Data danger zones

artmotion

An international benchmark of the world's safest - and riskiest - data locations

INTRODUCTION

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The rapid rise of cloud computing is exposing businesses to new risks. Seduced by the friendly user interfaces of Dropbox and Google Drive, it's easy to imagine that data "in the cloud" is safe and secure.

The reality is not so cosy.

The world's data has to exist somewhere in a physical form, often in some of the world's riskiest locations.

Yet almost half of European businesses don't know where their data is stored.

So where are the safest – and riskiest – data locations?

We hired some independent data experts to find out. They combined multiple data sources – including 3.5 trillion IP addresses - to produce a unique data privacy and security risk map.

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By examining over 3.5 trillion IP addresses, Artmotion was able to develop risk profiles for the 170 countries that host the bulk of the world's public computing data
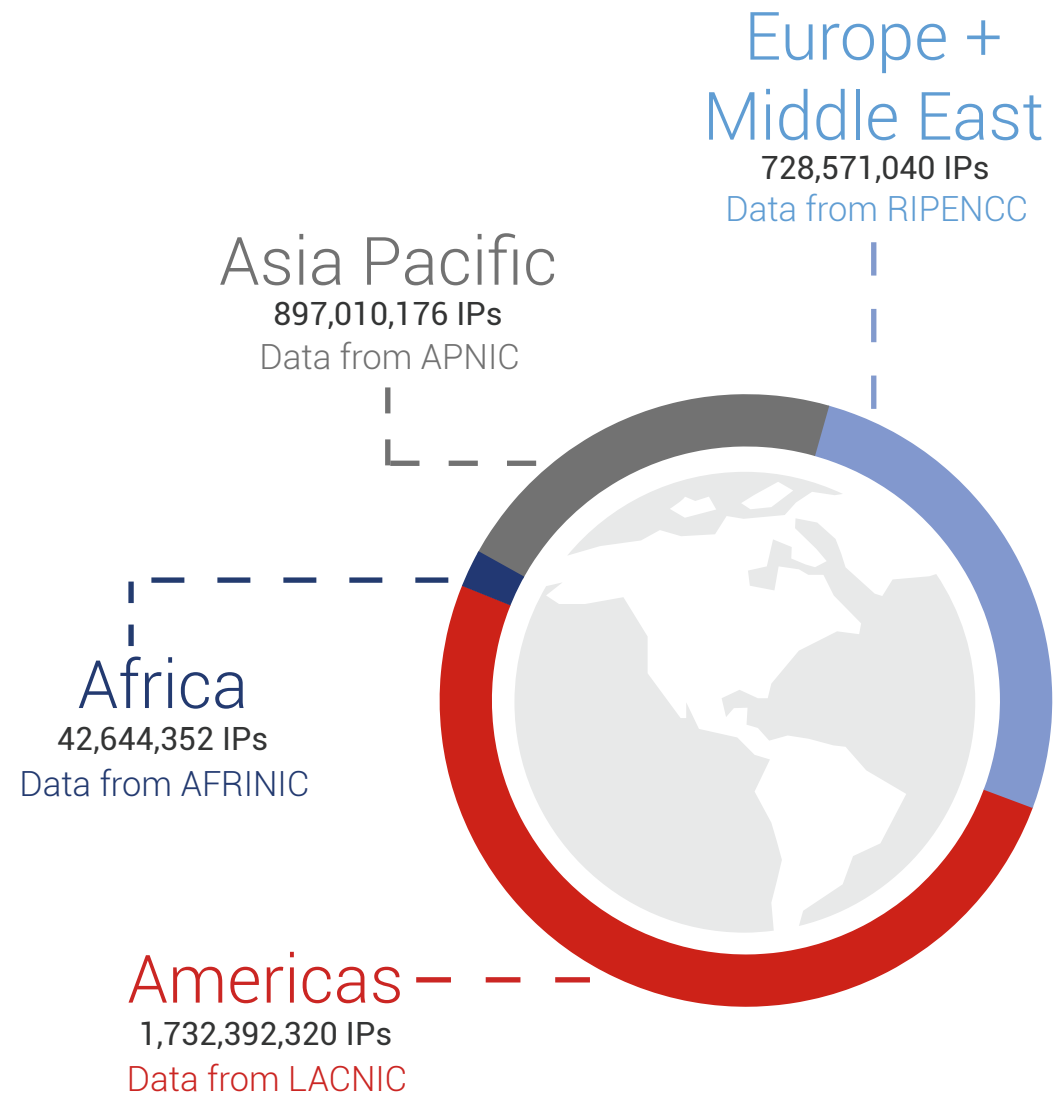
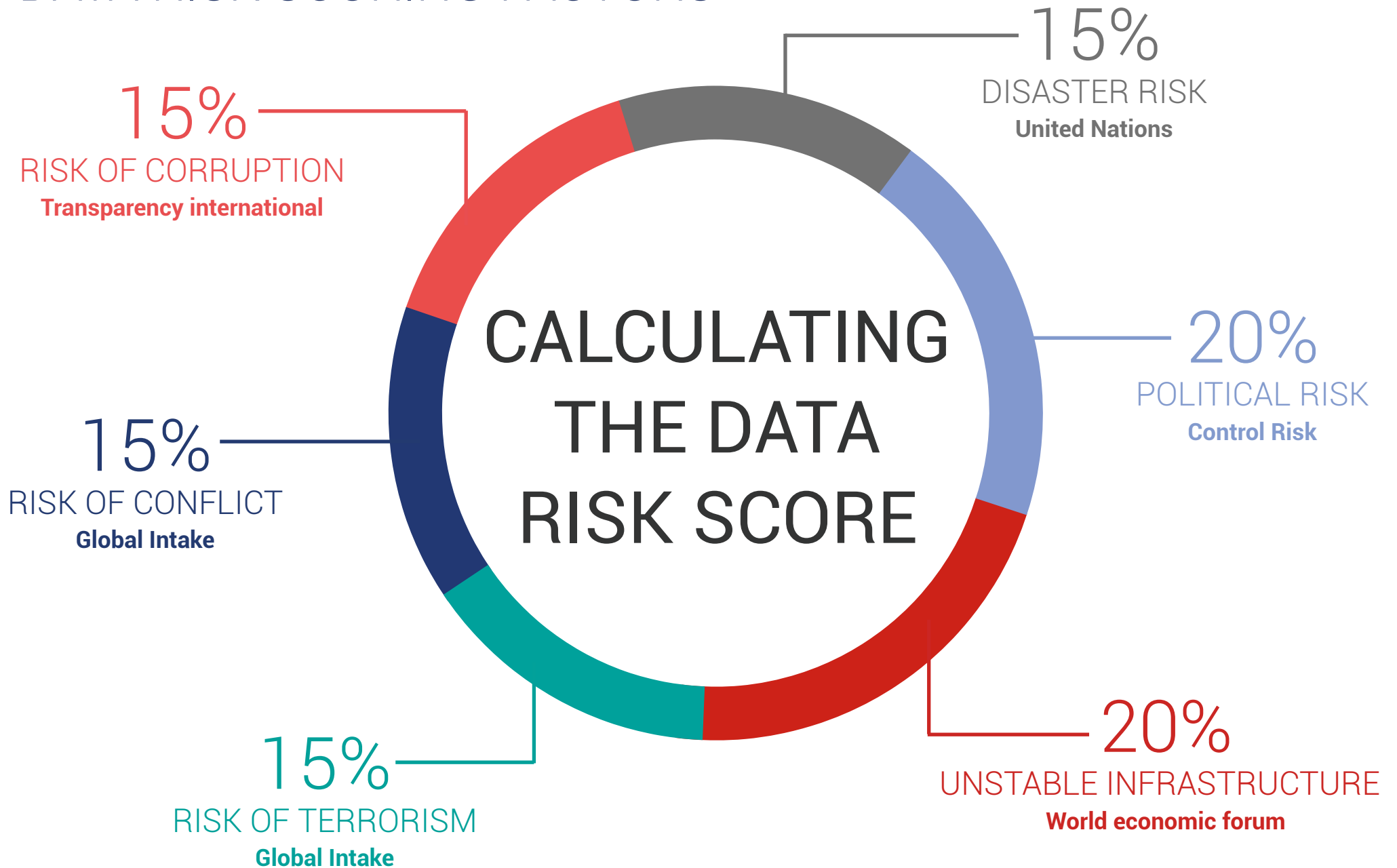"

IP ANALYSIS BY CONTINENT

To find out just how safe the world's data is, we put together a data risk score, using the latest independent data from the United Nations, Control Risks, Transparency International, Global IntAKE and the World Economic Forum

And to find out where the world's data is currently stored, we also examined over 3.5 trillion IP addresses assigned to 170 countries.

