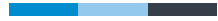


BuildIT

2021 User Conference

Improving Data Security Through GoAnywhere MFT Integrations





Improving Data Security
Through GoAnywhere
MFT Integrations

BuildIT

2021 User Conference



Let us help you Build a Better IT™

Today's Presenter



Scott Messick

Senior Solutions Engineer

HelpSystems

Why HelpSystems Data Security?



Understand

What data do I have?



Govern

How can I control it?

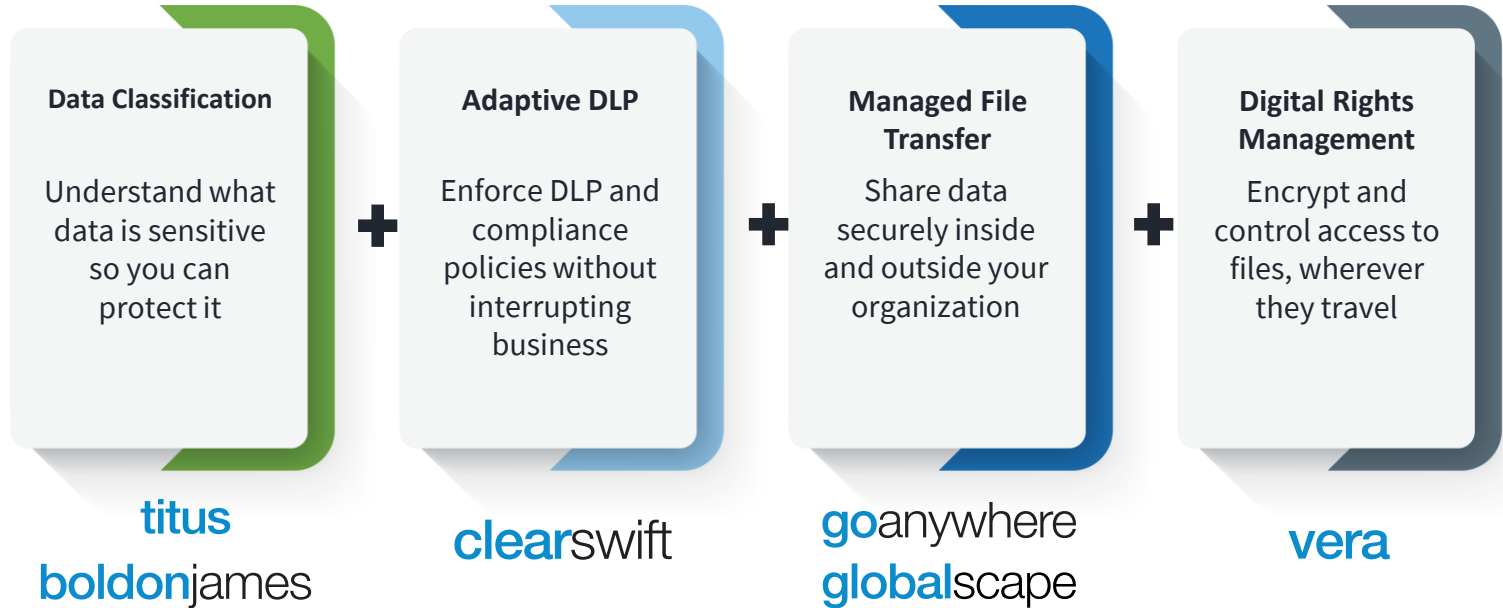


Protect

How can I share
it risk-free?

HelpSystems Data Security Suite

Data security platform designed for today's hybrid IT reality



Why GoAnywhere?

Our managed file transfer solution, GoAnywhere MFT, is the fastest-growing solution on the market. Deployable on-premises, in the cloud, in a hybrid environment, or hosted by HelpSystems, we streamline secure exchange of data between systems, employees, customers, and trading partners.



Secure File Transfer

Move files with extensive security controls to meet compliance requirements.



Automated Workflows

Eliminate the need for custom programs/scripts, single-function tools, or manual processes.



Centralized Admin

Single, easy-to-use platform with a modern web-based interface



Inbound Connections

Support for industry-standard protocols, like SFTP, FTPS, AS2/3/4, and HTTPS

Why Clearswift?

