

# Avast Global PCRisk Report2021





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### **htrocuction**

In 2021, cybercriminals continued to take advantage of the Covid-19 pandemic, exploiting people's habits formed during lockdown in order to spread scams.

The 2021 Avast Global PC Risk Report looks at Windows threats targeting home and business users throughout the year. On average, home users around the world had a 29.25% chance of encountering a threat, whereas business users had a 15.10% chance. Home users have an increased risk of encountering threats, as they do not have the same layers of protection in place as business users, whose networks and devices are often managed by professional IT-security teams, preventing them from even encountering certain threats in the first place.

With hundreds of millions of users worldwide, Avast has one of the largest threat detection networks in the cybersecurity industry. The attacks on these devices provide valuable insights and knowledge of the most prevalent threats and those who have been most affected by them.

Global

Europe







# **httocuction**

### Methodology

The data included in this report is collected from Avast's threat detection network, and represents the average ratio of Avast users protected monthly from at least one threat divided by the total number of monthly active Avast users from January 1, 2021 -December 31, 2021. In order to provide statistically relevant data, this report includes data from countries and territories with a sample size of at least 10,000 computers belonging to home users that encountered threats during the months the data was collected, and at least 1,000 computers used by businesses. The regional breakdowns included in this report includes data from regions with a sample size of at least 1,000 computers belonging to home users that encountered threats during the months the data was collected and at least 100 computers used by businesses.



# **Global Risk Ratio: Home Users**

The countries in which home users are most at risk of encountering threats are mainly in the Middle East, Asia, and Africa, and those least at risk are located mainly in Europe and North America.

**Global Home User Risk Ratio** 

34.5%

28.1%



![](_page_4_Picture_8.jpeg)

### **COUNTRIES MOST AT RISK**

The top ten countries most at risk of encountering threats are in the Middle East and Africa, in addition to Kosovo:

1.	Kosovo	53.71%
2.	China	48.11%
3.	Afghanistan	46.43%
4.	Yemen	46.21%
5.	Angola	44.65%
6.	Rwanda	44.61%
7.	Egypt	44.39%
8.	Madagascar	44.13%
9.	Algeria	44.05%
10.	Macao	44.01%

### **COUNTRIES LEAST AT RISK**

The ten countries with the lowest risk of encountering threats are:

1.	Puerto Rico	21.64%
2.	South Korea	22.81%
3.	United Kingdom	23.55%
4.	Martinique	23.80%
5.	Guadeloupe	23.83%
6.	Ireland	24.11%
7.	Finland	24.21%
8.	Switzerland	24.23%
9.	Netherlands	24.27%
10.	Denmark	24.39%

![](_page_5_Picture_0.jpeg)

# **Global Risk Ratio: Business Users**

The countries in which business users are most at risk of encountering threats are mainly in Asia and Africa, in addition to Croatia and Bulgaria, and those least at risk are located mainly in Europe and North America.

### **Global Business User Risk Ratio**

![](_page_5_Picture_4.jpeg)

### **COUNTRIES MOST AT RISK**

The ten countries in which businesses are most at risk of encountering a threat are:

1.	Vietnam	37.80%
2.	China	35.65%
3.	Tanzania	35.29%
4.	Pakistan	35.61%
5.	Croatia	32.55%
6.	Bulgaria	31.64%
7.	Mozambique	30.54%
8.	Indonesia	30.29%
9.	Bangladesh	30.07%
10.	Taiwan	29.78%

### **COUNTRIES LEAST AT RISK**

The ten countries with the lowest risk ratio are:

1.	Sweden	9.52%
2.	Norway	10.86%
3.	Luxembourg	11.24%
4.	Ireland	11.52%
5.	United Kingdom	11.71%
6.	Germany	11.83%
7.	Puerto Rico	11.86%
8.	Netherlands	11.86%
9.	Switzerland	12.00%
10.	United States	12.60%

![](_page_6_Picture_0.jpeg)

# The State of Cybersecurity

People are spending more time online due to the pandemic, and research conducted for the Avast Digital Citizenship Report shows that one-third of global respondents plan to continue to do more things online as it makes life easier in general. Cybercriminals used the pandemic to their advantage, spreading scams and phishing attacks to exploit people's digital habits.

The top ten types of malware consumers faced, globally, in 2021 were:

1.	Trojans	30.73%
2.	File infectors	24.21%
3.	Adware	12.00%
4.	Worms	7.79%
5.	Droppers	6.97%
6.	Password stealers	3.99%
7.	Coinminers	2.42%
8.	RATs	2.34%
9.	Scams	2.33%
10.	Bots	1.74%

![](_page_6_Picture_6.jpeg)

Many malware samples today are like a swiss army knife, capable of performing more than one malicious action and often designed to deliver more malware. That means, if people or businesses are infected with malware such as a dropper, RAT or bot, further malware will likely follow, as droppers, RATs, bots are typically used to spread malware.

Trojans are often spread via email, and file-sharing sites, and are risky as they can destroy files, take control over a user's device and enable data theft, impacting people's privacy. File infectors, such as Expiro, Virut, and Sality, which have remained dominant in 2021, copy malicious code into files in order to spread themselves.

