TAILOR YOUR CYBER THREAT INTELLIGENCE JEREMY HENDY, CEO

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TAILOR YOUR THREAT INTELLIGENCE

What is cyber threat intelligence? Cyber Threat Intelligence is critical but poses challenges How is tailored threat intelligence different? Examples from the real world CTI as a component of Digital Risk Protection



NEW UPDATES TO ISO27001 AND ISO27002

Third edition

INTERNATIONAL ISO/IEC STANDARD 27001

Information security, cybersecurity

security management systems -

Sécurité de l'Information, cybersécurité et protection de la vie privée - Systèmes de management de la sécurité de l'information -

Requirements

Exigences

and privacy protection - Information

> First update since 2013

> 11 new security controls

> Summary in ISO27001

> Detail in ISO27002

INTERNATIONAL ISO/IEC STANDARD 27002 Third edition 2022-02 Corrected version 2022-03 Information security, cybersecurity and privacy protection - Information security controls Sécurité de l'information, cybersécurité et protection de la vie privée - Mesures de sécurité de l'information

5.7 "Information relating to information security threats shall be collected and analysed to produce threat intelligence."



Reference number ISO/IEC 27002:2022(E)

@ ISO/IEC 2022



150/IEC 27001-2022/ET

Reference number

@ 150/TEC 2022

3

"Threat intelligence is data that is collected, processed, and analysed to understand a threat actor's motives, targets, and attack behaviours"



FOUR TYPES OF CYBER THREAT INTELLIGENCE



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ISO 27001 CHANGES



New controls added

- 5.7 Threat intelligence
- 5.23 Information security for use of cloud services
- 5.30 ICT readiness for business continuity
- 7.4 Physical security monitoring
- 8.9 Configuration management

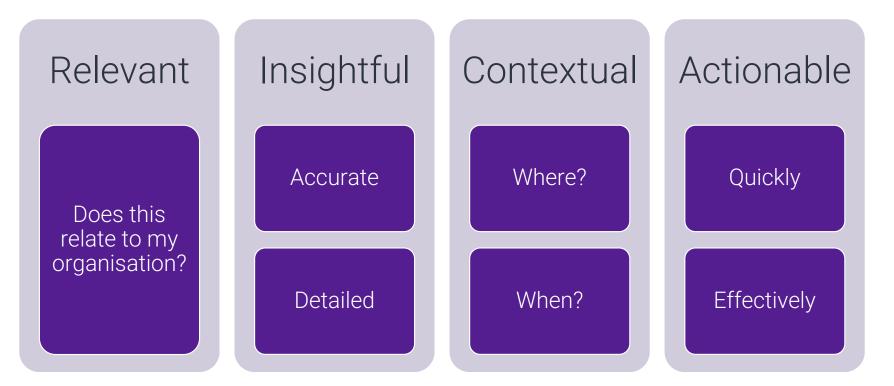
- 8.10 Information deletion
- 8.11 Data masking
- 8.12 Data leakage prevention
- 8.16 Monitoring activities
- 8.23 Web filtering
- 8.28 Secure coding

Controls have 5 types of attributes

Control type (preventive, detective, corrective) Information security properties (confidentiality, integrity, availability) Cybersecurity concepts (identify, protect, detect, respond, recover) Operational capabilities (governance, asset management, etc.) Security domains (governance & ecosystem, protection, defense, resilience)

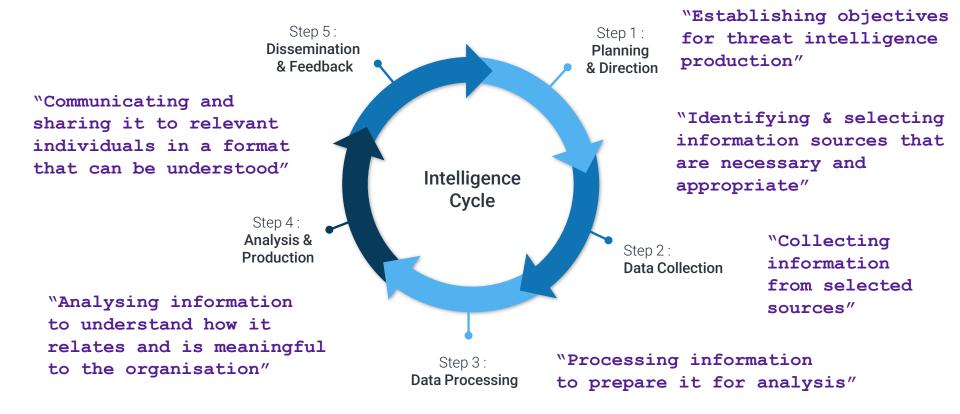
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ISO27002:2022 GUIDANCE FOR THREAT INTELLIGENCE



