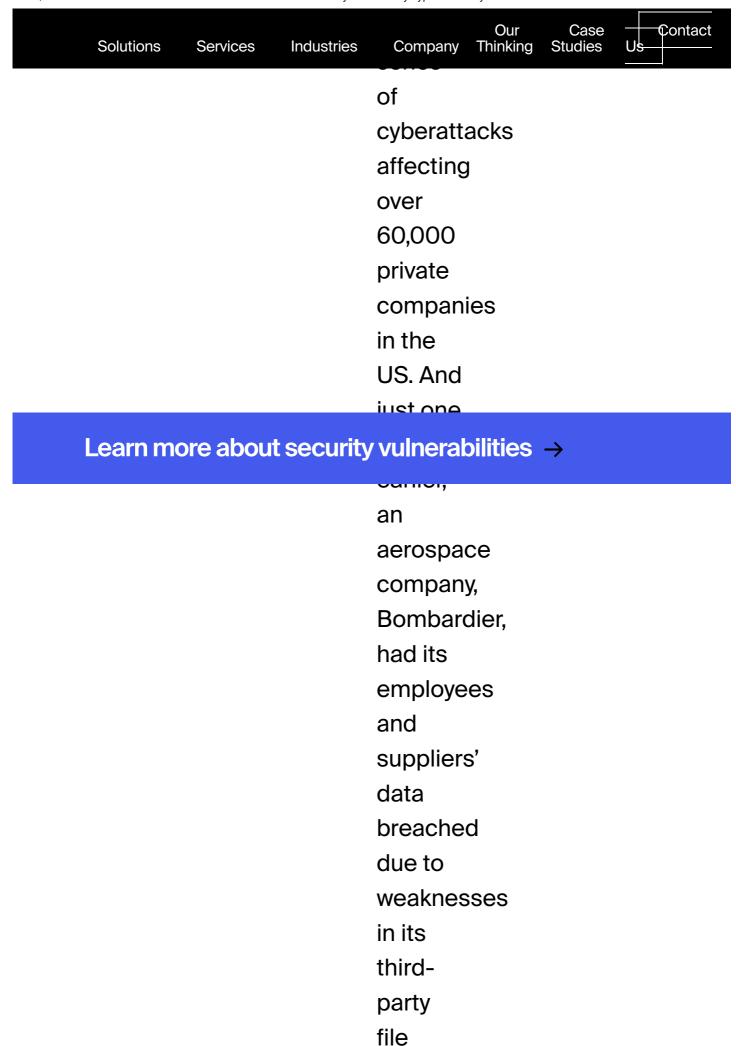


A
vulnerability
in
Microsoft's
Exchange
Server
contributed
to a



There

are

many

security

vulnerability

types

that can

put your

IT

system

on

hackers'

radar.

From

poor

coding

practices

to

defective

external

components,

no

matter

what

the

reason

is, many

72723, 3.54 T W				icrability Types and V			
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				being			
				exposed			
				То			
				mitigate			
				this			
				issue,			
				business	ses		
				benefit			
				from			
				QA and			
				testing			
				services			
				to			
				evaluate			
				their			
				own			
				software			
				and			
				networks	6		
				and			
				assess			
				the			
				security			
				risks of			
				external			
				vendor	onto		
				compone	ents.		

Our Case **Contact** Us Solutions Services Industries Company Thinking Studies security vulnerability types may be exposing your system to cyberthreats at this very moment? How do vulnerabilities appear? And how can we mitigate them?

What is a software

Solutions Services Industries Company Thinking Studies Us

and where does it originate from?

A security vulnerability is an unintended system or component characteristic that magnifies the risk of an intrusion or data loss, either by accidental exposure, intentional attack, or conflicts with new components.

Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact Us
		be a designant an implement bug, a misconficetc.	ntation	7		

we
proceed
any
further,
let's
clarify
the
difference
between
a
vulnerability,
an
exploit,
and a
threat.