Avast researchers saw an increase in adware activity, malware that displays ads, often in a disturbing way, without the victim realizing what is causing the ads to be displayed, in the last quarter of the year, which was likely due to an active rootkit called Cerbu. The primary function of Cerbu is to hijack browser homepages and redirect site URLs according to the rootkit configuration. This rootkit can therefore be easily deployed and configured for adware. With the price increase of Bitcoin at the end of 2021 crypto-related crime continued to be attractive for cyber gangs, which resulted in an increase of the number of coinminers, using their victims' devices to mine for

Lurope

cryptocurrencies, spreading by 40% in Q4/2021, often via infected web pages and pirated software.

RATs, remote access Trojans, giving attackers complete control of infected systems, spread in Q3/2021 more than in the first half of the year, but slowed down in the last quarter with cybercriminals taking a break around the holidays.

It might come as a surprise that ransomware does not appear on the list. While ransomware attacks persisted in 2021, with attacks on the Colonial Pipeline and Kaseya attack making headlines, ransomware does not belong to the top threats consumers face. Ransomware is just the tip of the iceberg of the overall threats consumers and businesses face worldwide. If ransomware hits, however, it can cause significant damage, which is why it is discussed and feared so widely, despite its relatively low overall share among threats.

Ransomware operators have moved away from the spray and prey models, where they attempt to attack large target pools, and now are focused on targeted attacks. Successful ransomware attacks can have detrimental consequences, especially for businesses, and repercussions that span beyond businesses losing access to their devices. The attack on the Colonial Pipeline caused gas shortages, and the attack on Baltimore County Public Schools interrupted

virtual learning for two days. In Q3/2021 ransomware attacks were 5% higher than in Q2/2021 and even 22% higher than in Q1/2021. The havoc ransomware caused in the first three quarters of 2021 triggered a coordinated cooperation of nations, government agencies, and security vendors to hunt down ransomware authors and operators, and Avast researchers believe all of this resulted in a significant decrease in ransomware attacks in Q4/2021. The ransomware risk ratio decreased by an impressive 28% compared to Q3/2021.

At the end of 2021, the vulnerability in Log4j, a Java logging library, proved extremely dangerous for businesses because of the ubiquity of the library and the ease of exploitation. Avast researchers observed coinminers, RATs, bots, ransomware, and APT groups abusing the vulnerability.

![](_page_7_Picture_0.jpeg)

### Concusion

The countries with the highest risk ratio, both for home users and business users, for the most part are those with more conflictive socio-political situations (Middle East, Asia, Africa, and Eastern Europe). Users in these countries might resort to accessing information online otherwise blocked in their countries, via unsafe channels and therefore put themselves at risk of encountering threats. Another theory as to why computer users in these countries are most at risk is a lower level of education in terms of cybersecurity best practices.

Nearly all of the top ten safest countries, meaning the ones with the lowest risk ratio, belong to the OECD (Organization for Economic Co-operation and Development). This organization is made up of 38 countries that work together to improve the economic and social well-being of people around the world. These countries are among the early technology adopters, which means the broad mainstream of users in these countries, for the most part, may be more aware and better informed when it comes to PC security best practices. Even so, this correlation is not completely conclusive.

State of Cybersecurity

![](_page_7_Picture_6.jpeg)

Appendix

Global

Europe

![](_page_7_Picture_10.jpeg)

![](_page_8_Picture_0.jpeg)

### Conclusion

### **2021 Global Home and Business User Risk Ratio Evolution**

![](_page_8_Figure_3.jpeg)

Home User

**Business User** 

State of Cybersecurity

![](_page_8_Picture_12.jpeg)

Global

Europe

September October August November December

Latin America

Oceania

Asia

North America

![](_page_9_Picture_0.jpeg)

# Appendix

This appendix shows a list of countries for which the global risk ratio for home and business users, as well as the data per country is also included in the appendix.

![](_page_9_Picture_5.jpeg)

![](_page_9_Picture_8.jpeg)

Latin America

![](_page_10_Picture_0.jpeg)

### Appendix: Global Data for Global Home User Risk Ratio

#### North America and Caribbean

Saint Lucia	36.92%
Jamaica	36.81%
Trinidad and Tobago	36.43%
Barbados	34.39%
Dominican Republic	32.72%
Bahamas	31.55%
Mexico	28.46%
Haiti	28.10%
Curaçao	27.26%
Canada	26.74%
USA	24.61%
Guadeloupe	23.83%
Martinique	23.80%
Puerto Rico	21.64%

#### **Central America**

Belize	38.38%
Nicaragua	33.06%
Panama	32.50%
Honduras	30.30%
El Salvador	28.99%
Guatemala	28.48%
Costa Rica	26.35%

#### South America

Peru	37.55%
Ecuador	37.39%

Venezuela	36.99%
Guyana	33.96%
Bolivia	33.43%
Colombia	32.47%
Suriname	30.96%
Chile	30.05%
Uruguay	29.10%
Paraguay	27.64%
Argentina	27.40%
Brazil	26.16%
French Guiana	25.97%

