

Sensitive Data Discovery Structured & Unstructured Data Simon Davey 2018

Who are Ground Labs?

- Global software vendor
- Recognised experts in Sensitive Data
- Offices in Australia, Ireland, North America, Singapore (HQ)
- Trusted by over 2,500 companies in 85 countries









Product Briefing Overview

- Architecture
- Sensitive Data
- Target Types
- Remediation
- Management Interface



Architecture

Enterprise Recon is designed to **identify**, **remediate**, and then **monitor** your organization's sensitive data from a single platform.

Using in-built automation and real-time alert features, keeping your data secure will become just another one of your Business-As-Usual practices.

Architecture

Master Server Virtual Appliance

- ISO deployable on bare metal or in a virtual machine
- On premise
- Built-in high performance database for centralised report storage
- Appliance is pre-configured and locked down
- Engineered to support beyond 50,000 concurrent endpoints
- Deployable in 15 minutes

Web Management Interface

- Locked down and hosted on the virtual appliance
- Integrated with Active Directory for centralised user management
- Offers both administration and all sensitive data management features
- No configuration or specialist knowledge required

Architecture (cont'd)

Scanning is performed locally on the endpoint

- Leverages Ground Labs leading sensitive data detection algorithm
- Lightweight and low impact designed for live production systems
- Native Support for 7 platforms + EBCDIC for mainframe data















Agentless Scanning + Device Discovery

- Master Server discovers new systems and devices on the network
- Deploy agentless scans directly from management console via existing agents
- Agentless scans use WMI for Windows and SSH for UNIX and macOS
- Mixed configuration options available local agent, agentless, remote scan

Sensitive Data Support

As the scope of data continually expands, organisations face increasing difficulty identifying and controlling all sensitive data handling points across an entire enterprise network.

Enterprise Recon enables sensitive data discovery across a broad variety of corporate data repository types whist inspecting all accessible data where sensitive information may be stored.

Sensitive Data Support

PCI DSS – Cardholder Data

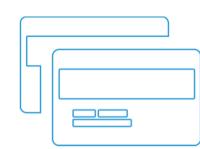
- Uses algorithm from our leading QSA discovery capabilities
- Incorporates all PCI DSS card types and more
- Detect Track 1/Track 2 magnetic stripe prohibited data

Privacy and Personally Identifiable Information (PII)

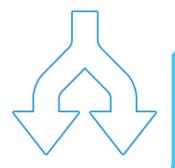
- Designed for compliance with global data protection laws
- Detects over 200 types of PII from over 50 countries
- Includes national ID cards, HIPAA, personal and financial data

Custom Data Types

- Design any data based on a consistent pattern using a simple GUI or Ground Labs' built-in scripting language
- Find evidence of employee fraud, data theft, intellectual property, or combinations of any existing data type.







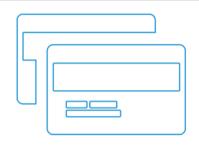
Sensitive Data Support (cont'd)

Financial Data Types

- Cardholder Data (PCI DSS)
- Bank Accounts, SWIFT and IBAN details
- National Insurance Numbers

Personal Data and Medical Records

- Mailing Address / Drivers Licence / Telephone number
- Health and Care #, NHS Number, Health Insurance Claim
- European EHIC, Generic License, Passport
- Personal Name, DOB, Email Address, Login Credentials
- Additional data types added in each release









Enterprise Recon is built to search both **Structured** and **Unstructured Data** including Local Storage, Network Storage, Deleted Files, Email Servers, Cloud Storage, Databases and more.

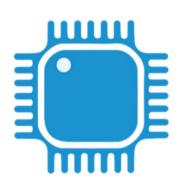
Target Types











er Data Files

Any type or source

Compressed archives

Files in-use

Shadow Files

- Temporary Files
- Recovery files
- Shadow volumes

Deleted Files

- o Recycle bin
- File slack space
- Unallocated sectors

Data in Memo

- By design
- Poor coding
- Uncontrollable

Target Types (cont'd)

Live Database Support



















- **Scanned Image Suport**
 - Identify sensitive data within faxes and scanned images (150 DPI+)
 - Supports a variety of image file formats
- **Recorded Audio Support**
 - Identify DTMF data in recorded audio (call centres)

Target Types (cont'd)