Before

A vulnerability

7/2/23, 9:34 PM		Co	ommon Security Vulner	ability Types and \	Ways to Fix The	m — ITRex	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				syster	m		
				withou			
				any			
				efforts	8		
				from			
				outsic	ders		
				An			
				explo	it		
				is the			
				way			
				that			
				intrud	ers		
				use			
				an			
				existir	ng		
				syster			
				weakr	ness		
				to			
				moun	t		
				an			
				attack	(
				A			
				threat	t		
				is the			
				actua			
				incide	ent		
				when			

Our Case **Contact** Us Solutions Services Industries Company Thinking Studies multiple exploits use a vulnerability to penetrate a system Security experts can eliminate vulnerabilities upon discovery using software patches, hardware replacement, and system reconfiguration. **Training** the end users on

7/2/23, 9:34 PM		C	ommon Security Vul	nerability Types and V	Nays to Fix The	em — II Rex	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				and			
				keeping			
				all			
				compon	ents		
				up to			
				date will			
				also			
				prevent			
				and			
				minimize	9		
				vulnerab	ilities.		
				Addition	ally,		
				the			
				security			
				teams			
				need to			
				keep in			
				mind			
				that as			
				systems			
				evolve,			
				new			
				weaknes	sses		
				appear.			
				Therefor			
				business	ses		
				need to			
				scan			

7/2/23, 9:34 PM Our Case **Contact** Us Solutions Services Industries Company Thinking Studies hardware, and networks systematically for emerging vulnerabilities and fix them before they are discovered and exploited. New security vulnerabilities keep emerging rapidly, as the US government's **National** Vulnerability

Database

(NVD)

7/2/23, 9:34 PM		Col	mmon Security vul	nerability Types and v	ways to Fix The	m — IIRex	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact Us
				8,000			
				new			
				entries			
				in the			
				first			
				quarter			
				of			
				2022.			
				With			
				this			
				rapid			
				pace,			
				many			
				business	ses		
				can't			
				keep up			
				and			
				leave			
				open			
				weaknes	ses		
				for			
				years,			
				exposing	9		
				their			
				systems.	•		
				A study			
				of			
				software	}		

7/2/23, 9:34 PM	PM Common Security Vulnerability Types and Ways to Fix Them — ITRex								
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Conta	act	
				that					
				75% of					
				the					
				attacks					
				mounted					
				in 2020					
				exploited	t				
				exposure	es				
				that					
				were at					
				least					
				two					
				years					
				old,					
				while					
				18%					
				relied					
				on					
				weaknes	ses				
				reported					
				back in					
				2013!					

How do security

Our Case Us Solutions Services Industries Company Thinking Studies yet into software and networks? **According** to research, 75% of applications developed by software vendors don't comply with the Open Web **Application** Security **Project** (OWASP) Top 10 standards. These

standards

Contact

			, ,,			
Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact Us
			available) <u>.</u>		
			So, why			
			are so			
			many			
			still			
			failing			
			to			
			produce			
			a safe			
			applicati	on?		
			Here			
			are the			
			main			
			reasons:			
			1. Vulne	rable		
			third-			
			party			
			code			
			and			
			other			
				onents).	
			It's a			
			comm			
			praction.	ce		
			to			
			reuse			
			third-			