#### Middle East

Afghanistan	46.43%
Yemen	46.21%
Palestine	42.67%
Jordan	39.98%
Qatar	36.43%
United Arab Emirates	35.95%
Turkey	35.06%
Saudi Arabia	34.86%
Bahrain	34.09%
Oman	33.99%
Kuwait	33.93%
Iraq	32.38%
Lebanon	31.62%
Israel	30.16%
Azerbaijan	29.83%

![](_page_10_Picture_14.jpeg)

#### Asia Pacific

Vietnam	40.50%
Sri Lanka	39.96%
Philippines	38.19%
Singapore	37.93%
Indonesia	37.00%
Brunei Darussalam	35.68%
Papua New Guinea	35.42%
Mongolia	35.28%
Taiwan	34.99%
Malaysia	34.12%
Myanmar	33.36%
Fiji	32.18%
Maldives	30.87%
Cambodia	30.78%
Thailand	30.77%
French Polynesia	29.83%
New Caledonia	27.35%
New Zealand	26.89%
Australia	24.73%

#### Asia

Macao44.01%Turkmenistan40.64%Pakistan39.35%Tajikistan38.81%Bangladesh38.45%	China	48.11%
Turkmenistan40.64%Pakistan39.35%Tajikistan38.81%Bangladesh38.45%	Macao	44.01%
Pakistan39.35%Tajikistan38.81%Bangladesh38.45%	Turkmenistan	40.64%
Tajikistan38.81%Bangladesh38.45%	Pakistan	39.35%
Bangladesh 38.45%	Tajikistan	38.81%
	Bangladesh	38.45%
Nepal 38.36%	Nepal	38.36%

Latin America	Oceania	Asia	North America

	Hong Kong	37.10%
	Georgia	35.17%
	Uzbekistan	34.19%
	Kyrgyzstan	30.56%
	Laos	29.84%
	India	28.99%
	Japan	28.18%
	Kazakhstan	27.78%
	South Korea	22.81%

#### Western Europe

Luxembourg	34.87%
Portugal	33.28%
Greece	33.21%
Malta	31.39%
Cyprus	30.52%
Spain	28.93%
Belgium	27.81%
France	26.79%
Italy	24.88%
Netherlands	24.27%
Ireland	24.11%
United Kingdom	23.55%

![](_page_11_Picture_0.jpeg)

### Appendix: Global Data for Global Home User Risk Ratio

#### Nordics

lceland	32.60%
Sweden	26.98%
Norway	26.40%
Denmark	24.39%
Finland	24.21%

#### **Central Europe**

Croatia	37.77%
Hungary	35.97%
Slovakia	34.66%
Slovenia	32.77%
Czech Republic	31.92%
Poland	25.18%
Germany	24.52%
Austria	24.45%
Switzerland	24.23%

#### Eastern Europe

Kosovo	53.71%
Serbia	40.56%
Montenegro	40.21%
Albania	40.12%
Bulgaria	39.13%
Bosnia and Herzegovina	38.78%
Republic of North Macedonia	37.48%
Romania	35.69%
Lithuania	34.67%

Latvia	33.85%
Ukraine	33.76%
Moldova (the Republic of)	33.52%
Estonia	31.97%
Armenia	29.95%
Belarus	29.95%
Russia	28.44%

#### Africa

Angola	44.65%
Rwanda	44.61%
Egypt	44.39%
Madagascar	44.13%
Algeria	44.05%
Togo	44.01%
Ethiopia	43.54%
Congo	43.05%
Tunisia	41.92%
Uganda	41.56%
Ghana	41.22%
Kenya	40.79%
Malawi	40.50%
Zambia	40.40%
Cameroon	40.34%
Morocco	39.94%
Gabon	39.86%
Tanzania	39.46%
Zimbabwe	39.60%
	AngolaRwandaEgyptMadagascarAlgeriaTogoEthiopiaCongoTunisiaUgandaGhanaKenyaMalawiZambiaCameroonMoroccoGabonTanzaniaZimbabwe

![](_page_11_Picture_14.jpeg)

Mozambique	39.03%
Benin	38.67%
Cabo Verde	37.94%
Botswana	37.78%
The Republic of Congo	37.60%
Libya	36.85%
Ivory Coast	36.45%
Namibia	35.78%
Senegal	35.75%
Nigeria	35.52%
Mali	34.61%
Mauritius	34.13%
South Africa	33.30%
Burkina Faso	32.90%
Somalia	31.84%
Réunion	29.01%

Latin America

Oceania Asia

North America

![](_page_12_Picture_0.jpeg)

## Appendix: Global Data for Global Business User Risk Ratio

#### North America and Caribbean

Mexico	23.15%
Trinidad and Tobago	20.95%
Jamaica	19.88%
Barbados	18.42%
Dominican Republic	14.53%
Canada	13.80%
USA	12.60%
Puerto Rico	11.86%

#### **Central America**

Panama	19.44%
Costa Rica	19.02%
Guatemala	18.85%

#### South America

Ecuador	26.82%
Peru	25.39%
Colombia	25.01%
Chile	21.08%
Brazil	20.61%
Argentina	20.07%
Uruguay	16.05%

