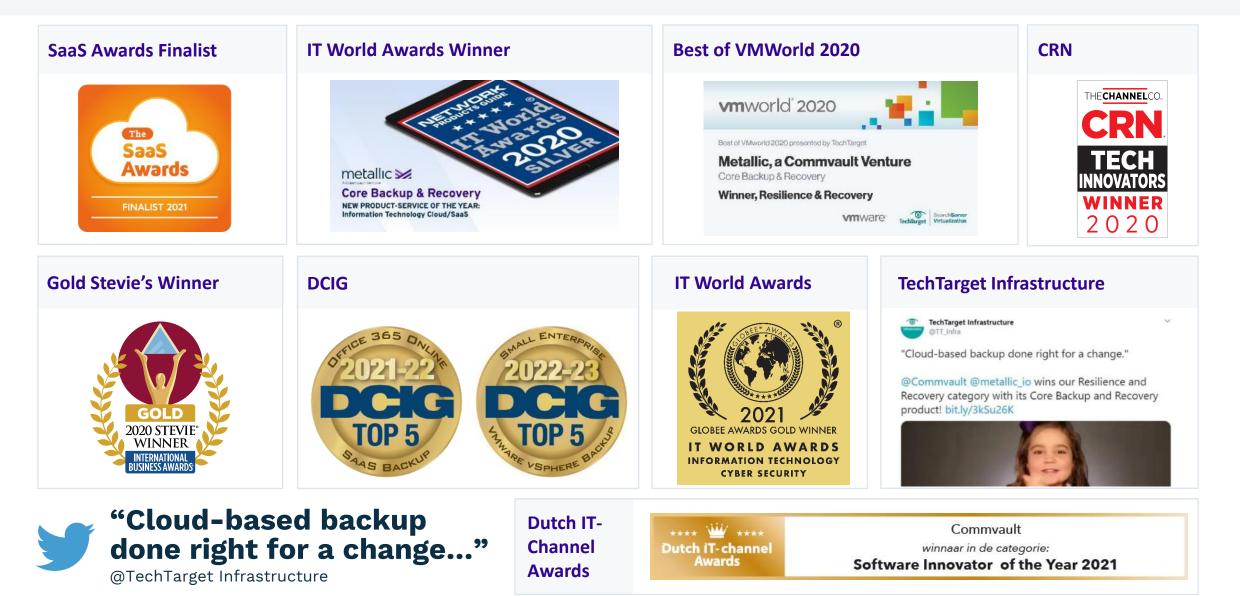
On-Premises Storage

- Commvault HyperScale X
- Commvault Distributed Storage
- NetApp E-Series
- Dell EMC > Isilon, DataDomain
- Pure Storage > FlashArray, Flashblade
- HPE > Primera, Nimble, 3PAR, StoreOnce Catalyst
- Hitachi > HNAS, VSP, HCP

Salesforce

- Sales Cloud
- Service Cloud
- Financial Cloud
- Health Cloud

What the Industry Is Saying About Metallic[®]...



Customers Are Living the Benefits

Across use cases and industries

Endpoints





It runs in the background and it's something that you install and then forget about ... For me, it works great and it does exactly what it says it does.

\bigcap	Benjamin Roper
	Enterprise Backup & Recovery
	Specialist
	Parsons



We're more efficient in all of our backups for Microsoft 365 because it's in a single pane of glass.

Kristian Smith] Technical Services and Support Manager Linamar







We are able to have all of our backups in the cloud now, and were even able to leverage our existing Azure storage. With Metallic, we no longer manage and maintain physical hardware which makes us financially and even technically more efficient.

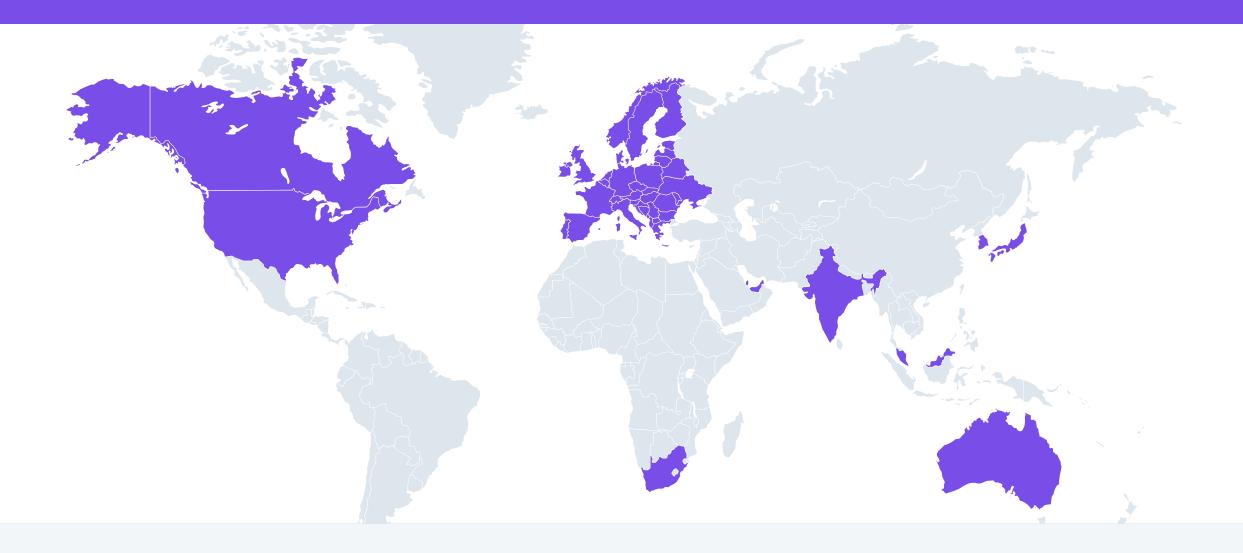
\mathcal{A}	J
	S
	S

Jeff Day Smith Systems Technical Supervisor State of Nevada DoT



We originally purchased Metallic Backup for Microsoft 365 and have since expanded that deployment [...] for File & Object and VM & Kubernetes Backup. The radical simplicity and unmatched scalability of Metallic is allowing us to completely rethink how we protect our data.

