

# Digital transformation accelerates, as risks are rising

**Digital transformation** accelerates as **risks are rising**.

## Hybrid cloud data sprawl

80% of enterprises have a hybrid cloud strategy<sup>1</sup>

## Rising cybercrime

Cybercrime increased 400% during the pandemic<sup>1</sup>

## Constrained resources

75% of companies report lack of resources as a top challenge in cloud adoption<sup>4</sup>



1. <https://www.Entrepreneur.Com/article/349509>  
2. State of the Cloud Repost, Flexera, 2021  
3. State of the Cloud Repost, Flexera, 2021

# SaaS Apps are transforming the workplace

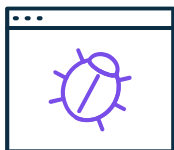
But data loss threatens productivity...

## Top Causes for SaaS app data loss<sup>1</sup>

### DATA CORRUPTION

21%

Complications from integrations or service unavailability



### MALICIOUS ATTACK

25%



19% ransomware & external attacks



6% internal bad actors

### ACCIDENTAL DELETION

20%

User or Admin error



\*\* Other data loss stems from misunderstood retention policies, gaps in current backup solutions, account closure, and more  
1 Source: ESG, The Evolution of Data Protection Cloud Strategies, 2021

# Microsoft recommends third-party data protection

Yet only 13% of businesses understand their role in safeguarding data<sup>1</sup>

## Microsoft shared responsibility model<sup>2</sup>:



### Microsoft responsibility

Availability of Office 365 applications



### Customer responsibility

Protecting their own data

Responsibility	SaaS	PaaS	IaaS	On-prem	
Information and data	Customer	Customer	Customer	Customer	Customer responsibility
Devices (Mobile and PCs)	Customer	Customer	Customer	Customer	
Accounts and identities	Customer	Customer	Customer	Customer	
Identity and directory infrastructure	Microsoft	Customer	Customer	Customer	Varies by service type
Applications	Microsoft	Customer	Customer	Customer	
Network controls	Microsoft	Customer	Customer	Customer	
Operating system	Microsoft	Microsoft	Customer	Customer	Cloud provider responsibility
Physical hosts	Microsoft	Microsoft	Microsoft	Customer	
Physical network	Microsoft	Microsoft	Microsoft	Customer	
Physical datacenter	Microsoft	Microsoft	Microsoft	Customer	
	Microsoft	Customer			

<sup>1</sup> Source: ESG, The Evolution of Data Protection Cloud Strategies, 2021

<sup>2</sup> <https://docs.microsoft.com/en-us/azure/security/fundamentals/shared-responsibility>

<sup>3</sup> How does – or did your organization recover Office 365 data? (Percent of respondents, N= 296), ESG Research, Data Protection Cloud Strategies, June 2019

<sup>4</sup> <https://www.microsoft.com/en-us/servicesagreement>

Office 365 Retweeted



**Azure Marketplace** @AzureMktPlace · Jun 30

Make sure your [#Microsoft365](#) data is recoverable from accidental deletion, corruption, or malicious attack with [#SaaS](#) backup & recovery from [@Metallic\\_io](#): [aka.ms/AA8udbv](https://aka.ms/AA8udbv)

Microsoft

Get it from  
Microsoft Azure  
Marketplace

**Metallic Office 365  
Backup & Recovery**



25

21



# Why Dedicated Backup for Office 365?

Extended beyond native controls

## Native Tools

No data separation

Recycle bin limitations

Baseline recovery controls

No retention/restore SLAs



## Dedicated Solutions

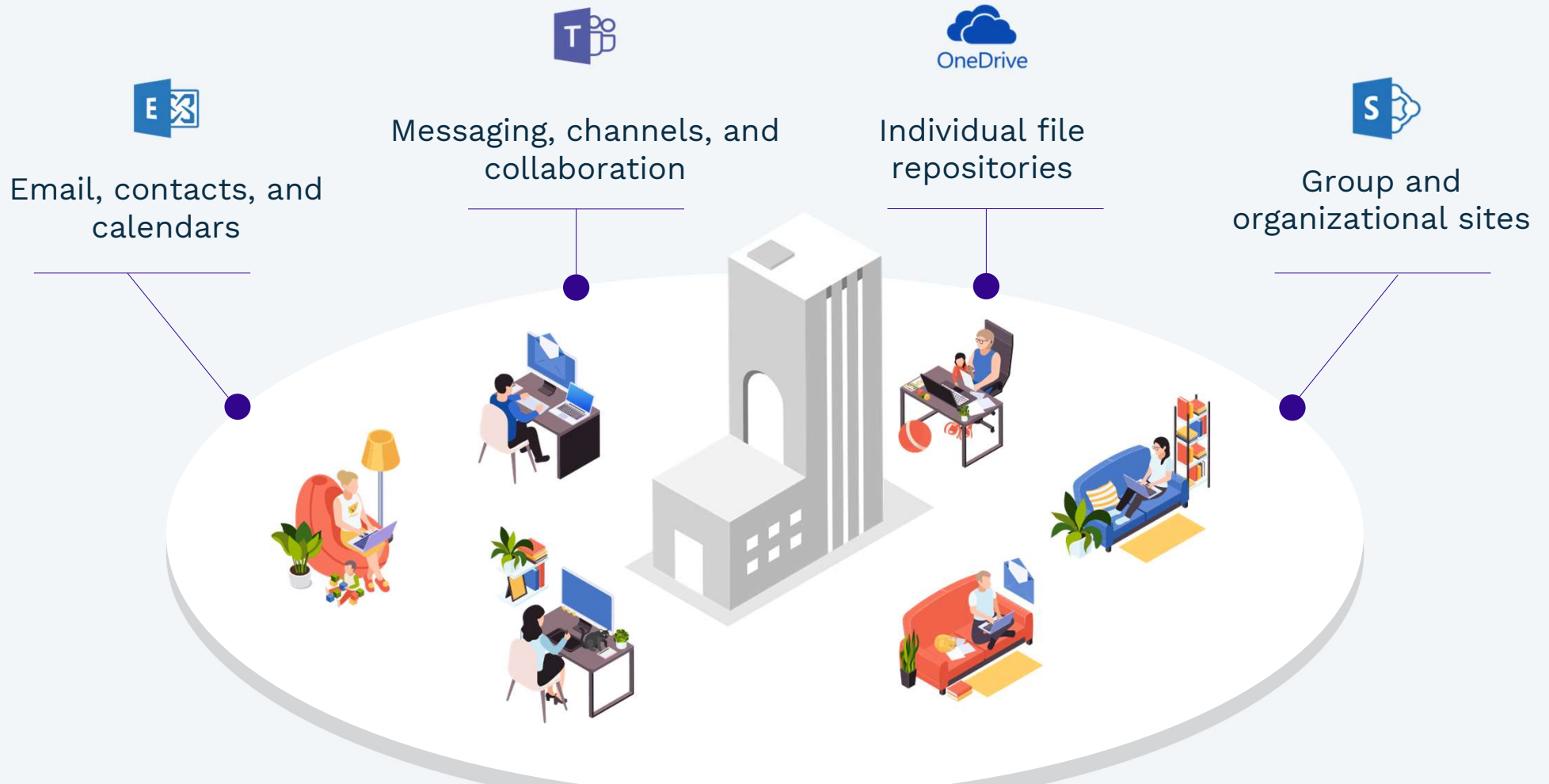
Isolated backups from source data

Long term, extended retention

Flexible and rapid restore options

Dedicated controls for SLA compliance

# Office 365 Requires Comprehensive Coverage



# Our Multi-Layered Security Approach

A new and differentiated approach to DMaaS

## YOUR DATA

### On Premises Workloads



Physical Virtual Converged

### Cloud Workloads



### Endpoints



### SaaS Applications



Threat Sensors &  
Ransomware  
Alerts

Data encryption  
in-flight/at-rest

Isolated  
virtual  
air-gap



Separate  
security domain

### Early threat detection

- Anomaly detection
- Trends & insights
- User behaviors



Metallic™ BaaS  
Control Plane

Built-on

Microsoft Azure



Multi-factor Authentication  
Zero-trust access controls



Immutable  
data backups



# The Metallic<sup>®</sup> Difference

Cloud-based data backup from trusted leaders, Commvault + Microsoft Azure

## Safeguard your data and comfortably meet SLAs

**No compromise SaaS**  
enterprise-grade coverage with  
reduced management overhead

**Up in minutes**  
pre-configured plans & best  
practices built-in

**Unique SaaS Plus**  
storage flexibility for  
performance and value

**Isolated, immutable backups**  
air-gapped coverage from  
deletion or attack



### Layered security

ransomware protection, advanced  
encryption, and comprehensive  
access controls

### Ultimate performance

flexible, granular search with  
rapid restore options

### Data compliance

GDPR, ISO 27001, & SOC2 Type II  
compliant\*

\* customers remain responsible for complying with applicable laws

# Metallic® DMaaS

Future-proof data backup and recovery – as a simple, cloud-native solution.

## SaaS Applications

Unlimited storage included.



**Metallic® Office 365 Backup†**  
For Exchange, Teams, SharePoint, OneDrive, Project



**Metallic® Backup for Microsoft Dynamics 365**  
For CRM applications



**Metallic® Salesforce Backup**  
For production and sandbox environments

## Hybrid Cloud Data Protection

Metallic® Recovery Reserve™ available as a storage target.



**Metallic® VM & Kubernetes Backup**  
For VMware, Hyper-V, VMC, Azure VM, AVS, Kubernetes, Amazon EC2



**Metallic® Database Backup**  
For Microsoft SQL Servers, SAP HANA, AWS, Oracle



**Metallic® File & Object Backup**  
For Windows Server, Linux/UNIX, Azure Blob & Files, Amazon S3



## Cloud Storage

Secure cloud storage.



**Metallic® Recovery Reserve™**  
For long and short-term retention

## Ransomware Detection

Integrated cyber deception.



**Metallic® ThreatWise™**  
For early warning into threats

## Endpoints

Unlimited storage included.



**Metallic® Endpoint Backup†**  
For laptops and desktops

## Active Directory

FREE w/any paid Metallic subscription.



**Metallic® Active Directory Backup**  
For Azure & Microsoft AD

†eDiscovery available



Metallic Government Cloud also available (FedRAMP High, hosted on Azure Government)

From the minds of Commvault with the power of Microsoft Azure



# Supported Platforms and Applications

## File System Backup

Linux/UNIX  
Windows Server

## Hypervisors

VMware  
Hyper-V

## Application Databases

Microsoft SQL Server  
Oracle  
SAP HANA  
Active Directory  
AWS

## 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 Service (OKE)  
Commvault Distributed Storage  
Any CNCF-certified Kubernetes Distribution, e.g.:  
RedHat OpenShift, VMware Tanzu, Rancher

## Microsoft Office 365

Office 365 Exchange Online  
Office 365 SharePoint  
Office 365 OneDrive  
Office 365 Teams  
Office 365 Groups  
Office 365 Project Online

## eDiscovery

Office 365 Exchange Online  
Endpoints

## Microsoft Dynamics 365

Sales CRM  
Marketing CRM  
Field Service CRM  
Customer Service CRM

## Endpoints

Linux  
MacOS  
Windows clients

## Object Storage

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

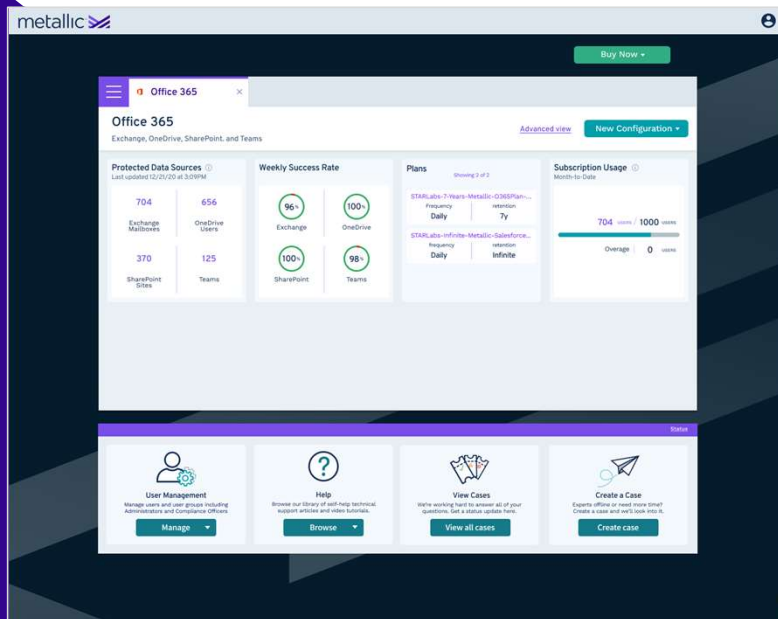
## Salesforce

Sales Cloud  
Service Cloud  
Financial Cloud  
Health Cloud

erved.