#### Middle East

Turkey	28.89%
United Arab Emirates	22.78%

Saudi Arabia	20.23%
Israel	19.93%

#### Asia Pacific

Vietnam	37.80%
Indonesia	30.29%
Taiwan	29.78%
Malaysia	29.21%
Philippines	26.26%
Singapore	25.91%
Thailand	20.46%
New Zealand	14.22%
Australia	12.78%

#### Asia

China	35.65%
Pakistan	34.61%
Bangladesh	30.07%
Hong Kong	28.18%
South Korea	26.11%
India	23.73%
Japan	19.91%

#### Western Europe

Portugal	24.74%
Greece	22.86%

![](_page_12_Picture_20.jpeg)

#### 21.91% Spain 19.43% Italy 16.57% Malta France 16.14% Belgium 13.53% 11.86% Netherlands United Kingdom 11.71% 11.52% Ireland Luxembourg 11.24%

#### Nordics

Finland	14.27%
Denmark	12.96%
Norway	10.86%
Sweden	9.52%

#### **Central Europe**

Croatia	32.55%
Hungary	26.99%
Slovakia	23.01%
Slovenia	22.67%
Poland	20.09%
Czech Republic	19.16%
Austria	13.69%
Switzerland	12.00%
Germany	11.83%

Latin America Oceania Asia North Amer
---------------------------------------

#### Eastern Europe

Bulgaria	31.64%
Serbia	28.85%
Romania	25.53%
Ukraine	23.61%
Armenia	20.07%
Russia	19.71%
Bosnia and Herzegovina	18.84%
Lithuania	17.02%
Latvia	15.38%

#### Africa

Tanzania	35.29%
Mozambique	30.54%
Nigeria	28.25%
Ghana	25.98%
Morocco	24.90%
Kenya	22.77%
South Africa	21.66%

![](_page_13_Picture_0.jpeg)

### Appendix: Europe United Kingdom

#### Home User **Risk Ratio: UK**

	25.0%	26.1%
<b>26.8%</b>	27.3%	36.3%

East Midlands	25.66%
East of England	24.85%
London	36.24%
North East	26.69%
North West	27.55%
Northern Ireland	24.51%
Scotland	27.06%
South East	25.80%
South West	24.56%
Wales	26.84%
West Midlands	27.33%
Yorkshire and the Humber	26.44%

![](_page_13_Picture_6.jpeg)

### **Business User Risk Ratio: UK**

	12.6%	13.0%
<b>13.4%</b>	<b>14.0%</b>	<b>15.2%</b>

East Midlands	11.88%
East of England	13.98%
London	15.17%
North East	11.71%
North West	13.40%
Northern Ireland	13.28%
Scotland	13.00%
South East	12.57%
South West	14.08%
Wales	12.97%
West Midlands	14.03%
Yorkshire and the Humber	12.86%

Appendix

Global

Europe

![](_page_13_Picture_15.jpeg)

Baden-Württemberg	25.00%
Bavaria	24.00%
Berlin	28.45%
Brandenburg	23.87%
Bremen	29.51%
Hamburg	26.82%
Hesse	31.77%
Lower Saxony	24.90%
Mecklenburg-Western Pomerania	22.95%
North Rhine-Westphalia	25.24%
Rhineland-Palatinate	27.00%
Saarland	26.84%
Saxony	25.27%
Saxony-Anhalt	25.55%
Schleswig-Holstein	24.47%
Thuringia	25.46%

![](_page_13_Picture_17.jpeg)

Oceania

Asia

![](_page_13_Picture_21.jpeg)

Baden-Württemberg	11.40%
Bavaria	11.89%
Berlin	14.45%
Brandenburg	13.39%
Bremen	11.58%
Hamburg	14.68%
Hesse	13.42%
Lower Saxony	12.26%
Mecklenburg-Western Pomerania	8.43%
North Rhine-Westphalia	12.60%
Rhineland-Palatinate	14.73%
Saarland	12.58%
Saxony	11.72%
Saxony-Anhalt	12.34%
Schleswig-Holstein	11.98%
Thuringia	12.34%

![](_page_14_Picture_0.jpeg)

### Appendix: Europe Austria

![](_page_14_Picture_2.jpeg)

Burgenland	24.58%	Burgenland	36.12%
Carinthia	28.90%	Carinthia	13.13%
Lower Austria	26.32%	Lower Austria	15.70%
Salzburg	26.96%	Salzburg	12.28%
Styria	28.24%	Styria	13.71%
Tyrol	26.02%	Tyrol	10.88%
Upper	26.09%	Upper	13.36%
Vienna	28.80%	Vienna	16.99%
Vorarlberg	24.77%	Vorarlberg	13.34%

Appendix

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Europe

# Switzerland

#### Home User Risk Ratio: Switzerland

![](_page_14_Picture_11.jpeg)

**27.3% 28.3% 30.9%** 

Aargau	26.89%
Appenzell Ausserrhoden	28.41%
Basel-Landschaft	26.00%
Basel-Stadt	28.04%
Bern, Berne	27.22%
Fribourg, Freiburg	30.81%
Genève	28.24%
Graubünden, Grigioni, Grischun	22.54%
Jura	27.03%
Luzern	24.63%
Neuchâtel	29.21%
Nidwalden	22.55%
Sankt Gallen	24.02%
Schaffhausen	22.15%
Schwyz	25.30%
Solothurn	27.28%
Thurgau	25.16%
Ticino	24.30%
Valais, Wallis	26.81%
Vaud	28.28%
Zug	27.80%
Zürich	29.70%