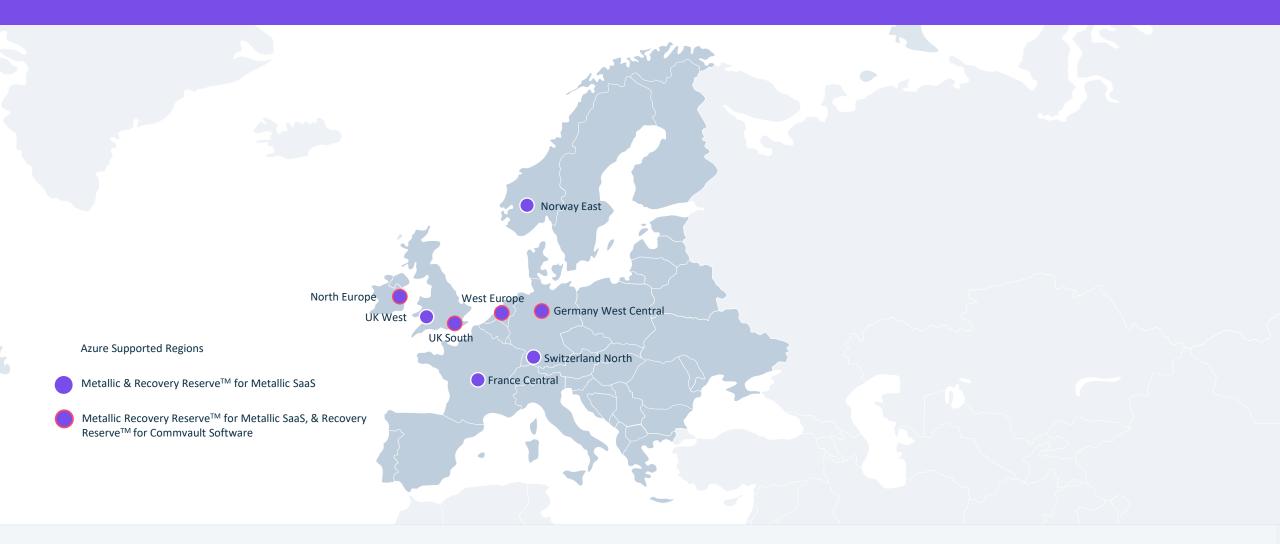
Peter Gregorowicz, Network Services Manager, Vancouver Community College



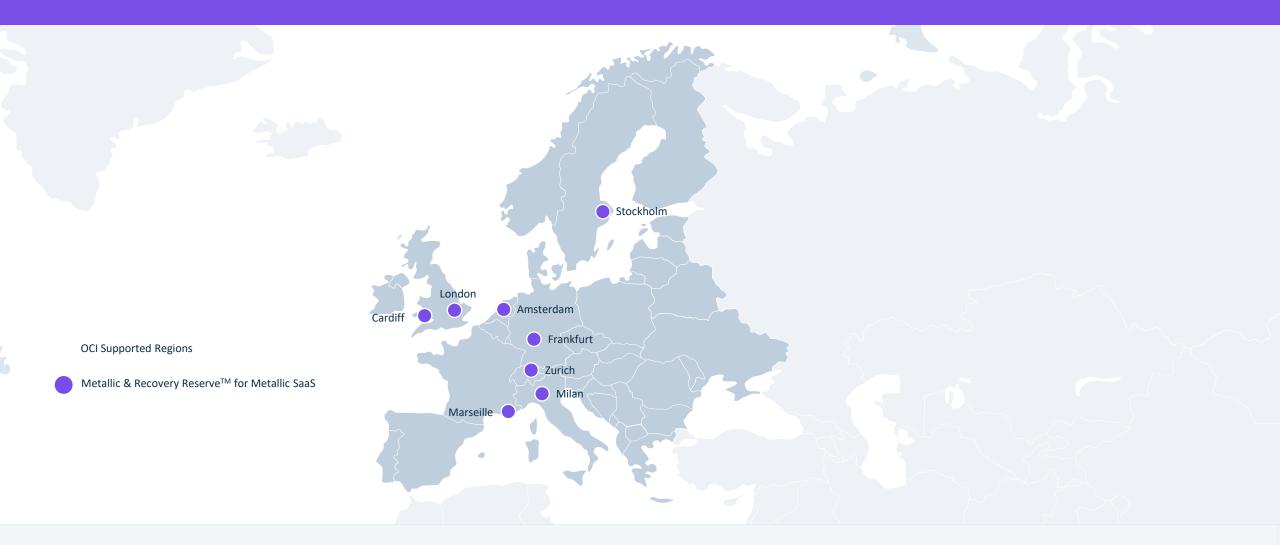
Metallic regional availability...



Metallic DMaaS is now available for purchase in **over 30 countries and growing**



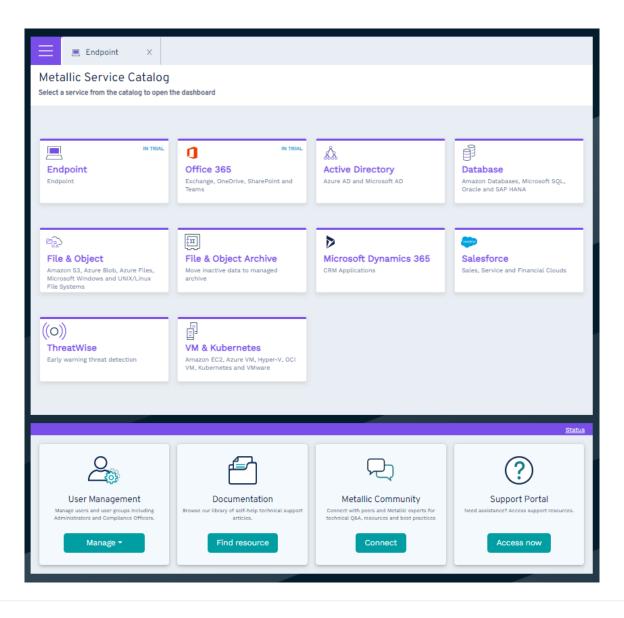






Metallic Hub

Designed to customers needs





Metallic® Partnership Slides (MSFT)



Copyright 2023 Metallic, A Commvault Venture. All rights reserved.



Extending our joint capabilities to customers in three ways:

Metallic provides a simple SaaSdelivered solution for world-class data protection of on-prem, cloud-native, and SaaS workloads like Microsoft 365.



Metallic is built leveraging the best of Azure PaaS and native services for secure, high performance and infinite scale for companies of all sizes.

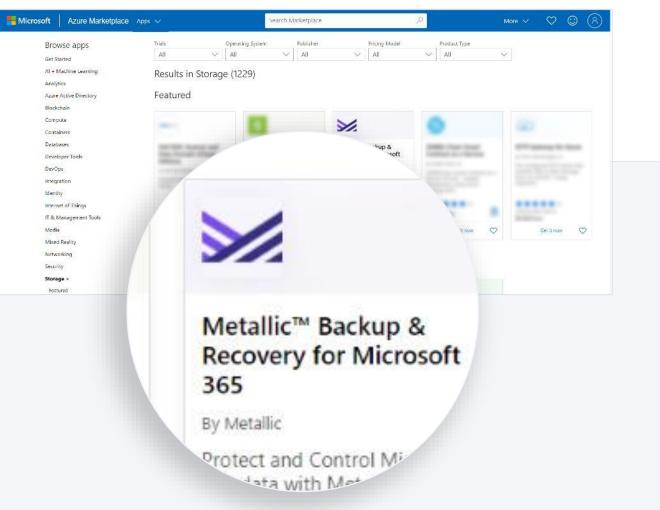
\bigcap
2

Metallic seamlessly leverages the durability, security, and scalability of Azure Blob Storage – for cloud data protection customers can trust.

For more information on the partnership, you can also visit: **www.microsoft.com/metallic**



Metallic[®] Is Featured on the Azure Marketplace!