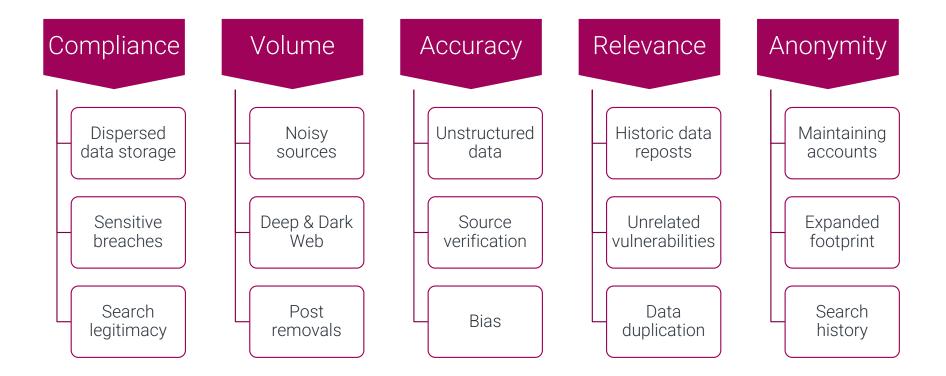


REQUIREMENTS MAP TO THE INTELLIGENCE CYCLE





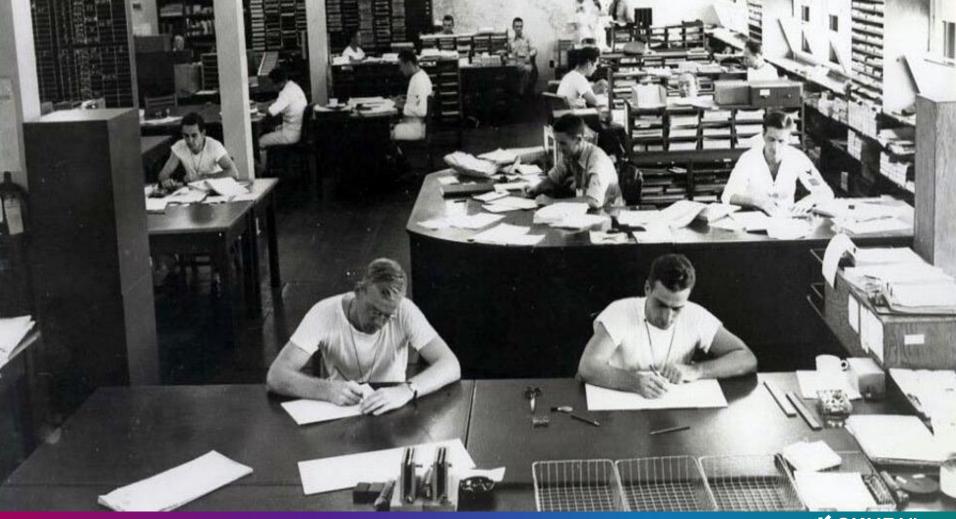
THE THREAT INTELLIGENCE CHALLENGE





		text:00401010	sub_401010	proc n	ear ; CODE XREF: DllEntryPoint:loc_4010014p
		text:00401010 text:00401010	var_D	- bute	ptr -00h
-		text:00401010	var_C		d ptr -OCh
00	tober 27, 2022 • 15 min read	text:00401010	var_8		d ptr -8
		text:00401010 text:00401010	var_4	= dwor	d ptr -4
R	aspberry Robin worm part of larger ecosystem	text:00401010 55		push	ebp
	aspberry Robin worm part of larger ecosystem	text:00401011 89 E5 text:00401013 83 EC 14		sub	ebp, esp esp, 14h
f,	acilitating pro rancomwara activity	text:00401016 31 C0		xor	eax, eax
10	acilitating pre-ransomware activity	text:00401018 88 0D A0 30 40 00 text:0040101E 80 39 88		cmp	ecx, ds:CloseHandle byte ptr [ecx], 088h
		text:00401021 89 45 FC		mov	[ebp+var_4], eax
		text:00401024 74 1D text:00401026 A1 A4 30 40 00		jz	<pre>short loc_401043 eax, ds:GetCurrentThreadId</pre>
		text:00401028 FF D0		call	eax ; GetCurrentThreadId
N	licrosoft Security Threat Intelligence	text:0040102D 89 01 00 00 00 text:00401032 88 15 A8 30 40 00		mov	ecx, 1 edx, ds:OutputDebugStringA
		text:00401038 80 3A 6A		cmp	byte ptr [edx], 6Ah
		text:00401038 89 45 F8 text:0040103E 89 4D FC		mov	[ebp+var_8], eax [ebp+var_4], ecx
		text:00401041 75 38		jnz	short loc_401078
		text:00401043 text:00401043	loc_401043:		; CODE XREF: sub 401010+141j
		text:00401043			; sub_401010+5A4j
		text:00401043 88 45 FC text:00401046 83 C4 14		add	eax, [ebp+var_4] esp, 14h
		text:00401049 5D		pop	ebp
	$\longrightarrow \textcircled{a} \longrightarrow \textcircled{b} \longrightarrow \rule \rule{b} \longrightarrow \rule \rule{b} \rule{b} \longrightarrow \rule{b} \longrightarrow \rule \rule{b} \rule{b} \rule{b} \rule{b} \rule{b} \rule{b} \rule{b} $	text:0040104A C3 text:00401048	;	retn	
	Malicious ads DEV-0206: DEV-02.02. LockBit ransomware	taxt-00401048	loc_401048:		: CODE XREF: sub 401010+9341
