



# Extreme Networks Security Survey Results

## Agenda

<b>Introduction</b>	<b>1</b>
<b>Demographics</b>	<b>2</b>
<b>Results Summary</b>	<b>2</b>
<b>Results by Vertical</b>	<b>5</b>
<b>Results by Region</b>	<b>8</b>

## Introduction

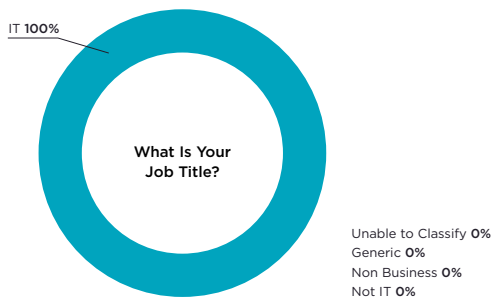
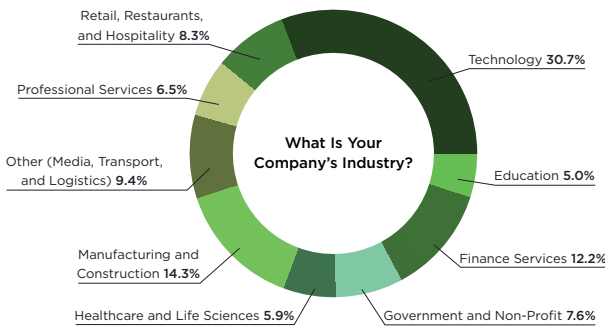
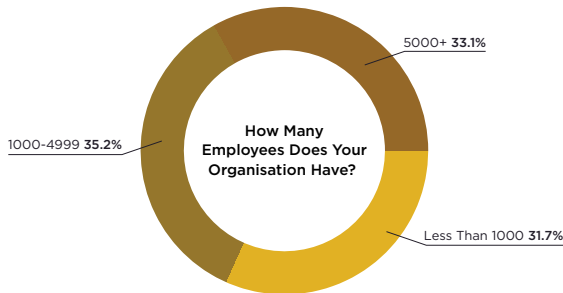
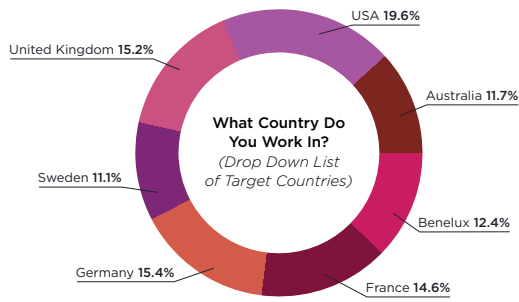
In 2019, Extreme Networks conducted a survey of 540 IT professionals to determine their views on network security.

The survey covered areas such as

- Security awareness and perception
- Security practices
- IoT security
- Network Access Control Security

The results are included in this report.

# Demographics



# Results Summary

## Q1 Do you feel your organization's network is at risk from cyberattacks and/or breaches?

Yes, very concerned ..... 42.2%  
 Yes, there is at least some risk.....38.1%  
 No, our network is secured against attacks and breaches ..... 15.0%  
 No, our network is not a target for attacks or breaches .4.6%

## Q2 Do you feel this risk largely originates on the outside or on the inside of your organization?

Mostly outside ..... 55.5%  
 Mostly inside.....16.6%  
 About equal - inside and outside.....27.9%

## Q3 Do you use Internet of Things in your organization?

Yes, and our device population has been increasing..... 56.9%  
 Yes, but IoT use is limited/very limited.....26.9%  
 No, but we are considering introducing IoT in the next 12 months..... 8.7%  
 No, we don't use IoT and are not considering an introduction..... 7.6%

## Q4 If you use IoT, do you take measures to secure them?

Yes, we use the pre-set passwords they come with ..... 48.7%  
 Yes, we take incremental/specific measures to secure them..... 48.7%  
 No..... 2.7%

## Q5 If you use IoT, are you aware of attempts to hack them?

Yes, there have been attempts to hack our IoT ..... 45.6%  
 Yes, our IoT have been targeted and have been successfully hacked ..... 25.0%  
 Not aware of any, but can't say for sure they have not been hacked..... 9.1%  
 No, our IoT have never been the target of hack attempts.....20.4%

