

Data Protection Technical:

Five Critical Steps to Secure your Cloud Data



Cloud Apps have helped drive this transformation

Increases collaboration and productivity - reduces cost and complexity









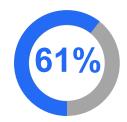




But are causing new challenges

Distributed data

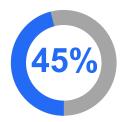
Security appliances weren't built for the cloud



claim their network security can't scale or is too complex¹

Mobile users

Off network, away from security and using risky unmanaged devices



are struggling with risky BYOD usage²

Data Exposure

Cloud data often easily exposed and exfiltrated, causing:



Loss of revenue 51%



Top initiatives to secure data:

- Prevent data loss and breaches
 Secure distributed and sensitive data
- Secure data collaboration and prevent exposure
 Get better visibility of collaboration risks
- Restore regulatory compliance
 Enforce proper risk controls per requirements
- Reduce cost & complexity
 Simplify and centralize data protection operations

Delivering Data Protection with Zscaler Zero Trust Exchange



200B daily transactions 175k daily threat updates



Unified Threat & Data Protection

Fully Integrated SSE for risk reduction



Complete Data Protection: How to stop both External and Internal Threats

Recommended Steps

- **1** Full Visibility
- Reduce Exposure and Mitigate Risk
- Gain Control of Content Types
- 4 Control Sensitive Data
- 5 Advanced Incident Management

Shadow IT, 3rd Party Apps, Endpoints (Activities and Configuration)

Secure internet, Approved SaaS Apps, Tenancy Restrictions, Cloud App Instances

Block based on File Types, Size, Unscannable Content for Upload/Download

Control sensitive data - Device, Network, Cloud

Perform DLP incident triage and investigations all in one spot

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Security Cloud
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Required Steps

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- Gain Control of Content Types
- Control Sensitive
 Data
- Advanced Incident
 Management

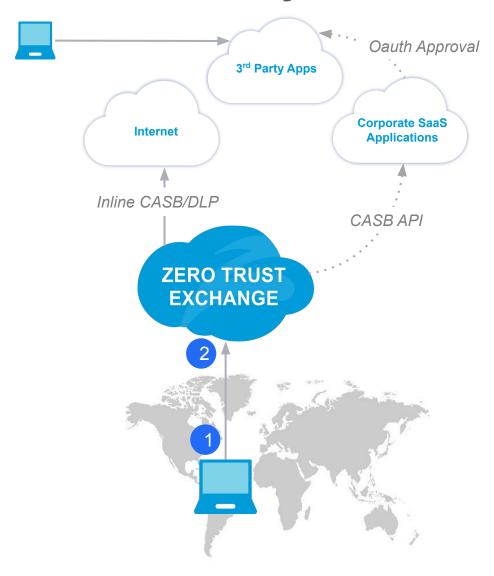
Shadow IT, 3rd Party Apps, SSPM (Activities and Configuration)

Secure Internet, Approved SaaS Apps, Tenancy Restrictions, Cloud App Instances

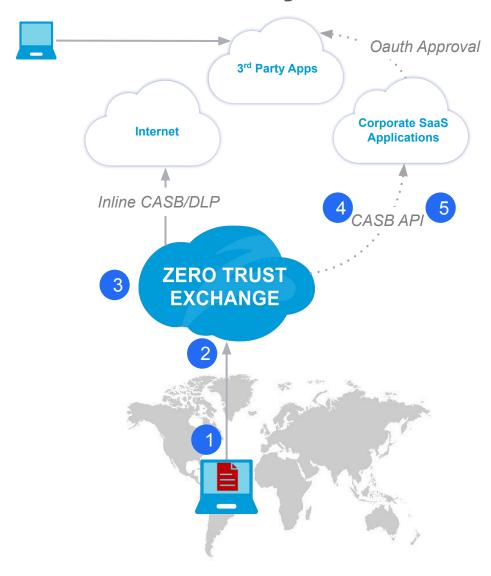
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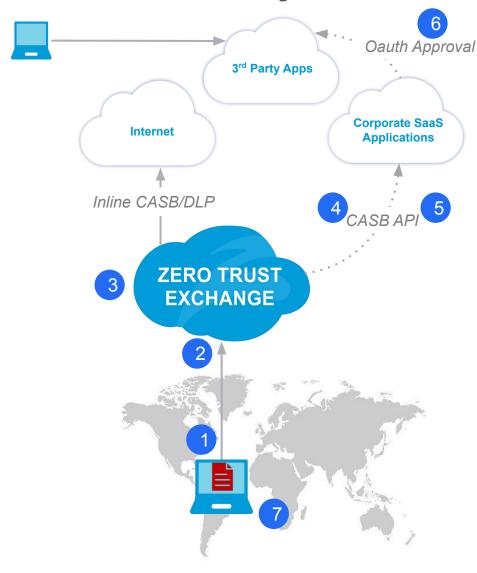
Perform DLP incident triage and investigations all in one spot



- 1 Full Visibility of Who is connecting, Access Context, Where is Connection Going.
- 2 Full visibility with Scalable SSL Decryption and Shadow IT

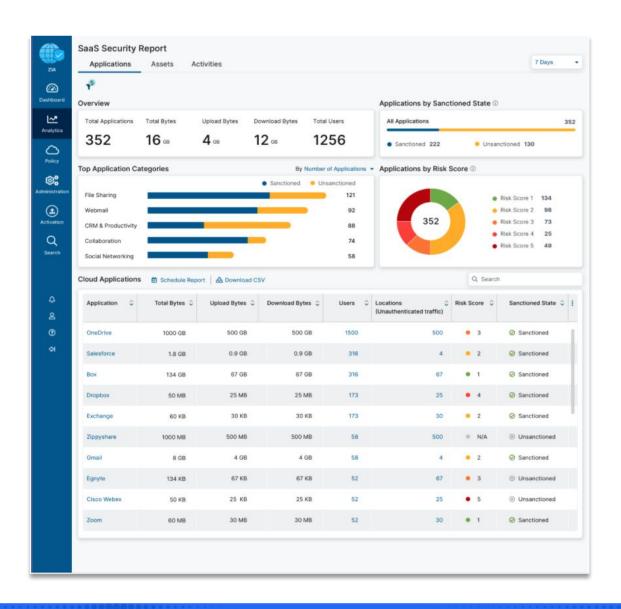


- 1 Full Visibility of Who is connecting, Access Context, Where is Connection Going.
- Pull visibility with Scalable SSL Decryption and Shadow IT
- 3 Zero Touch Configuration Data Discovery for data in motion
- 4 SaaS Misconfigurations
- 5 Visibility of User Activities to SaaS Application with UEBA



- 1 Full Visibility of Who is connecting, Access Context, Where is Connection Going.
- 2 Full visibility with Scalable SSL Decryption and Shadow IT
- 3 Zero Touch Configuration Data Discovery for data in motion
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- 5 Visibility of User Activities to SaaS Application with UEBA
- 6 Visibility of 3rd Party Apps performing Oauth.
- Visibility of activities that end users take with sensitive data on endpoints

Find cloud app usage with Shadow IT Visibility



Get complete visibility of cloud app usage

See Trending Cloud Apps

- Understand trending apps across ALL users on an off network
- View by Category, Usage, Users, and Search

Identify Cloud App Risks

- Find risky app usage that can lead to data loss
- Sort by risk score and apply sanctioned or unsanctioned tagging