Live Email Server Support

- Exchange, Office365, Gmail, Lotus Notes, and general IMAP
- Search all user mailboxes, emails, attachments
- Delete remediation for Exchange / Office365
- Additional file-based email on workstations and servers
- Multiple mail client storage formats supported







Target Types (cont'd)

Cloud Storage Support

- Google Drive, Calendar and Tasks
- Amazon (AWS) S3 Storage
- Microsoft Azure Storage
- Dropbox, Box.net and Microsoft OneDrive for Office 365



- SharePoint 2013, 2016, and Online
- Additional support for generic portals / sites



- Scan large SAN / NAS devices
- SSH based scanning for legacy devices





















Remediation & Integration Features

Enterprise Recon takes its capabilities beyond simply identifying your data storage risks by empowering you with remediation options to take affirmative action on sensitive data.

Combine this with Enterprise Recon's centralised user framework for delegation of security issues by triggering immediate alerts directly to the right person to avoid data storage risks from recurring in the future.

File Remediation

Mask In Place

Overwrites sensitive data within existing documents

Permanent Delete

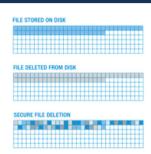
- Deletes files permanently using secure erase methods
- Renders data unrecoverable by undelete tools

Secure Quarantine

- Relocate files to a secure location of your choice
- Securely overwrites existing location

Encrypt

- Secure a file within its existing location
- Moves the file into a AES encrypted zip file









Enterprise Integration

Real-time Alerting

- Generate instantaneous alerts when findings identified
- Supports large number of event types to alert on
- Set scan-specific alerts and host/group specific alerts



- System level events sent to SIEM for correlation
- Integrate with centralized operational controls
- Active Directory / LDAP Integration
 - Central authentication based on AD user credentials
 - Greater control of user-level permissions





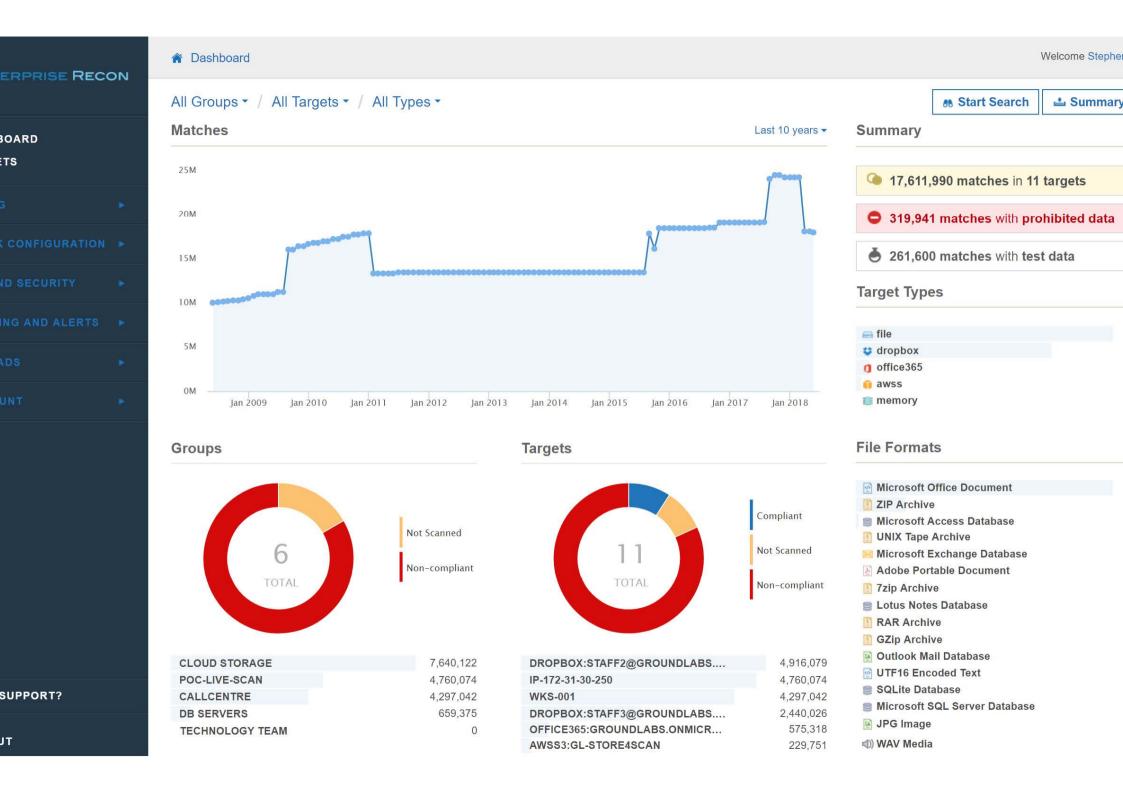


Management Interface

Powerful software is of little value if people find it hard to use.