# Metallic® Office 365 Backup

For SharePoint, OneDrive, Exchange, Teams, and more



## Total protection for your Microsoft investment



**Comprehensive coverage** of Exchange, OneDrive, SharePoint, Teams, and more



**Highly performant** with granular search and flexible point-in-time/out-of-place restore options



**All inclusive TCO** via unlimited Azure storage with unlimited retention built-in



**Robust controls**, hardened security, and intuitive eDiscovery to meet SLA regulatory requirements

**It's your Office 365 data – protect it!**

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# Compliance That Spans Your Workloads

Robust search, that works across Office 365, laptops, and desktop data

## eDiscovery for Metallic supports:



Exchange  
Online



Endpoints

With the eDiscovery package from Metallic, you get inclusive coverage that fluidly spans across Office 365 and Endpoint workloads, making compliance a breeze.



# Office 365 Backup

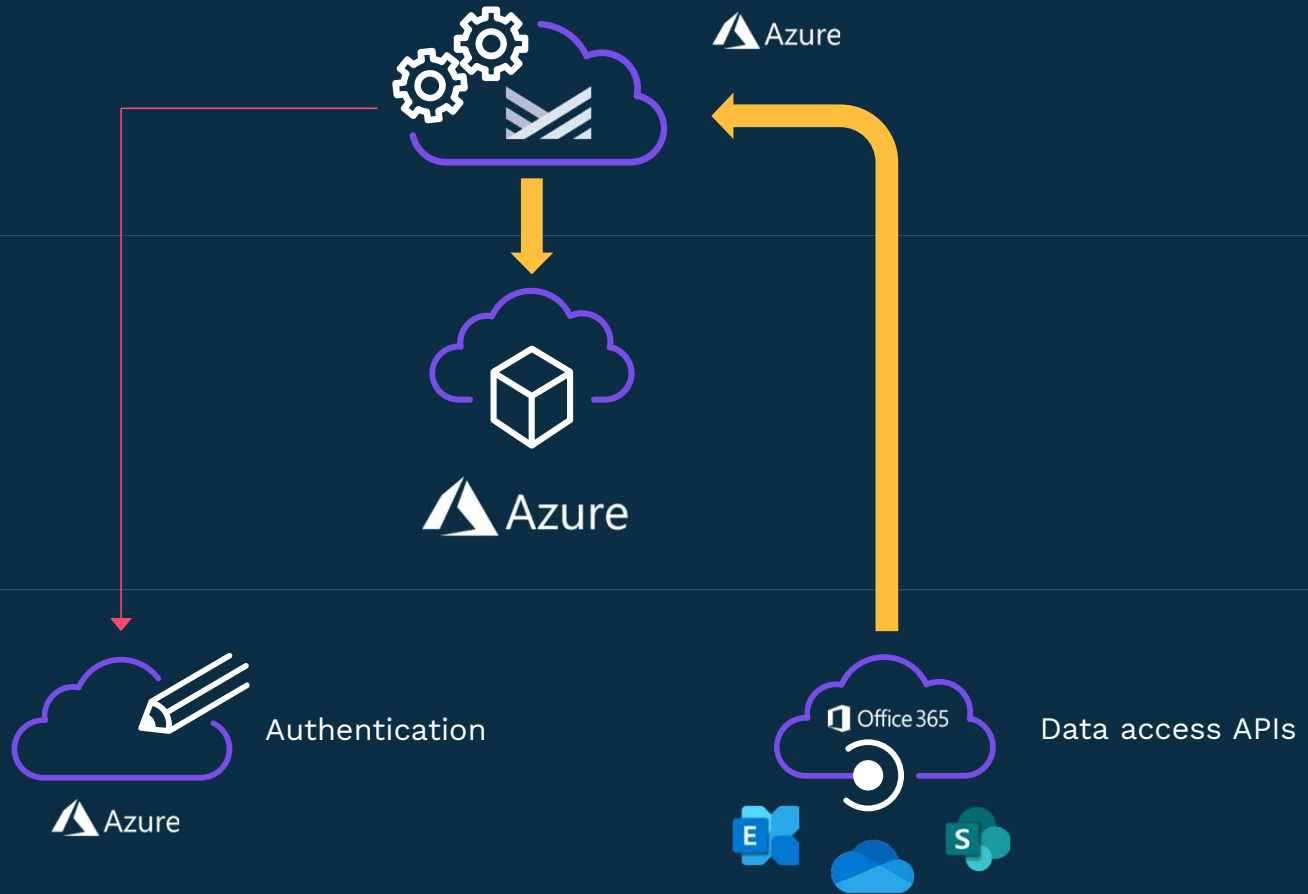
- Backup data flow
- Signaling traffic

Deployment models

Backup Services

Storage

Source Data



# Office 365 - Protected Data

## What is protected

### Exchange Online



- User Mailboxes
- Group Mailboxes
- Public Folders
- Auto-discovery of:
  - All Users
  - AD groups
  - Mailboxes

### SharePoint Online



- Files
- File versions
- Folders
- Libraries
- Lists and List Items
- Sites and sub sites
- Pages
- Permissions
- Forms
- Templates

### OneDrive



- Files
- File versions
- Folders
- Auto-discovery
- Users
- Groups

# Office 365 - Recoverable Data

## What can you recover

### Exchange Online



- Emails Entire Mailbox  
Calendars Contacts
- To Disk (MSG files)
- To Source mailbox
- To Different mailbox
- Data from deleted mailboxes
- Deleted items

### SharePoint Online



- Sites
- Large file (> 2Gb)
- Top-level site
- Sub-sites
- Documents/List Items
- In-place to original location
- Out-of-place with in Site
- Deleted list/Library
- Out-of-place  
(different site sub-site)

### OneDrive



- Files
- File versions
- Folders
- OneDrive for Business accounts
- Restore to
- Cloud (in-place)

# Office 365 - Protected Data

## What is protected

### Project Server Online



- Lists and Libraries in project site
- Deliverables
- Task lists

### Groups



- Groups created in Outlook
- Yammer Groups
- Planner Groups

# Office 365 - Recoverable Data

What can you recover

## Project Server Online



- In-place to original location
- Out-of-place in Project Site
- Deleted list/Library
- Project site
- Deliverables
- Task lists

## Groups



- In place within Group Mailbox
- Out of place to other Group Mailboxes
- In place within SharePoint Group Sites
- Out of place to other SharePoint Group Sites

# Teams In-place Restore Capabilities

Type	Description	Backup		In-Place Restore	
Teams	<ul style="list-style-type: none"> <li>Private Teams</li> <li>Public Teams</li> <li>Org-wide Teams</li> </ul>	Fully Supported		Fully Supported	
Channels	<ul style="list-style-type: none"> <li>Regular Channel</li> <li>Private Channel</li> </ul>	Fully Supported		Fully Supported	
Tabs	<ul style="list-style-type: none"> <li>Posts</li> <li>Files</li> <li>Wiki</li> <li>Website</li> <li>Word, Excel, PowerPoint, PDF</li> <li>Document Library</li> </ul>	Fully Supported		Fully Supported	
Tabs	<ul style="list-style-type: none"> <li>Tab Name</li> <li>Type</li> <li>Settings</li> <li>Planner</li> <li>Streams</li> <li>Forms</li> <li>OneNote</li> <li>Power BI</li> <li>SharePoint page</li> <li>SharePoint list</li> <li>External (non MSFT apps like Jira, Box, etc.)</li> </ul>	<b>Supported:</b> <ul style="list-style-type: none"> <li>Tab Name</li> <li>Type</li> <li>Settings</li> </ul>	<b>Unsupported:</b> <ul style="list-style-type: none"> <li>Planner</li> <li>Streams</li> <li>Forms</li> <li>OneNote</li> <li>Power BI</li> <li>SharePoint page</li> <li>SharePoint list</li> <li>External apps</li> </ul>	<b>Supported:</b> <ul style="list-style-type: none"> <li>Tab Name</li> <li>Type</li> <li>Settings</li> </ul>	<b>Unsupported:</b> <p>Data within this tab is not restored.</p> <p>As data for these apps resides in other applications, after restore of tab you need manually associate the tab to the required data source.</p> <p>Please see MSFT API limitations for Tab restore <a href="#">here</a></p>
Posts	<ul style="list-style-type: none"> <li>Conversation items</li> <li>Replies</li> </ul>	Fully Supported		Fully Supported	
Files	<ul style="list-style-type: none"> <li>Files</li> </ul>	Fully Supported		Fully Supported	

# Granular Recovery for Exchange Example

Recover smallest unit of data direct to target  
limiting data traversing networks for  
the most accurate, speediest recovery possible

## Identify the right data to recover

- Search for users by name
- Select the item level to recover (message, folder, mailbox)
- Identify specific mail items (From, To, Subject, etc.)
- Apply optional filters (e.g., specify date range, cloud copy)

## Recover direct to desired destination

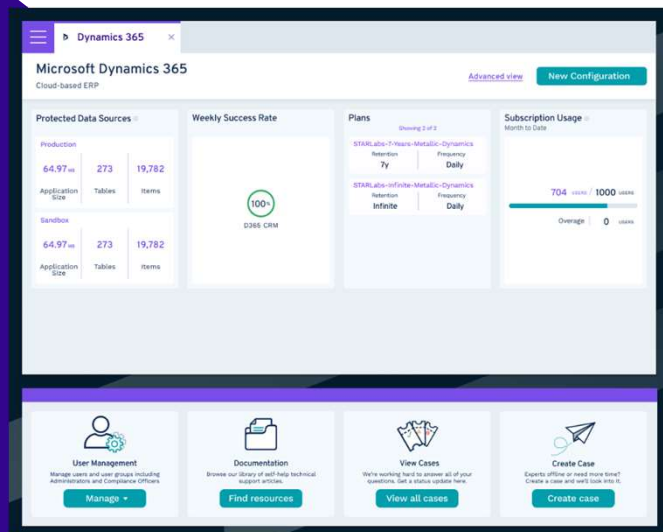
- Recover to original source user
- Recover to different users' mailboxes

A screenshot of a search interface for granular recovery. It features several input fields: 'From' (containing 'o365user1'), 'To' (with a mouse cursor), 'Subject', 'Folder', and 'Mail size' (set to 'Greater than'). There is a checkbox for 'Has attachment' and a 'KB' field. Below these is a 'Contains' field and a 'Received' field. A large blue 'Search' button is at the bottom.