**Q6 Are you totally confident that you have visibility into all the devices on your network?**

Yes ..... 72.4%  
No.....27.6%

**Q7 Do you onboard and secure guest, BYOD and corporate devices differently, and how?**

Yes, different approach for each of the three groups ..... 33%  
No, same approach for all three groups..... 12%  
Yes, we use one approach for corporate devices, and a different approach for guest and/or BYOD..... 23%  
We use 802.1X authentication for corporate devices ..... 13%  
We use pre-shared keys (PSK) for guest devices ..... 11%  
We use pre-shared keys (PSK) for BYOD .....9%

**Q8 Do you secure your wired devices and/or Ethernet ports?**

Yes .....90.4%  
No.....9.6%

**Q9 Do you currently use 802.1X authentication?**

Yes, for wired and wireless devices ..... 58.3%  
Yes, only for wired devices..... 19.7%  
Yes, only for wireless devices.....10.6%  
No..... 11.5%

**Q10 What are/were your biggest pain points when implementing 802.1X authentication?**

Deploying Certificates..... 31.3%  
Deploying Device Profiles..... 30.3%  
Troubleshooting Client Connectivity ..... 25.8%  
Not Sure ..... 5.1%  
N/A -- our 802.1X deployment was straightforward ..... 6.7%  
Other.....0.8%

**Q11 Which of these security solutions do you currently have deployed?**

Firewall..... 75.9%  
Mobile Device Management/Enterprise Mobility Management (MDM/EMM) .....51.4%  
Other endpoint security/management solution .....35.1%  
Intrusion Detection/Prevention (IDS/IPS)..... 45.6%  
Identity and Access Management (IAM).....47.7%  
Unified Threat Management (UTM)..... 28.9%  
Security Information and Event Management (SIEM).. 34.3%  
Other..... 2.2%

**Q12 Have you implemented a Network Access Control (NAC) solution, or are you considering implementing one?**

No, and not considering NAC .....5.6%  
Yes, successfully implemented NAC or currently implementing.....54.0%  
No, but currently considering NAC ..... 13.9%  
Yes, but with partial success..... 26.5%

**Q13 What were/are your top 3 drivers for adopting a NAC solution?**

Security for growing device population, including IoT and BYOD .....52.7%  
Efficient and secure onboarding of corporate, guest and BYOD devices..... 43.8%  
Want to automate certain security tasks..... 35.6%  
Comprehensive authentication, including 802.1X ..... 31.4%  
Control access to the network (block, quarantine, redirect, remediate).....32.1%  
Use NAC to orchestrate other security tools (e.g. firewalls, MDM/EMM, IDS/IPS) ..... 18.6%  
Guest management..... 9.8%  
Other (please specify) .....0.2%

**Q14 If you have not implemented a NAC solution, what concerns are holding you back?**

Would not provide enough additional functionality beyond our other security solutions (e.g. firewalls, IAM, MDM/EMM, SIEM, UTM) .....	11.1%
Deployment complexity .....	5.6%
Too costly to deploy and/or maintain .....	5.6%
Lack of qualified networking or security personnel.....	5.6%
Need for outside consulting services .....	2.8%
Would not scale (well) across our multiple sites .....	8.3%
N/A. My organization is currently not interested in NAC.....	36.1%
Other.....	25.0%

**Q15 If you consider your NAC implementation unsuccessful, what were the main reasons?**

Too complex to implement.....	19.2%
Lack of qualified networking/security personnel.....	36.8%
Too much effort/too costly to maintain .....	29.0%
Does not scale across our different sites .....	15.0%

**Q16 What is/would be your preferred deployment model for a NAC solution?**

On-premises deployment.....	28.1%
Cloud deployment (all functionality in the cloud).....	41.5%
Hybrid model (some functionality in the cloud, some on-premises).....	27.3%
RADIUS in the cloud, some/all other functionality on-premises.....	3.1%
Other.....	0%