Compatible with your existing Microsoft Enterprise Agreements

Both Available NOW!



Metallic[®] Backup for Microsoft 365

Metallic[®] Endpoint Backup

Ransomware/Security Slides



Copyright 2023 Metallic, A Commvault Venture. All rights reserved.

Agenda





\bigcap	
2	

Why dedicated ransomware protection

The importance of a multi-layered approach for your data How Metallic DMaaS helps



The Growing Sophistication of Cybercrime

Understanding the financial impact of cybercrime



A new ransomware attack will occur every **11 seconds** in 2021¹ Yet, half of cybersecurity pros believe their business is not prepared to combat a ransomware attack²

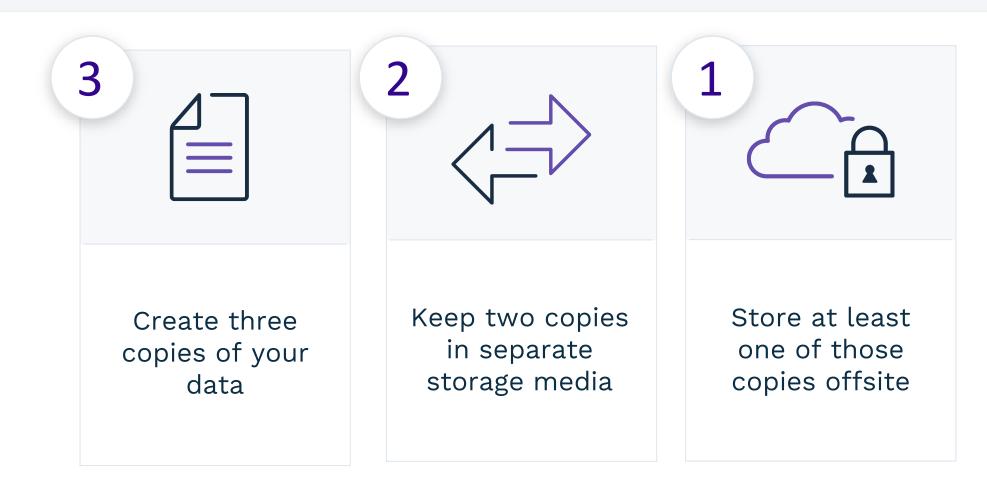




Cybercrime Magazine March 2020. "Top 5 Cybersecurity facts, Figures, Predictions, and Statistics for 2020 to 2021."
https://phoenixnap.com/blog/ransomware-statistics-facts
IBM 2020. "Cost of Data Breach Report."
https://safeatlast.co/blog/ransomware-statistics/#gref
https://blogs.gartner.com/andrew-lerner/2014/07/16/the-cost-of-downtime/

Simplifying the 3-2-1 Rule

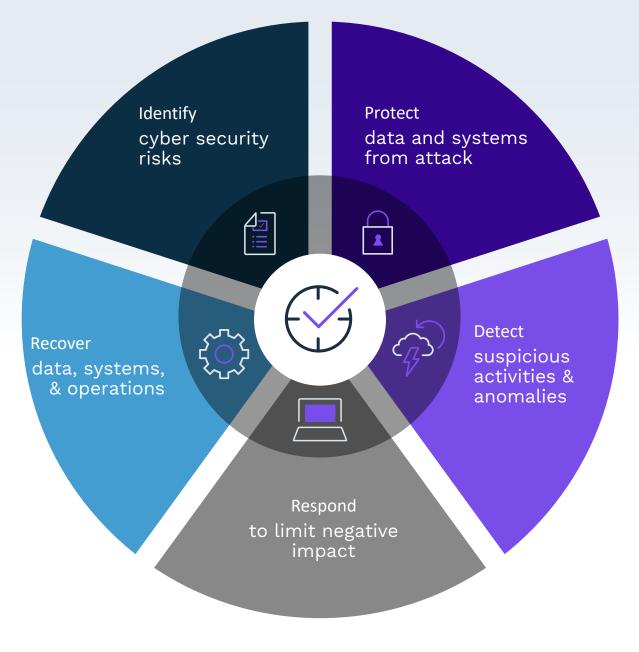
The cloud's role in data protection





A Ransomware Recovery Framework

A proactive strategy for your data



Three Keys for Comprehensive Ransomware Protection

A multi-layered approach to data protection





Protect

Preserve data with virtually air-gapped services





Your Data

Immutable, separated data copies prevent tampering, altering, or deletion in the event of a breach



Your Service

Isolated service architectures ensure backup and recovery utilities are available if production environments are penetrated





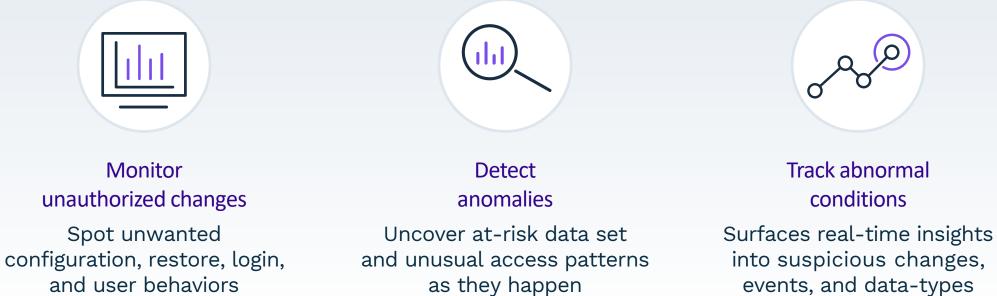




Detect threats and vulnerabilities early



Advanced insights to pinpoint active and latent risks



events, and data-types



Recover

Recover fast and eliminate downtime





Guidance

Intuitive recommendations on pre-ransomware recovery points

Speed

Optimized services for less redundancies and a higher availability of backup data

Precision

Granular search and flexible recovery options to restore data to the right place, at the right time