![](_page_14_Picture_13.jpeg)

Oceania

![](_page_14_Picture_17.jpeg)

Sankt Gallen	11.95%
Schaffhausen	11.68%
Schwyz	11.98%
Solothurn	16.08%
Thurgau	11.61%
Ticino	9.53%
Uri	12.26%
Valais, Wallis	12.08%
Vaud	13.92%
Zug	13.50%
Zürich	13.11%

![](_page_15_Picture_0.jpeg)

### Appendix: Europe France

#### Home User **Risk Ratio:** France

![](_page_15_Figure_3.jpeg)

5 mm

Auvergne-Rhône-Alpes	29.59%
Bourgogne-Franche-Comté	28.34%
Bretagne	29.63%
Centre-Val de Loire	28.46%
Corse	26.40%
European Collectivity of Alsace	28.86%
Grand-Est	28.61%
Hauts-de-France	28.47%
Île-de-France	32.97%
Normandie	27.03%
Nouvelle-Aquitaine	29.02%
Occitanie	29.37%
Pays-de-la-Loire	27.87%
Provence-Alpes-Côte-d'Azur	29.24%

![](_page_15_Picture_6.jpeg)

Auvergne-Rhône-Alpes	16.99%
Bourgogne-Franche-Comté	19.15%
Bretagne	20.38%
Centre-Val de Loire	20.25%
European Collectivity of Alsace	13.90%
Grand-Est	17.69%
Hauts-de-France	18.12%
Île-de-France	19.01%
Normandie	20.04%
Nouvelle-Aquitaine	17.96%
Occitanie	19.10%
Pays-de-la-Loire	19.79%
Provence-Alpes-Côte-d'Azur	16.81%

Global

![](_page_15_Picture_11.jpeg)

![](_page_15_Picture_13.jpeg)

Andalusia	31.64%
Aragon	30.93%
Balearic Islands	28.73%
Basque Country	32.20%
Canary Islands	30.10%
Cantabria	32.99%
Castile and León	34.27%
Castile-La Mancha	31.37%
Catalonia	31.05%
Ceuta	32.40%
Chartered Community of Navarre	31.30%
Community of Madrid	31.47%
Extremadura	31.61%
Galicia	34.34%
La Rioja	33.01%
Melilla	31.38%
Principality of Asturias	31.95%
Region of Murcia	30.90%
Valencian Community	31.14%

![](_page_15_Picture_18.jpeg)

Oceania

Asia

![](_page_15_Picture_22.jpeg)

Andalusia	25.89%
Aragon	23.14%
Balearic Islands	19.56%
Basque Country	25.20%
Canary Islands	22.09%
Cantabria	29.46%
Castile and León	25.12%
Castile-La Mancha	28.02%
Catalonia	24.05%
Chartered Community of Navarre	27.74%
Community of Madrid	24.87%
Galicia	25.40%
Principality of Asturias	28.66%
Region of Murcia	13.59%
Valencian Community	24.50%

![](_page_16_Picture_0.jpeg)

### Appendix: Europe Slovakia

![](_page_16_Picture_2.jpeg)

43.12%
41.26%
40.75%
47.96%
44.56%
49.21%
46.76%
43.14%

### 

Banskobystrický kraj	30.90%
Bratislavský kraj	26.65%
Košický kraj	27.26%
Nitriansky kraj	27.42%
Prešovský kraj	25.17%
Trenčiansky kraj	35.61%
Trnavský kraj	30.19%
Žilinský kraj	23.31%

Appendix

endix Global

![](_page_16_Picture_10.jpeg)

### Czech Republic

![](_page_16_Picture_12.jpeg)

#### Home User Risk Ratio: Czech Republic

![](_page_16_Figure_14.jpeg)

Central Bohemia	32.30%
Hradec Králové	33.73%
Karlovy Vary	32.36%
Liberec	36.12%
Moravia-Silesia	34.59%
Olomouc	36.47%
Pardubice	35.75%
Plzeň	34.89%
Prague	34.00%
South Bohemia	32.55%
South Moravia	36.10%
Ústí nad Labem	33.70%
Vysočina	33.21%
Zlín	33.59%

![](_page_16_Picture_20.jpeg)

#### Business User Risk Ratio: Czech Republic

	19.2%	20.5%
<b>21.1%</b>	22.5%	24.0%

Central Bohemia	20.53%
Hradec Králové	16.99%
Karlovy Vary	18.29%
Liberec	21.21%
Moravia-Silesia	18.20%
Olomouc	23.34%
Pardubice	21.96%
Plzeň	19.78%
Prague	20.50%
South Bohemia	22.27%
South Moravia	22.89%
Ústí nad Labem	20.03%
Vysočina	20.75%
Zlín	23.91%

![](_page_17_Picture_0.jpeg)

### Appendix: Latin America Argentina

![](_page_17_Picture_2.jpeg)

![](_page_17_Picture_3.jpeg)