A screenshot of the 'Restore options' panel. It includes a 'Restore to' dropdown set to 'Mailbox', a 'Destination host' dropdown set to 'Kaly\_Inc\_Exchange', and a 'Destination path' field containing 'o365user2' with a 'Browse' button. There is a checkbox for 'Restore to original folder' and a 'When message exists' section with radio buttons for 'Overwrite unconditionally' (selected) and 'Skip'.

# Metallic<sup>®</sup> Backup for Microsoft Dynamics 365

For CE applications



## Automated protection for your CE data



**Full-fidelity backups** of tables, rows, columns, attributes, files, and more



**Flexible restore** with item-level, point-in-time, and direct-to-production recovery options



**Sandbox management** to populate and retain environments with granular control



**Meet SLA compliance** with unlimited Azure storage and unlimited retention included

**Safeguard your Sales, Marketing, Service, and Field data.**

# Trust the experts with your Dynamics 365 data



## Data integrity

Automated protection from migration to maturity.

Boost productivity while meeting recovery SLAs



## Worry-free retention

Unlimited retention across CE environments.

## Immediate restores

Direct restores for better speed & precision.



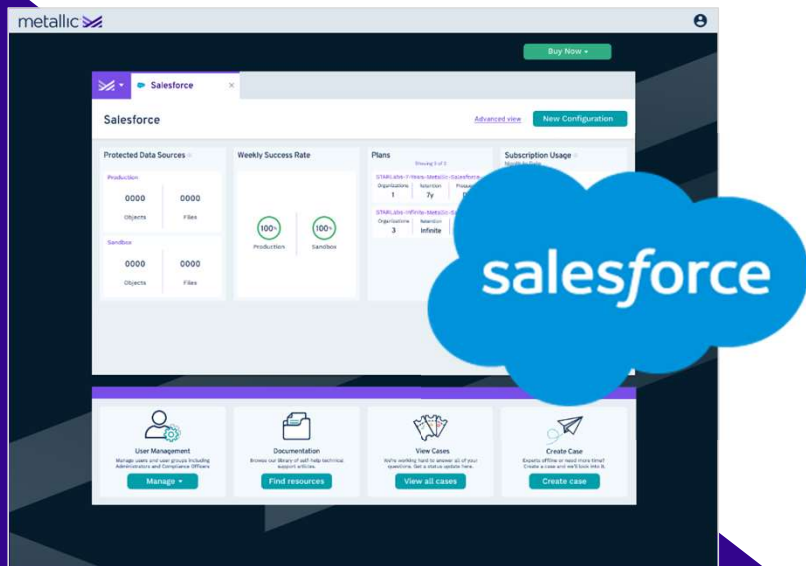
## Single solution

Proven protection for Dynamics 365, Office 365, the Microsoft Cloud – and beyond.



# Metallic® Salesforce Backup

For production + sandbox environments



## Hassle-free protection for your Salesforce Cloud



**Automate backups** and protect multiple orgs - all from a single view.



**Preserve content**, relationships, files, custom objects, profiles, metadata, seed data, and more...



**Rapidly recover** deletion or attack with granular, version, and in-place restore options



**Seed, retain, and repopulate** sandbox environments for development and testing

Industry-proven protection for your Salesforce investment.

# Salesforce - Protected Data

What's protected and recoverable



## Supported Applications

Sales Cloud  
Service Cloud  
Financial Cloud  
Health Cloud



## Supported Editions

Developer  
Enterprise  
Performance  
Unlimited



## Supported Environments

Production  
Sandbox



## Content

Users  
Profiles  
Metadata  
Layouts  
App settings



## Objects

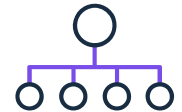
Default objects  
used to store data  
(Ex – Accounts,  
Contacts)

Custom objects  
created used to  
store data  
(Ex – Invoices)



## Files

Files  
File versions  
Folders  
Attachments  
Libraries  
Groups

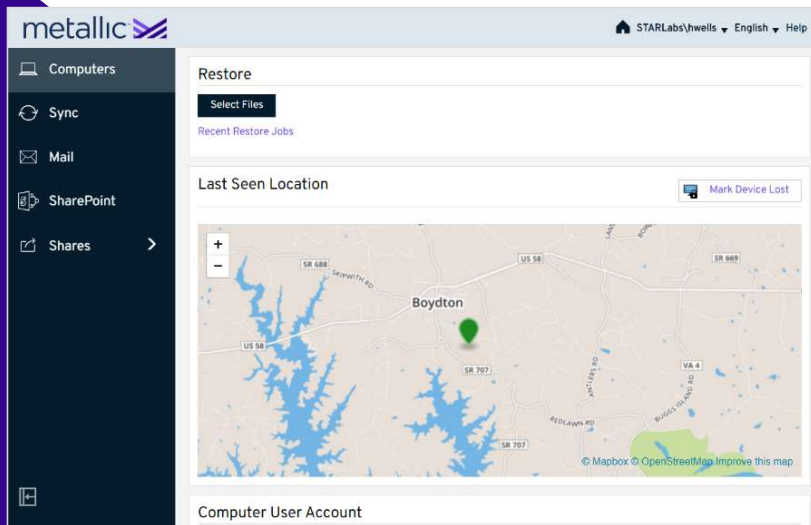


## Relationships

Parent  
Child  
Links between  
objects

# Metallic® Endpoint Backup

For Linux, MacOS, and Windows clients



## Enterprise-grade protection for your remote workforce



**Silent backups:** seamless, uninterrupted end user experience



**Reduced downtime:** anomaly detection, item-level search, and cross OS restore options



**Unrivaled control:** prevent misuse and drive regulatory compliance with geo-location, remote data wipe, and eDiscovery



**SLA compliance:** unlimited storage and 1 year of retention included, with additional eDiscovery capabilities available

*\*Extended data retention also available*

**A system is only as strong as its most vulnerable laptop.**

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# Anomaly Detection Capability for Core & Endpoint

## Ransomware risk mitigation

### Detect pattern deviations

- For the first 7 days, File Systems protected by Metallic are monitored and analyzed for day-to-day activity.
- After 7 days, a base line of file activities is established
- Activities on endpoints are checked every 5 minutes and any abnormal activity is reported

### Honeypot file detects possible ransomware

- Periodic monitoring of File Systems for rogue access of hidden file

#### File Activity Anomaly Alert

Type	Operation - Event Viewer Events
CommCell	cs-sp15
Detected Criteria	1. Event Viewer Events

Event ID 137605

Monitoring Criteria (Event Code equals to 7:211|7:212)

Severity Critical

Job ID 0

Event Date Tue Jun 18 17:06:51 2019

Program CVD

Client cs-sp15\_2

Description Detected file activity anomaly of type [Created Deleted ] in last 5 minutes. Number of files Modified [390] Deleted [29028] Renamed [4] and Created [2306]. Please verify the data on the machine.

Please click for more details

Generated At: Tue Jun 18 17:07:26 2019

# Endpoint Backup

- Backup data flow
- Signaling traffic

Deployment models

Backup Services



Storage

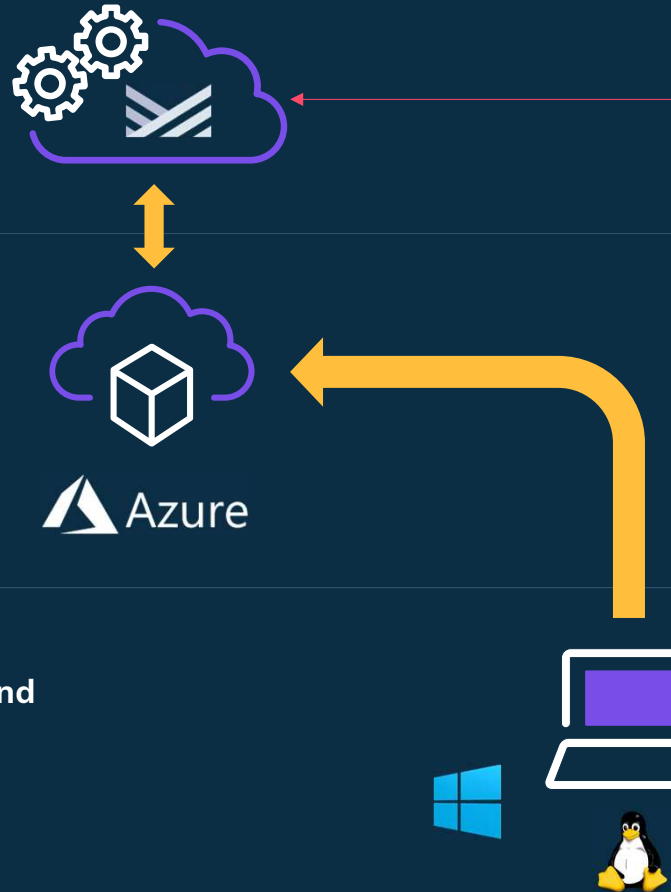


Azure

Source Data



**Silent  
deployment and  
management**



# Granular Recovery for Endpoint Example

Recover smallest unit of data direct to target  
limiting data traversing networks for  
the most accurate, speediest recovery possible


## Identify the right data to recover

- Search for users or devices by name
- Select the item level to recover (file, folder)
- Apply optional filters (e.g. specify date range)

## Recover direct to desired destination

- Recover to original location on the Laptop or Desktop
- Download the file directly via the browser

Backup content

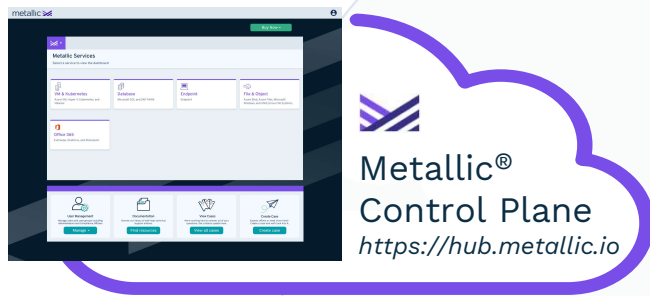
 [Show latest backup ▼](#)

[Download](#) [Restore](#) [...](#)

default / C: / Users / Administrator / Documents

<input type="checkbox"/>	Name	Size	Modified Time
<input type="checkbox"/>	My Music	0 B	Jun 23, 2015 1:40 PM
<input type="checkbox"/>	My Pictures	0 B	Jun 23, 2015 1:40 PM
<input type="checkbox"/>	My Videos	0 B	Jun 23, 2015 1:40 PM
<input checked="" type="checkbox"/>	CVaaSandRansomware [Autos...	4.15 MB	May 17, 2017 8:08 AM

# DMaaS With Full Flexibility for Your Hybrid Cloud



## SaaS plus means:

- Flexibility for cloud OR on-premises backup target
- Flexibility to leverage your existing storage investments – cloud or on-prem
- Flexibility to choose Commvault's integrated on-premises scale-out storage