**Q17 Would anything hold you back from adopting a cloud-based solution?**

Concerns about cloud-hosting security .....	31%
Uptime/availability concerns.....	24%
Our IT Security solutions are required to reside on-premises.....	26%
Data security/privacy concerns .....	18%
Other: <free text field>.....	1%

## Results by Vertical

	Education	Finance Services	Government and Non-Profit	Healthcare and Life Sciences	Manufacturing and Construction	Other (Other/Media/Transport and Logistics)	Professional Services	Retail and Restaurants and Hospitality	Technology
<b>Q1 Do you feel your organization's network is at risk from cyberattacks and/or breaches?</b>									
Yes, very concerned	25.9%	50.0%	29.3%	40.6%	39.0%	41.2%	28.6%	44.4%	49.4%
Yes, there is at least some risk	48.1%	37.9%	48.8%	43.8%	40.3%	29.4%	57.1%	28.9%	33.1%
No, our network is secured against attacks and breaches	14.8%	10.6%	14.6%	12.5%	16.9%	19.6%	14.3%	24.4%	12.7%
No, our network is not a target for attacks or breaches	11.1%	1.5%	7.3%	3.1%	3.9%	9.8%	0.0%	2.2%	4.8%
<b>Q2 Do you feel this risk largely originates on the outside or on the inside of your organization?</b>									
Mostly outside	60.0%	55.2%	59.4%	63.0%	65.6%	52.8%	66.7%	48.5%	48.2%
Mostly inside	10.0%	15.5%	15.6%	7.4%	9.8%	25.0%	6.7%	21.2%	21.9%
About equal - inside and outside	30.0%	29.3%	25.0%	29.6%	24.6%	22.2%	26.7%	30.3%	29.9%
<b>Q3 Do you use Internet of Things in your organization?</b>									
Yes, and our device population has been increasing	29.6%	57.6%	31.7%	65.6%	63.6%	49.0%	48.6%	60.0%	65.7%
Yes, but IoT use is limited/very limited	44.4%	30.3%	29.3%	9.4%	19.5%	21.6%	34.3%	31.1%	27.7%
No, but we are considering introducing IoT in the next 12 months	11.1%	6.1%	9.8%	18.8%	15.6%	15.7%	11.4%	2.2%	3.0%
No, we don't use IoT and are not considering an introduction	14.8%	6.1%	29.3%	6.3%	1.3%	13.7%	5.7%	6.7%	3.6%
<b>Q4 If you use IoT, do you take measures to secure them?</b>									
Yes, we use the pre-set passwords they come with	40.0%	58.6%	44.0%	41.7%	42.2%	58.3%	37.9%	43.9%	51.6%
Yes, we take incremental/specific measures to secure them	55.0%	41.4%	56.0%	45.8%	56.3%	38.9%	51.7%	51.2%	47.7%
No	5.0%	0.0%	0.0%	12.5%	1.6%	2.8%	10.3%	4.9%	0.6%
<b>Q5 If you use IoT, are you aware of attempts to hack them?</b>									
Yes, there have been attempts to hack our IoT	30.0%	63.8%	52.0%	45.8%	45.3%	38.9%	24.1%	43.9%	45.8%
Yes, our IoT have been targeted and have been successfully hacked	35.0%	24.1%	28.0%	20.8%	17.2%	22.2%	31.0%	24.4%	27.1%
Not aware of any, but can't say for sure they have not been hacked	15.0%	5.2%	8.0%	8.3%	10.9%	8.3%	20.7%	4.9%	8.4%
No, our IoT have never been the target of hack attempts	20.0%	6.9%	12.0%	25.0%	26.6%	30.6%	24.1%	26.8%	18.7%
<b>Q6 Are you totally confident that you have visibility into all the devices on your network?</b>									
Yes	51.9%	78.5%	65.9%	59.4%	68.8%	76.5%	74.3%	75.6%	76.5%
No	48.1%	21.5%	34.1%	40.6%	31.2%	23.5%	25.7%	24.4%	23.5%
<b>Q7 Do you onboard and secure guest, BYOD and corporate devices differently, and how? (Select all that apply)</b>									
Yes, different approach for each of the three groups	14	32	16	12	26	21	16	20	97
No, same approach for all three groups	9	11	4	8	16	11	5	14	17
Yes, we use one approach for corporate devices, and a different approach for guest and/or BYOD.	4	29	10	10	27	8	16	12	59
We use 802.1X authentication for corporate devices	1	13	6	4	23	6	12	11	24
We use pre-shared keys (PSK) for guest devices	2	5	10	3	22	2	6	9	24
We use pre-shared keys (PSK) for BYOD	1	8	6	4	14	12	3	6	12
<b>Q8 Do you secure your wired devices and/or Ethernet ports?</b>									
Yes	74.1%	92.3%	85.4%	90.6%	96.1%	90.2%	94.3%	86.7%	91.0%
No	25.9%	7.7%	14.6%	9.4%	3.9%	9.8%	5.7%	13.3%	9.0%