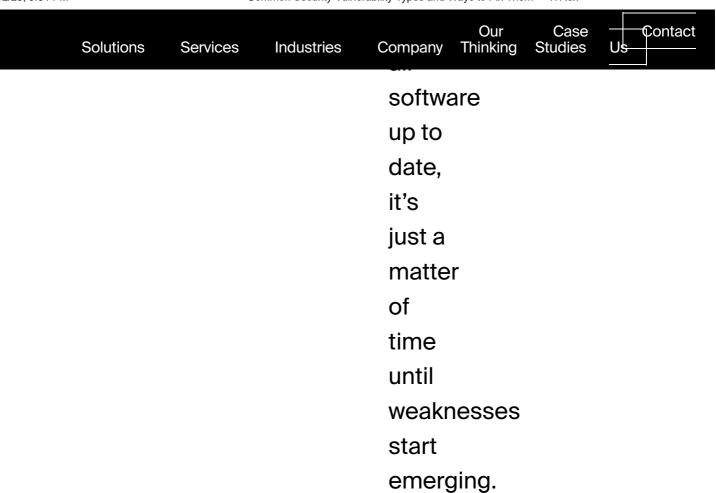
7/2/23, 9:34 PM		C	ommon Security vuine	rability Types and v	ways to Fix The	m — IIRex	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				as		,	
				this			
				speed	ls		
				up			
				the			
				develo	opmen	t	
				proce	SS		
				signifi	cantly.		
				Howe	ver,		
				users			
				tend			
				to			
				take			
				the			
				securi	ity		
				of			
				these			
				parts			
				lightly,	•		
				and			
				often			
				deplo	y		
				them			
				withou	ut		
				thorou	ıgh		
				evalua	ation.		
				The			
				same			

172720, 5.541 W			ommon occurry varie	Stability Types and W	vays to 1 ix 11ic	III — TITICX	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				сору-			
				pastin	g		
				code			
				from			
				source	es,		
				such			
				as			
				Stack			
				Overflo	OW,		
				withou	ıt		
				asses	sing		
				its			
				safety.			
				2. Insecu	ıre		
				coding	g		
				practi	ces.		
				Recen	nt		
				studie	S		
				show			
				that			
				securi	ty		
				is not			
				even			
				on			
				the			
				radar			
				for			

Our Case **Contact** Us Solutions Services Industries Company Thinking Studies In an experiment exploring the attitude of 1,200 developers, researchers concluded that only 14% view security as a priority when writing code. Also, note that many organizations demand their developers

112123, 9.34 PIVI			ommon Security vulne	rability Types and v	vays to Fix The	ııı — II Kex	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				code			
				fast			
				under			
				tight			
				deadli	ines,		
				which			
				simply	/		
				doesn	ı't		
				leave			
				room			
				for			
				thorou			
				securi	_		
				evalua	ation		
				and 			
				result	S		
				in			
				code	م نداانط م		
					abilitie	S.	
				3. Rapid	_		
				chang			
					attack		
				lands			
				Attack	kers		
				are			
				const	_		
				discov	vering		

772723, 3.54 T W		<u> </u>	ommon occurry vame	rability Types and V	rvayo to r ix rric	iii iiitox	
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact Us
				to			
				breac	h		
				applic	ations'		
				securi	ity.		
				So,			
				parts			
				that			
				were			
				consid	dered		
				immu	ne		
				before	Э		
				can			
				becor	ne		
				vulner	able		
				today.			
				If the			
				IT			
				team			
				doesr			
				syster	matical	ly	
				asses			
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				and			
				netwo	rks		
				for			
					abilitie	S,	
				and			
				doesr	ı't		



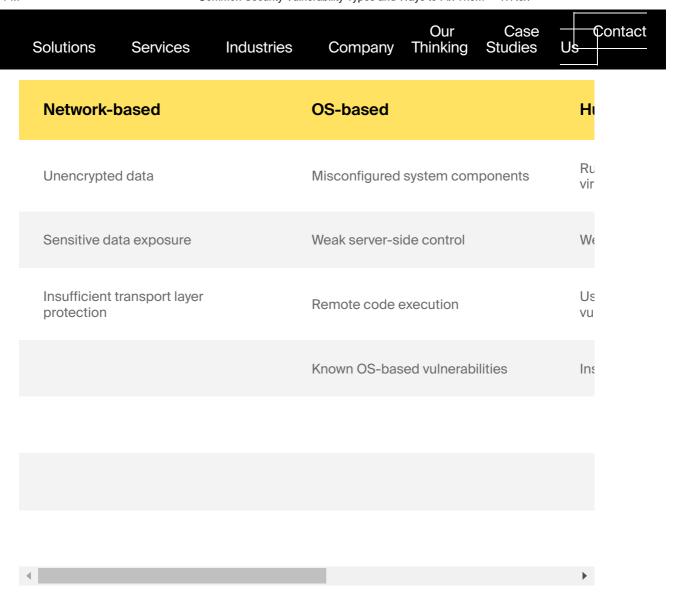
Security vulnerability types classification