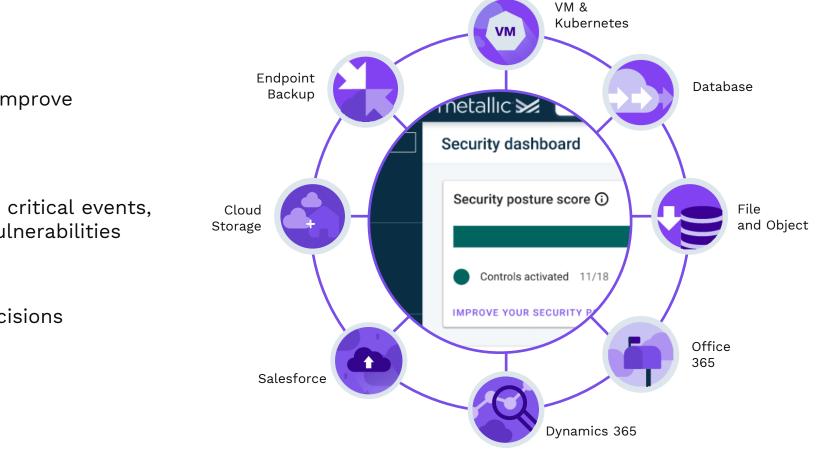
Our Multi-Layered Security Approach

A new and differentiated approach to Data Protection



Security IQ Dashboard

Advanced security tools and insights





Outcomes

Evaluate and continuously improve backup security stature



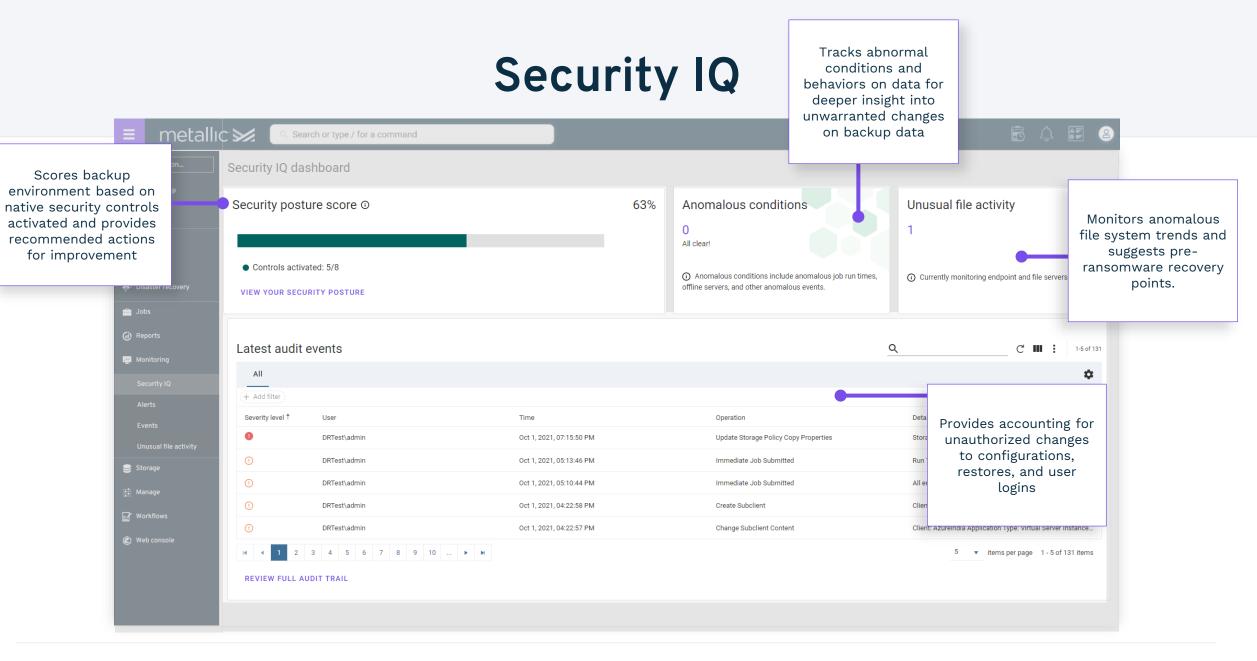
Insights

Gain real-time visibility into critical events, anomalous activities, and vulnerabilities

Recovery Points

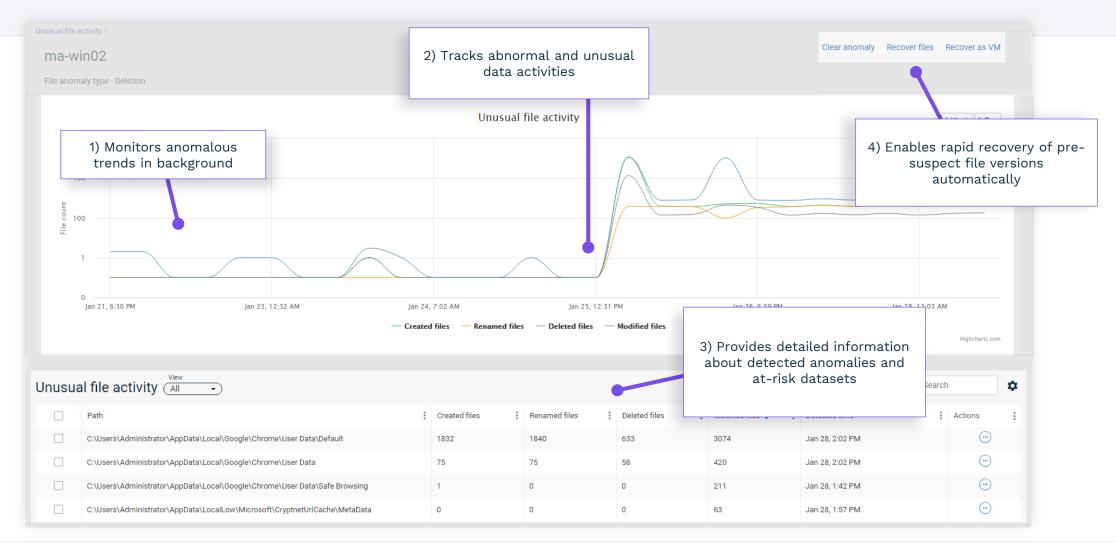
Make informed recovery decisions to exceed SLA objectives







Intelligent Ransomware Recovery





Security IQ Stories

Metallic Security IQ Dashboard surfaces information on security controls, data anomalies, and security audit information within the Metallic environment, bringing awareness to unusual events, suspicious behaviors, and potential threats which could impact data and backups.

The following are five practical examples of how Security IQ helps businesses identify risks, improve their security posture, and recover fast.



Security Posture

Customer Scenario

Company XYZ recently implemented a new MFA provider and did not proactively update their Metallic environment to reflect this change.

How Security IQ Helps

Secure Posture Score: Metallic intuitively detected this change and provided the user with recommended actions to configure their new MFA. Metallic also surfaced other native controls (such as key management, storage encryption, & more) which were disabled, but could be configured to further bolster their security stature within their backup environments.







Malicious Insiders

Customer Scenario

Company XYZ terminated a former contractor but failed to revoke system access. The former contractor used their active credentials to re-enter their environment and attempt to delete sensitive data in mass.

How Security IQ Helps

Multi-authorization: Metallic multi-authorization prevented this deletion, as all deletion and restore attempts require additional authorization (from another administrator) to execute. This helps prevent both accidental and destructive tasks. As a result, the rogue user was not able to execute this action, and the organization was made aware of the attempt.

Audit Trails: Metallic audit trails captures all user actions within the environment, including logins, configuration changes, backup, and restore attempts. This provided Company XYZ with clear line of sight into the former contractor's activities and malicious attempts.







External Attack

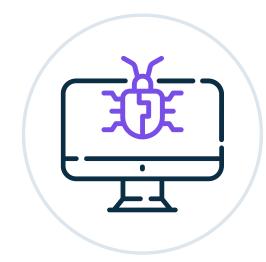
Customer Scenario

A zero-day threat had successfully penetrated Company XYZ's environment, without them knowing. The bad actor began embedded itself across systems to preparing to encrypt Company XYZ's data.