Clearswift offers award-winning DLP and threat protection solutions for email, web and the endpoint incorporating the use of our unique deep content inspection technology. Our solutions can be deployed on-premises, in the cloud, or hosted by HelpSystems. Via our Secure ICAP Gateway, we extend our unique technology to the MFT platform.



Content Inspection

Deep rich content analytics ensure sensitive data is not transmitted.



Adaptive Redaction

Redaction of text allows for file transfer to continue minus offending content.



False Positives

Distinguish between things that may look like PII which may not be PII.

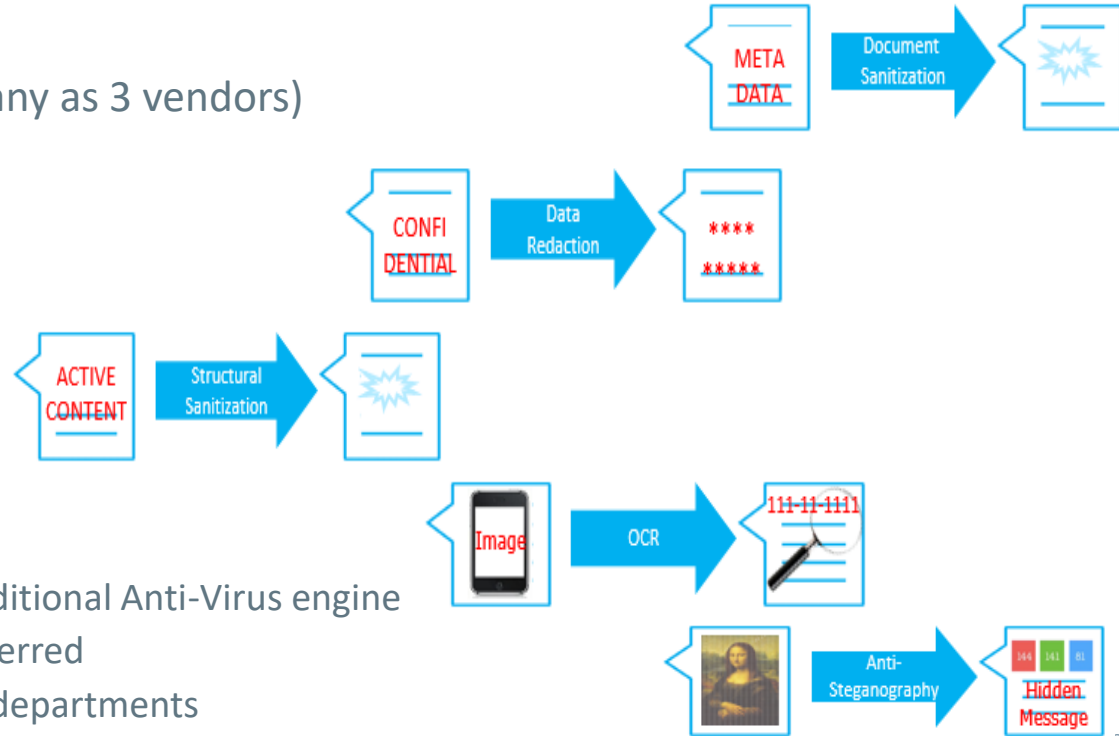


Threat Protection

Ability to inspect content for viruses and malware.