Ground Labs have invested significant time designing an interface for Enterprise Recon v2.0 that is powerful yet simple, delivering the information you need in a clear and concise manner whilst offering the ability to quickly drill down into your organisation to view the exact detail of issues that represent the highest risk.





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* Targets

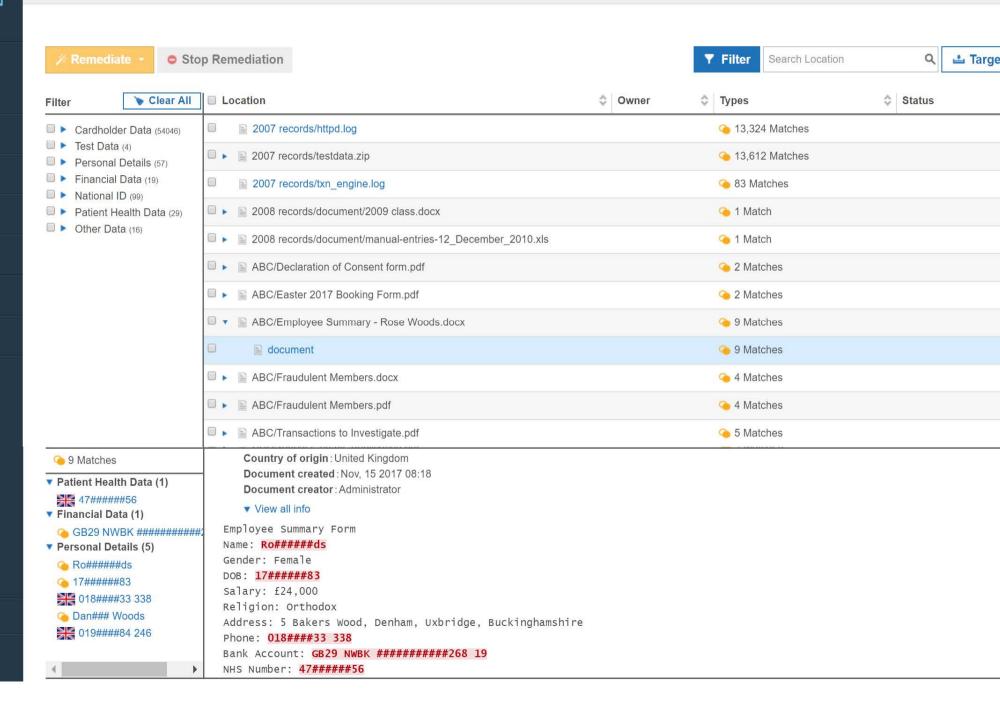
All Groups - / All Targets - / All Types -

Welcome Stephe

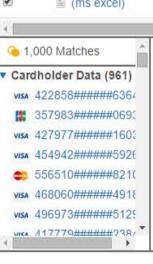
Targets		Searched	
■ ▼ POC-LIVE-SCAN			⇒ 32 Prohibited
□ ► 🔬 IP-172-31-30-250		25 weeks ago	⇒ 32 Prohibited <a>◆ 4,760,042 Matches <a>◆ 1,556 Test
■ ▼ EMAIL SERVERS			all 2 Prohibited 6 575,306 Matches 4 248,665 Test
□ ► △ OFFICE365:GROUNDLA	ABS.ONMICROSOFT.COM	5 weeks ago	□ 12 Prohibited G 575,306 Matches 🕹 248,665 Test
■ ▼ TECHNOLOGY TEAM			Not searched
■ ▶ ♣ PWC-TESTAGENT		Never	Not searched
☐ ▼ CALLCENTRE			319,862 Prohibited
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■ ▼ CLOUD STORAGE			⇒ 35 Prohibited → 7,640,087 Matches → 146 Test
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□ ► △ DROPBOX:STAFF2@G	ROUNDLABS.COM	4 weeks ago	3 Prohibited 4,916,076 Matches 54 Test
□ ► △ DROPBOX:STAFF3@G	ROUNDLABS.COM	5 weeks ago	2,440,026 Matches
□ ► △ DROPBOX:STAFF1@G	ROUNDLABS.COM	12 weeks ago	← 54,266 Matches
■ ▼ DB SERVERS			659,375 Matches
□ ► 🔬 DBLINUX3		1 weeks ago	319,194 Matches
□ ► 🔬 DBLINUX2		Never	Not searched
□ ► 🔬 DBLINUX1		14 weeks ago	340,181 Matches