	Education	Finance Services	Government and Non-Profit	Healthcare and Life Sciences	Manufacturing and Construction	Other (Other/Media/Transport and Logistics)	Professional Services	Retail and Restaurants and Hospitality	Technology
<b>Q9 Do you currently use 802.1X authentication?</b>									
Yes, for wired and wireless devices	48.1%	76.9%	43.9%	43.8%	54.5%	62.7%	51.4%	60.0%	60.2%
Yes, only for wired devices	14.8%	13.8%	22.0%	25.0%	19.5%	19.6%	14.3%	20.0%	22.3%
Yes, only for wireless devices	11.1%	6.2%	12.2%	12.5%	6.5%	7.8%	17.1%	6.7%	13.9%
No	25.9%	3.1%	22.0%	18.8%	19.5%	9.8%	17.1%	13.3%	3.6%
<b>Q10 What are/were your biggest pain points when implementing 802.1X authentication?</b>									
Deploying Certificates	39.3%	33.0%	23.5%	23.8%	34.0%	29.7%	33.3%	31.8%	31.3%
Deploying Device Profiles	21.4%	29.4%	29.4%	31.0%	29.1%	26.6%	27.5%	34.8%	32.5%
Troubleshooting Client Connectivity	17.9%	24.8%	19.6%	33.3%	27.2%	21.9%	27.5%	21.2%	28.3%
Not Sure	14.3%	2.8%	13.7%	4.8%	0.0%	9.4%	7.8%	1.5%	4.9%
N/A -- our 802.1X deployment was straightforward	7.1%	9.2%	9.8%	7.1%	9.7%	9.4%	3.9%	9.1%	3.0%
Other	0.0%	0.9%	3.9%	0.0%	0.0%	3.1%	0.0%	1.5%	0.0%
<b>Q11 Which of these security solutions do you currently have deployed?</b>									
Firewall	77.8%	72.3%	80.5%	87.5%	88.3%	64.7%	74.3%	73.3%	72.3%
Mobile Device Management/Enterprise Mobility Management (MDM/EMM)	22.2%	63.1%	56.1%	46.9%	48.1%	41.2%	45.7%	60.0%	54.8%
Other endpoint security/management solution	37.0%	49.2%	36.6%	40.6%	33.8%	23.5%	28.6%	35.6%	33.1%
Intrusion Detection/Prevention (IDS/IPS)	22.2%	53.8%	41.5%	46.9%	51.9%	39.2%	34.3%	46.7%	48.2%
Identity and Access Management (IAM)	40.7%	47.7%	41.5%	59.4%	57.1%	39.2%	34.3%	37.8%	51.8%
Unified Threat Management (UTM)	18.5%	33.8%	24.4%	40.6%	37.7%	17.6%	28.6%	26.7%	27.7%
Security Information and Event Management (SIEM)	25.9%	35.4%	31.7%	25.0%	50.6%	27.5%	45.7%	28.9%	31.3%
Other	0.0%	3.1%	7.3%	0.0%	0.0%	3.9%	2.9%	4.4%	1.2%
<b>Q12 Have you implemented a Network Access Control (NAC) solution, or are you considering implementing one?</b>									
No, and not considering NAC	11.1%	3.1%	12.2%	12.5%	2.6%	11.8%	2.9%	6.7%	2.4%
Yes, successfully implemented NAC or currently implementing	44.4%	64.6%	39.0%	34.4%	53.2%	45.1%	60.0%	53.3%	60.8%
No, but currently considering NAC	18.5%	3.1%	17.1%	28.1%	13.0%	21.6%	22.9%	8.9%	11.4%
Yes, but with partial success	25.9%	29.2%	31.7%	25.0%	31.2%	21.6%	14.3%	31.1%	25.3%
<b>Q13 What were/are your top 3 drivers for adopting a NAC solution?</b>									
Security for growing device population, including IoT and BYOD	37.0%	64.6%	36.6%	50.0%	49.4%	35.3%	62.9%	62.2%	57.2%
Efficient and secure onboarding of corporate, guest and BYOD devices	33.3%	60.0%	46.3%	28.1%	37.7%	27.5%	40.0%	51.1%	48.2%
Want to automate certain security tasks	11.1%	35.4%	26.8%	40.6%	48.1%	31.4%	37.1%	28.9%	38.0%
Comprehensive authentication, including 802.1X	29.6%	35.4%	19.5%	31.3%	33.8%	29.4%	34.3%	40.0%	29.5%
Control access to the network (block, quarantine, redirect, remediate)	33.3%	32.3%	34.1%	28.1%	40.3%	33.3%	31.4%	26.7%	29.5%
Use NAC to orchestrate other security tools (e.g. firewalls, MDM/EMM, IDS/IPS)	3.7%	15.4%	9.8%	28.1%	28.6%	21.6%	14.3%	6.7%	21.1%
Guest management	25.9%	4.6%	12.2%	12.5%	10.4%	9.8%	14.3%	4.4%	8.4%
Other (please specify)	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%