### Metallic® VM & Kubernetes Backup

For VMware, Hyper-V, VMC,  
Azure VM, AWS,  
Kubernetes, Amazon EC2

### Metallic® Database Backup

For Microsoft SQL Servers,  
SAP HANA, AWS, & Oracle

### Metallic® File & Object Backup

For Windows Server,  
Linux/UNIX, Azure Blob &  
Files, Amazon S3

#### 1. Backup copies in cloud



#### 2. Existing on-prem storage



#### 3. HyperScale™ X on-prem

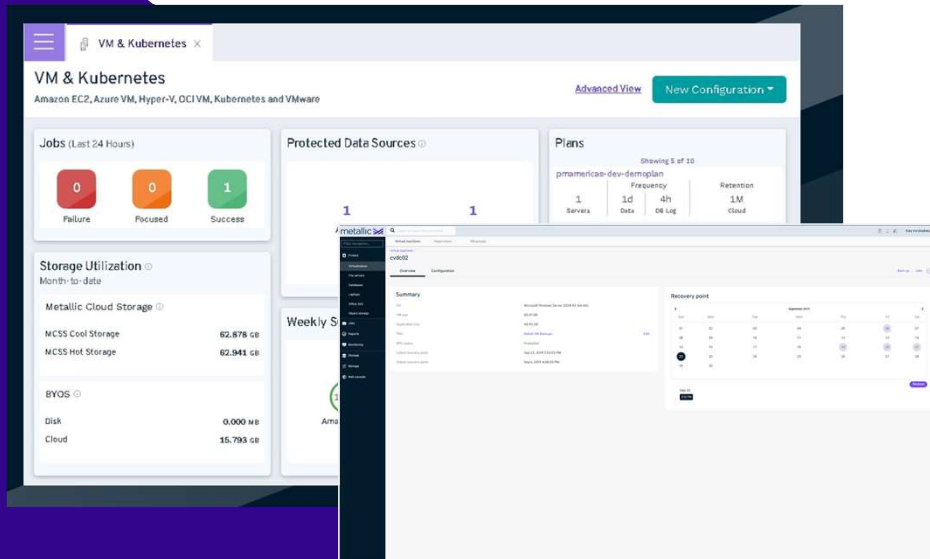


#### 4. On-prem copy & cloud secondary



# Metallic® VM & Kubernetes Backup

VMware, Hyper-V, VMC, Azure VM, Kubernetes, Amazon EC2, OCI VM



## Essential DMaaS protection for hybrid workloads



**Full breadth:** coverage across on-premises to cloud-native to support hybrid cloud environments



**Kubernetes protection:** enterprise-grade DMaaS protection for all CNCF-Certified Kubernetes distributions



**Transparent:** flexible pricing per instance, single interface

**Unified data protection that supports your entire hybrid cloud journey.  
From on-premises to cloud workloads, and cloud-native apps in containers.**

# VM & Kubernetes Backup

## Hypervisors



### Protection

- Agent-less VM backup
- Crash consistent protection
- Browse & select VM's
- Add VM filters/rules
- Auto select transport modes
- via Local Network (NBD)
- via Local ESX server (HotAdd)
- via Storage network (SAN)

### Recovery

- Full VM
- Guest files and folders
- VM files (vmdk, vmdx)
- Attach disk to different VM
- Out-of-place / different vCenter
- Out-of-place / Azure

## Cloud Workloads



### Protection

- No software deployment required
- Snap & Streaming
- Crash consistent protection
- Files and folders
- Attached disks

### Recovery

- Full VM
- Guest files and folders
- Attach disk to different VM

## Kubernetes



### Protection

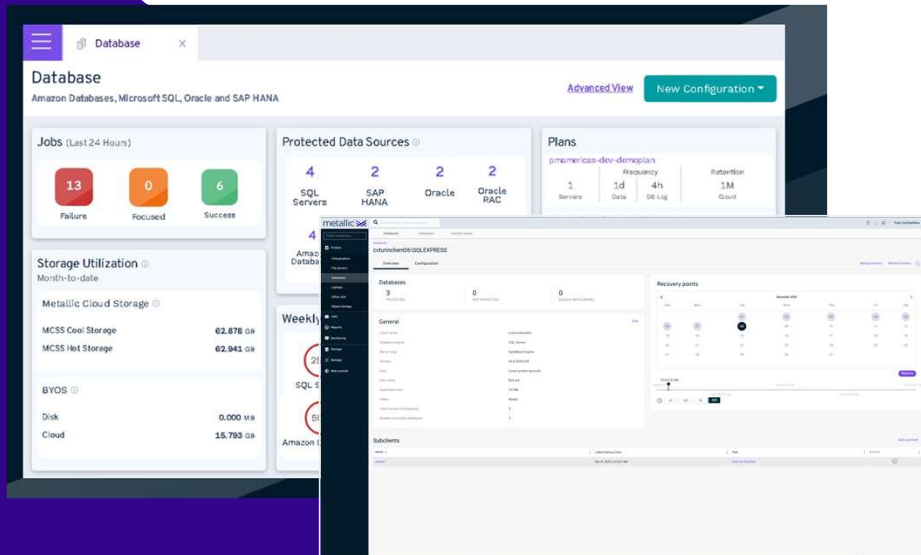
- Labels and selectors, or namespaces
- Application consistency
- Applications (Pod, deployment, Stateful or workload)
- Persistent volumes
- Custom Resource Definitions (CRDs)
- Image registries
- CSI snapshot

### Recovery

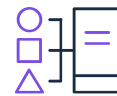
- Application
- Volume and data restore
- Application manifest restore
- In-place / Out-of-place

# Metallic® Database Backup

Microsoft SQL and Active Directory, SAP HANA, AWS, Oracle



## DMaaS database protection for a hybrid world



**Hybrid support:** seamless integration for database protection, on-prem, in the cloud, in VMs, and in Azure



**Integrated:** gives administrators seamless visibility to database protection



**Efficiency:** free up time from writing recovery scripts

**Business critical protection for your databases on-prem or in the cloud – powerful, easy-to-use SaaS model with unique flexibility and ultimate security.**

# Database

## ORACLE



### Protection

- Application aware integration
- Application consistent protection
- Instances
- Databases
- Log files
- Tablespace
- Permissions

### Recovery

- Full instance
- Individual databases
- Log files
- In-place / source server
- Out-of-place / different server
- Restore files to disk

## SAP HANA



### Protection

- Native backup API integration
- Application consistent protection
- Databases
- Log files
- Catalog files
- Permissions

### Recovery

- Most recent state
- point-in-time
- specific data backup

## MS SQL



### Protection

- Native backup API integration
- Application consistent protection
- Instances
- Databases
- Log files
- Permissions

### Recovery

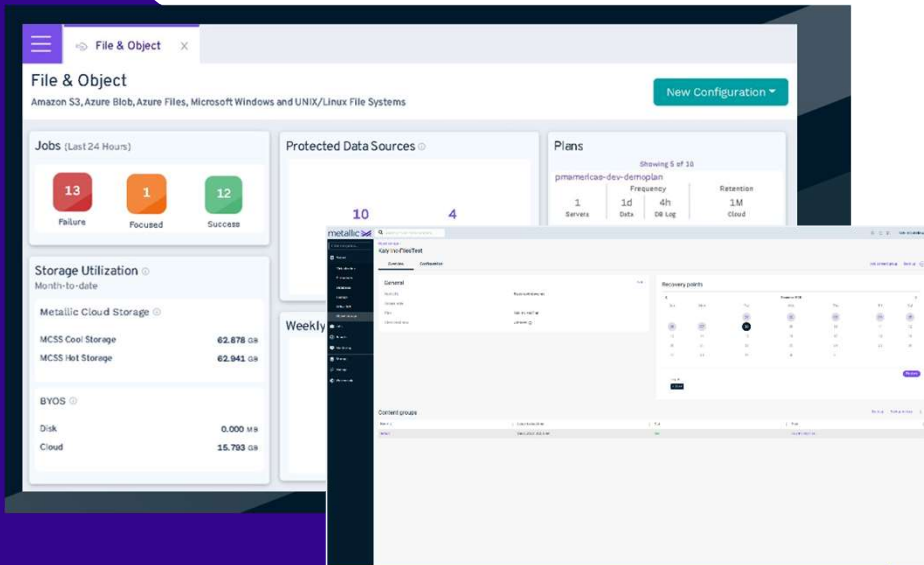
- Full instance
- Individual databases
- Log files
- In-place / source server
- Out-of-place / different server
- Restore files to disk

# Metallic® File & Object Backup

Windows server, Linux/UNIX, Azure Blob & Files, Amazon S3



Microsoft Azure



## Cost optimized protection for unstructured data



**Data silos:** protect all your data regardless of where it lives – on-prem, in the cloud, or in VMs



**Physical servers:** more than just files – support physical servers on-prem and the edge

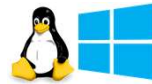


**FETB pricing:** optimized pricing model for unstructured data

Single solution that protects unstructured data – Windows & Linux files systems and cloud object storage reducing IT overhead and supporting your hybrid cloud strategy

# File & Object

## OS/File Systems



### Protection

- Native backup API integration
- Crash consistent protection
- Files and folders
- System state
- UNC paths
- Mount points
- Permissions

### Recovery

- Full systems restore
- Files and folders
- System state
- In-place / source server
- Out-of-place / different server

## Object Storage



### Protection

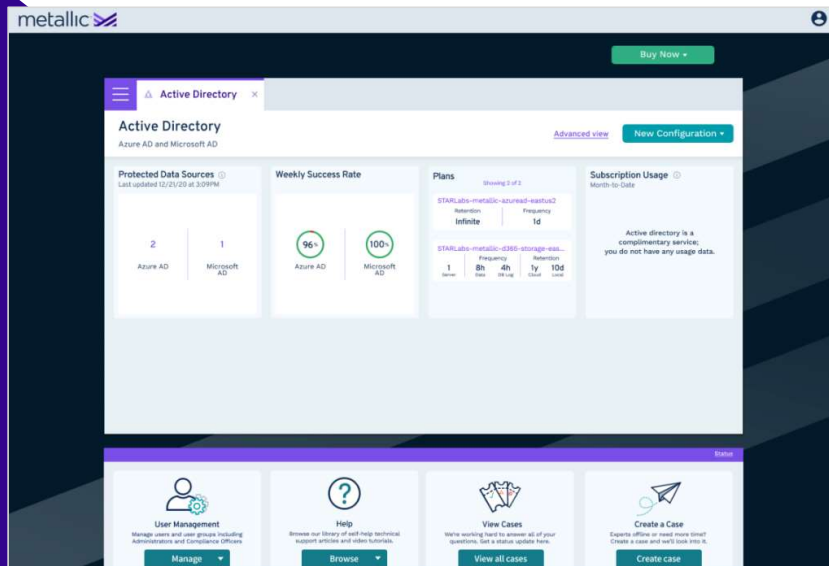
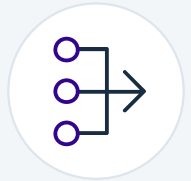
- No deployment required
- Content group