Easily understand data risks with ML-Powered Discovery



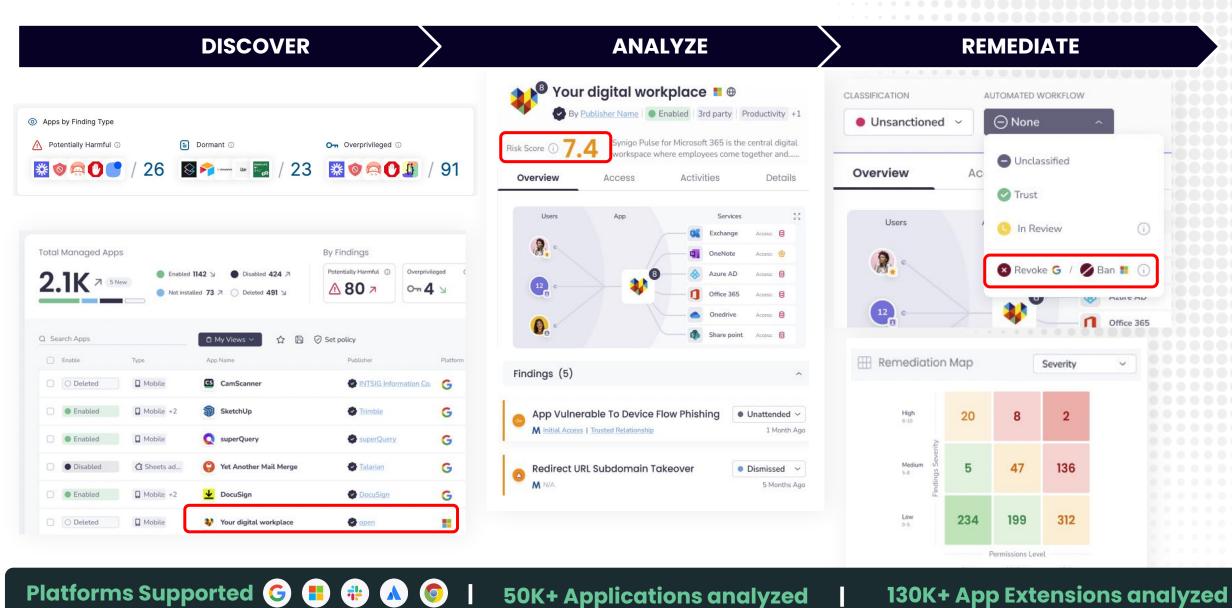
See all data risks with ease

Accelerated deployments – no administration needed!

Pivot to policy creation in a few clicks



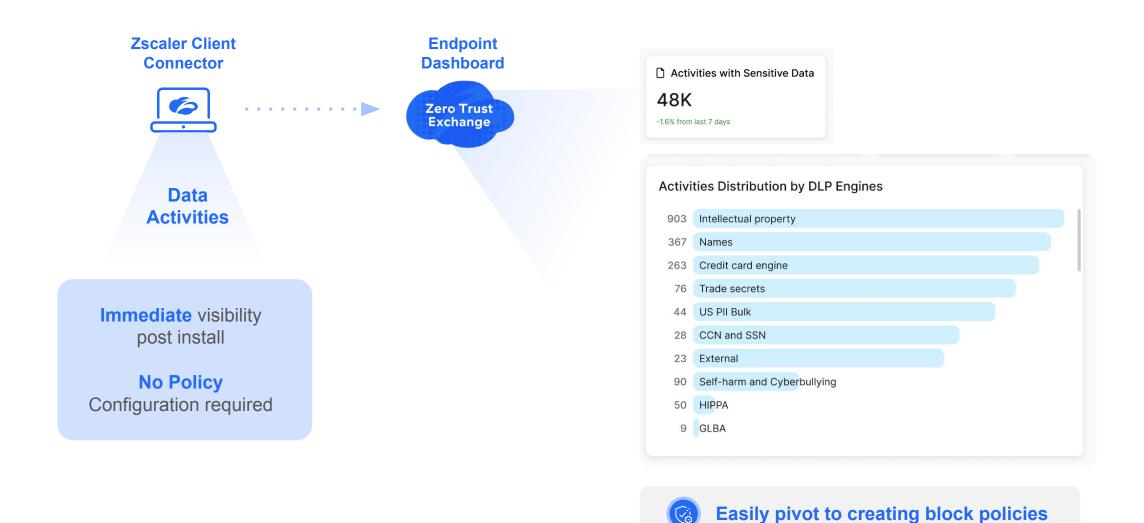
Use AppTotal to govern Third-Party Apps



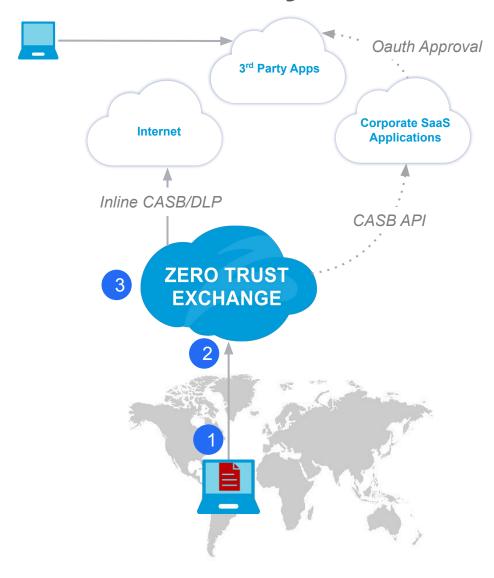
Szscaler

Experience your world, secured.

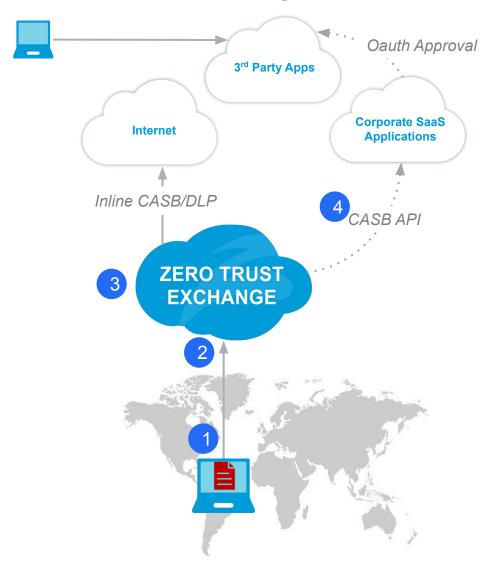
Instant visibility out of the box with Data Activities



Experience your world, secured.



- 1 Full Visibility of Who is connecting, Access Context, Where is Connection Going.
- 2 Full visibility with Scalable SSL Decryption and Shadow IT
- 3 Zero Touch Configuration Data Discovery for data in motion



- 1 Full Visibility of Who is connecting, Access Context, Where is Connection Going.
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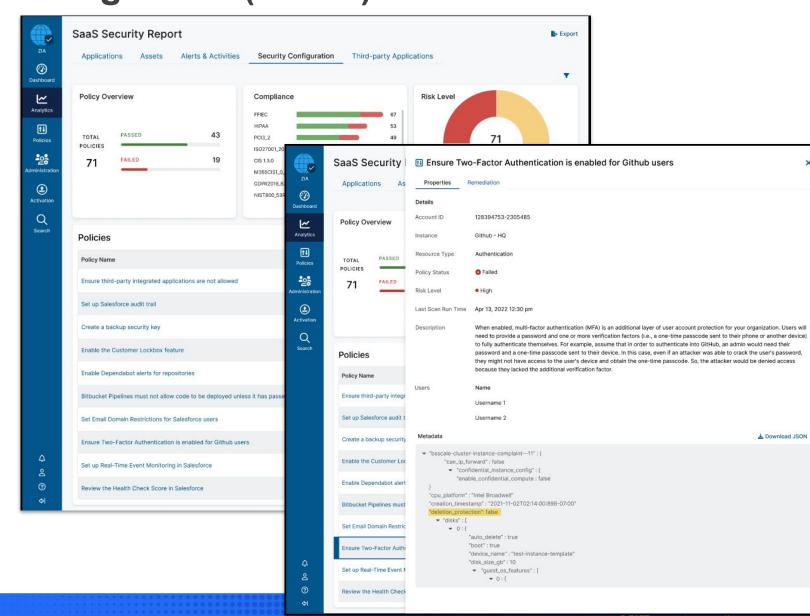
SaaS Security Posture Management (SSPM)

Breadth of Integration

 Support Posture Reporting for O365, Google Workspace, SFDC, Confluence, Bitbucket and GitHub.