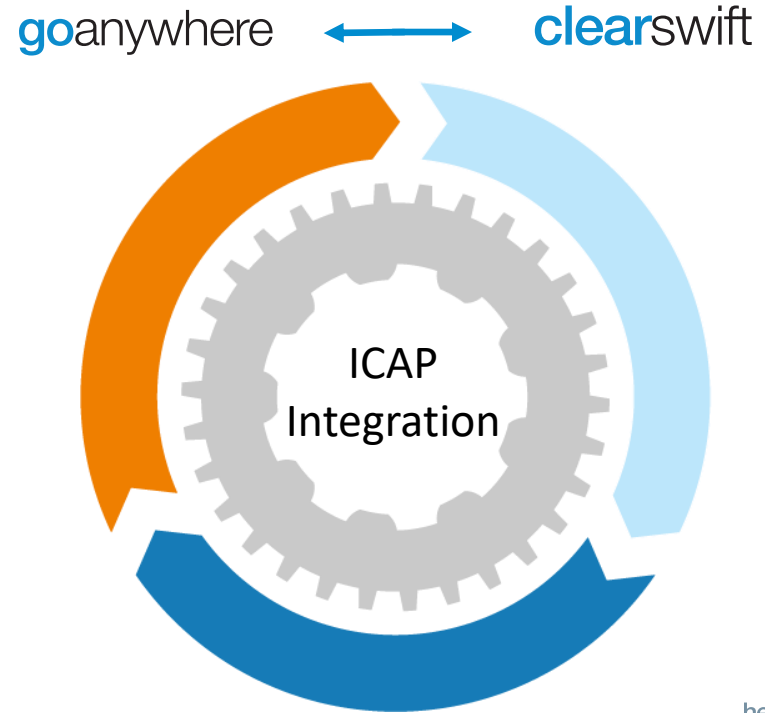
Threat Protection and DLP Integration

- ▶ Advanced Persistent Threats
- ▶ Anti-Virus protection (1 to as many as 3 vendors)
- ▶ Traditional DLP
- ▶ Adaptive DLP
 - ▶ Adaptive Redaction
 - ▶ Optical Character Recognition
 - ▶ Metadata Cleanup
- ▶ Media Type Protection
- ▶ Unique/Custom protection
 - ▶ Threat Prevention outside of traditional Anti-Virus engine
 - ▶ Content not allowed to be transferred
 - ▶ Varying business rules between departments
 - ▶ Ability to allow executable and/or dll transfer for some not others



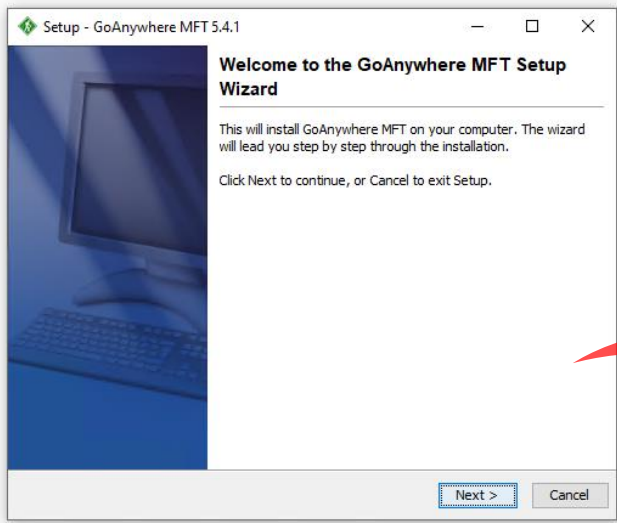
How GoAnywhere and Clearswift work together

- 1 GoAnywhere securely transfers attachments between employees or trading partners.
- 2 Clearswift's ICAP Gateway only intercepts content when threat protection and DLP requirements exist.
- 3 ICAP runs rule set (keyword search, executable renaming, script removal, etc.).
- 4 If the content *can* be sanitized, the transmission is allowed and continues.
- 5 If the content *cannot* be sanitized, the transmission is blocked.



MFT Media Type Protection

Name	Date modified	Type	Size
ga5_4_1_windows_x64.exe	02/02/2017 07:27	Application	216,550 KB



Executable Detected By GoAnywhere Media Type Protection Module During Upload

```
Executing task 'icap 1.0'
Scanning file 'C:\Program Files\Linoma Software\GoAnywhere\UserHome\Demo\gacmd1_5_2_windows.exe'.
----- BEGIN ICAP REQUEST -----
RESPMOD icap://192.168.250.139:1344/policy_service_resp ICAP/1.0
Host: 192.168.250.139
User-Agent: GoAnywhere
Allow: 204
Connection: close
X-Authenticated-User: ZGVtbzE=
Encapsulated: req-hdr=0, res-hdr=77, res-body=121
GET /gacmd1_5_2_windows.exe HTTP/1.1
Host: goanywhere.examplecompany.org
HTTP/1.1 200 OK
Content-Length: 1352192
----- END ICAP REQUEST -----
----- BEGIN ICAP RESPONSE HEADERS -----
server: Traffic Spider 2.4.0
encapsulated: res-hdr=0, res-body=158
x-violations-found: 1
connection: close
x-virus-id: Executable/Win32Exe
x-infection-found: Type=1; Resolution=2; Threat=Executable/Win32Exe;
istag: "CSICAP/v2.4.0/c92f1ad/CSAdapter"
----- END ICAP RESPONSE HEADERS -----
```