### Recovery

- In-place
- Out-of-place
- Data to disk

# Metallic<sup>®</sup> Active Directory Backup

For Microsoft AD + Azure AD



## Simple, purpose-built protection



**Automated backups** for single-solution protection of Microsoft AD and Azure AD



**Comprehensive coverage** of objects, attributes, users, groups, app registrations, and more...



**Granular recovery** to roll back damaging, unwanted, or accidental changes

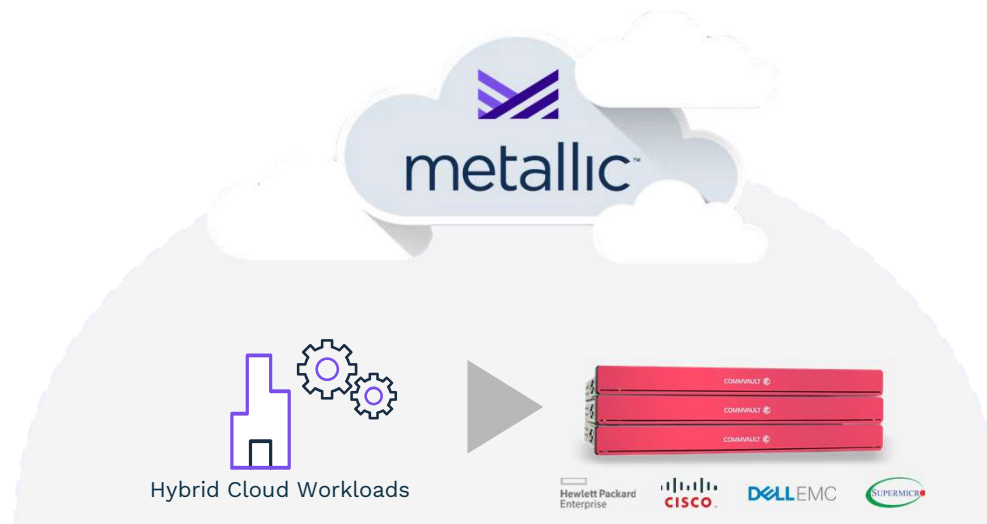


**Layered security** with data encryption and air-gapped ransomware protection

**Included for FREE with every Metallic service.**

# HyperScale X for Metallic

Expanding SaaS Plus capabilities with integrated scale-out storage



## Commvault HyperScale™ X as Edge Storage for Metallic



### Simplified management

Commvault's connected portfolio delivers SaaS simplicity with Local recovery



### Performance & security

Rapid recovery & built-in resiliency for ransomware protection

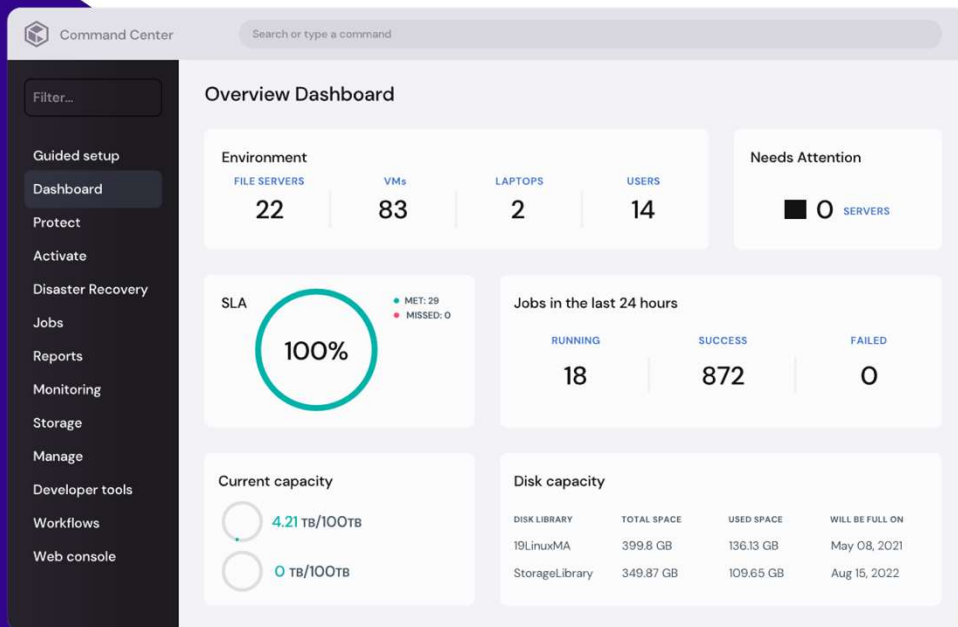


### Cost optimized scalability

Edge storage can start small and scale out, as data needs grow

# Metallic® Cloud Storage Service

Cloud storage options for Metallic DMaaS, HyperScale X, and Commvault Backup and Recovery



**NEW:** Storage tiers for the easy button to cloud storage adoption, for both long- and short-term data retention needs

**Enhanced flexibility:** Choose between hot and cool tiers across Metallic DMaaS and Commvault software.

**Simplified management:** As simple as 1, 2, 3 - purchase, add, and apply. Single pane of glass management makes administration easy.

**Secure:** Air-gapped ransomware protection with encryption built-in, for both hot and cool tiers.

Easy adoption of cloud storage for short- and long-term data retention

# Hybrid Cloud Backup

- Backup data flow
- Signaling traffic

Deployment models

Backup via Gateway for on-prem / AWS

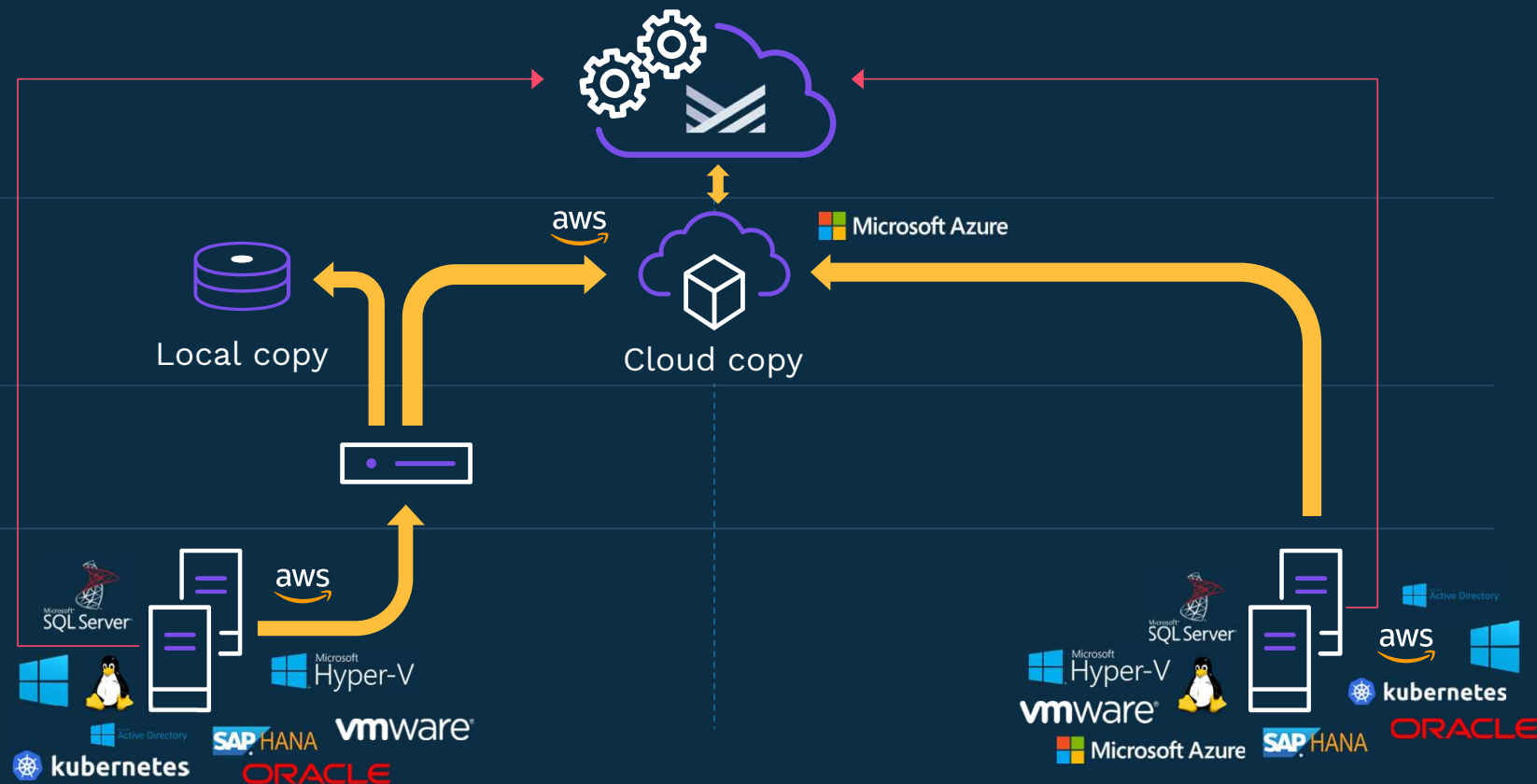
Backup direct to cloud for Azure

Backup Services

Storage

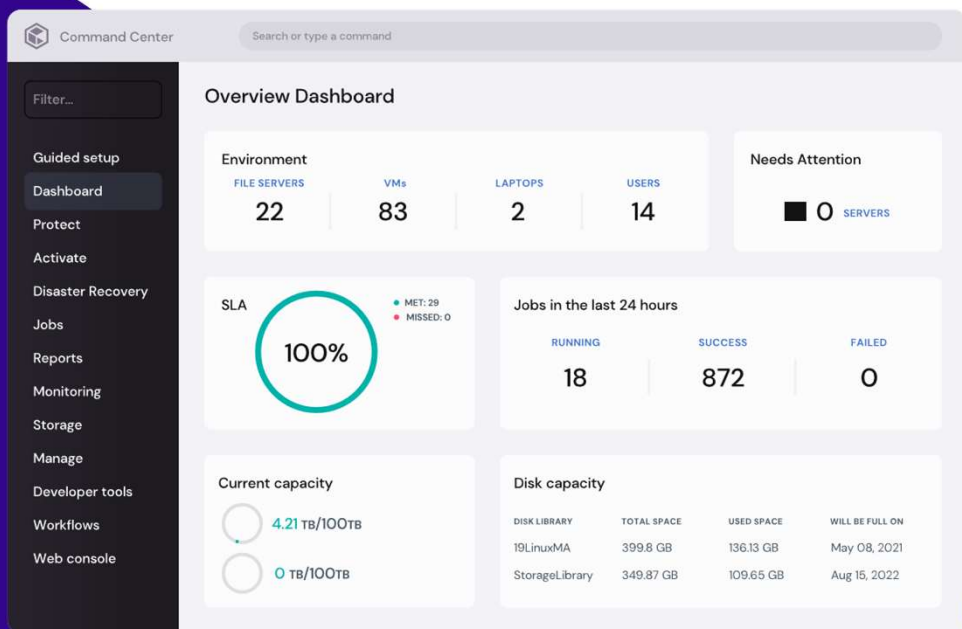
Backup Gateway

Source Data



# Metallic® Recovery Reserve™

Cloud storage options for Metallic DMaaS, HyperScale X and Commvault Backup and Recovery



**NEW:** Storage tiers for the easy button to cloud storage adoption, for both long- and short-term data retention needs

**Enhanced flexibility:** Choose between hot and cool tiers across Metallic DMaaS, and Commvault Software.

**Simplified management:** As simple as 1, 2, 3 - purchase, add, & apply. Single pane of glass management makes administration easy.