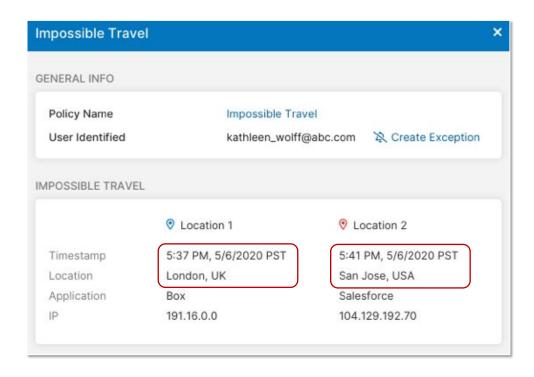
Deep Security Checks

- Continuous Periodic Posture Evaluation
- 150+ predefined policies
- Multiple Compliance Frameworks: FFIEC, PCI 3.2, GDPR, HIPAA, NIST 800-53, ISO 27001:2013, SOC2 AICPA, CIS 1.3.0, M365 CIS 1.0.0
- Contextual Reporting: Provides metadata around 'resources type" 'Status' and 'Risk level'
- Remediation Change with Threat & likely Impact information

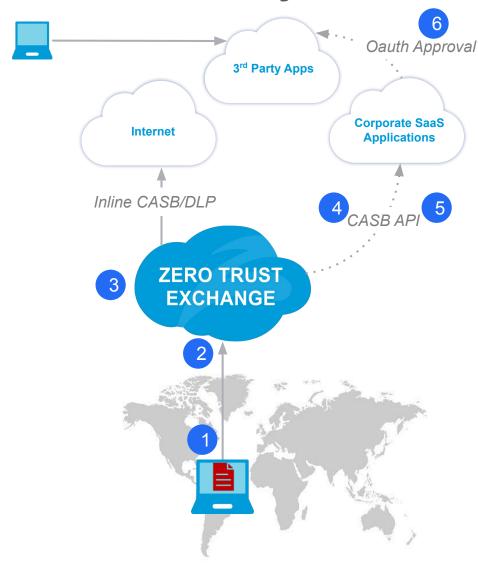


Identity Risky SaaS App Behavior with UEBA

User and Entity Behavior Analytics

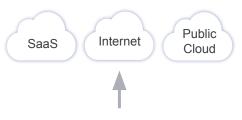


- Identify risky cloud app behaviors like:
 - Impossible Travel
 - Bulk Downloads
 - Bulk Uploads
 - Failed Logins
- Full UEBA Dashboard enables quick filtering and sorting



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Delivering Data Protection with Zscaler Zero Trust Exchange



World's largest security cloud

200B daily transactions 175k daily threat updates



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Fully-integrated SSE for risk reduction



Complete Data Protection:

How to stop both external and internal threats

Required steps

1 Full visibility

Reduce Exposure and Mitigate Risk

Gain Control of Content Types

Control Sensitive
Data

Advanced Incident
Management

Shadow IT, 3rd Party Apps, SSPM (Activities and Configuration)

Secure internet, Approved SaaS Apps, Tenancy Restrictions, Cloud App Instances

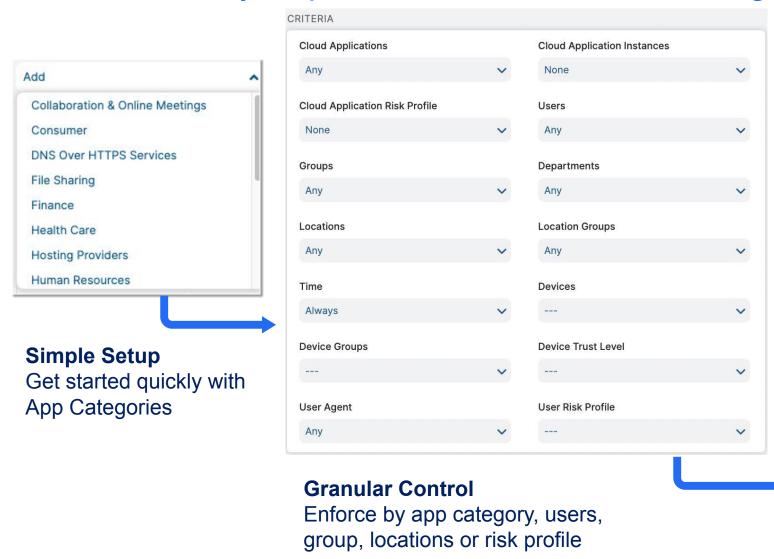
Block based on File Types, Size, Unscannable Content for Upload/Download

Control Sensitive data - Device, Network, Cloud

Perform DLP incident triage and investigations all in one spot

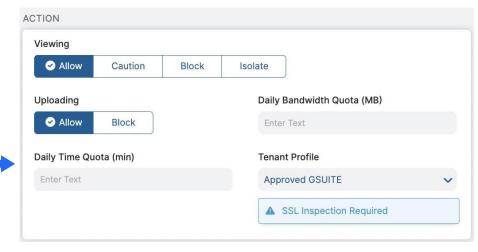
Control Data Flows with Cloud App Control

Restrict activity or prevent sensitive data leakage



Flexible actions like:

- View but no uploads
- Define by tenant profile
- Enforce browser isolation for safe data access

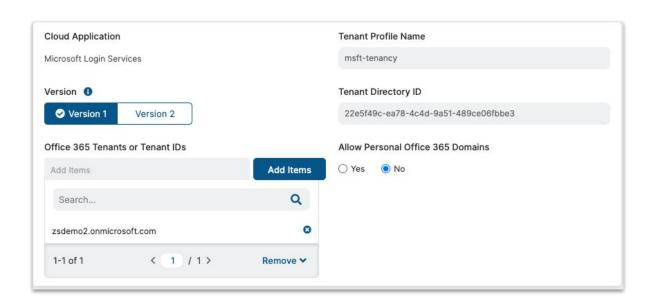


Zscaler

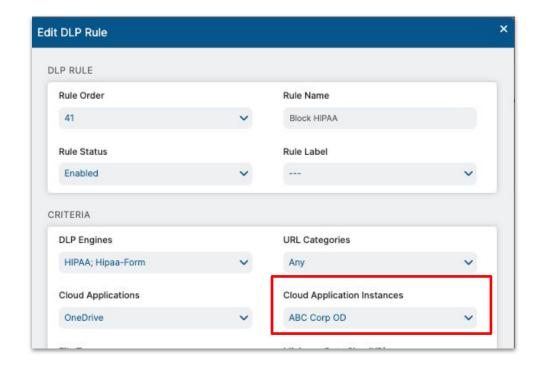
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Tenancy Restrictions and Cloud App Instance Control

- Ability to distinguish between and enforce policy on different enterprise instances of Apps such M365, Slack, Gsuite, Youtube, Dropbox etc
- Support for M365 TRv1 and TRv2
- Support for AWS



 Different DLP policies for different instances of apps such as OneDrive, SharePoint, Box etc



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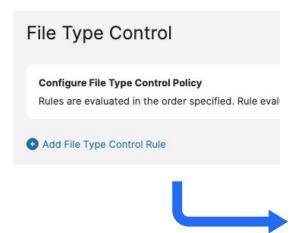
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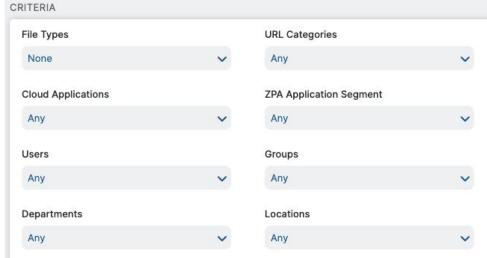
Monitor/Block content