	Education	Finance Services	Government and Non-Profit	Healthcare and Life Sciences	Manufacturing and Construction	Other (Other/Media/Transport and Logistics)	Professional Services	Retail and Restaurants and Hospitality	Technology
<b>Q14 If you have not implemented a NAC solution, what concerns are holding you back?</b>									
Would not provide enough additional functionality beyond our other security solutions (e.g. firewalls, IAM, MDM/EMM, SIEM, UTM).	33.3%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	20.0%	25.0%
Deployment complexity	0.0%	0.0%	0.0%	14.3%	0.0%	16.7%	0.0%	0.0%	0.0%
Too costly to deploy and/or maintain	0.0%	0.0%	0.0%	14.3%	0.0%	16.7%	0.0%	0.0%	0.0%
Lack of qualified networking or security personnel	0.0%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Need for outside consulting services	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Would not scale (well) across our multiple sites	0.0%	0.0%	16.7%	14.3%	0.0%	0.0%	0.0%	20.0%	0.0%
N/A. My organization is currently not interested in NAC	66.7%	0.0%	50.0%	0.0%	50.0%	33.3%	0.0%	40.0%	75.0%
Other	0.0%	100.0%	33.3%	0.0%	50.0%	33.3%	100.0%	20.0%	0.0%
<b>Q15 If you consider your NAC implementation unsuccessful, what were the main reasons?</b>									
Too complex to implement	22.2%	10.7%	20.0%	18.2%	28.1%	20.0%	14.3%	10.5%	21.1%
Lack of qualified networking/security personnel	33.3%	42.9%	33.3%	27.3%	31.3%	46.7%	14.3%	36.8%	40.4%
Too much effort/too costly to maintain	0.0%	39.3%	40.0%	36.4%	25.0%	26.7%	28.6%	31.6%	26.3%
Does not scale across our different sites	44.4%	7.1%	6.7%	18.2%	15.6%	6.7%	42.9%	21.1%	12.3%
<b>Q16 What is/would be your preferred deployment model for a NAC solution?</b>									
On-premises deployment	37.5%	22.2%	33.3%	14.3%	21.3%	28.9%	29.4%	35.7%	30.9%
Cloud deployment (all functionality in the cloud)	29.2%	50.8%	33.3%	46.4%	41.3%	37.8%	38.2%	31.0%	45.1%
Hybrid model (some functionality in the cloud, some on-premises)	33.3%	25.4%	33.3%	25.0%	37.3%	24.4%	32.4%	28.6%	21.0%
RADIUS in the cloud, some/all other functionality on-premises	0.0%	1.6%	0.0%	14.3%	0.0%	8.9%	0.0%	4.8%	3.1%
<b>Q17 Would anything hold you back from adopting a cloud-based solution</b>									
Concerns about cloud-hosting security	48.1%	49.2%	39.0%	43.8%	37.7%	39.2%	51.4%	55.6%	48.2%
Uptime/availability concerns	22.2%	46.2%	24.4%	34.4%	39.0%	39.2%	40.0%	31.1%	37.3%
Our IT Security solutions are required to reside on-premises	18.5%	46.2%	31.7%	31.3%	39.0%	27.5%	31.4%	35.6%	49.4%
Data security/privacy concerns	33.3%	13.8%	39.0%	31.3%	37.7%	21.6%	31.4%	22.2%	25.9%
Other: <free text field>	0.0%	0.0%	2.4%	0.0%	0.0%	2.0%	2.9%	4.4%	0.0%