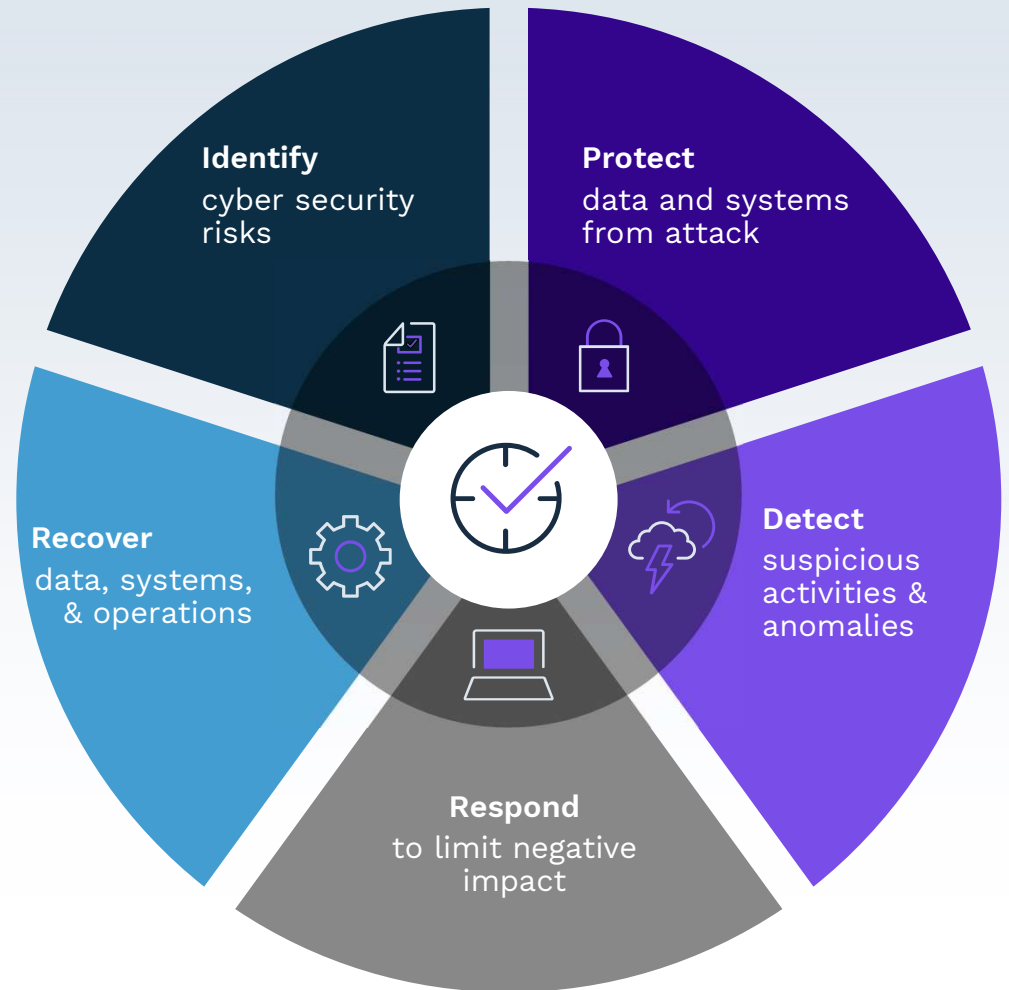
**Secure:** Air-gapped ransomware protection with encryption built-in, for both hot and cool tiers.

**Cost:** No egress, no guesswork, no hidden fees

Easy adoption of cloud storage for short- and long-term data retention

# The Ransomware Recovery Framework

A proactive strategy for your data



Source: NIST Cybersecurity Framework

# Three Keys for Comprehensive Ransomware Protection

A multi-layered approach to data protection



## Protect

Insulate data from successful breaches



## Detect

Spot and identify attacks



## Recover

Fast and reliable data restoration

# 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

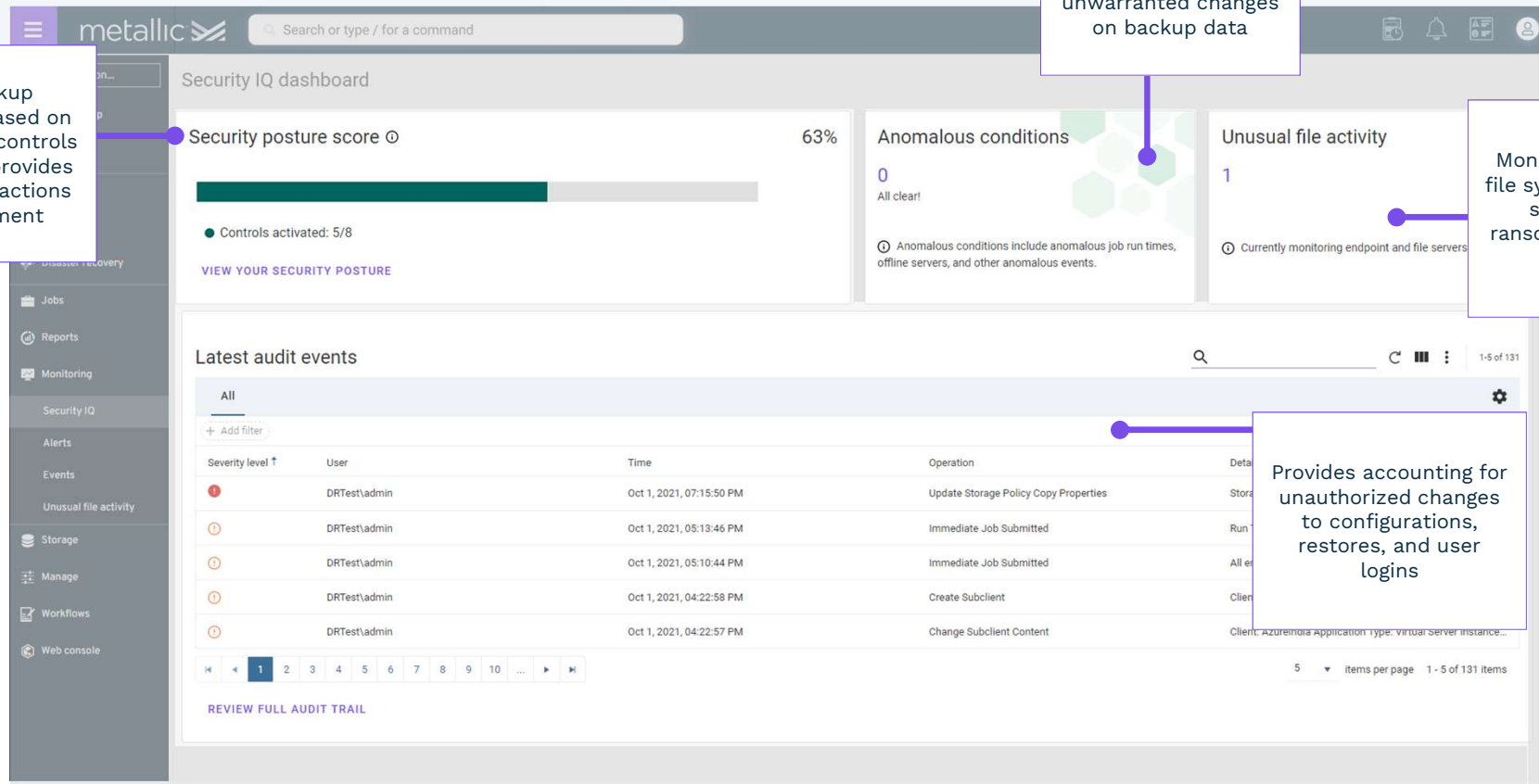


## Recovery Points

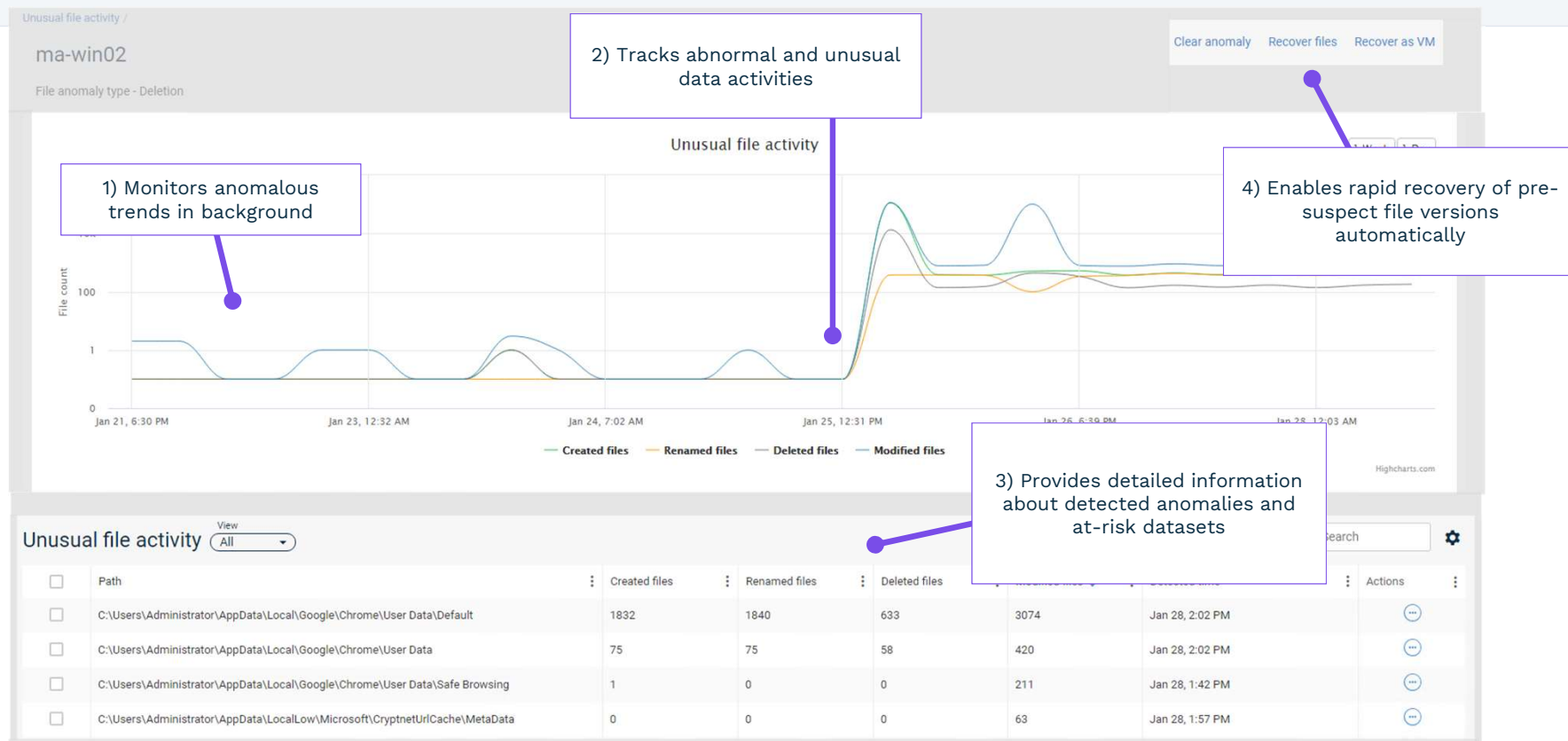
Make informed recovery decisions to exceed SLA objectives