Prevent potential sensitive data leakage



Rule without Content Inspection

Select without content inspection



Select File Type

Use File Type to detect Password Protected/Encrypted Files



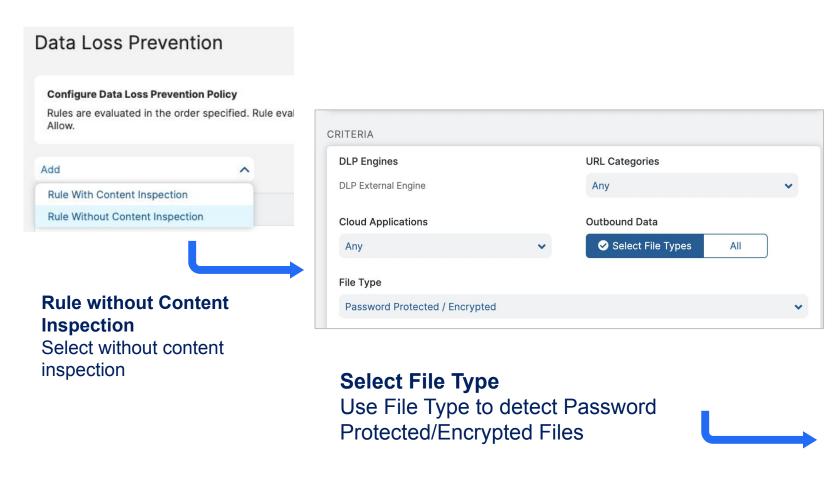
Actions

- Allow Monitor
- Block
- Caution
- Uploads or Downloads



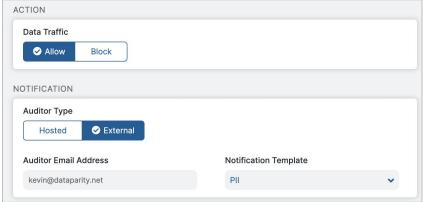
Monitor/Block content as a DLP Incident

Prevent potential sensitive data leakage

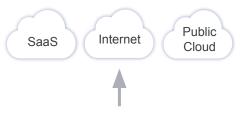


Actions for Monitor or Block

- Allow Monitor
- Block



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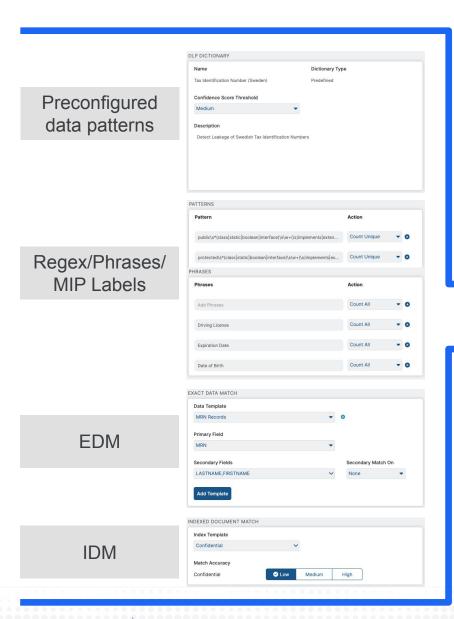
Control sensitive data - Device, Network, Cloud

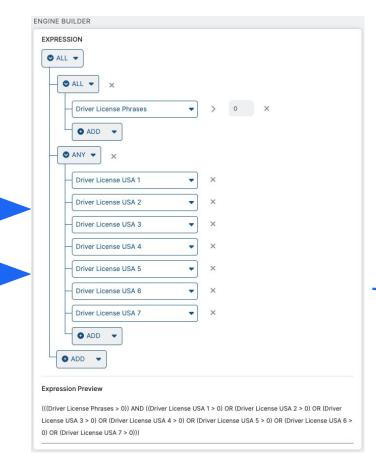
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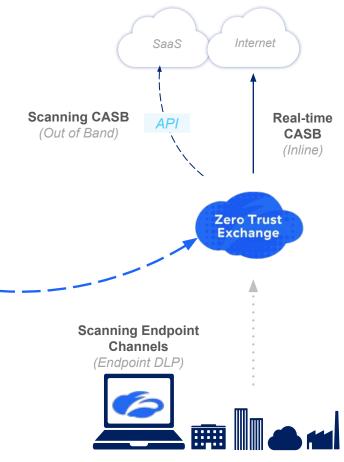
Zscaler content inspection capabilities & custom dictionaries

Inspection Category Inspection Technique US Street Address CA DL Proximity Regex Match Type Match Type Match Any Description US Street Address (Expected format #####(upto 6 digits) Any string ,2 Letter State Abbreviation 5 digits piccide followed by optional 4 digit zip code extension) - 2 line addresses are welcome This dictionary contains phrases to catch CA DL **Described** [1-9][0-9](0,5)[_](0,1)[]+.*(0,1)+[A-Za-z](2),(0,1)+[0-9](5) Single & multi word content keywords with proximity Driving License [1-9]{0-9]{0,5}{,]{0,1}\s+.*,{0,1}\n.*{\s]+[\w]{2}\s+[\d]{5}-[\d]{4} Citizen service # (Netherlands) Social security # (US) Preconfigured National ID # (Hong Kong) National insurance # (UK) data patterns Social insurance # (Canada) NRIC # (Singapore) **Trained** Pre-trained Credit card number Card expiration & CCV Financial statements First name, last name data sets engines Structured Medical information CPT & ICD codes **Fingerprinting** Medicare number fingerprints (EDM & IDM) High value documents/forms

Unified Data Identifiers for Inline and OOB

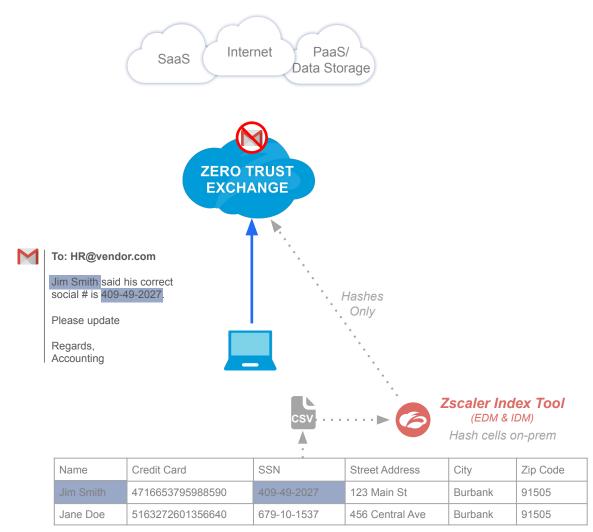






Users, data centers, workloads and IoT/OT

Secure Custom Data with Exact Data Match



Custom Structured Data

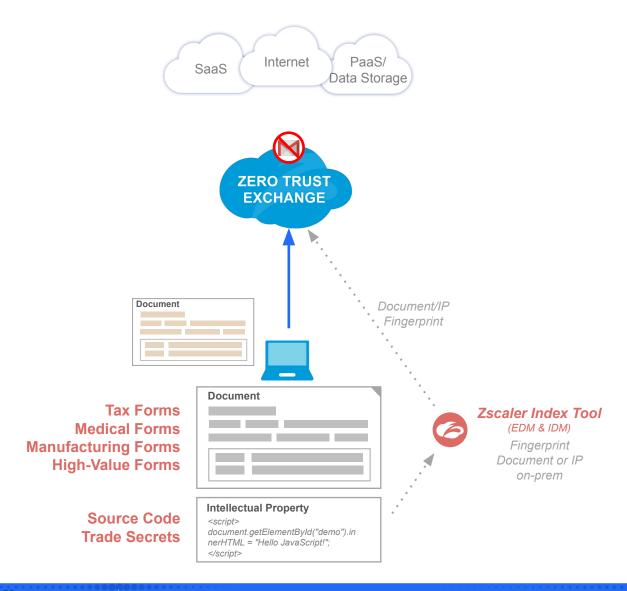
How Exact Data Match Works

- 1 Structure custom data you want to secure
- Index data and send only hashes to Zscaler
- 3 Zscaler ready to find custom data
- 4 Prevent data loss with DLP block policies

Benefits of Zscaler EDM

- Secure high value sensitive data
 PCI, PII, HIPAA, Inventory Codes, Membership #s, ect.
- Reduce DLP False Positives
 Ex: Trigger on meaningful SSNs, not all SSNs
- VM-based Index tool keeps things simple
 High-value data doesn't leave premises
 Used for both Exact Data Match & Index Document Matching

Secure Custom Forms and IP with Index Document Matching



How to use Index Document Matching

- 1 Identify high-value Form or IP to protect
- 2 Fingerprint Form or IP with Index Tool
- 3 Zscaler ready to find other instances of Form or IP
- 4 Prevent data loss with DLP block policies

Benefits of Zscaler EDM

- Secure high-value documents and IP from loss
- Managed docs with ease by mounting SMB drives
 Index up to 100GB of files
- Powerful VM-based Index tool
 Fine-tune detection with adjustable match accuracy
 Used for both Index Document Matching & Exact Data Match

OCR Powered by ML & Al

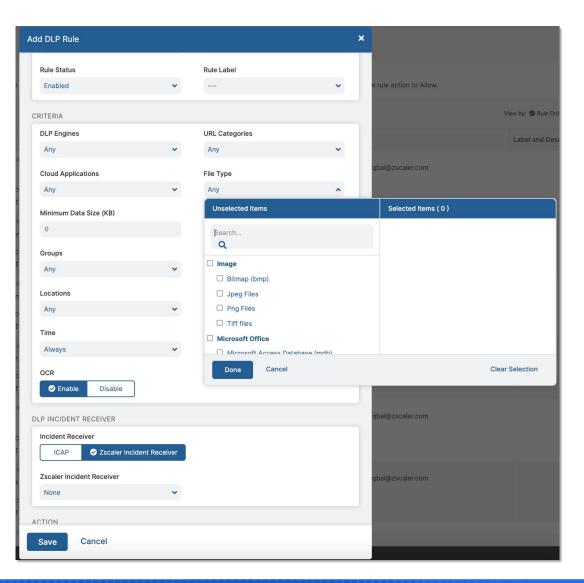
Secure image files, embedded images, handwritten texts

Advanced Data Classification

Experience your world, secured.