How Security IQ Helps

Anomalous Condition: Metallic identified offline servers, elevated resource loads, and slower than usual backups caused by data change, flagging this for Company XYZ. As a result, they were able to proactively cut-off infected systems and begin sanitization efforts – avoiding a successful ransomware payout.

Unusual File Activity (file systems & endpoints): Built-in anomaly detection was triggered, providing Company XYZ with visibility into an unusual number of files being created, changed, and renamed. Company XYZ was able to monitor these patterns and quickly execute an automated preanomalous recovery, rolling back data to a pre-suspect state.







Threat Response

Customer Scenario

Customer XYZ's security team has identified malicious applications within their environment, and fear that these malicious applications were also backed up.

How Security IQ Helps

Unusual File Activity (file systems & endpoints): With file anomaly detection, Metallic provides great insight into data changes, and allow preanomalous recoveries of data. Data can also be recovered out of place for forensic or investigative purposes of infected systems and datasets.

Data Sanitization: Metallic helps locate threat applications within backup content and quarantine the malicious applications in backups. This allows organizations to isolate datasets, to safely recover data without reinfection. You can also choose to restore the quarantined items out of place for forensic purposes.







Security Audit

Customer Scenario

Customer XYZ is required to provide detailed information to Security Auditors pertaining to what security controls are applied protecting Metallic backups, such as MFA, Dual Auth, and Encryption.

How Security IQ Helps

Security Posture Score: With Metallic, you can easily gauge security levels and quickly enable missing parameters to bolster security posture of your environment. Users can also view a comprehensive list of leveraged security controls, and export details for offline access and review.

Audit Trail: With easily exportable audit trails, Metallic enables users to send information via email, on schedule, or with the use of APIs for offline preservation into another monitoring system.





For more information on Security IQ, as well as Metallic's entire multi-layered approach to security, visit metallic.io/security-compliance

ThreatWise™



Copyright 2023 Metallic A Sommvault Venture. All rights reserved.

Strengthening customer security with Metallic

Innovative data security services in the cloud

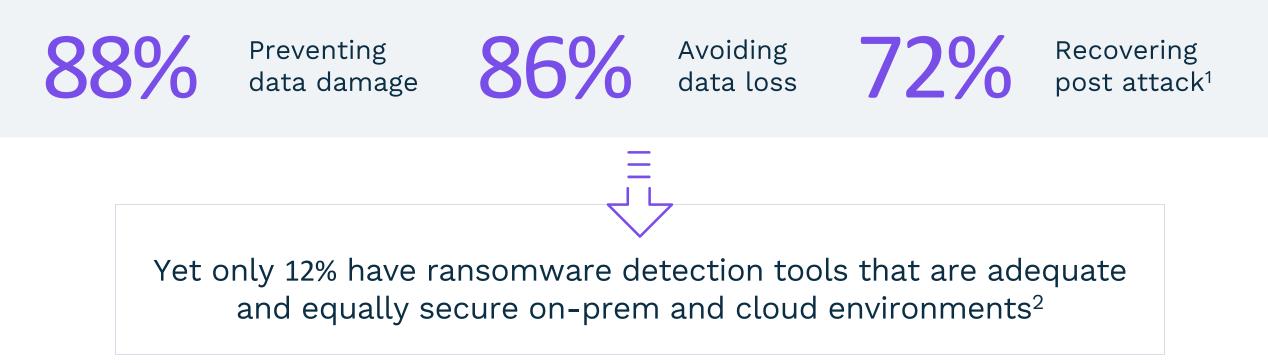




Lines Between Data Protection & Security are blurring

As ransomware surges, new data protection imperatives emerge

What keeps IT up at night?

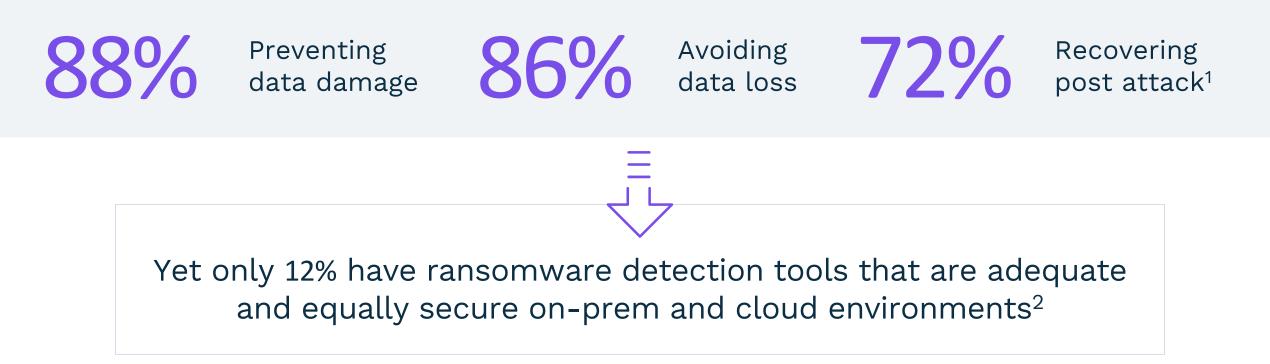




Lines Between Data Protection & Security have blurred

As ransomware surges, new data protection imperatives emerge

What keeps IT up at night?

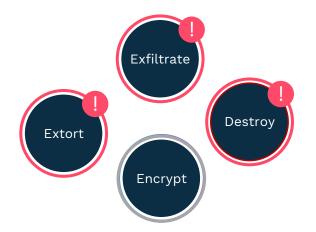




Confronting New Wave of Cyber Threats

Double and Triple Extortion Tactics

Ransomware featuring, exfiltration, extortion, or damage has increased 83%.²





Introducing Metallic[®] ThreatWise™

Industry Leading DMaaS meets Cyber Deception

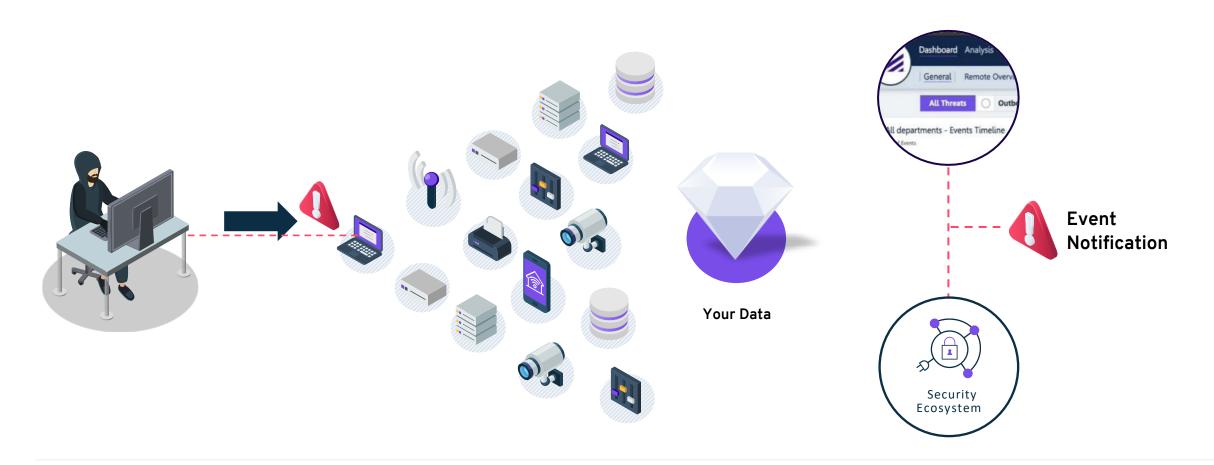
Data Protection starts before your data is compromised.