SUPPORT?

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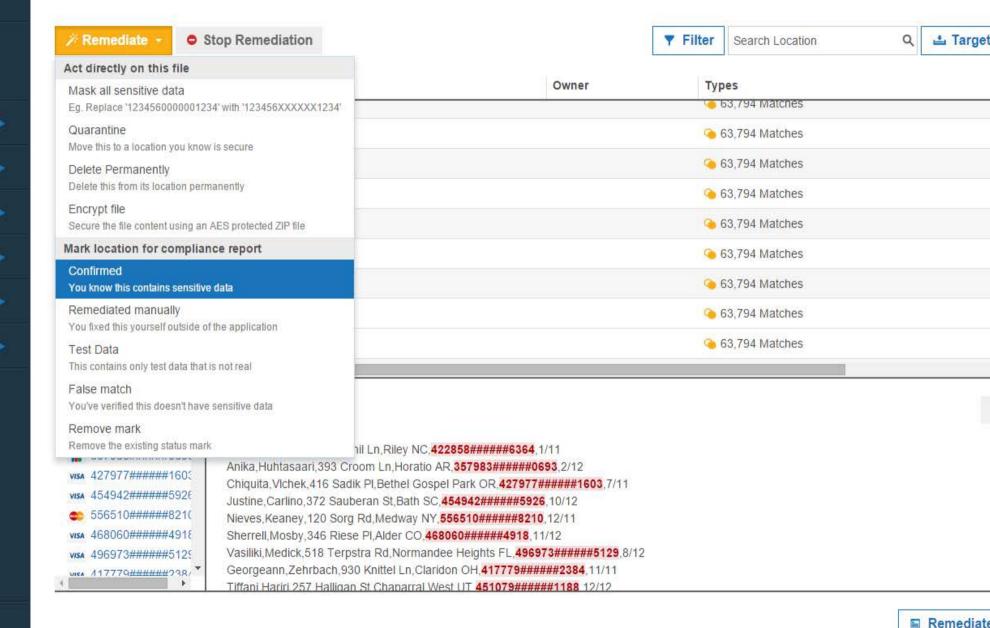
Stop Remediation **≛** Targe Y Filter Search Location ✓ Location Owner Types ZUU9 records/accounts-2009-07-01.XIS 63,794 Matches 2009 records/accounts-2009-08-01.xls 63,794 Matches 2009 records/accounts-2009-09-01.xls 63.794 Matches 2010 records/accounts-2010-01-01.xls 63,794 Matches 2010 records/accounts-2010-02-01.xls 63.794 Matches 2010 records/accounts-2010-03-01.xls 63,794 Matches 2010 records/accounts-2010-04-01.xls 63,794 Matches 2010 records/accounts-2010-05-01.xls 63.794 Matches (ms excel) 63,794 Matches (ms excel) ▼ Cardholder Data (961) View all info Sina, Bustard, 255 Pospishil Ln, Riley NC, 422858######6364, 1/11 Anika, Huhtasaari, 393 Croom Ln, Horatio AR, 357983######0693, 2/12 Chiquita, VIchek, 416 Sadik PI, Bethel Gospel Park OR, 427977#####1603, 7/11 Justine, Carlino, 372 Sauberan St, Bath SC, 454942######5926, 10/12 Nieves, Keaney, 120 Sorg Rd, Medway NY, 556510#####8210, 12/11