## Results by Region

	Benelux	France	Germany	Sweden	United Kingdom	USA	Australia
<b>Q1 Do you feel your organization's network is at risk from cyberattacks and/or breaches?</b>							
Yes, very concerned	41.8%	39.2%	45.8%	38.3%	40.2%	41.5%	49.2%
Yes, there is at least some risk	32.8%	35.4%	33.7%	40.0%	46.3%	34.0%	47.6%
No, our network is secured against attacks and breaches	14.9%	22.8%	15.7%	16.7%	9.8%	18.9%	3.2%
No, our network is not a target for attacks or breaches	10.4%	2.5%	4.8%	5.0%	3.7%	5.7%	0.0%
<b>Q2 Do you feel this risk largely originates on the outside or on the inside of your organization?</b>							
Mostly outside	48.0%	72.9%	34.8%	68.1%	53.5%	50.0%	67.2%
Mostly inside	30.0%	13.6%	31.8%	14.9%	7.0%	15.0%	6.6%
About equal - inside and outside	22.0%	13.6%	33.3%	17.0%	39.4%	35.0%	26.2%
<b>Q3 Do you use Internet of Things in your organization?</b>							
Yes, and our device population has been increasing	46.3%	51.9%	54.2%	36.7%	68.3%	65.1%	68.3%
Yes, but IoT use is limited/very limited	34.3%	22.8%	33.7%	38.3%	24.4%	19.8%	19.0%
No, but we are considering introducing IoT in the next 12 months	4.5%	15.2%	7.2%	5.0%	6.1%	10.4%	11.1%
No, we don't use IoT and are not considering an introduction	14.9%	10.1%	4.8%	20.0%	1.2%	4.7%	1.6%
<b>Q4 If you use IoT, do you take measures to secure them?</b>							
Yes, we use the pre-set passwords they come with	55.6%	55.9%	50.7%	42.2%	32.9%	47.8%	60.0%
Yes, we take incremental/specific measures to secure them	44.4%	42.4%	43.8%	48.9%	64.5%	51.1%	40.0%
No	0.0%	1.7%	5.5%	8.9%	2.6%	1.1%	0.0%
<b>Q5 If you use IoT, are you aware of attempts to hack them?</b>							
Yes, there have been attempts to hack our IoT	55.6%	44.1%	49.3%	35.6%	39.5%	35.6%	65.5%
Yes, our IoT have been targeted and have been successfully hacked	25.9%	23.7%	28.8%	24.4%	25.0%	28.9%	14.5%
Not aware of any, but can't say for sure they have not been hacked	3.7%	11.9%	5.5%	15.6%	14.5%	7.8%	5.5%
No, our IoT have never been the target of hack attempts	14.8%	20.3%	16.4%	24.4%	21.1%	27.8%	14.5%
<b>Q6 Are you totally confident that you have visibility into all the devices on your network?</b>							
Yes	76.1%	74.4%	72.3%	51.7%	75.6%	74.5%	77.8%
No	23.9%	25.6%	27.7%	48.3%	24.4%	25.5%	22.2%
<b>Q7 Do you onboard and secure guest, BYOD and corporate devices differently, and how? (Select all that apply)</b>							
Yes, different approach for each of the three groups	26	21	49	30	43	55	30
No, same approach for all three groups	12	14	18	13	11	15	12
Yes, we use one approach for corporate devices, and a different approach for guest and/or BYOD.	15	21	26	16	32	43	22
We use 802.1X authentication for corporate devices	11	11	17	5	13	21	22
We use pre-shared keys (PSK) for guest devices	11	22	11	5	9	10	15
We use pre-shared keys (PSK) for BYOD	17	17	5	1	6	9	11
<b>Q8 Do you secure your wired devices and/or Ethernet ports?</b>							
Yes	93.2%	88.5%	89.2%	86.7%	97.6%	89.6%	92.1%
No	6.8%	11.5%	10.8%	13.3%	2.4%	10.4%	7.9%
<b>Q9 Do you currently use 802.1X authentication?</b>							
Yes, for wired and wireless devices	52.4%	52.6%	59.0%	30.0%	68.3%	60.4%	66.7%
Yes, only for wired devices	11.9%	19.2%	24.1%	25.0%	20.7%	17.9%	15.9%
Yes, only for wireless devices	7.1%	10.3%	10.8%	21.7%	6.1%	9.4%	9.5%
No	28.6%	17.9%	6.0%	23.3%	4.9%	12.3%	7.9%