Buenos Aires	28.49%
Catamarca	27.29%
Chaco	29.27%
Chubut	27.38%
Ciudad Autónoma de Buenos Aires	30.28%
Córdoba	26.67%

State of Cybersecurity Conclusion Introduction

Corrientes	28.53%
Entre Ríos	27.37%
Formosa	27.65%
Jujuy	29.43%
La Pampa	24.96%
La Rioja	28.52%
Mendoza	27.50%
Misiones	29.84%
Neuquén	27.69%
Río Negro	27.80%
Salta	28.20%
San Juan	28.45%
San Luis	26.81%
Santa Cruz	27.38%
Santa Fe	26.55%
Santiago del Estero	26.81%
Tierra del Fuego	28.72%
Tucumán	28.18%

Appendix

Global

Europe

![](_page_17_Picture_11.jpeg)

![](_page_17_Figure_12.jpeg)

Buenos Aires	23.56%
Chaco	17.55%
Chubut	21.46%
Ciudad Autónoma de Buenos Aires	20.52%
Córdoba	22.90%

![](_page_17_Picture_14.jpeg)

Oceania

North America

Corrientes	16.29%
Entre Ríos	15.10%
Mendoza	24.62%
Misiones	17.79%
Neuquén	16.37%
Río Negro	13.39%
Salta	17.54%
San Juan	26.19%
Santa Cruz	19.77%
Santa Fe	21.11%
Tierra del Fuego	19.56%
Tucumán	21.08%

![](_page_18_Picture_0.jpeg)

### Appendix: Latin America Brazil

![](_page_18_Picture_2.jpeg)

![](_page_18_Figure_3.jpeg)

Acre	27.37%
Alagoas	28.01%
Amapá	32.52%
Amazonas	28.93%
Bahia	28.14%
Ceará	28.38%
Distrito Federal	29.09%

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Espírito Santo	27.91%
Goiás	26.89%
Maranhão	29.19%
Mato Grosso	25.33%
Mato Grosso do Sul	26.13%
Minas Gerais	25.72%
Pará	28.33%
Paraíba	28.30%
Paraná	26.45%
Pernambuco	28.12%
Piauí	27.88%
Rio de Janeiro	26.61%
Rio Grande do Norte	28.57%
Rio Grande do Sul	24.33%
Rondônia	26.81%
Roraima	34.62%
Santa Catarina	25.47%
São Paulo	26.19%
Sergipe	28.01%
Tocantins	27.37%

15.87%

21.41%

19.71%

Europe

![](_page_18_Picture_12.jpeg)

Ceará

Distrito Federal

Espírito Santo

North America

Goiás	20.10%
Maranhão	23.73%
Mato Grosso	22.29%
Mato Grosso do Sul	15.59%
Minas Gerais	19.24%
Pará	26.84%
Paraíba	21.14%
Paraná	22.21%
Pernambuco	18.07%
Piauí	16.04%
Rio de Janeiro	19.58%
Rio Grande do Norte	18.98%
Rio Grande do Sul	21.79%
Rondônia	20.37%
Santa Catarina	21.30%
São Paulo	21.75%
Sergipe	29.28%
Tocantins	20.56%

![](_page_19_Picture_0.jpeg)

### Appendix: Latin America Mexico

![](_page_19_Picture_2.jpeg)

![](_page_19_Picture_3.jpeg)

Aguascalientes	28.49%
Baja California	31.49%
Baja California Sur	30.09%
Campeche	35.61%
Chiapas	32.25%
Chihuahua	29.29%
Ciudad de México	29.37%
Coahuila de Zaragoza	30.52%

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Colima	26.74%
Durango	28.84%
Guanajuato	27.12%
Guerrero	29.29%
Hidalgo	30.36%
Jalisco	27.16%
México	31.14%
Michoacán de Ocampo	26.09%
Morelos	29.65%
Nayarit	28.57%
Nuevo León	31.85%
Oaxaca	30.38%
Puebla	30.22%
Querétaro	30.21%
Quintana Roo	32.26%
San Luis Potosí	30.51%
Sinaloa	29.01%
Sonora	32.34%
Tabasco	36.27%
Tamaulipas	31.94%
Tlaxcala	29.74%
Veracruz de Ignacio de la Llave	31.29%
Yucatán	33.22%
Zacatecas	26.84%

Europe

![](_page_19_Picture_11.jpeg)

22.3% 24.2% **25.8% 28.2% 33.9%** 

Aguascalientes	33.86%
Baja California	20.66%
Baja California Sur	33.21%
Chiapas	24.07%
Chihuahua	24.21%
Ciudad de México	24.26%
Coahuila de Zaragoza	22.42%
Colima	25.59%

Oceania

Durango	17.47%
Guanajuato	23.88%
Guerrero	20.53%
Hidalgo	28.39%
Jalisco	22.61%
México	28.13%
Michoacán de Ocampo	19.05%
Morelos	24.41%
Nayarit	16.20%
Nuevo León	26.16%
Oaxaca	27.74%
Puebla	29.19%
Querétaro	28.17%
Quintana Roo	27.03%
San Luis Potosí	25.29%
Sinaloa	25.34%
Sonora	25.09%
Tabasco	21.59%
Tamaulipas	29.13%
Veracruz de Ignacio de la Llave	23.66%
Yucatán	26.84%
Zacatecas	30.70%