	Microsoft's analysis of Fauppod samples also identified some Dridex filename to	esting features, which are	100_401040.	mov	eax, esp
		5		mov	<pre>dword ptr [eax], offset aSelfExe ; "self.exe" eax, ds:GetModuleHandleA</pre>
	used to avoid running in certain environments. Fauppod has similar functionalit	y to avoid execution if it		call	eax ; GetModuleHandleA
â	recognizes it's running as testapp.exe or self.exe. This code similarity has histori	cally caused some		sub	esp, 4 ecx, 1
DEV-065	recognizes it's running as testapp.exe of sentexe. This code similarity has histori	cally caused some		cmp	eax, 0
000	Fauppod samples to trip Dridex detection alerts.			jnz	<pre>[ebp+var_4], ecx short loc_401043</pre>
				call mov	<pre>sub_401700 [ebp+var_C], eax</pre>
		text:00401074 31 C0		xor	eax, eax
		text:00401076 89 45 FC text:00401079 EB C8		jmp	[ebp+var_4], eax short loc 401043
	$\begin{array}{c} \cdot \\ \circ \\ \bullet \\ \bullet$	(text:00401078	;		
	July 26, 2022 September 19, 2022 September 28, 2022 September 30, 2022 Cobalt trike and ra	Clop text:00401078 nsomware text:00401078	loc 401078:		: CODE XREF: sub 401010+3111
	r human-	text:00401078 89 E0 text:0040107D C7 00 08 71 48 00	-	mov	<pre>eax, esp dword ptr [eax], offset aTestappExe ; "testapp.exe"</pre>
	So what?	text:00401070 C7 00 08 71 48 00 text:00401083 A1 80 30 40 00		mov	eax, ds:LoadLibraryW
		text:00401088 FF D0 text:0040108A 83 EC 04		call	eax ; LoadLibraryW esp, 4
		text:00401080 3D 00 00 00 00		cmp	eax, 0
	What am I supposed to do now?	text:00401092 0F 94 C1 text:00401095 88 4D F3		setz	cl [ebp+var_D], cl
		text:00401098 31 C0		xor	eax, eax
		text:0040109A 8A 4D F3 text:0040109D F6 C1 01		test	cl, [ebp+var_0] cl, 1
		text:004010A0 89 45 FC		mov	[ebp+var_4], eax
		text:004010A3 75 A6 text:004010A5 E8 9C		jnz jmp	short loc_401048 short loc_401043
		text:004010A5	sub_401010	endp	

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How is tailored threat intelligence different?