This analysis exclusively examines IPv4 addresses – the most widely-used format on the Internet

Europe + Middle East
728,571,040 IPs
Data from RIPENCC

Asia Pacific
897,010,176 IPs
Data from APNIC

Africa
42,644,352 IPs
Data from AFRINIC

Americas
1,732,392,320 IPs
Data from LACNIC

DATA RISK SCORING FACTORS

15%
DISASTER RISK
United Nations

15%
RISK OF CORRUPTION
Transparency international

20%
POLITICAL RISK
Control Risk

15%
RISK OF CONFLICT
Global Intake

CALCULATING THE DATA RISK SCORE

20%
UNSTABLE INFRASTRUCTURE
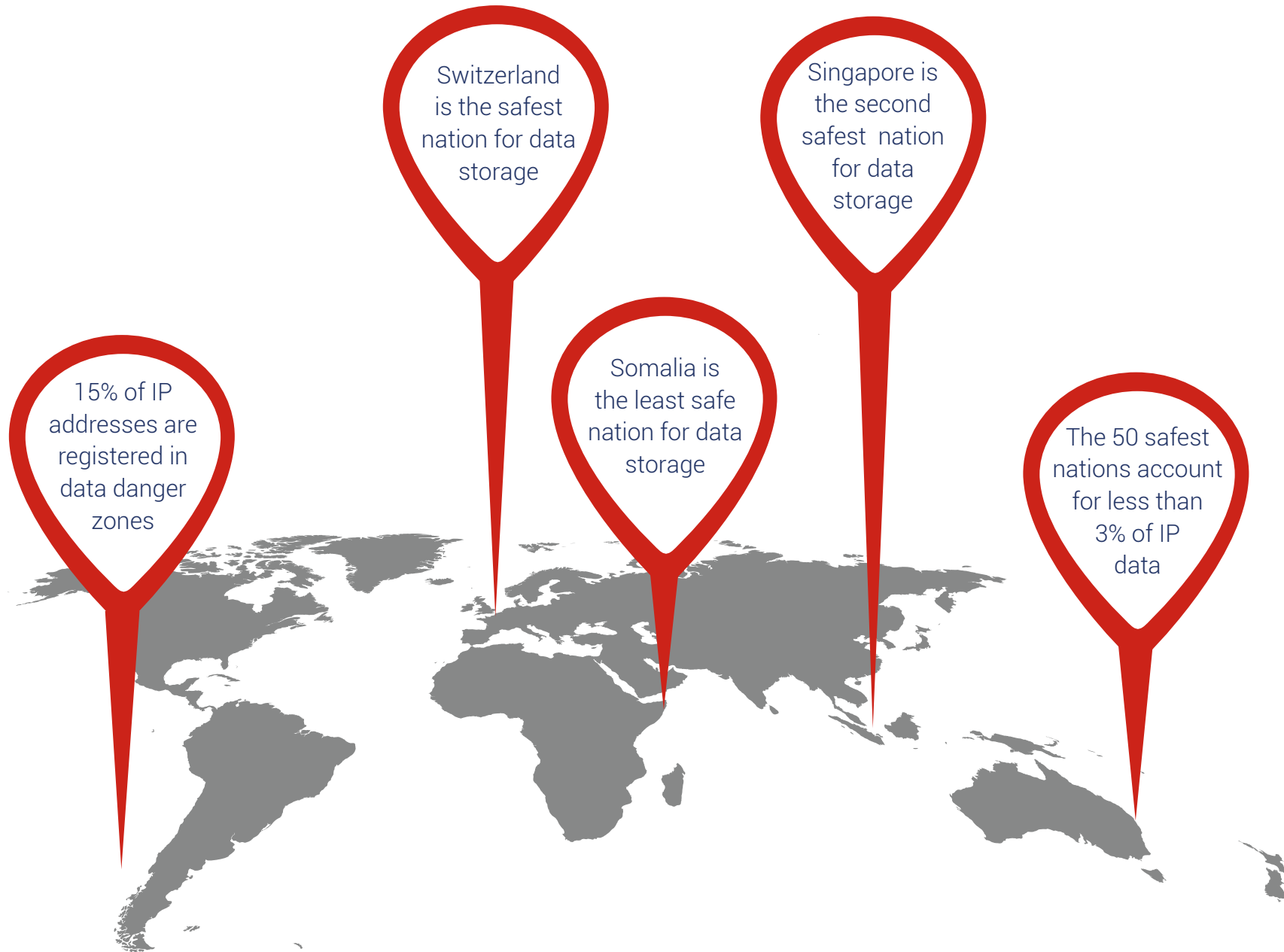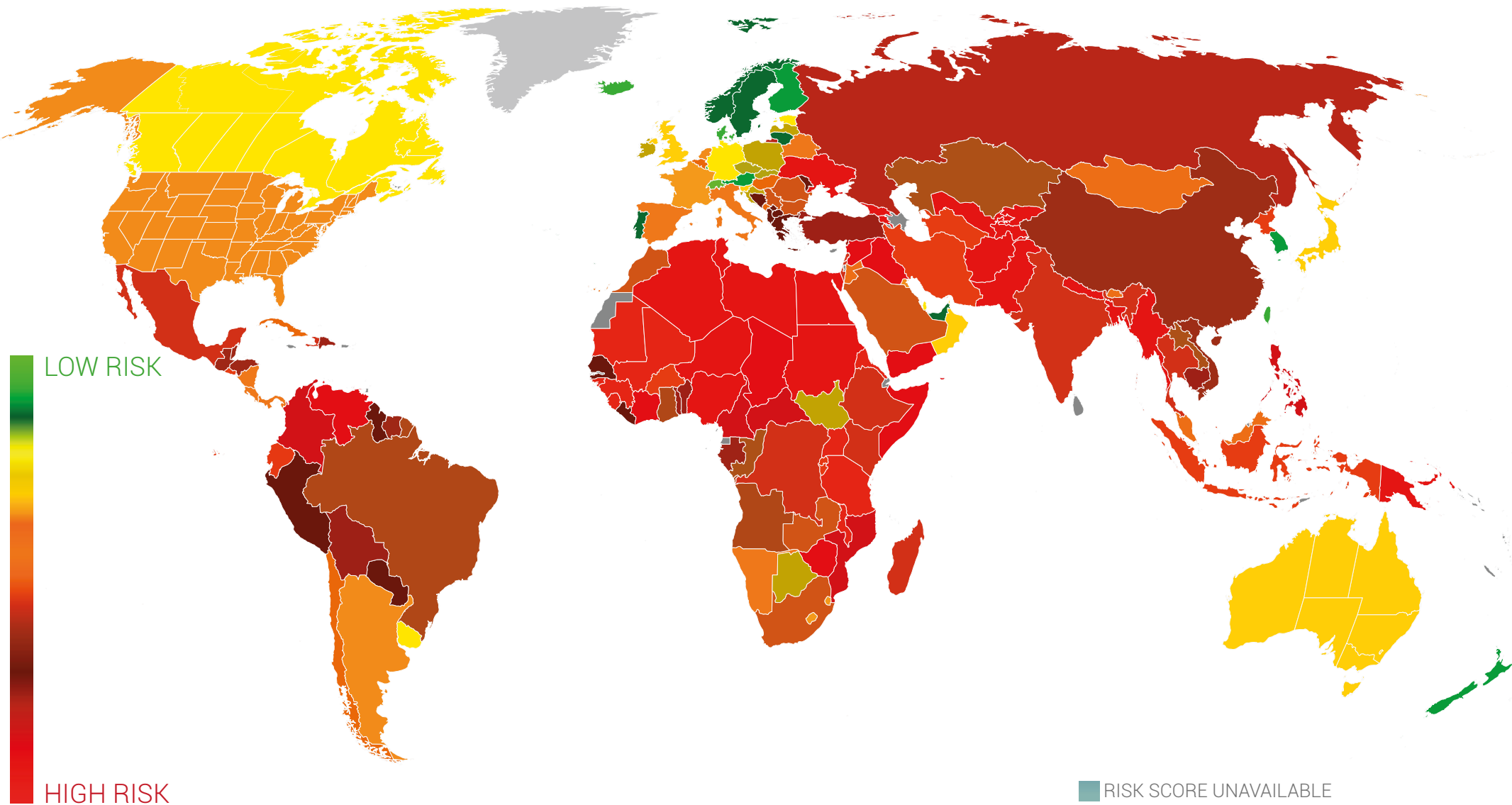World economic forum