![](_page_20_Picture_0.jpeg)

### Appendix: Oceania Australia

![](_page_20_Picture_2.jpeg)

![](_page_20_Picture_3.jpeg)

Australian Capital Territory	24.97%	Australian Capital Territory	12.95%
New South Wales	25.97%	New South Wales	13.13%
Northern Territory	26.39%	Northern Territory	15.64%
Queensland	24.10%	Queensland	13.23%
South Australia	24.28%	South Australia	11.89%
Tasmania	22.53%	Tasmania	11.06%
Victoria	26.47%	Victoria	12.77%
Western Australia	24.90%	Western Australia	14.00%

![](_page_20_Picture_6.jpeg)

### Business **User Risk Ratio: Australia**

![](_page_20_Figure_8.jpeg)

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Conclusion Appendix Global

Europe

![](_page_20_Picture_14.jpeg)

![](_page_20_Picture_15.jpeg)

![](_page_21_Picture_0.jpeg)

Appendi	x: Asia
Japan	Home User Risk Ratio: Japan 28.6%
29.8%	<b>30.4% 32.6%</b>
Chūbu	29.84%
Chūgoku	29.41%
Hokkaido	28.85%
Kansai	30.40%
Kantō	32.51%
Kyushu & Okinawa	27.42%
Shikoku	28.62%
Tōhoku	29.09%
	Business
	USEL KISK
	Ratio: Japan
13.7%	<b>23.9% 26.1%</b>
Hokkaido	13.65%
Kansai	26.07%
Kantō	23.84%

![](_page_21_Figure_3.jpeg)

Rājasthān

Tamil Nādu

Uttar Pradesh

West Bengal

Telangāna

Madhya Pradesh	34.02%
Mahārāshtra	31.37%
Manipur	33.94%
Meghālaya	43.04%
Mizoram	44.81%
Nāgāland	47.57%
Odisha	30.23%
Puducherry	43.20%
Punjab	32.29%
Rājasthān	28.71%
Sikkim	42.51%
Tamil Nādu	29.30%
Telangāna	31.72%
Tripura	52.29%
Uttar Pradesh	31.60%
Uttarākhand	40.63%
West Bengal	31.87%

#### Latin America

![](_page_21_Picture_12.jpeg)

#### Oceania Asia North America

![](_page_21_Picture_14.jpeg)

27.71%

24.56%

29.70%

24.33%

23.97%

![](_page_22_Picture_0.jpeg)

### Appendix: Asia Russia

![](_page_22_Picture_2.jpeg)

#### Home User **Risk Ratio: Russia**

![](_page_22_Picture_4.jpeg)

Adygeya, Respublika	32.15%
Altay, Respublika	33.11%
Altayskiy kray	31.20%
Amurskaya oblast'	31.13%
Arkhangel'skaya oblast'	27.92%
Astrakhanskaya oblast'	29.57%
Bashkortostan, Respublika	27.77%
Belgorodskaya oblast'	30.18%
Bryanskaya oblast'	30.65%
Buryatiya, Respublika	30.54%

![](_page_22_Picture_9.jpeg)

Krasnodarskiy kray	30.41%	R
Krasnoyarskiy kray	30.13%	Sa
Kurganskaya oblast'	30.29%	Sa
Kurskaya oblast'	30.33%	Sa
Leningradskaya oblast'	29.87%	Sa
Lipetskaya oblast'	32.04%	Sa
Magadanskaya oblast'	29.36%	Se
Mariy El, Respublika	29.57%	Sr
Mordoviya, Respublika	30.16%	St
Moskovskaya oblast'	29.38%	S
Moskva	28.52%	Ta
Murmanskaya oblast'	29.23%	Ta
Nenetskiy avtonomnyy okrug	26.29%	Ту
Nizhegorodskaya oblast'	29.71%	Tc
Novgorodskaya oblast'	28.75%	Tu
Novosibirskaya oblast'	30.94%	Τv
Omskaya oblast'	30.18%	Ту
Orenburgskaya oblast'	29.61%	U
Orlovskaya oblast'	30.73%	U
Penzenskaya oblast'	29.58%	V
Permskiy kray	29.73%	Vo
Primorskiy kray	29.77%	Vo
Pskovskaya oblast'	29.04%	Vo
Ryazanskaya oblast'	30.27%	Za

#### Latin America

Oceania Asia

![](_page_22_Picture_17.jpeg)

North America

Rostovskaya oblast'	32.28%
Sakhalinskaya oblast'	28.85%
Saha Respublika	29.49%
Samarskaya oblast'	33.22%
Sankt-Peterburg	28.80%
Saratovskaya oblast'	30.12%
Severnaya Osetiya, Respublika	29.05%
Smolenskaya oblast'	30.31%
Stavropol'skiy kray	29.45%
Sverdlovskaya oblast'	29.36%
Tambovskaya oblast'	30.57%
Tatarstan Respublika	29.75%
Tyumenskaya oblast'	29.57%
Tomskaya oblast'	31.83%
Tul'skaya oblast'	30.40%
Tverskaya oblast'	28.80%
Tyva, Respublika	27.54%
Udmurtskaya Respublika	30.84%
Ul'yanovskaya oblast'	31.05%
Vladimirskaya oblast'	29.15%
Volgogradskaya oblast'	32.05%
Vologodskaya oblast'	28.34%
Voronezhskaya oblast'	31.05%
Zabaykal'skiy kray	29.92%