- Mimic real assets
- Trick bad actors
- Expose threats early
- Contain attacks before impact



Lightweight, Highly-Accurate Threat Signals





Metallic[®] ThreatWise[™]

Integrated Cyber Deception



	III. Threats	0 0	utbound Thre	ats 💿	Internal Ti	hreats		Sh	ow: Last week	All Departmenti~	
All departmen # of Events	its - Events	Timeline		ound Threat	s 🔳 leternal Th	hreats	Department Eve Department Administrator	ents (98) Risk Level •	Type Imarial	# Of Events 55	
20											
10											
0 04.00 08.00	12:00	16:00	20 05	і. 37. Мау	04:00	C0 00					
1 300	96 2022	10.01	1.2022 88	\$1.05.20	22	.u.,					
Traps			Top 10 Eve	ents			Threat Stat	istics			
			Source IP	Attacks	Dectination IP	Attacks					
10	0		172.161.92		164-68121-40	2		00		0	
Emulation Traps	FullOS Traps		172.181.90	*		1		30		U	
					45.01.188.208	- 1		Trap events	Network Int	elligence Events	
					78352153	4	-				
					93.95.227.171	1	4 tr	fection	0 Both	let & CC	
	aps				104,344,73,85	1	16	teraction	O Make	are & Trojan	
Workstation Tr					145,299,76.95	- 1					
Workstation Tr	4				195.201.141.188	1	-4 R	econnaissance	0 Intell	igence Gathering	
Workstation Tr	4 📀										
Workstation Tr	4 📀	11					37 c	onnection			

Early Warning Ransomware Detection



Intelligent decoys that mimic and behave-like legitimate assets



Precise alerts to pinpoint threats without falsepositives or alert-fatigue



Rapid scalability to protect entire environments and applications in seconds



Simple SaaS delivery with flexible, lightweight architecture

Data protection starts *before* you're compromised.

Data Centric Advantage

Vision for upcoming Releases



Alerting Benefits

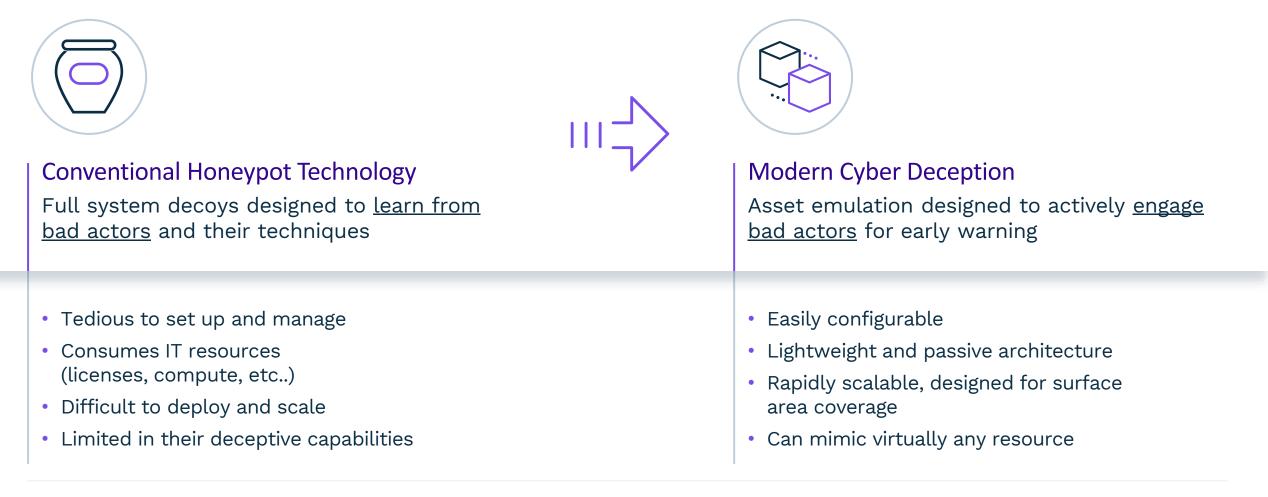
Attacks on sensors are related to real assets and their data value

Alerts trigger both SIEM incidents and backup and recover playbooks



The Need for Modern Cyber Deception

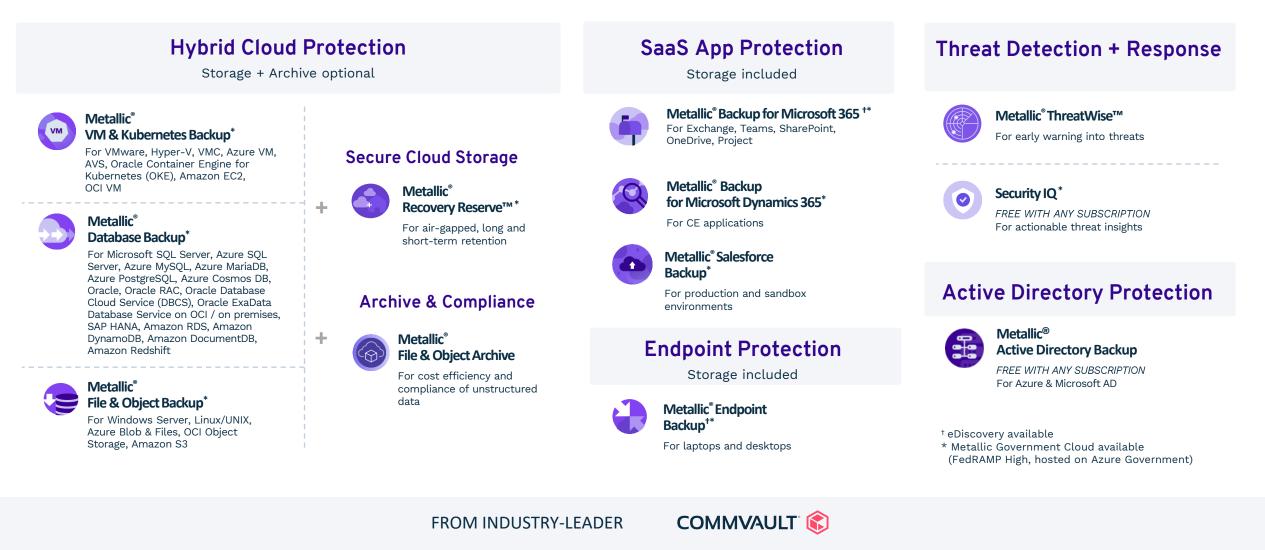
Evolution of next-generation deception





Metallic® SaaS Solutions

Data Protection as a Service (DPaaS) for your entire data estate



Our Multi-Layered Security Approach

A new and differentiated approach to Data Protection



ustomer Environmenx

rust authenticat.

access

irtual air sap

hnutability

Deception

With built-in zero-trust security protocols, Metallic meets the most stringent confidentiality, integrity, and availability standards for government agencies and business, alike

Customer Environment:

Advanced cyber deception for early warning into ransomware and malicious intent.