Sherrell, Mosby, 346 Riese Pl, Alder CO, 468060######4918, 11/12

Vasiliki, Medick, 518 Terpstra Rd, Normandee Heights FL, 496973#####5129, 8/12

Georgeann, Zehrbach, 930 Knittel Ln, Claridon OH, 417779######2384, 11/11

Tiffani Hariri 257 Halligan St Chaparral West UT 451079#####1188 12/12



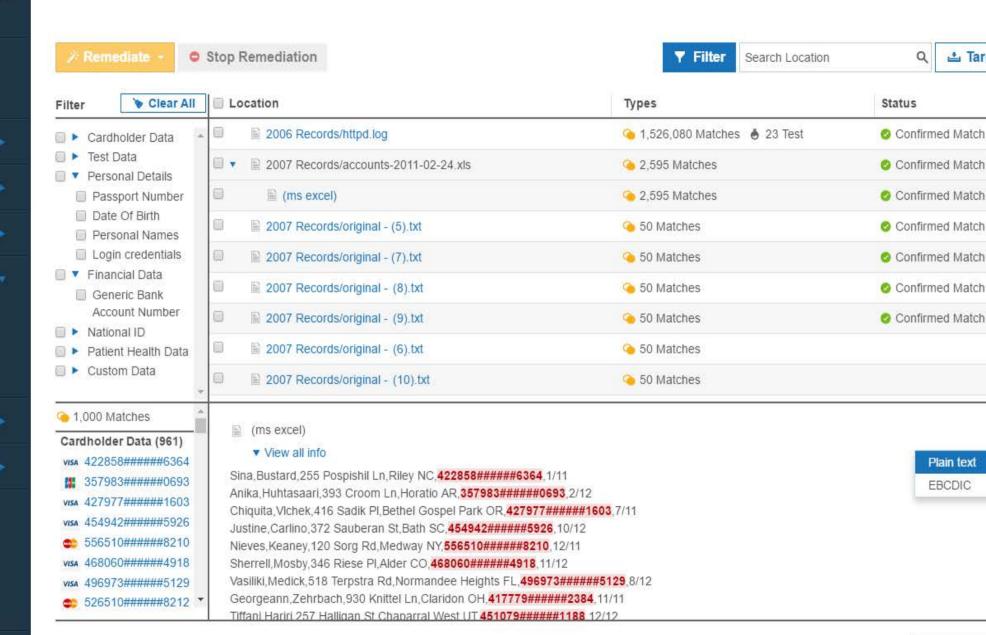
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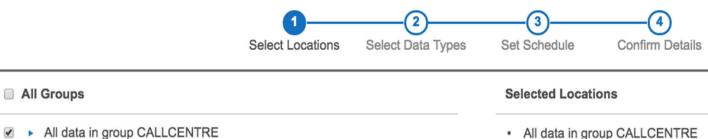
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RK CONFIGURATION >

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- All data in group CLOUD STORAGE
- ℧ Dropbox Location in group CLOUD STORAGE
- All data on target DROPBOX:STAFF1@GROUNDLABS.COM
- All data on target DROPBOX:STAFF2@GROUNDLABS.COM
- All data on target DROPBOX:STAFF3@GROUNDLABS.COM
- All data in group DB SERVERS
- All local files in group DB SERVERS
- All local process memory in group DB SERVERS
- All data on target DBLINUX1

- · All data in group CALLCENTRE
- All data on target DROPBOX:STAFF1@GROUNDLABS.COM
- In All local process memory in group DB SERVERS

OARD

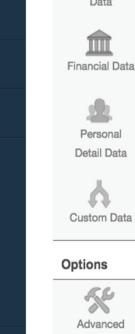
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Search 2 locations

GDPR and other data types available

Filter by	Data Type Profiles	Version	Owner	Last Modified
Search by Name	☐ â All Cardholder Data ♣	v1		24 Apr 2018
Shared with Me	☐ â Australian Health Information ♣	v1		24 Apr 2018
Archived		v1		24 Apr 2018
		v1		24 Apr 2018
	☐ â Canadian Personal Information &	v1		24 Apr 2018
	☐	v1		24 Apr 2018
	☐ â GDPR Profile - 28 EU Countries	v1	scavey	14 Jul 2017
	□ â Login Credentials ♣	v1		24 Apr 2018
	☐	v1		24 Apr 2018
	☐ ● PCI Compliance ■	v1		24 Apr 2018
	□ â Robust-GDPR-EU ♣	v1		14 Jul 2017
	☐ â UK Health Information \$	v1		24 Apr 2018
	☐ â UK Personal Information 	v1		24 Apr 2018
	□	v1		24 Apr 2018
	■ B USA Personal Information	v1		24 Apr 2018

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Personal Detail Data

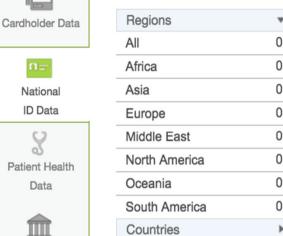
Custom Data

Advanced Features

Data Type Profile Label: Our Company Data Profile

Choose Categories of National ID Data

Search for...