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SKURIO IS DIFFERENT TO TRADITIONAL THREAT INTELLIGENCE

Traditional Cyber Threat Intelligence Providers	SKURIO			
Generic Threat Intelligence	Tailored Threat Intelligence	Data Breach Detection		
 Feeds of "bad stuff", not specific to you Malicious IP addresses Malware signatures Nation State / APT Activity Exploits & Vulnerabilities 	 Alerting you to threats specific to your organization Credentials, Domains, Infrastructure, People, Assets, Sites, Intellectual Property 	 Detecting leaks of your data throughout the supply chain Customer & Staff data, Intellectual Property, Business Critical Information 		



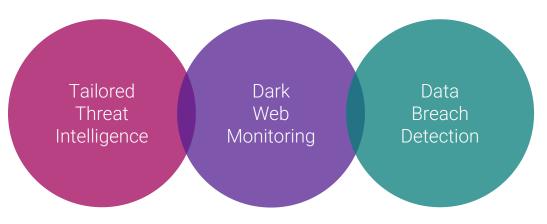
TAILORING YOUR THREAT INTELLIGENCE





HOW DO WE DO THAT?

- > Automated SaaS platform
- > Looking "outside the firewall"
- Continuous, real-time monitoring
- SaaS only, or plus analyst services
- > Detect leaks and breaches across your supply chain
- > Protect your core assets

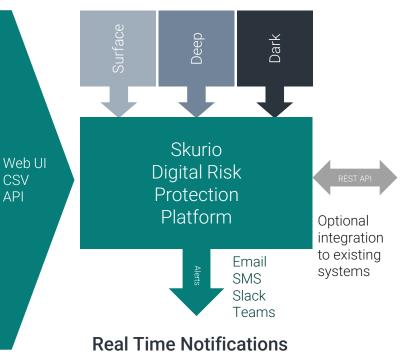




TAILORING YOUR THREAT INTELLIGENCE

Use cases	Search Terms (static or dynamic)			
Staff	Corporate domains Hashed email addresses VIP information Banking details			
Infrastructure	Server names Database table prefixesIP addresses IP Address rangesDevice serial numbers Database table prefixes			
Customers	Breachmarkers Hashed email addresses Postcodes Reference numbers			
Brand	Brand Names Domains (typosquatting) Company names Product names Keywords			
Margin	Discount codes Loyalty scheme details Contract terms Voucher details			
Products	Trademark details Intellectual property terms Product data Code markers Partner brands + IOCs			

Continuous, Automated Monitoring





SKURIO - COMPANY OVERVIEW

- > UK Cybersecurity company
 - > Development & Operations: Belfast, Northern Ireland
 - > Sales, Marketing, Finance, Customer Success: London
 - > Intelligence Analysts: England & NI
- > Operating since 2011
 - > Original focus: UK government & public sector
 - > Since 2017: refocus on the commercial sector
- > What we do: Digital Risk Protection
 - > Cloud-hosted SaaS platform
 - > Dark Web monitoring
 - > Data breach detection
 - > Cyber threat intelligence





DEMO & QUESTIONS?

- > Discover DRP use cases
- > Have a personalized view of Skurio in action
- > Request a risk assessment



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Examples



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TESTING IF YOUR THREAT INTEL MEETS THE STANDARD

Hackers Exploiting Unpatched Critical Atlassian Confluence Zero-Day Vulnerability

🋗 June 02, 2022 🛔 Ravie Lakshmanan

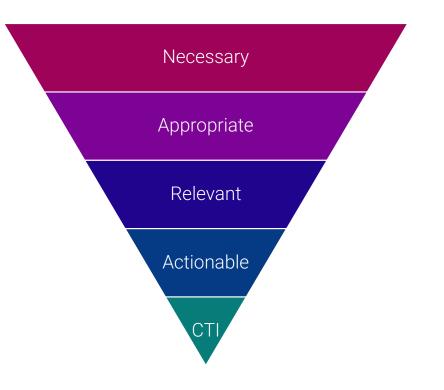


Atlassian has warned of a critical unpatched remote code execution vulnerability impacting Confluence Server and Data Center products that it said is being actively exploited in the wild.

The Australian software company credited cybersecurity firm Volexity for identifying the flaw, which is being tracked as CVE-2022-26134.