MFT PCI Controls

The image shows a sequence of three screenshots illustrating MFT PCI controls. A red arrow points from the left sidebar to the file upload area. A second red arrow points from the file name to the account statement. A third red arrow points from the redacted account number to the account statement. A fourth red arrow points from the account number to the account activity table.

1. JPG With Loan Account Number

2. Upload JPG Into MFT Secure Folders

3. Loan Account Number Redacted During Upload Into MFT

GO ANYWHERE® Web Client

Files

Upload New Folder Refresh Share Navigate

/ (Home)

Name	Date Modified	Size
eStatement - JANE LEWDWYN.JPG	10/6/20 3:32:19 PM	92.42 KB

Your personal chequing account statement

19 Mar ATM withdrawal 50.00
22 Mar ATM withdrawal 30.00
Interest purchase - 1361 - The Bay 125.13
Interest purchase - 1361 - Highland Farms 6.94

Your account number: 02782-5094431 1-800-DEMO 1-1

How to reach us: 123-9876543-123

JANE LEWDWYN
1234 ANY STREET, SUITE 5678
ADDRESS LINE #2
CITY, PROVINCE, A1B 2C3

From March 12, 2018 April 12, 2018

(1-800-769-2511)
www.rbcroyalbank.com/deposits

Summary of your account for this period
Signature Plus 02782-5094431

Demonstration Bank is now paperless!
Dear Jane, we're pleased to introduce you to digital imaging. Now you can maintain images of cheques, records and view them online, as easy as a click of a mouse.
This new digital imaging service is only available if you're not already a Demonstration Bank Online Banking client. Visit www.demonstrationbank.com/online-banking-client or call 1-800-DEMO 1-1 (1-800-769-2511).

Details of your account activity

Date	Description	Withdrawals (\$)

Your personal chequing account statement

19 Mar ATM withdrawal 50.00
22 Mar ATM withdrawal 30.00
Interest purchase - 1361 - The Bay 125.13
Interest purchase - 1361 - Highland Farms 6.94

Your account number: [REDACTED] 1-800-DEMO 1-1

How to reach us: 123-9876543-123

JANE LEWDWYN
1234 ANY STREET, SUITE 5678
ADDRESS LINE #2
CITY, PROVINCE, A1B 2C3

From March 12, 2018 April 12, 2018

(1-800-769-2511)
www.rbcroyalbank.com/deposits

Summary of your account for this period
Signature Plus [REDACTED]

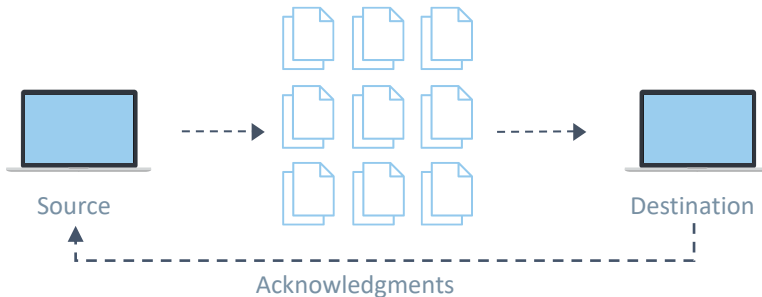
Demonstration Bank is now paperless!
Dear Jane, we're pleased to introduce you to digital imaging. Now you can maintain images of cheques, records and view them online, as easy as a click of a mouse.
This new digital imaging service is only available if you're not already a Demonstration Bank Online Banking client. Visit www.demonstrationbank.com/online-banking-client or call 1-800-DEMO 1-1 (1-800-769-2511).

Details of your account activity

Date	Description	Withdrawals (\$)

Who is FileCatalyst and Why Use HotFolders ?