Robust Search

Relaxed Search

Less results, less false matches

More results, more false matches

	All	National	ID	Data

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	0 0 0 0 0

All National ID Data	
Australian Tax File Number	Customise
☐ Austrian SSN	Customise
■ Belgian National Number	Customise
□ Brazilian CPF	<u> Customise</u>
□ Brazilian Registro Geral	Customise
Canadian Social Insurance Number	Customise
☐ Chilean RUN	Customise
☐ Croatian OIB	Customise
☐ Czech Republic RC	Customise
□ Danish CPR	Customise
□ Dutch Burgerservicenummer	Customise
☐ Finnish HETU	Customise
□ French INSEE	Customise
☐ Gambian National Identification Number	Customise
☐ Greek AFM	Customise
☐ Greek AMKA	Customise
☐ Hong Kong ID	Customise
☐ Icelandish Kennitala	Customise

PII Examples – over 200 types from 50 countries available

Patient Health Data		All Financial Data	
stralian Healthcare Identifier - Organisation	Customise	Australian Bank Account Number	Customise
ıstralian Individual Healthcare Identifier	Customise	Australian Business Number	Customise
ıstralian Medicare Card	Customise	Australian Company Number	Customise
ıstralian Medicare Provider	Customise	Canadian Bank Account Number	Customise
anadian Health Service Number	Customise	Generic Bank Account Number	Customise
anadian Personal Health Identification Number (PHIN)	Customise	☐ International Bank Account Number (IBAN)	Customise
ug Enforcement Agency Number	Customise		Customise
ropean EHIC	Customise	☐ ISO8583 message with PAN	•
nited Kingdom Community Health Index	Customise	□ Israeli Bank Account Number	
nited Kingdom Health and Care Number		Japanese Bank Account Number	<u> </u>
nited Kingdom National Health Service Number	Customise	SWIFT Code	Customise
nited States Health Insurance Claim Number	Customise	 United Kingdom VAT Number 	Customise
nited States Health Plan Identifier	Customise	 United States Bank Account Number 	Customise
nited States National Provider Identifier	Customise	■ United States Routing Transit Number	Customise

Personal Details Data	☐ License Number	
ustralian Driver License Number	Customise □ Login credentials	Custom
ustralian Mailing Address		
ustralian Passport Number		 Custom
ustralian Telephone Number	Customise ☐ Passport Number	 Custom
anadian Mailing Address	Customise ☐ Personal Names	Custom
anadian Passport Number	Customise ☐ Polish Passport Number	
anadian Telephone Number		Custom
ate Of Birth	Customise □ Turkish Telephone Number	 Custom
mail addresses	Customise United Kingdom Driver License Number	Custom
rench Driver License Number	Customise □ United Kingdom Electoral Roll Number	
rench Passport Number	Customise □ United Kingdom Mailing Address	Custom
erman Driver License Number	Customise United Kingdom Telephone Number	Custom
erman Passport Number	Customise United States Driver License Number	Custom
Address	Customise ☐ United States Mailing Address	
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GROUNDLABS.COM		

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Data Type Profile Label: Our Company Data Profile

Search for...