# Security IQ



# Intelligent Ransomware Recovery



# Ransomware New Normal

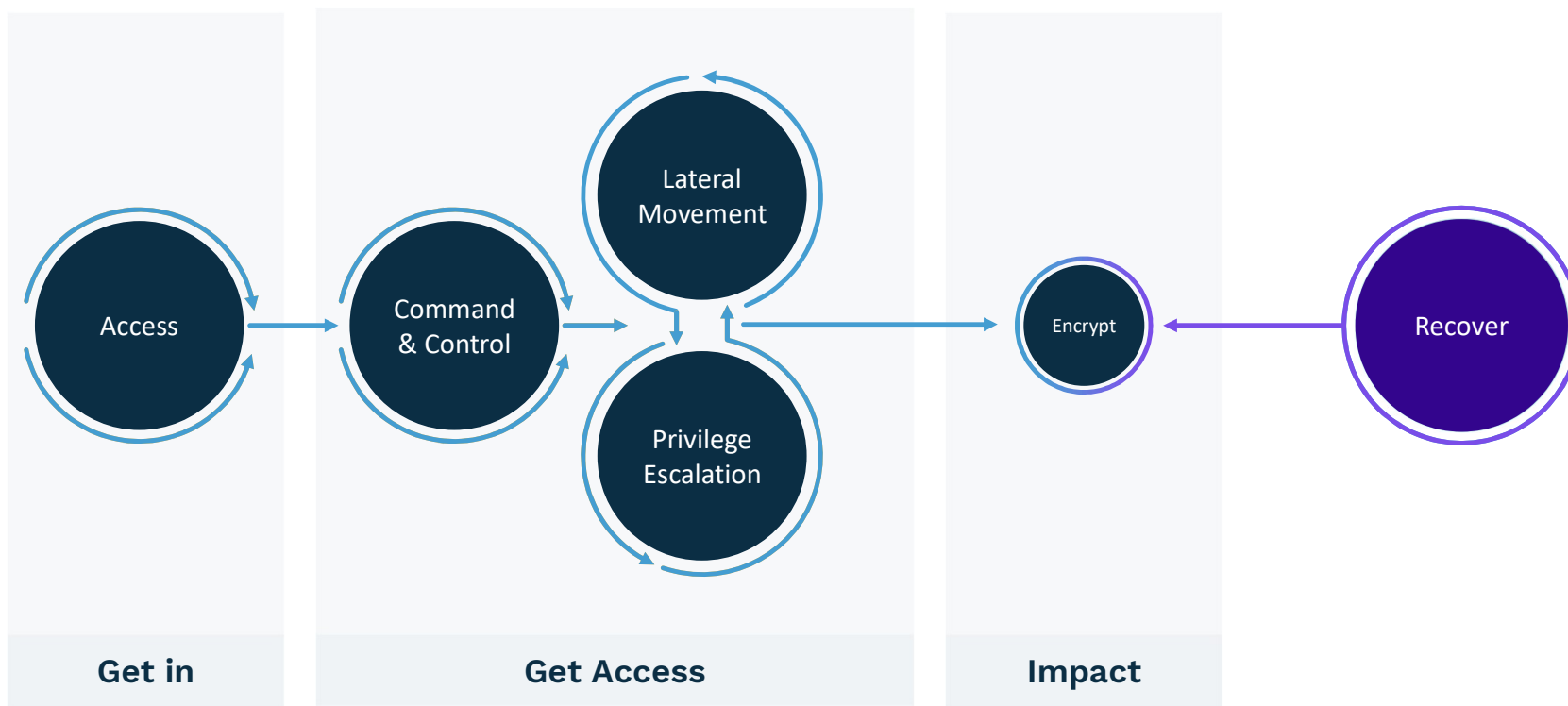
No customer boundary is impenetrable

## Encrypt

2015-Present

Unpatched legacy systems still vulnerable

Ex: WannaCry, NotPetya, etc.



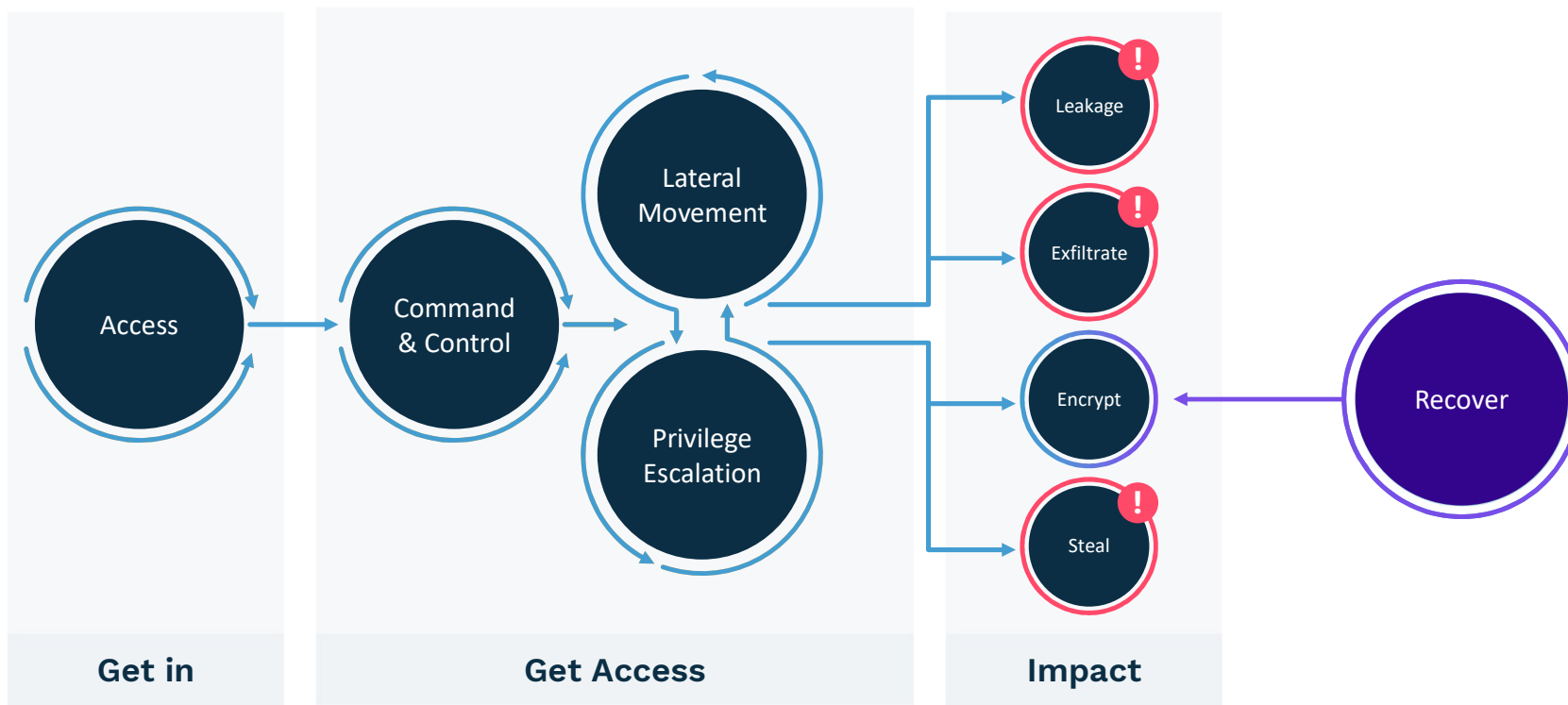
# Ransomware New Normal

No customer boundary is impenetrable

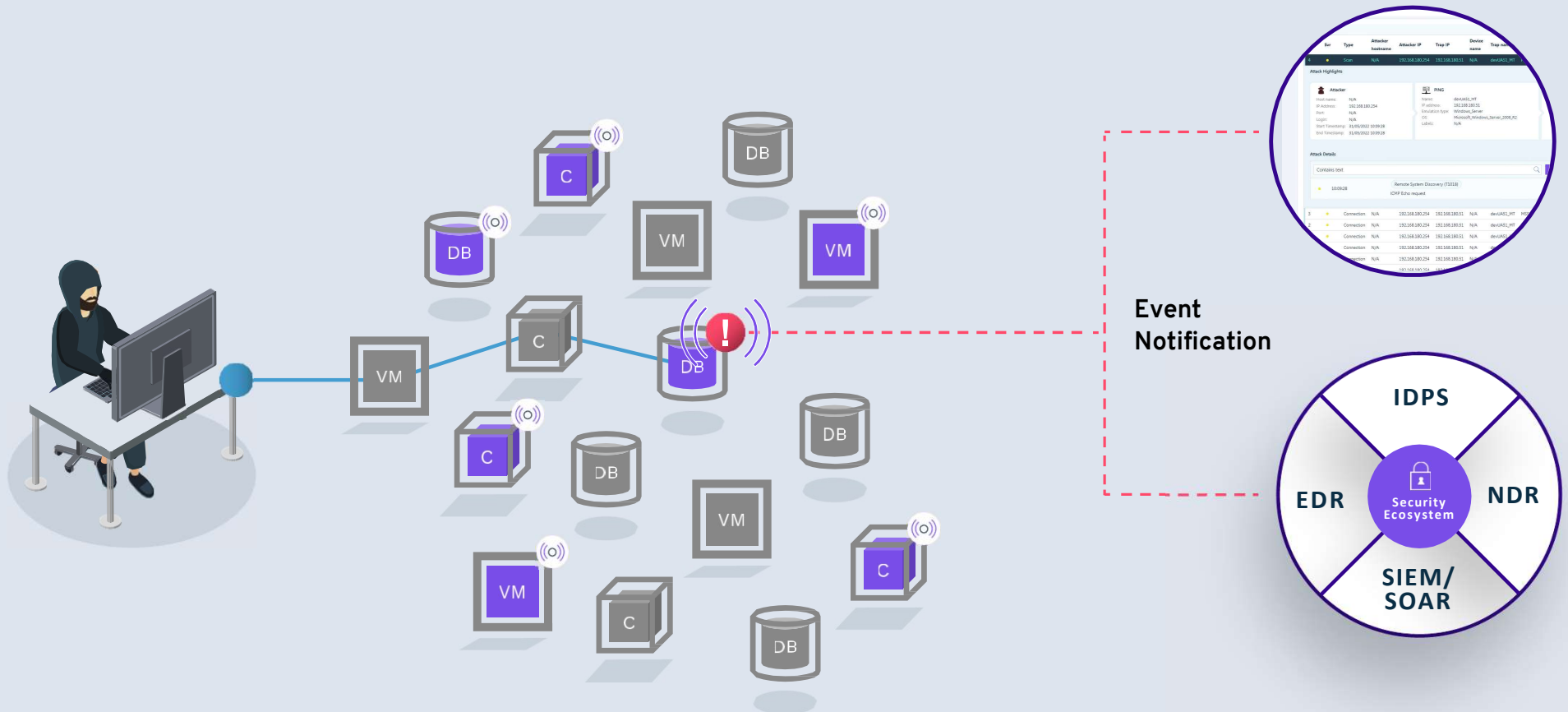
## Encrypt and Steal

2020-Present

Double / Triple Extortion – Big Game Hunting  
Maze RaaS > Egregor RaaS, LockBit 2.0, etc.



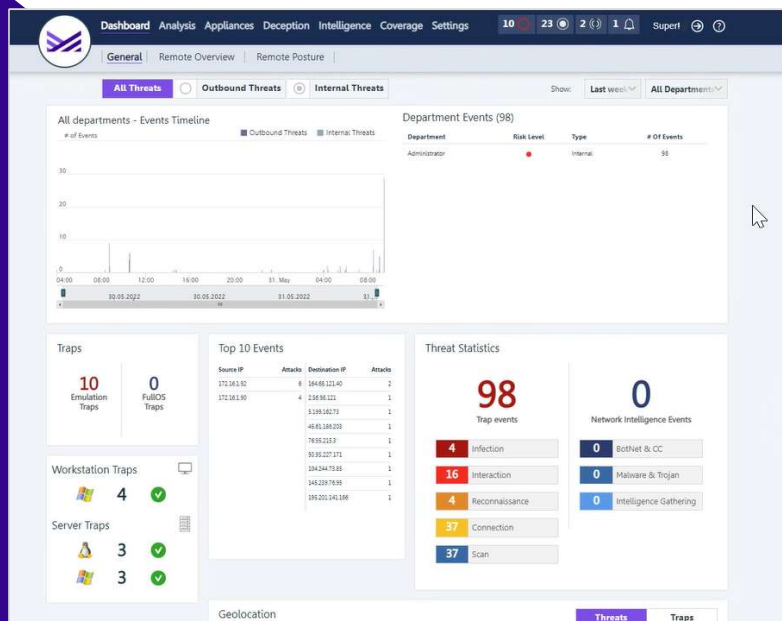
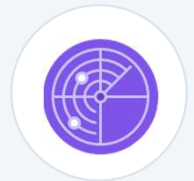
# Lightweight, Highly-Accurate Threat Signals