- ▶ Ideal for bulk file transfer (10K files +, 10GB+)
- ▶ Automation
- ▶ Predictable - Can send at a perfect rate
- ▶ Not affected by latency or packet loss (world wide)
- ▶ Congestion Control implemented in application layer
- ▶ Tunable congestion control aggression
- ▶ Instantly detect link capacity



FileCatalyst completely saturates the pipe by sending multiple blocks of data
= Increased transfer speed

Why Titus?

HelpSystems data classification technology allows you to control, identify, and protect your sensitive data – better than anyone else out there.



Identify your Data

Intelligent, machine learning detection of sensitive data



Classify your Data

A powerful, flexible policy engine to classify your data



Protect your Data

Protect data at creation, at rest, and in flight



Empower DLP

Integrate for more intelligent data loss prevention

Titus & Clearswift provide granular options ensuring classified data is handled the way you want it to be

Name	Persistent Metadata
ML Category	Loan Agreement
GDPR Flag	Yes
LoanID	27038-49b
Legal Hold	LH-4726
PI Type	Name;Address;PII,PCI,Contract
Share Consent	No
Retention	11_9_2021
Data Center Source	EMEA Zone 4
Secure Transfer Required	True
Classification	Confidential
Sensitivity	Customer Confidential
Customer	New
Visual Markings	Headers Footers
Contains Personal Data	True
Apply Encryption	True

Customer Confidential - Sara Peterson
Mortgage Loan Agreement Draft

Sara J. Peterson
 Borrower

Co-Borrower

I. TYPE OF MORTGAGE AND TERMS OF LOAN

Mortgage Applied for: [Redacted]

Amount: \$ 146800

Subject Property: [Redacted]

Legal Description: [Redacted]

Purpose of Loan: [Redacted]

Borrower's Name: Sara J. Peterson

Social Security Number: 123-12-1234

Married: Married (include spouse, street, city, state)

Present Address: [Redacted]

Mailing Address: [Redacted]

Former Address: [Redacted]

I hereby acknowledge the formal acceptance of this legally binding Mortgage Loan Application document that outlines the type and purpose of the Loan Agreement in the eye of the Legal Entity overseeing this Application and will abide by the Terms and Conditions within.

Customer Confidential - Sara Peterson
 Uniform Residential Loan Application
 Freddie Mac Form 65 (7/04) (rev. 4/06)

Page 1 of 1

Freddie Mac Form 1003 100 (rev. 6/09)

Uniform Mortgage Loan Application - Copy Pro...

General Summary Statistics Contents Custom

Name: [Redacted] Add Delete

Checked by Client
 Date completed
 Department
 Destination
 Disposition

Type: Text Link to content

Value: [Redacted]

Properties:

Name	Value
ML Category	Loan Agreement
GDPR Flag	Yes
LoanID	27038-49b
Legal Hold	LH-4726
PI Type	Name;Address;locati...
Share Consent	No
Retention	11_9_2021
Data Center Source	EMEA Zone 4


OK Cancel

What To Look For?

In order for this content rule to trigger the test conditions detailed on this panel must be met by the message being processed. If the conditions are met, then the collection of actions described within the 'What to do?' panel will be carried out.

Lexical Expression

Using the expression list and trigger conditions below :

Expression list : Classification - Loan Agreement 

Trigger : Greater than or equal

For a mail message


Scan the following parts of the message :

- Content - the message body.
- Content - the attachments matching the conditions in the other clauses.
- The subject line.
- Specific message header(s)


For a web transaction

Scan the following parts of the HTTP conversation :