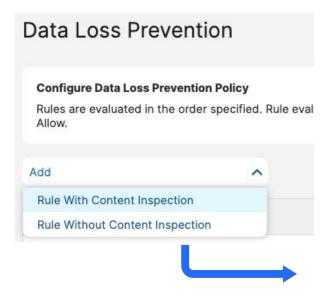
Advanced ML & Al is utilized to extract contextual data

Recognizes sensitive data in image files, within embedded images.

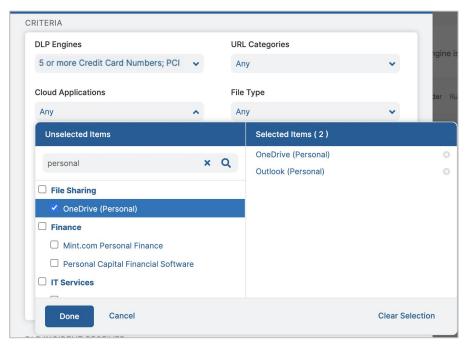


Control Sensitive Data - Inline CASB

Prevent sensitive data leakage



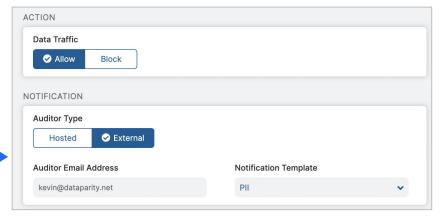
Rule with Content Inspection Create Rule DLP Rule



Select Personal Apps Enforce by app such as Personal vs Enterprise

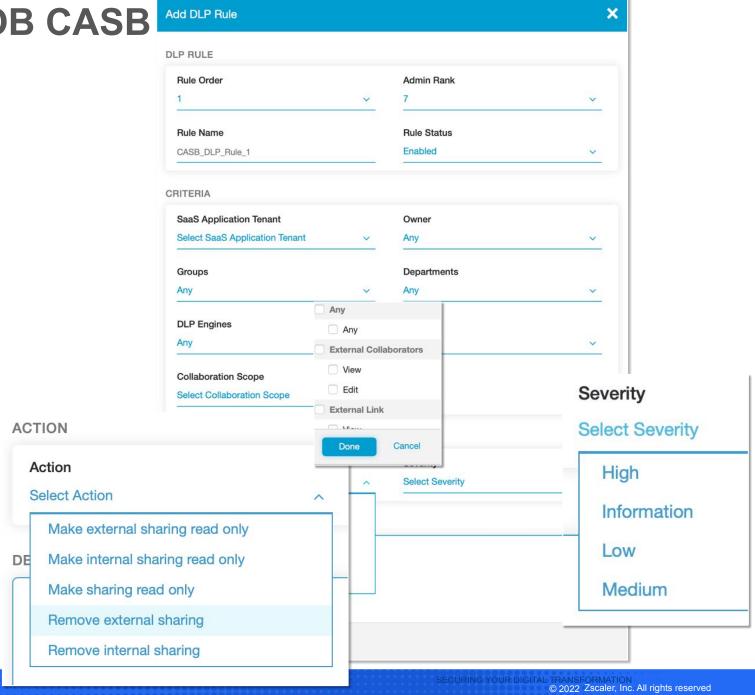
Actions for Monitor or Block

- Allow Monitor
- Block



Control Sensitive Data - OOB CASB

- Leverage DLP engine against defined CASB tenants
- Actions and collaboration scope change dependent on the API capabilities of the selected SaaS tenant
- Apply policy based on incident severity



Zscaler Endpoint DLP: Streamline & simplify endpoint data protection

Zscaler Endpoint DLP

Streamlined Protection

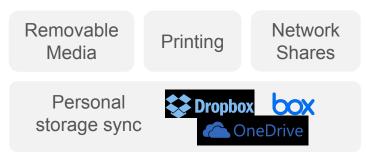
Use single DLP policy and unified agent

Unparalleled Visibility

See sensitive data movement immediately

no policy required

Endpoint Channels Protected:





Benefits

Quick Deployment

Leverage existing Zscaler DLP policy controls

Unified Policy

Consistent alerting across Endpoint, Inline & Cloud

Consolidated Agent

Streamlined, lightweight approach

Faster Incident Management

In-depth dashboards and forensics

Endpoint DLP - End User Experience

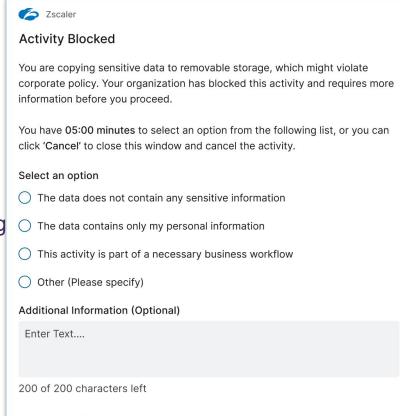
- Windows & macOS support
- Policy rule action options: **Allow**(=Monitor), **Confirm**, **Block**
- **End-user** interaction
 - **Notification dialog** optional for Allow/Block actions
 - Show Provides context to block action
 - Hide Stealth monitoring
 - **Confirmation dialog** for Confirm action (excellent tool for user coaching
 - Request exemption
 - Exemption from being blocked (policy still in place)
 - 12 Hours non configurable in V1



data. Your organization blocked this activity.

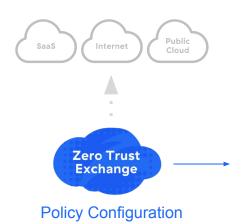
Learn More More options ~

Continue Cancel



X

Policy Configuration





Channel

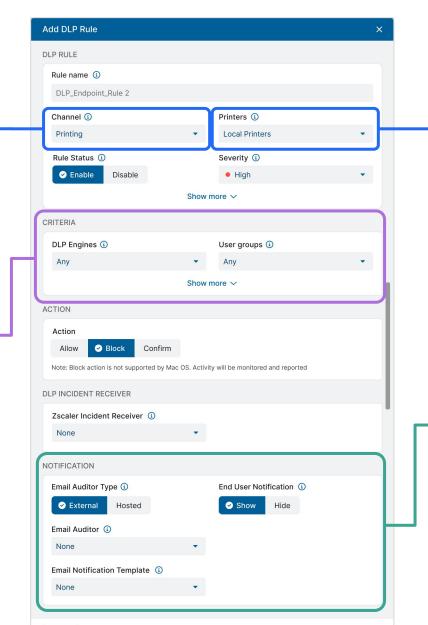
Select Channel:

Removeable Media Network Share Printing Cloud Storage sync

Criteria

Rules based on:

Users,
DLP engines,
Devices,
U]ser risk profile,
File type,
And more



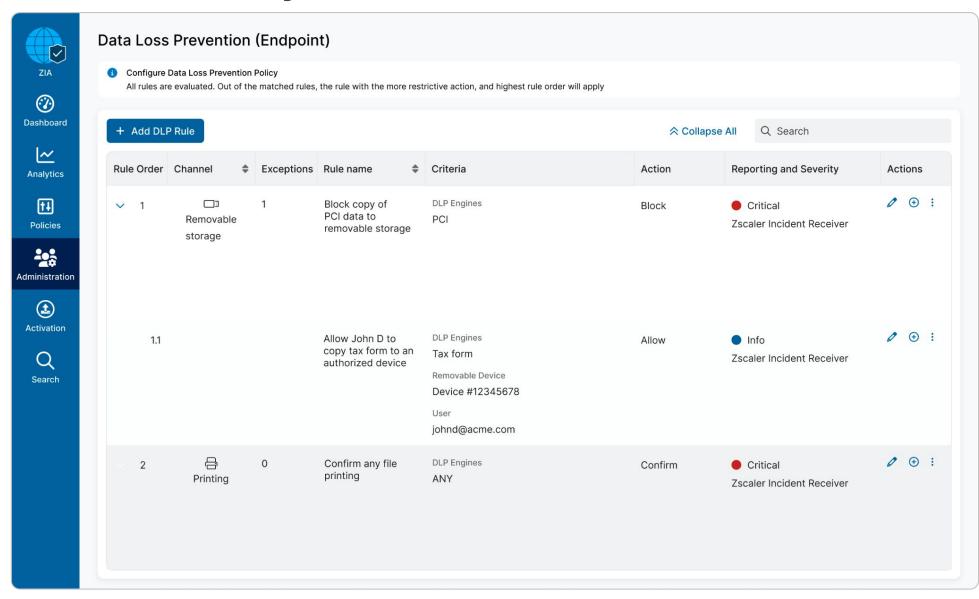
Channel Settings

Changes based upon channel selected

Notifications

Stakeholder emails or push notifications to users

Endpoint DLP - Policy Rules



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Streamline incident control with Workflow Automation