There
are two
platforms,
OWASP
and
CWE,
that
offer a

Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
			detailed			
			security			
			vulnerabi	ilities		
			list.			
			They			
			update			
			their			
			listings			
			to			
			include			
			any			
			emerging			
			weaknes	ses.		
			Both			
			resource	:S		
			can be			
			used to			
			educate	more		
			programi testers,	illeis,		
			and			
			engineer	'S		
			originioor	0.		
			OWASP			
			is a			
			non-			
			profit			
			global			

Our Case **Contact** Company Us Solutions Services Industries Thinking Studies regularly publishes **OWASP** top 10 software vulnerabilities list. Common Weakness **Enumeration** (CWE) is a composition of software and hardware vulnerabilities also developed by a dedicated community, and it includes 25 entries.

,			,	, ,,	,		
	Solutions	Services	Industries	Company	Our Thinking	Case Studies	Contact
				of the			
				most			
				promine	nt		
				security			
				vulnerab	ilities		
				that we			
				want to			
				highlight			
				in this			
				article,			
				sorted			
				by			
				domain.			
				These			
				can			
				manifest			
				themselv	/es		
				in any IT			
				system,			
				such as			
				the			
				cloud,			
				IoT-			
				based			
				configura	ations,		
				and			
				mobile			
				apps.			



1. Lack of strong encryption practices

Even
though
encryption
would
not stop

Our Case Contact Us Solutions Services Industries Company Thinking Studies it is essential to ensure that sensitive data remains safe even if its storage platform is breached. **Attackers** can't misuse encrypted data until they decode it, which gives the violated business

7/2/23, 9:34 PM Common Security Vulnerability Types and Ways to Fix Them — ITRex Our Case **Contact** Us Solutions Services Industries Company Thinking Studies necessary measures, such as notify the impacted parties and prepare identity theft countermeasures. Research shows that

many

companies

have no

immediate

plans of

encrypting

data on

USB

sticks,

laptops,

and

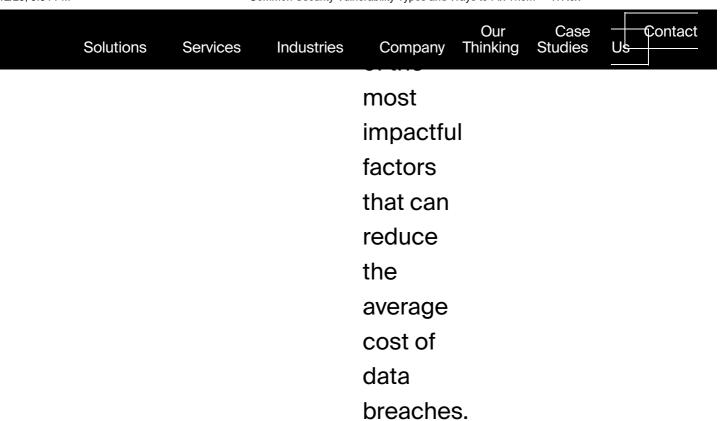
desktops.

7/2/23, 9:34 PM Common Security Vulnerability Types and Ways to Fix Them — ITRex Our Case **Contact** Us Solutions Services Industries Company Thinking Studies of data protection regulations, **GDPR** doesn't explicitly require encryption, but describes it as "appropriate technical and organizational measures" for data safety. In its Cost of a Data **Breach** report,

> out that encryption

IBM

pointed



Our Thinking Case Contact Solutions Services Industries Company Studies