- HTTP Headers
- Request URL
- Content

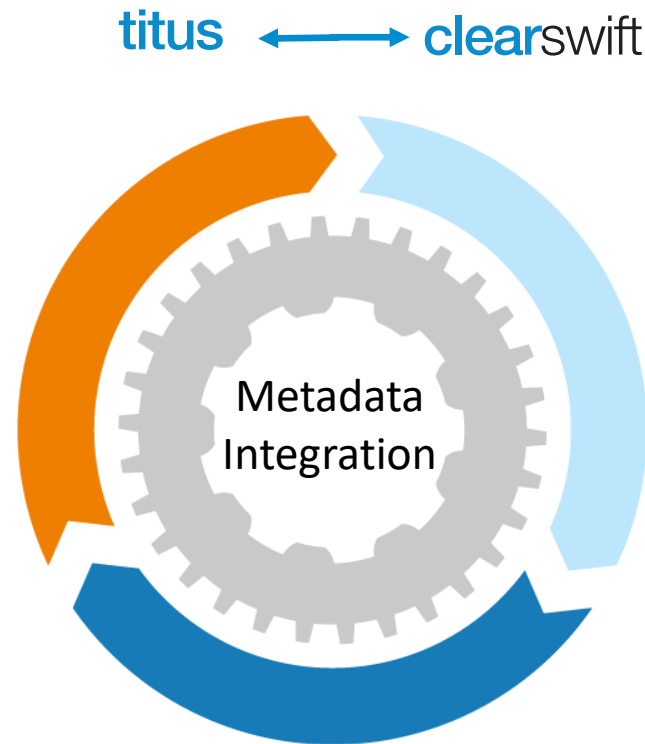
 **Note that when scanning content you must select at least one of Scan body, Scan header and footer, Scan properties and Scan comments.**

Document options (for content) :

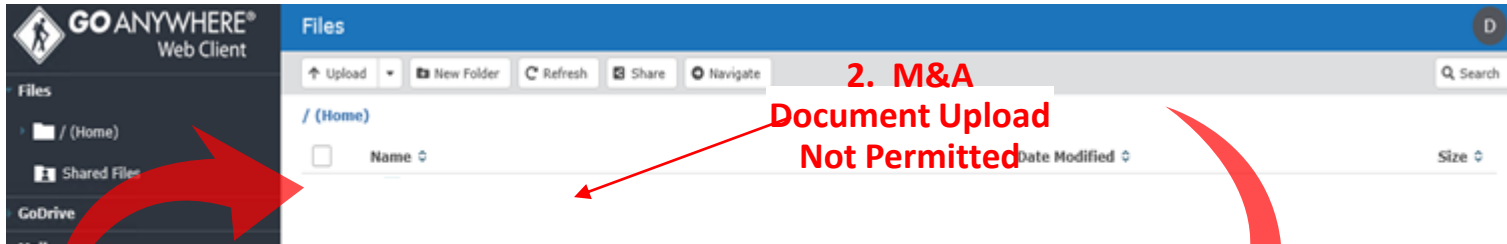
- Scan body
- Scan header and footer
- Scan properties 
- Scan comments
- Scan embedded script

How Titus and Clearswift work together

- 1 Titus **adds classification tags** to emails or attached documents.
- 2 Clearswift **scans emails/attachments** for classification tags.
- 3 Emails/attachments **are processed** according to the classification tags that have been configured.
- 4 Emails/attachments are **either allowed or disallowed** depending upon what tags have been defined. If allowed, the email messages can be sent in the clear, password protected, encrypted, etc.



MFT Guarding Sensitive Information



1. M&A Document HelpSystems Acquires Titus

TITUS Inc
Attn: Jim Barkdoll
343 Preston Street Suite 800
Ottawa, ON K1S 1N4, Canada

Dear Jim,

We are pleased to submit the following proposal whereby HelpSystems, LLC ("HelpSystems"), through certain of its affiliates, will acquire 100% of the equity of TITUS Inc ("TITUS Inc" or the "Company").

HelpSystems is a leading provider of systems management and cybersecurity software and is majority owned by TA Associates ("TA"), HGGC, LLC ("HGGC"), Charlesbank Capital Partners ("Charlesbank"), and their affiliates.

TA has raised over \$32 billion of capital since inception and has over 50 years of experience working with software companies. TA has invested in over 500 companies, including more than 250 software businesses. TA creates lasting value for its portfolio companies by helping them build their teams, improve their products and services, and expand internationally.

HGGC is a Palo Alto, California-based middle market private equity firm that has completed 71 transactions and has been involved in transactions with an aggregate value of over \$16 billion. HGGC partners with management teams to build differentiated middle-market business in North America and beyond.