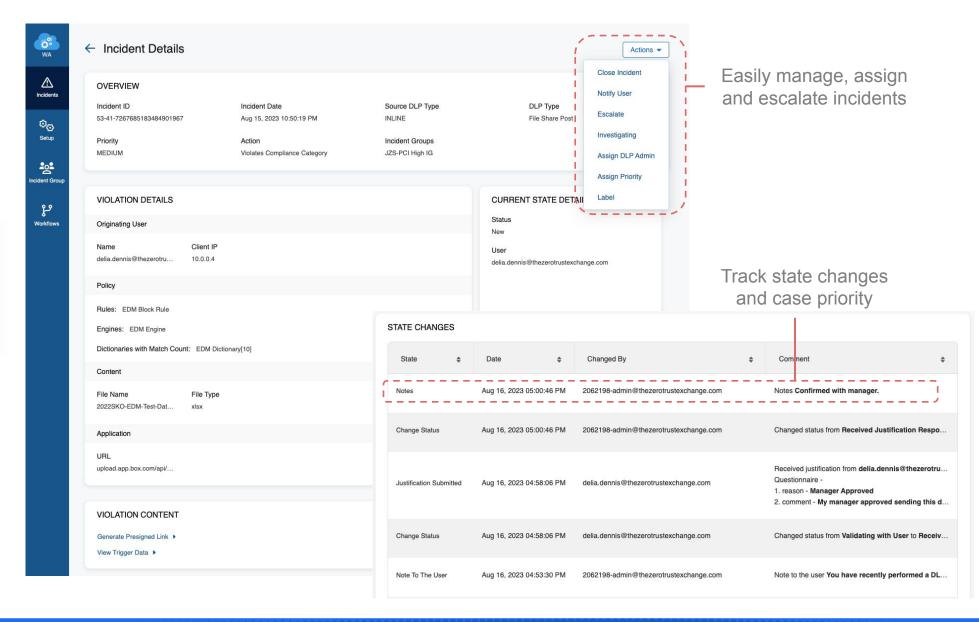
Workflow **Automation**

Cloud Hosted incident management

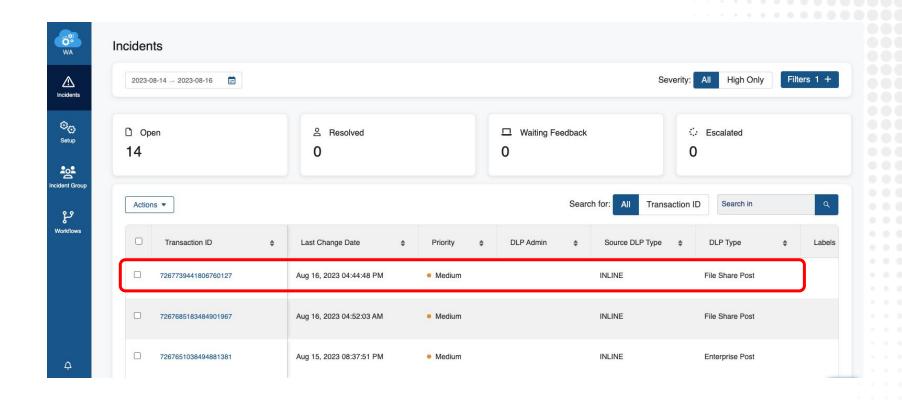


Incident justification across users & managers

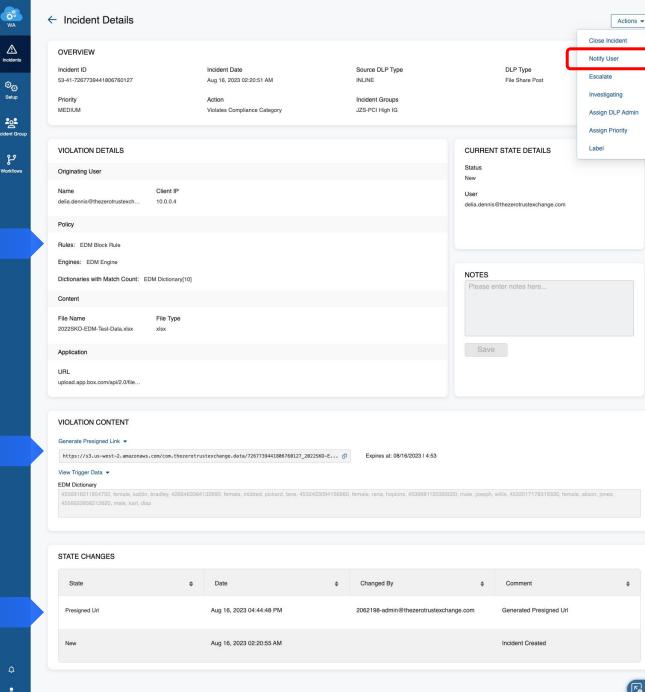
User Coaching -Improve protection program



Sales Employee Uploads EDM Data to Box



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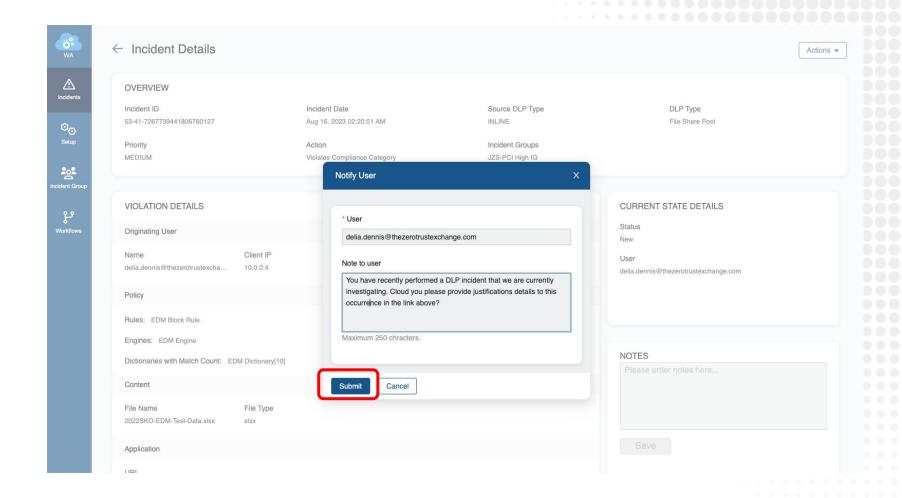




Violating Content

State Changes

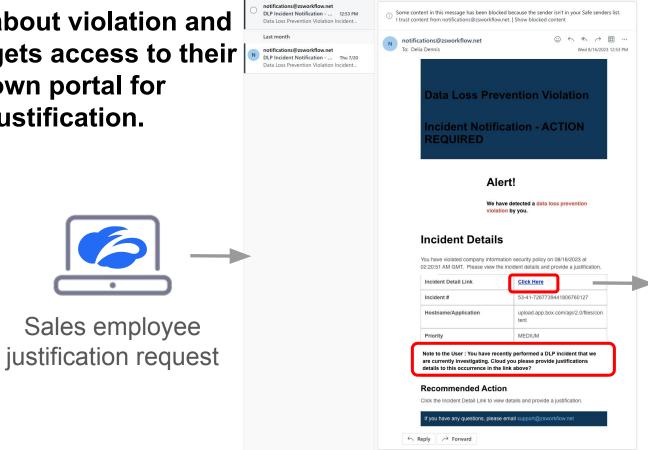
Notify the user from directly within the Incident Management Portal and ask for justification.



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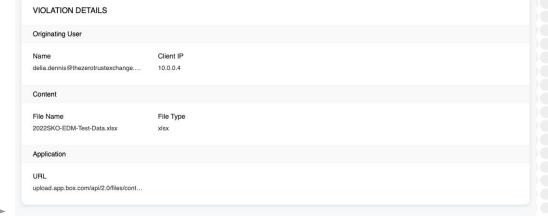
User receives email about violation and gets access to their own portal for justification.