	Benelux	France	Germany	Sweden	United Kingdom	USA	Australia
<b>Q10 What are/were your biggest pain points when implementing 802.1X authentication?</b>							
Deploying Certificates	30.1%	33.0%	34.1%	25.8%	32.8%	31.2%	29.4%
Deploying Device Profiles	28.0%	29.0%	30.1%	28.8%	29.6%	29.4%	37.3%
Troubleshooting Client Connectivity	23.7%	20.0%	26.8%	19.7%	25.6%	32.4%	25.5%
Not Sure	8.6%	6.0%	4.9%	16.7%	1.6%	1.8%	3.9%
N/A -- our 802.1X deployment was straightforward	6.5%	12.0%	4.1%	6.1%	10.4%	4.7%	3.9%
Other	3.2%	0.0%	0.0%	3.0%	0.0%	0.6%	0.0%
<b>Q11 Which of these security solutions do you currently have deployed?</b>							
Firewall	56.0%	76.9%	77.1%	73.3%	89.0%	69.8%	74.6%
Mobile Device Management/Enterprise Mobility Management (MDM/EMM)	34.5%	42.3%	54.2%	55.0%	61.0%	58.5%	39.7%
Other endpoint security/management solution	29.8%	26.9%	39.8%	38.3%	32.9%	29.2%	46.0%
Intrusion Detection/Prevention (IDS/IPS)	34.5%	46.2%	44.6%	26.7%	43.9%	53.8%	55.6%
Identity and Access Management (IAM)	26.2%	43.6%	47.0%	38.3%	59.8%	55.7%	49.2%
Unified Threat Management (UTM)	17.9%	26.9%	27.7%	16.7%	34.1%	31.1%	41.3%
Security Information and Event Management (SIEM)	19.0%	30.8%	28.9%	25.0%	39.0%	47.2%	38.1%
Other	6.0%	0.0%	2.4%	8.3%	0.0%	0.0%	0.0%
<b>Q12 Have you implemented a Network Access Control (NAC) solution, or are you considering implementing one?</b>							
No, and not considering NAC	11.9%	6.4%	4.8%	13.3%	2.4%	2.8%	0.0%
Yes, successfully implemented NAC or currently implementing	59.7%	55.1%	45.8%	41.7%	59.8%	52.8%	63.5%
No, but currently considering NAC	3.0%	17.9%	15.7%	20.0%	13.4%	17.0%	7.9%
Yes, but with partial success	25.4%	20.5%	33.7%	25.0%	24.4%	27.4%	28.6%
<b>Q13 What were/are your top 3 drivers for adopting a NAC solution?</b>							
Security for growing device population, including IoT and BYOD	43.3%	48.7%	48.2%	35.0%	70.7%	61.3%	52.4%
Efficient and secure onboarding of corporate, guest and BYOD devices	43.3%	41.0%	38.6%	33.3%	42.7%	52.8%	50.8%
Want to automate certain security tasks	23.9%	30.8%	38.6%	28.3%	34.1%	38.7%	54.0%
Comprehensive authentication, including 802.1X	26.9%	29.5%	39.8%	21.7%	35.4%	25.5%	41.3%
Control access to the network (block, quarantine, redirect, remediate)	23.9%	30.8%	28.9%	28.3%	40.2%	32.1%	39.7%
Use NAC to orchestrate other security tools (e.g. firewalls, MDM/EMM, IDS/IPS)	11.9%	17.9%	21.7%	10.0%	18.3%	24.5%	20.6%
Guest management	11.9%	3.8%	14.5%	18.3%	7.3%	9.4%	4.8%
Other (please specify)	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%
<b>Q14 If you have not implemented a NAC solution, what concerns are holding you back?</b>							
Would not provide enough additional functionality beyond our other security solutions (e.g. firewalls, IAM, MDM/EMM, SIEM, UTM).	9.1%	0.0%	25.0%	20.0%	0.0%	0.0%	0.0%
Deployment complexity	0.0%	0.0%	0.0%	10.0%	50.0%	0.0%	0.0%
Too costly to deploy and/or maintain	0.0%	0.0%	0.0%	10.0%	50.0%	0.0%	0.0%
Lack of qualified networking or security personnel	0.0%	16.7%	0.0%	10.0%	0.0%	0.0%	0.0%
Need for outside consulting services	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Would not scale (well) across our multiple sites	9.1%	16.7%	25.0%	0.0%	0.0%	0.0%	0.0%
N/A. My organization is currently not interested in NAC	36.4%	50.0%	25.0%	20.0%	0.0%	100.0%	0.0%
Other	45.5%	0.0%	25.0%	30.0%	0.0%	0.0%	0.0%