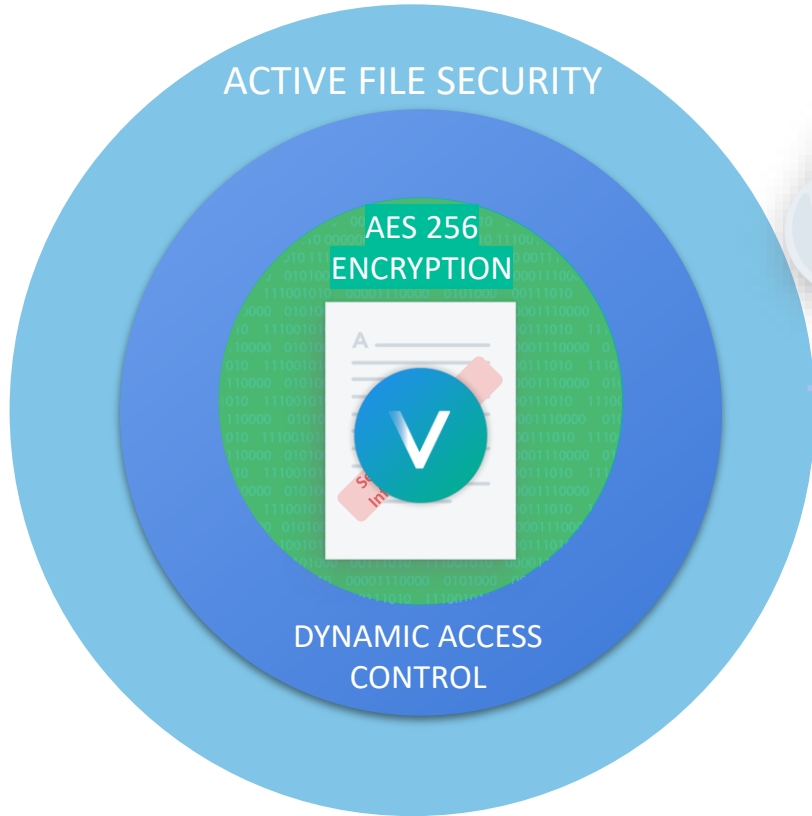
2. M&A Document Upload Not Permitted

February
11, 2020

```
Executing task 'icap 1.0'  
Scanning file 'C:\Program Files\Linoma Software\GoAnywhere\UserHome\Demo4\Titus LOI 02.11.2020_vFinal_Demo.docx'.  
Overwriting the output file 'C:\Program Files\Linoma Software\GoAnywhere\UserHome\Demo4\Titus LOI 02.11.2020_vFinal_Demo.docx'  
ICAP server returned status code '200'.  
[9001 - ICAP] File is infected. Full stack trace written to '100000002813_error_1.log'  
Continuing with the next task or module, if any  
Executing task 'print 1.0 (Output Status)'  
HTTP 403  
ICAP 200  
Finished task 'print 1.0 (Output Status)'  
Executing task 'readFlatFile 1.0'  
Data parsed successfully and the rowset variable 'ContentRule' was created  
Finished task 'readFlatFile 1.0'  
Executing task 'setVariable 2.0 (setVar file)'  
Variable 'file' was created and set to 'server: Traffic Spicer 2.4.0  
encapsulated: res-hdr=0, res-body=158  
x-violations-found: 1  
connection: close  
x-virus-id: Classification - Restricted M&A  
x-infection-found: Type=1; Resolution=2; Threat=Classification - Restricted M&A;  
istag: "CSICAP/v2.4.0/c92fiad/CSAdapter"
```

3. MFT Identifies a Restricted Document Upload Attempt

Why Vera?



Sensitive Internal Data

Modern Collaboration Required

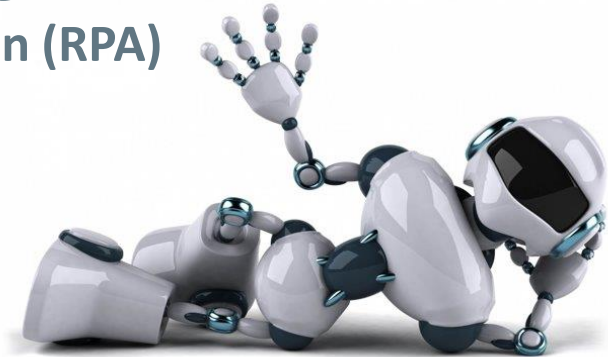
Reduce Risk & Overhead

- Security travels everywhere the data goes
- Supports all file types and devices
- Dynamic, granular control on key file types
- Little-to-no administrative overhead
- Intuitive, low friction end-user experience