National ID Data



Patient Health Data



Personal Detail Data

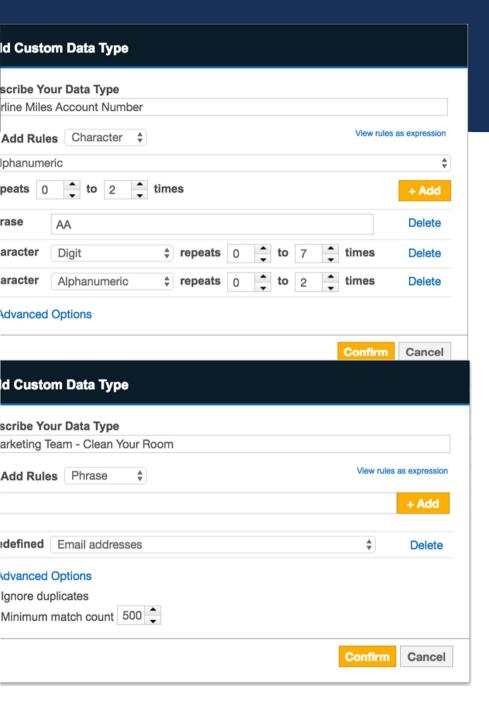


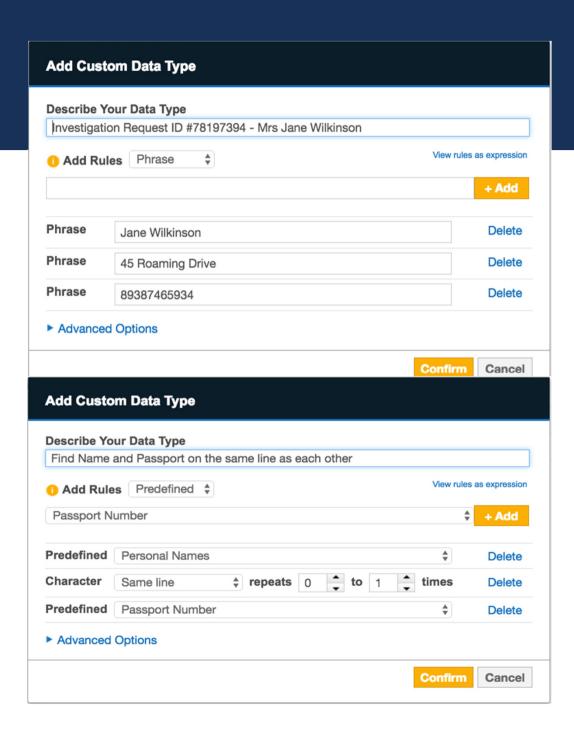
Options



Choose Custom Expressions

- Airline Miles Account Number
- ☑ Investigation Request ID #78197394 Mrs Jane Wilkinson
- Marketing Team Clean Your Room
- Find Name and Passport on the same line as each other
 - + Add Custom Data Type



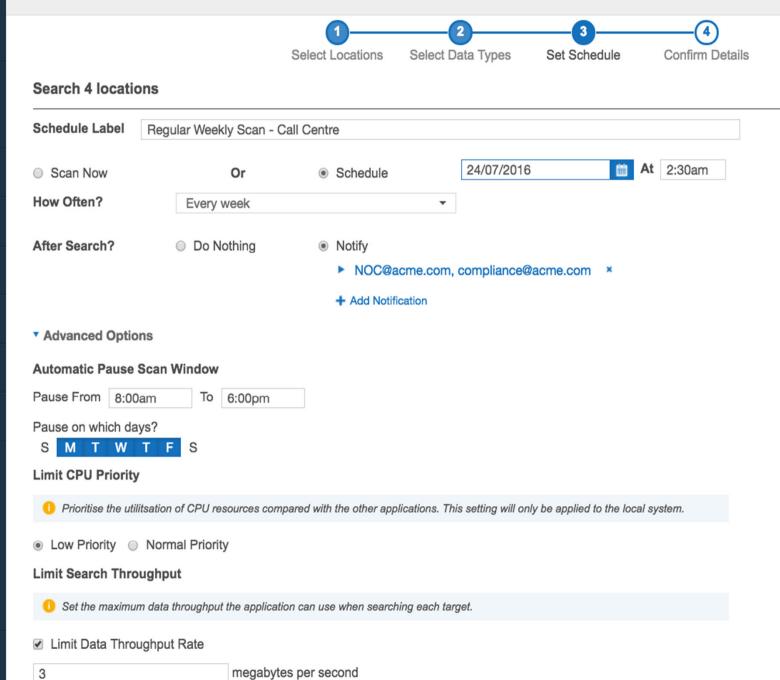


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RING AND ALERTS

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Platform Support Summary

Enterprise Storage – Servers, Cloud, Databases, Big Data















































User Storage – Workstations, Cloud, Email

























Questions & Answers