● Threat Sensors only visible to bad actors

# Metallic® ThreatWise™

Integrate Cyber Deception



## Early Warning Ransomware Detection



**Intelligent decoys** that mimic and behave-like legitimate assets



**Precise alerts** to pinpoint threats without false-positives or alert-fatigue



**Rapid scalability** to protect entire environments and applications in seconds

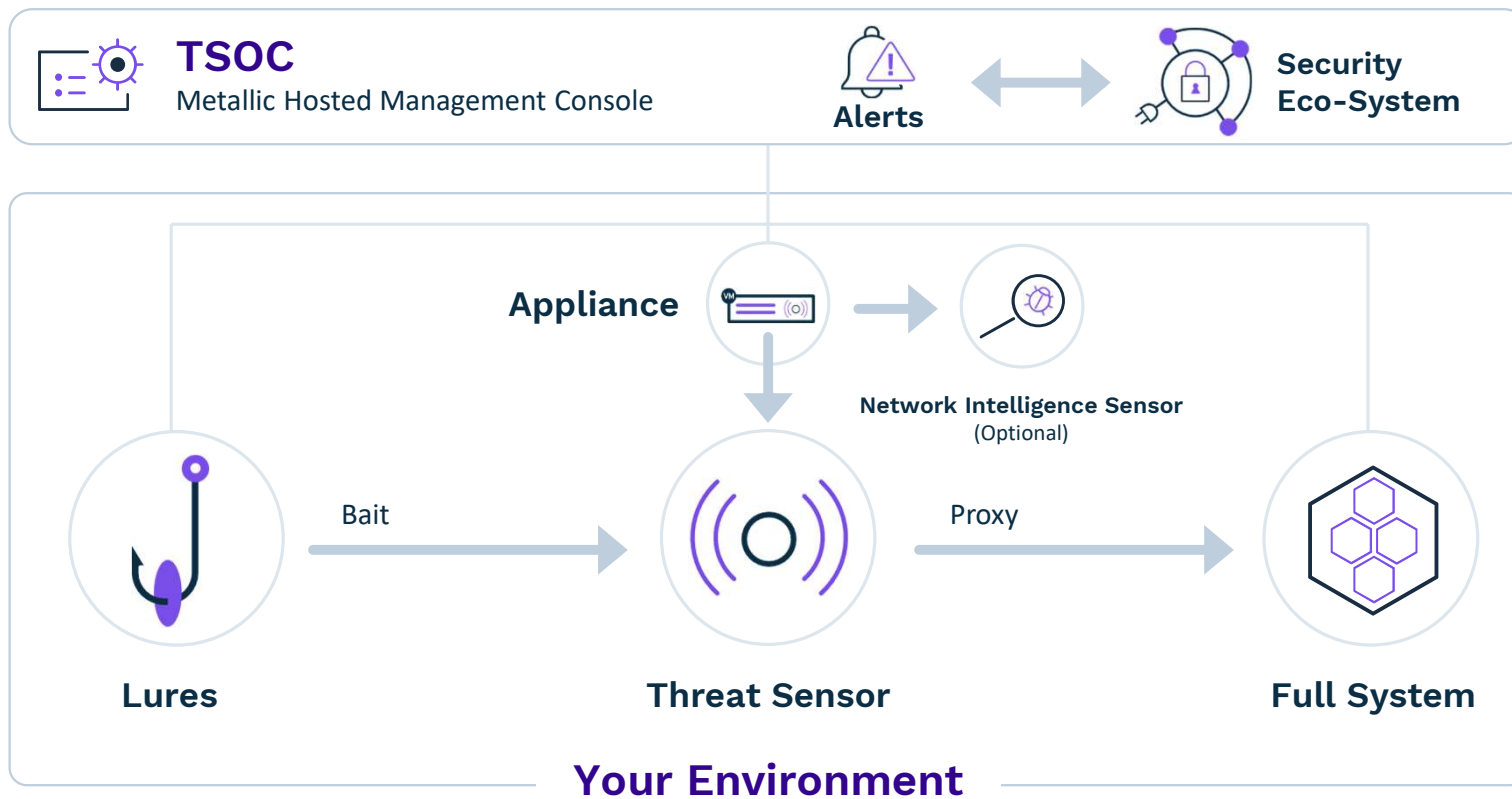


**Simple SaaS delivery** with flexible, lightweight architecture

**Data protection starts *before* you're compromised.**

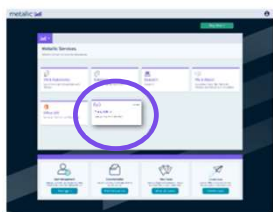
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# High Level Architecture

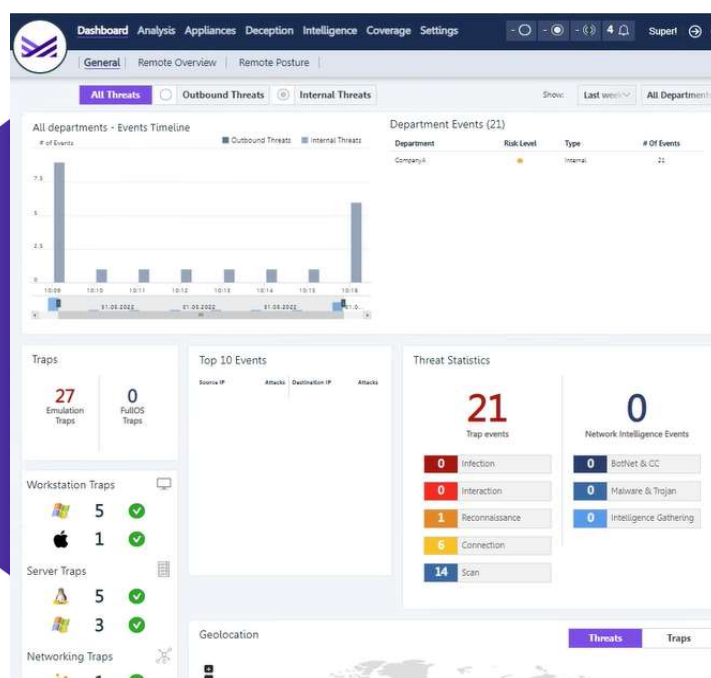


# TSOC

## ThreatWise™ Security Operations Console



 **Metallic®**  
Control Plane



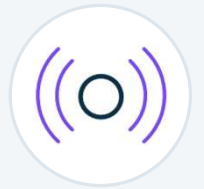
**Manage ThreatWise™**  
appliances, deploy threat  
sensors and view events

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

Accessed via **Metallic**  
Hub/Control Plane

# Threat Sensor Deployment








Out of the box



## Threat Sensor

Replicated Network Assets

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

Category		Used Cases	
	<b>Workstation</b>	<ul style="list-style-type: none"><li>• Windows, Linux or Mac Endpoints</li></ul>	
	<b>Servers</b>	<ul style="list-style-type: none"><li>• Databases</li><li>• Backup Servers</li></ul>	<ul style="list-style-type: none"><li>• Virtual Machines</li></ul>
	<b>IoT Devices</b>	<ul style="list-style-type: none"><li>• Printer</li><li>• Security Cameras</li></ul>	<ul style="list-style-type: none"><li>• Point of Sale</li><li>• Smart Lights</li></ul>
	<b>Networking</b>	<ul style="list-style-type: none"><li>• Switches (incl. PBX)</li></ul>	<ul style="list-style-type: none"><li>• VPN</li></ul>
	<b>Medical</b>	<ul style="list-style-type: none"><li>• MRI</li><li>• CT</li></ul>	<ul style="list-style-type: none"><li>• PACS Systems</li></ul>
	<b>Industrial</b>	<ul style="list-style-type: none"><li>• SAP</li><li>• PLC</li></ul>	<ul style="list-style-type: none"><li>• SCADA</li></ul>
	<b>Financial</b>	<ul style="list-style-type: none"><li>• SWIFT</li></ul>	<ul style="list-style-type: none"><li>• ATM</li></ul>

# The Security Guy



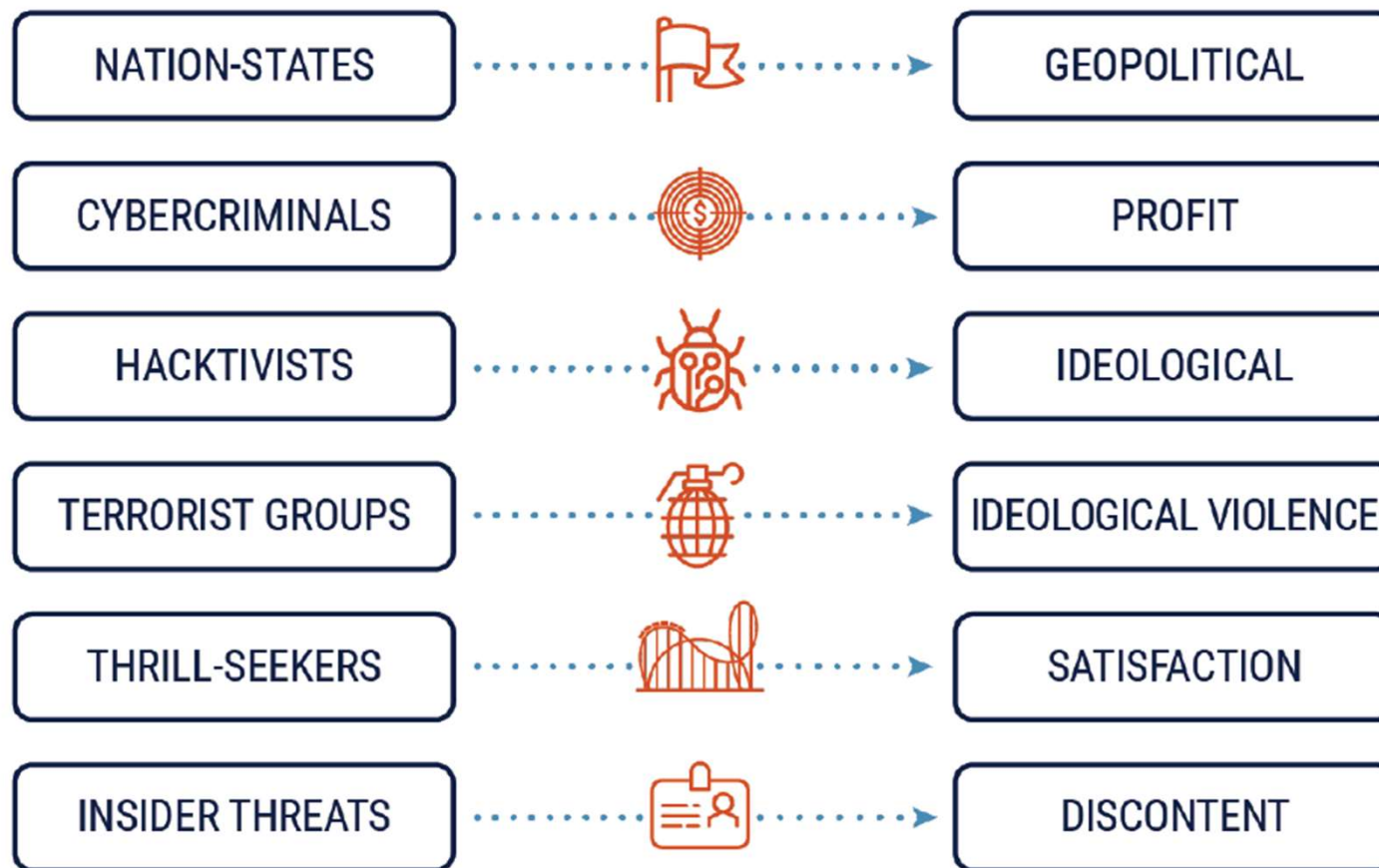
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**&**



## CYBER THREAT ACTOR

## MOTIVATION



# Thank You!



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