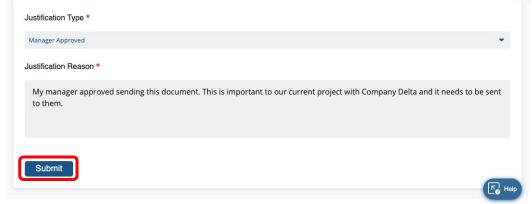
Sales employee

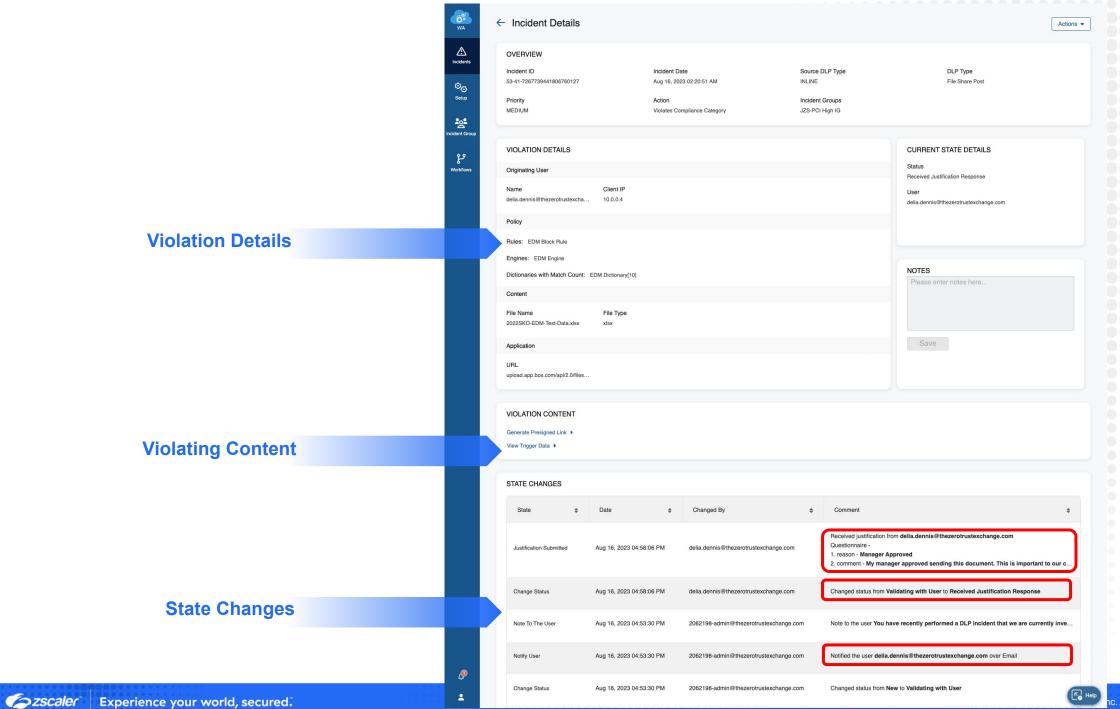


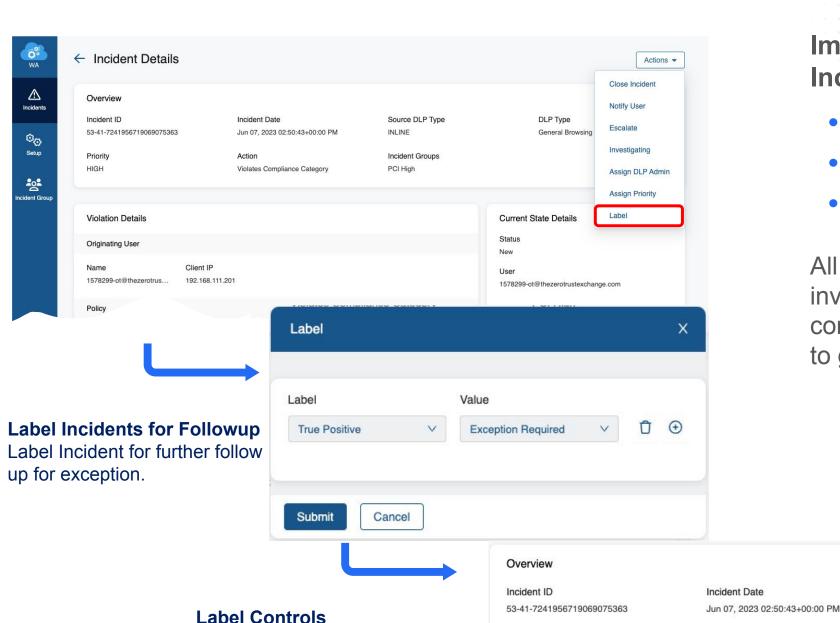
DLP Incident Notification - ACTION REQUIRED

Incident Your upload of the document 2022SKO-EDM-Test-Data.xlsx to upload.app.box.com/api/2.0/files/content violated your company's Information Security Policy. Please provide a justification here. **OVERVIEW** Incident ID Incident Date 53-41-7267739441806760127 Aug 16, 2023 02:20:51 AM









Implement Workflows for Incident Triage

- Label Incidents
- **Escalate to Managers**
- Assign to other Admins

All from one location through investigation and after completion control follow-ups and assignments to get resolution

> Source DLP Type **DLP Type** INLINE General Browsing Post Incident Groups Labels PCI High True Positive: Exception Required

Experience your world, secured.

Assign via label to appropriate

groups for review after investigation

Priority

Action

Violates Compliance Category

Ensure everything that occurs during Incident Management is audited.

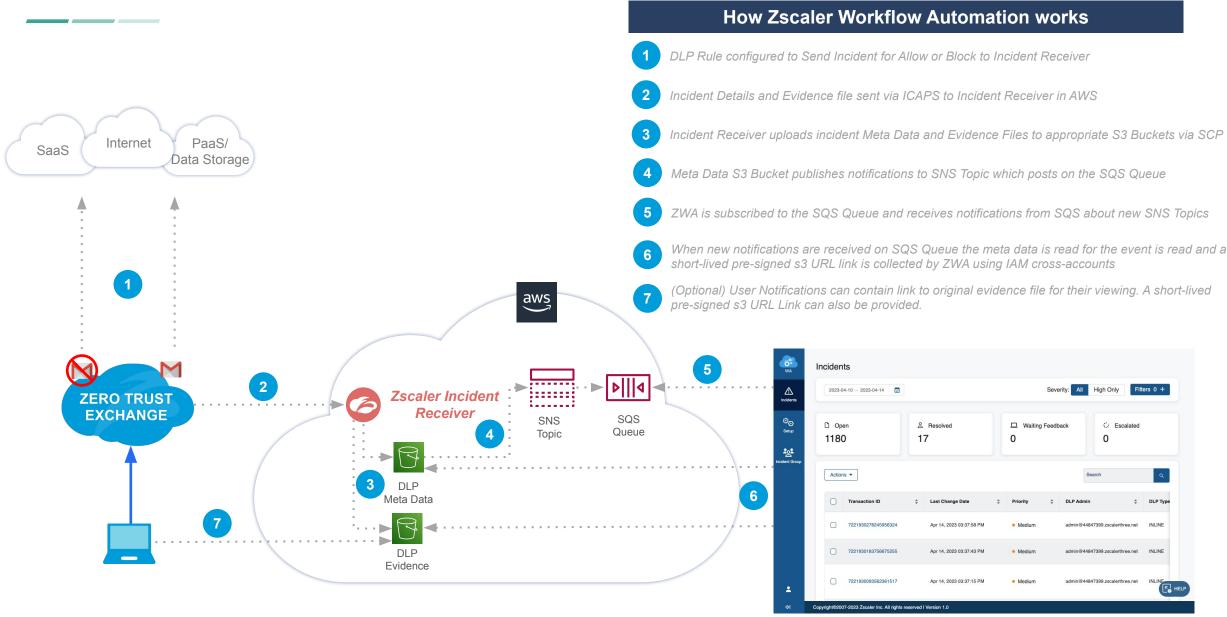
- All State Changes
- Assignments
- Notifications to Users or Management
- Escalations
- Closures
- Labeling

Everything that is performed on the incident will be tracked and reviewable.