![](_page_23_Picture_0.jpeg)

### Appendix: Asia Russia

# 

#### **Business User Risk Ratio: Russia**

![](_page_23_Picture_4.jpeg)

Altajskij kraj	15.62%
Baškortostan, Respublika	20.74%
Čeljabinskaja oblasť	16.11%
Čuvašskaja Respublika	24.67%
Hanty-Mansijskij avtonomnyj okrug	23.37%
Irkutskaja oblasť	14.21%
Jaroslavskaja oblasť	22.21%
Kaliningradskaja oblast'	25.93%
Kalužskaja oblasť	21.35%

![](_page_23_Picture_7.jpeg)

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Europe

#### Latin America

Oceania Asia

![](_page_23_Picture_15.jpeg)

North America

![](_page_24_Picture_0.jpeg)

### Appendix: North America USA

![](_page_24_Picture_2.jpeg)

![](_page_24_Picture_3.jpeg)

Alabama	22.86%
Alaska	23.36%
Arizona	24.85%
Arkansas	22.91%
California	27.23%
Colorado	24.87%
Connecticut	25.74%
Delaware	26.97%
District of Columbia	40.47%
Florida	26.63%
Georgia	26.40%
Hawaii	27.56%
Idaho	21.35%
Illinois	25.50%
Indiana	23.54%
lowa	22.13%
Kansas	22.63%
Kentucky	23.73%

Louisiana	23.47%
Maine	24.28%
Maryland	26.95%
Massachusetts	27.70%
Michigan	21.94%
Minnesota	23.37%
Mississippi	22.02%
Missouri	23.08%
Montana	20.68%
Nebraska	21.57%
Nevada	27.64%
New Hampshire	25.34%
New Jersey	28.98%
New Mexico	22.53%
New York	30.03%
North Carolina	24.13%
North Dakota	21.11%
Ohio	23.82%
Oklahoma	22.89%
Oregon	25.06%
Pennsylvania	24.25%
Rhode Island	25.77%
South Carolina	23.88%
South Dakota	21.72%
Tennessee	23.38%
Texas	25.33%
Utah	22.37%
Vermont	24.18%
Virginia	27.24%
Washington	26.30%
West Virginia	24.14%
Wisconsin	23.24%
Wyoming	20.38%

Business User Risk Ratio: USA			
		11.9%	12.6%
	<b>13.1%</b>	<b>14.0%</b>	<b>17.5%</b>
Alabama			13.69%
Alaska			11.30%
Arizona			12.54%
Arkansas			10.09%
California			11.98%
Colorado			12.52%
Connecticut			14.16%
Delaware			14.94%
District of Columbia			17.47%
Florida			13.60%
Georgia			14.83%
Hawaii			11.73%
ldaho			9.09%
Illinois			11.88%
Indiana			11.95%
lowa			14.35%
Kansas			13.90%
Kentucky			13.34%

13.34%

Asia

North America

Louisiana	10.62%
Maine	12.04%
Maryland	16.03%
Massachusetts	13.04%
Michigan	11.77%
Minnesota	13.94%
Mississippi	11.89%
Missouri	12.78%
Montana	13.10%
Nebraska	15.64%
Nevada	12.52%
New Hampshire	14.47%
New Jersey	12.59%
New Mexico	11.77%
New York	12.97%
North Carolina	12.80%
North Dakota	13.47%
Ohio	12.94%
Oklahoma	10.84%
Oregon	9.78%
Pennsylvania	13.05%
Rhode Island	14.92%
South Carolina	12.64%
South Dakota	12.70%
Tennessee	13.43%
Texas	13.97%
Utah	14.28%
Vermont	12.27%
Virginia	13.40%
Washington	11.85%
West Virginia	12.79%
Wisconsin	10.90%
Wyoming	12.65%

![](_page_25_Picture_0.jpeg)

### Appendix: North America Canada

#### Home User Risk Ratio: Canada

![](_page_25_Picture_3.jpeg)

Alberta	24.42%
British Columbia	27.13%
Manitoba	25.56%
New Brunswick	25.29%
Newfoundland and Labrador	22.42%
Northwest Territories	26.23%
Nova Scotia	25.40%
Ontario	28.69%
Prince Edward Island	26.15%
Quebec	26.99%
Saskatchewan	22.27%
Yukon	24.30%

![](_page_25_Figure_6.jpeg)

Alberta	14.27%
British Columbia	12.84%
Manitoba	13.17%
New Brunswick	16.70%
Newfoundland and Labrador	11.38%
Nova Scotia	12.63%
Ontario	14.81%
Prince Edward Island	14.22%
Quebec	12.61%
Saskatchewan	12.81%

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dix Global

al Eu

Europe

#### Latin America

Oceania

Asia

North America

![](_page_26_Picture_0.jpeg)

# Contact Information

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![](_page_26_Picture_3.jpeg)