Security DPR:

Foundational detection, protection, and response services across the entire Metallic surface – from the Edge to the Data.

Zero-Trust Authentication:

Stringent user authentication protocols built on FIPS 140-2 framework.

Zero-Trust Authorization and Access:

Hardened controls with privileged identity management to prevent unwarranted access.

Virtual Air-gap:

Cloud-based architecture, isolated and separate from source environments via security domains.

Immutability:

Robust, multi-layered controls for tamper and deletion prevention.

Deception & Detection:

Intelligent monitoring and risk identification to deceive and flag threats early in the attack life-cycle.



Bridging the Gap: Extending <u>DATA</u> Protection Beyond Backup

End-to-End Protection from Metallic



Metallic[®] ThreatWise[™]

Cyber Deception & Active Defense

Spot ransomware threats before data impact.

- Identification of zero day & unknown threats
- Rapid discovery, recon, & lateral movement detection
- Patented baiting, decoy, and threat sensor technology
- High-fidelity notification system

Security IQ

Actionable Threat Insights

Deep insights into suspicious data and behaviors.

- Security posture validation
- Anomalous and unusual file monitoring
- Pre-ransomware recovery suggestions
- Dataset isolation and reinfection prevention
- Commvault honey-pots

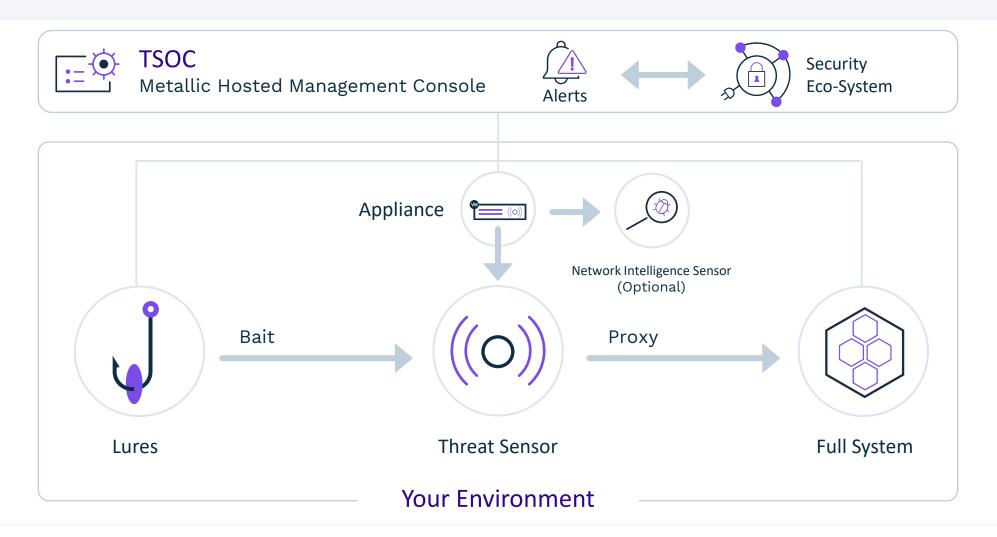
Metallic[®] Backup

Data Backup & Recovery

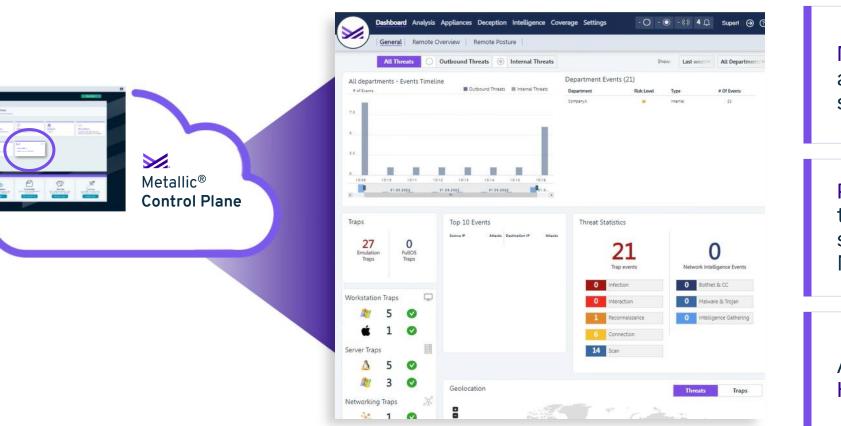
Proven and reliable recoverability.

- Virtually air-gapped architecture
- Post-attack, rapid recovery controls
- Hardened-security controls baked-in
- eDiscovery & SLA compliance

High Level Architecture









Manage ThreatWise™ appliances, deploy threat sensors and view events

Point of Integration to Security Eco-System such as SIEM, Firewall, NAC and Sandboxes

Accessed via Metallic Hub/Control Plane





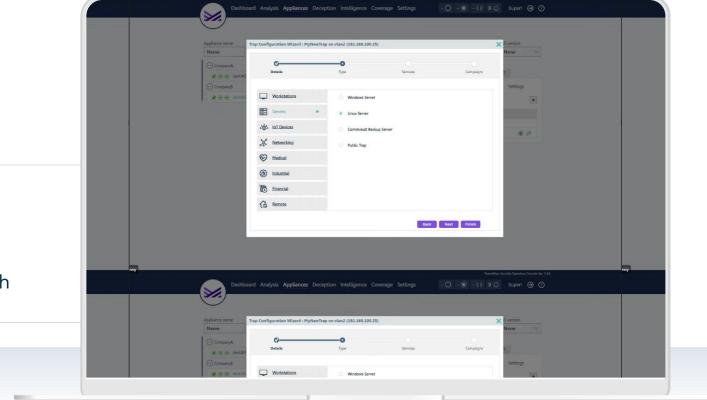
Threat Sensors

Infrastructure Components

Medium interaction decoys that replicate network assets

- Quick deployment via Wizard
- Easy scalable via Mass Deployment
- Seamlessly customizable and blend-in
- Up to 512 sensors per appliance

	=	<u></u> УМ	(Im
Databases	Servers	VMs	and much more







Threat Sensor Deployment

Out of the box



Replicated Network Assets

- Highly scalable due to mass and bulk deployment
- Seamless blend in due to configurable services
- Deployed in Seconds

Category	Used Cases				
Workstation	• Windows, Linux or Mac Endpoints				
Servers	DatabasesBackup Servers	Virtual Machines			
IoT Devices	PrinterSecurity Cameras	Point of SaleSmart Lights			
Networking	• Switches (incl. PBX)	• VPN			
CUD Medical	• MRI • CT	PACS Systems			
င်္နို _{က္က} Industrial	• SAP • PLC	• SCADA			
S Financial	• SWIFT	• ATM			