TATE CHANGES			
State \$	Date \$	Changed By	Comment
Notes	Aug 16, 2023 05:00:46 PM	2062198-admin@thezerotrustexchange.com	Notes Confirmed with manager.
Change Status	Aug 16, 2023 05:00:46 PM	2062198-admin@thezerotrustexchange.com	Changed status from Received Justification Response to Resolved
Justification Submitted	Aug 16, 2023 04:58:06 PM	delia.dennis@thezerotrustexchange.com	Received justification from delia.dennis@thezerotrustexchange.com Questionnaire - 1. reason - Manager Approved 2. comment - My manager approved sending this document. This is important to our curren.
Change Status	Aug 16, 2023 04:58:06 PM	delia.dennis@thezerotrustexchange.com	Changed status from Validating with User to Received Justification Response
Note To The User	Aug 16, 2023 04:53:30 PM	2062198-admin@thezerotrustexchange.com	Note to the user You have recently performed a DLP incident that we are currently investiga
Notify User	Aug 16, 2023 04:53:30 PM	2062198-admin@thezerotrustexchange.com	Notified the user delia.dennis@thezerotrustexchange.com over Email
Change Status	Aug 16, 2023 04:53:30 PM	2062198-admin@thezerotrustexchange.com	Changed status from New to Validating with User
Presigned Url	Aug 16, 2023 04:48:26 PM	2062198-admin@thezerotrustexchange.com	Generated Presigned Url
Presigned Url	Aug 16, 2023 04:44:48 PM	2062198-admin@thezerotrustexchange.com	Generated Presigned Url
New	Aug 16, 2023 02:20:55 AM		Incident Created



Data Protection: Reporting, Analytics & Incident Management with ZWA

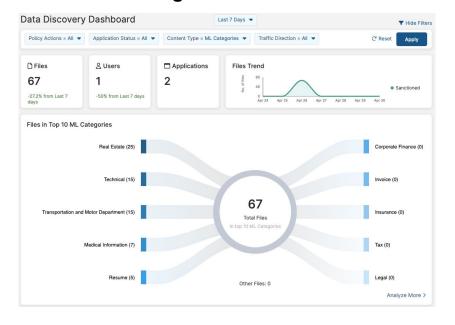




One to Rule Them All

Data Discovery Dashboard

Machine Learning Classification



DLP Engines Data Discovery Dashboard





Other Files: 0

DLP Dictionaries

2 Users

Last 7 Days -

Files Trend

1040 Form Filed Out (4)

Corporate_PII EDM (3)

DOUBLE BYTE (1)

Self-Harm & Cyberbullying (

Analyze More >

5

Applications

▼ Hide Filters

Sanctioned

1040 Form Filled Out (4)

Corporate_PII (3)

DOUBLE BYTE TEST (1)

Tax Identification Numbers

Analyze More >

Data Discovery Dashboard

Last 7 Days -

Content Type = DLP Engines ▼ Traffic Direction = All ▼

EDM_Rule (1)

Analyze More >

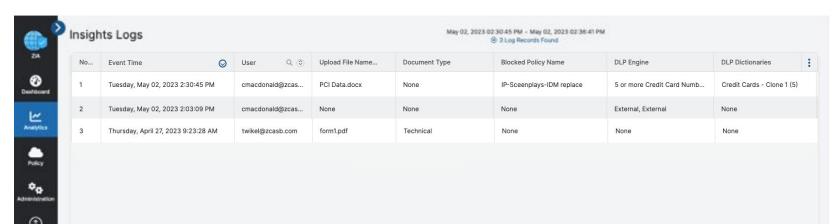
Files Trend

50

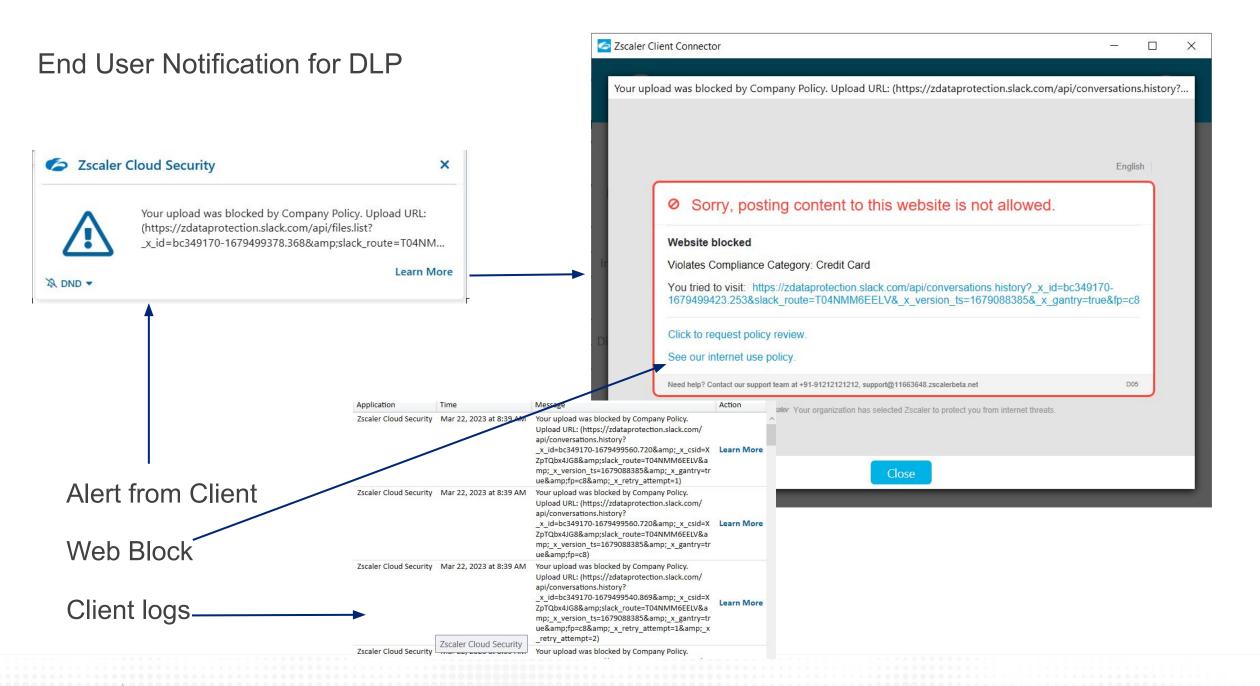
□ Applications

5

Application Status = All -



1040 Form Filled Out (4)

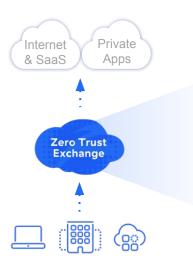


Workflow Automation

Streamline workflows with automated closed-loop investigations

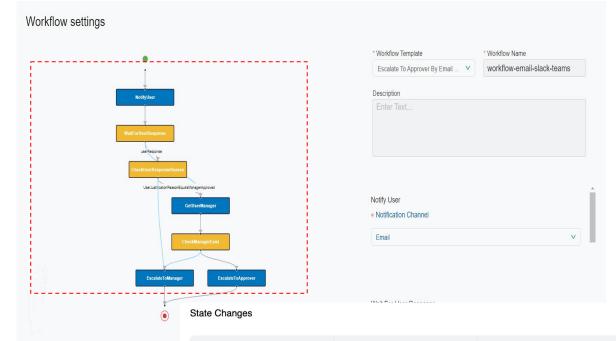
Workflow Automation

Cloud Hosted incident management



Incident justification across users & managers

User Coaching -Improve protection program



Automate the incident
Triaging with
conditional workflow
management

Reduce manual triaging, help IR team focus on optimization and real issues

State	\$ Date	\$ Changed By	\$ Comment	\$
Justification Submitted	Dec 08, 2022 10:57:51 PM	jiqbal@zscaler.com	Received justification from jiqbal@zscaler.com Questionnaire - 1. reason - Manager Approved 2. comment - My manager approved it	
Change Status	Dec 08, 2022 10:57:51 PM	jiqbal@zscaler.com	Changed status from Validating with User to Received Justification Response	
Change User	Dec 08, 2022 10:56:57 PM	jiqbal@zscaler.com	User email changed from kevin@dataparity.net to jiqbal@zscaler.com	
Notify User	Dec 08, 2022 10:56:57 PM	jiqbal@zscaler.com	Notified the user jiqbal@zscaler.com	
Change Status	Dec 08, 2022 10:56:57 PM	jiqbal@zscaler.com	Changed status from New to Validating with User	
New	Dec 08, 2022 05:31:52 PM		Incident Created	