Why Automate

Robotic Process Automation (RPA)









- ▶ Repetitive task automation
- ▶ Virtual workforce
- ▶ Digital workforce
- ▶ Software robots – agents
- ▶ Virtual assistant



- ▶ Interacting with web sites
- ▶ Entering data in multiple sources
- ▶ Generating reports and spreadsheets
- ▶ Copying and pasting data
- ▶ Monitoring email messages
- ▶ Moving data from multiple sources to application
- ▶ Logging in to multiple apps
- ▶ Extracting data from PDF files

Why Automate

Automation Capabilities





-  ✓ Managed File Transfer (FTP/SFTP/FTPS)
-  ✓ Network and PC File Management
-  ✓ File Compression And Encryption
-  ✓ Read/Write Any Database
-  ✓ Read/Write Excel, CSV, XML and Text Files
-  ✓ Inbound and Outbound Email Processing
-  ✓ Microsoft SharePoint Integration
-  ✓ Active Directory and User Provisioning



Integration

Image Capture/OCR/PDF Processing, Web Service Calls (SOAP/REST), VB/COM/ActiveX, PowerShell Commands, Microsoft .Net Custom Assemblies (C# / VB), Run Command Line Apps, MS Dynamics Action

User Interface Automation

-  ✓ Web browser applications
-  ✓ Windows desktop applications
-  ✓ Java applications
-  ✓ Telnet Terminal (5250,3270, VT100, SSH)
- ✓ When your applications have no APIs available

Why use Business Activity Monitoring Dashboard (BAM)?

Review failed file transfers and identify why

The screenshot displays the BAM interface. On the left, a 'GoAnywhere Transactions | ALL' dashboard shows filters for Start Date (2021-02-01), End Date (2021-02-09), and Status (Failed). Below the filters is a table of transactions with columns for Date, File Name, and Status. A large blue arrow points from the 'Failed' status filter to a 'Transaction Information' modal window on the right.

The 'Transaction Information' modal window shows details for a failed transaction:

- Sender: HelpSystems
- Receiver: Bank
- Start Time: 2021-02-09 10:22:09.0
- End Time: 2021-02-09 10:22:09.0
- Time Taken: 0 milliseconds
- Number of Files: 1
- Transaction ID: 1000000825876
- Business Value: Normal
- Domain: Demo
- Node: Default
- Environment: Dream Box
- Status: **Failed**

The transaction details include a log of events:

- Transaction started (with a blue plus icon)
- Uploading File 'test.txt' (with a red minus icon)
- Start Time: 2021-02-09 10:22:09.000
- End Time: 2021-02-09 10:22:09.000
- File Name: test.txt
- File Size: 0 B
- Source Path: /usr/local/HelpSystems/GoAnywhere/test.txt
- Destination: 10.60.144.78
- Destination Path: /F1002/test.txt
- Transfer Time: 0 milliseconds
- Transfer Type: Job
- Job: F1001 - Accolim MFT - Scottish Bank - Failed
- User Name: F1001-usr002
- Domain: Demo
- Node: Default
- Result: [8098 - SFTP] java.io.FileNotFoundException: /usr/local/HelpSystems/GoAnywhere/test.txt (No such file or directory)
- Status: **✘**
- View Log

At the bottom of the modal, a red minus icon indicates 'This transaction failed'.

- Instant access to file transfer statuses
- End-to-end monitoring of business processes that run on the MFT Server
- Identifies all file transfers related to a particular business process
- Advanced security and granular access control
- Identifies sender/receiver easily by naming external partners and internal applications real names, not usernames or an IP address
- Provides easy searching and tracking of MFT activities
- Helps in tracking business-critical file transfers
- Provides notification capabilities for pro-active business process monitoring

A short horizontal bar with three segments: a blue segment on the left, a light blue segment in the middle, and a black segment on the right.

Thank you for
attending!

Be sure to stop by the Data Security booth to chat with our MFT experts, schedule a demo, or request product support.