15%
RISK OF TERRORISM
Global Intake

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Over a third of the world's IP addresses are registered in unsafe countries, while the fifty safest nations account for less than 3% of public computing.

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DATA RISK FINDINGS

Switzerland is the safest nation for data storage

Singapore is the second safest nation for data storage

15% of IP addresses are registered in data danger zones

Somalia is the least safe nation for data storage

The 50 safest nations account for less than 3% of IP data

WHERE IS MY DATA MOST SECURE?

LOW RISK

HIGH RISK

RISK SCORE UNAVAILABLE

THE SAFEST NATIONS FOR DATA STORAGE

Based on the key risk factors above, Switzerland and Singapore rank as the safest nations for data privacy and storage, receiving average risk scores of only 1.6% and 1.9%. Both of these nations scored highly as a result of their independent privacy legislation and political stabilities, with Switzerland in particular benefiting from its status outside of the EU.

Ranking	Country	GDP (million)	Population	Registered IP addresses	Data risk score
1	Switzerland	$664,603	8,341,600	20,872,696	1.6%
2	Singapore	$292,724	5,535,000	5,719,552	1.9%
3	Iceland	$16,718	334,300	814,592	2.3%
4	Luxembourg	$57,423	576,200	1,299,456	2.6%
5	Hong Kong	$309,931	7,324,300	11,777,024	3.6%
6	Taiwan	$523,581	23,503,349	35,383,040	3.9%
7	Austria	$374,124	8,725,931	11,312,096	5.2%
8	New Zealand	$172,248	4,699,050	6,954,496	5.2%
9	Portugal	$199,077	10,374,822	5,833,504	6.9%
10	Denmark	$294,951	5,717,014	12,280,304	7.6%
11	Finland	$229,671	5,491,817	13,553,856	7.6%
12	Lithuania	$41,267	2,872,294	2,240,256	7.6%
13	Norway	$389,482	5,223,256	15,259,312	7.9%
14	Sweden	$492,618	9,884,285	30,373,544	7.9%
15	Korea (South)	$1376,868	50,801,405	112,239,104	8.3%

THE RISKIEST DATA DANGER ZONES

While few IT managers store data in Afghanistan or Somalia, rapidly expanding data centre markets such as China weren't far behind, falling below Russia, Sri Lanka and Rwanda for data security. India, which recently became home to the world's third largest data centre, received a risk score of 41% - 3% lower than that of Iran.

Ranking	Country	GDP (million)	Population	Registered IP addresses	Data risk score
1	Somalia	$5,707	11,079,000	10,240	92.9%
2	Afghanistan	$19,204	27,657,145	103,744	88.3%
3	Burundi	$2,881	10,114,505	5,376	80.4%
4	Yemen	$36,852	27,478,000	51,200	79.0%
5	Iraq	$169,460	37,883,543	243,712	77.7%
6	Syria	$77,460	18,564,000	824,320	77.7%
7	Cen African Republic	$1,605	4,998,000	17,408	74.4%
8	Nigeria	$568,508	4,699,050	1,005,312	71.8%
9	DR of the Congo	$33,121	85,026,000	21,248	71.4%
10	Chad	$10,894	14,497,000	4,096	70.8%
11	South Sudan	$2,627	12,131,000	0	68.5%
12	Niger	$7,151	20,715,000	20,480	68.1%
13	Libya	$38,300	6,385,000	299,008	66.8%
14	Guinea-Bissau	$1,057	1,547,777	5,120	66.5%
15	Sudan	$83,612	39,598,700	283,904	65.1%

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Keeping your data local doesn't necessarily provide a secure solution. Businesses in the US and the EU are just as likely to suffer data breaches as the rest of the world

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DATA SAFTEY IN THE USA

In the age of government snooping, it's no secret that the USA no longer holds the best reputation for data privacy, yet four out of five businesses still claim to be happy to host their data there.

Despite this however, the USA not only fails to make the top ten safest nations, but also fails to fall within the top 25, ranking at 38th, behind Slovakia, Bahrain and Latvia.

Despite this fact, over 35% of the world's public computing is conducted in the USA, with data giants such as Google, Microsoft and Dropbox locating many of their servers around the country.

TOP TEN SAFEST EUROPEAN NATIONS

Of the 28 countries that form the European Union, only eight fall within the top twenty safest countries for data storage. Outside of this list was the United Kingdom, which came in at #23 behind Estonia, Qatar and South Korea for data privacy and secure storage.

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* European nations outside of the EU

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If the location of your data hosting service does not match the promised levels of privacy and protection, then it's time to make a switch.

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KEEPING YOUR DATA SECURE

It's easy to forget the importance of physical location when selecting a cloud hosting service or data centre provider. But in today's increasingly unsafe world, it is more important than ever to consider the physical infrastructure, geographic location and political environments that surround your data.

As our risk map shows, keeping data "at home" does not necessarily provide the most secure solution. Instead, businesses need to find the solutions best-suited to their individual needs.

Those with the strictest privacy concerns may require a stronger approach than is available in their home nations. Similarly, those seeking cloud and data storage solutions have every right to demand information on how, and where, their data is being stored.

If the location does not match the promised levels of protection, then perhaps it's time to make a switch.

MATEO MEIER, CEO, ARTMOTION

Artmotion is a highly secure data centre based in the Swiss Alps.

To find out more about how location can impact your data privacy, contact artmotion at:

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