	Benelux	France	Germany	Sweden	United Kingdom	USA	Australia
--	---------	--------	---------	--------	----------------	-----	-----------

Q15 If you consider your NAC implementation unsuccessful, what were the main reasons?							
Too complex to implement	23.8%	27.3%	28.2%	11.1%	15.4%	14.3%	12.0%
Lack of qualified networking/security personnel	47.6%	27.3%	28.2%	38.9%	46.2%	38.1%	36.0%
Too much effort/too costly to maintain	19.0%	22.7%	35.9%	33.3%	19.2%	28.6%	40.0%
Does not scale across our different sites	9.5%	22.7%	7.7%	16.7%	19.2%	19.0%	12.0%
Q16 What is/would be your preferred deployment model for a NAC solution?							
On-premises deployment	27.1%	31.5%	26.6%	25.0%	22.5%	31.1%	31.7%
Cloud deployment (all functionality in the cloud)	45.8%	38.4%	44.3%	40.4%	45.0%	38.8%	38.1%
Hybrid model (some functionality in the cloud, some on-premises)	23.7%	30.1%	27.8%	25.0%	31.3%	23.3%	30.2%
RADIUS in the cloud, some/all other functionality on-premises	3.4%	0.0%	1.3%	9.6%	1.3%	6.8%	0.0%
Q17 Would anything hold you back from adopting a cloud-based solution							
Concerns about cloud-hosting security	46.3%	44.9%	37.3%	31.7%	62.2%	45.3%	50.8%
Uptime/availability concerns	31.3%	44.9%	36.1%	28.3%	34.1%	32.1%	50.8%
Our IT Security solutions are required to reside on-premises	28.4%	29.5%	48.2%	26.7%	39.0%	50.0%	44.4%
Data security/privacy concerns	14.9%	26.9%	26.5%	26.7%	31.7%	32.1%	30.2%
Other: <free text field>	1.5%	0.0%	1.2%	0.0%	1.2%	1.9%	0.0%



<http://www.extremenetworks.com/contact>

©2020 Extreme Networks, Inc. All rights reserved. Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries. All other names are the property of their respective owners. For additional information on Extreme Networks Trademarks please see <http://www.extremenetworks.com/company/legal/trademarks>. Specifications and product availability are subject to change without notice. 28860-0220-14