Indistinguishable Threat Sensor

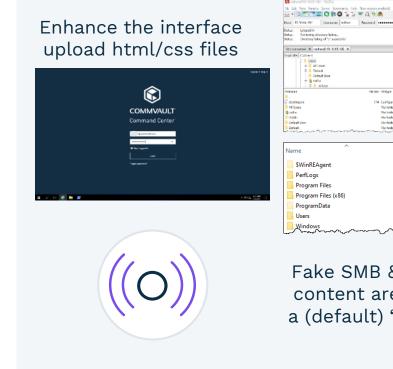
To blend-in each Sensor type has various ways to enhance the configuration

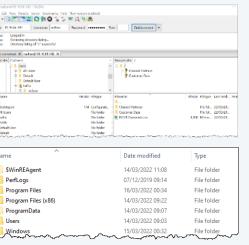
Threat Sensor Type: Windows Server 2019

Replicate a

Backup Server

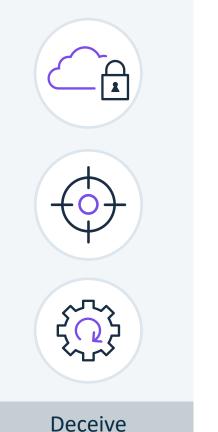






Fake SMB & FTP enabled content are uploaded to a (default) "Data" folder

Individualize Sensor Template



re-use templates in multiple deployments



Where Deception Helps

Last mile defense for ransomware attacks

SIEM – Better with Deception



- Insight where SIEM can't reach
- Detects stealth techniques
- Reduces meantime to response

Vulnerability Management – Better with Deception



- Reduces risk during the patch cycle
- Guards against Zero-day exploits

Perfect with Pen Testing

- Informs Sensor distribution
- Demonstrates value

Protection and countermeasures against active and successful attacks

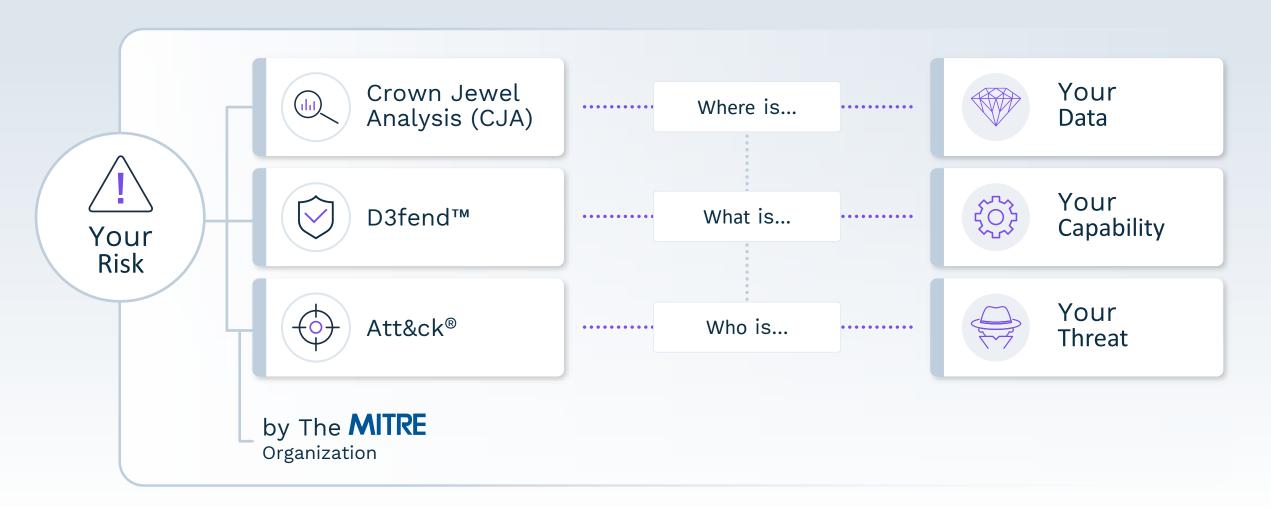
netallic

A Commvault Ventur



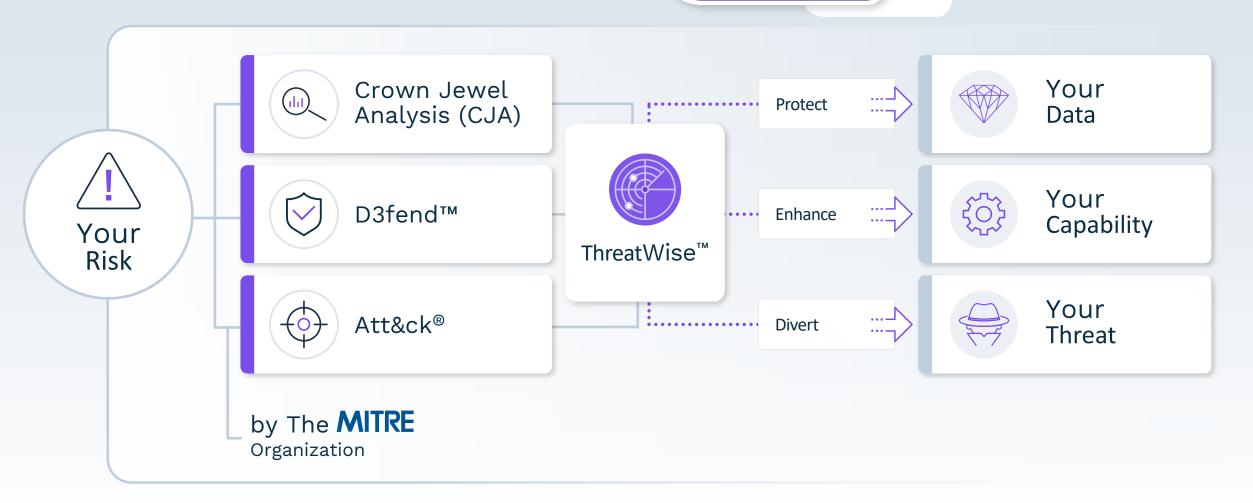


Data Protection











Closing Slides



Copyright 2023 Metallic, A Commvault Venture. All rights reserved.

Q & A

Try Metallic® for yourself Get a free trial today at <u>metallic.io/trial/</u>

Take Metallic for a test drive!

Technology is changing faster than ever. Choose data protection that's up in minutes, agile for years.

Check us out at Metallic.io

Start your free trial today!



Thank You!



Copyright 2023 Commvault Systems, Inc. All rights reserved. Metallic, Metallic and the "M Wave" logo, and the "M Wave" logo are the trademarks or registered trademarks of Commvault Systems, Inc. All third party brands, product names, service names, trademarks or registered trademarks are the property of and used to identify the products or services of their respective owners.

Appendix



Copyright 2023 Metallic, A Commvault Venture. All rights reserved.