Atlassian has been made aware of current active exploitation of a critical severity unauthenticated remote code execution vulnerability in Confluence Data Center and Server, it said in an advisory.

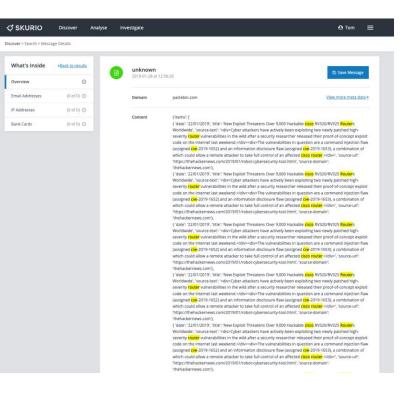
"There are currently no fixed versions of Confluence Server and Data Center available. Atlassian is working with the highest priority to issue a fix." Specifics of the security flaw have been withheld until a software patch is available.





DRP EXAMPLE – SUPPLY CHAIN BREACH

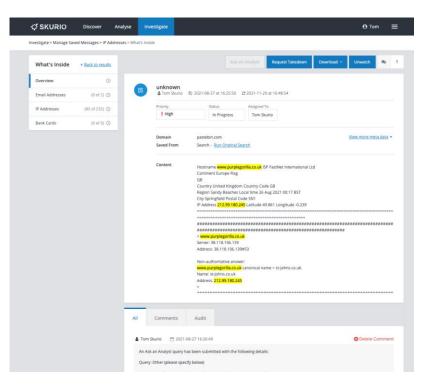
- > What are we looking for?
 - > Equipment vulnerability
- > How do we tailor the search?
 - > Model number / range
- > What results might we find?
 - > Relevant CVEs / Zero Days
 - > Stolen equipment
 - > Default setting exposure
- > What steps can be taken?
 - > Patching / upgrades
 - > Additional monitoring
 - > Augment perimeter defences





DRP EXAMPLE – INFRASTRUCTURE

- > What are we looking for?
 - > Mentions of our infrastructure terms
 - > IP addresses etc.
- > How do we tailor the search?
 - > Individual IP addresses
 - > Domain names
 - > 'Tailored IOCs' e.g. "open port", "DDoS"
- > What results might we find?
 - > Evidence of recon
 - > Possible attack planning
- > What steps can be taken?
 - > Proactive threat hunt searches
 - > Beef up defences in specific areas
 - > Patch / close ports etc.





DRP EXAMPLE – STAFF CREDENTIALS

- > What are we looking for?
 - > Data breaches
 - > Spearphishing planning
- > How do we tailor the search?
 - Key staff emails: admins / marketing / c-suite / finance
- > What results might we find?
 - > Unauthorised use of 3rd party apps
 - > Password sharing
- > What steps can be taken?
 - > Application policy
 - > Awareness training
 - > Password refresh

SKURIO	Discover	Analyse	Investigate		🕑 Tor	n 🗏
tigate Manage S	aved Messages					
	Ask an Ar	nalyst Requ	est Takedown	Download ~	Unwatch	۰ و
-	n Skurio 🖺 2021-11-	-05 at 16:33:12		16:33:12		
Priority Unspecified	Status Open	Assigne	d To Skurise			
Domain Saved From	promo.com	al Search			View less met	a data 🔺
Description	Search - <u>Run Original Search</u> In July 2020, the self-proclaimed World's #1 Marketing Video Maker Promo suffered a data breach which was then shared extensively on a hacking forum. The incident exposed 22 million records containing almost 15 million unique email addresses alongside IP addresses, genders, names and salted SHA-256 password hashes. This breach included: Email addresses Genders IP addresses Names Passwords					
Timeline	Received - 2020-07- Published - 2020-07 Updated - 2021-11-	-26 02:44				
	Created - 2021-11-0	5 16:33				



DRP EXAMPLE – VIP PROTECTION

- > What are we looking for?
 - > PII
- > How do we tailor the search?
 - > Partial payment details
 - > Mobile number / social media account mentions
- > What results might we find?
 - > Trolling
 - > Doxxing
 - > Evidence of whalephishing
 - > Targeting family members
- > What steps can be taken?
 - > Patching / upgrades
 - > Additional monitoring
 - > Augment perimeter defences

