



NINTH ANNUAL LEADERSHIP EVENT

# CYBER SECURITY

*Security solutions through collaboration.*<sup>™</sup> **SUMMIT**

October 28–30, 2019 | Minneapolis Convention Center

[cybersecuritysummit.org](https://cybersecuritysummit.org) | [#cybersummitmn](https://twitter.com/cybersummitmn)

# Tackling the talent shortage problem

An honest look at challenges related to finding and retaining information security talent

Evan Francen, CEO  
FRSecure and SecurityStudio



# Tackling the talent shortage problem

## Introduction

- So, I'm told that we have a talent shortage problem in our industry.
- I don't trust everything I hear, and neither should you.
- Do we actually have a talent shortage problem?
- Regardless, what are we going to do about it?

Before we dive in, let me introduce myself and who I work for. Don't worry, there's no sales pitch.

# Tackling the talent shortage problem

## ME: Evan Francen, CEO & Founder of FRSecure and SecurityStudio

I do a lot of security stuff...

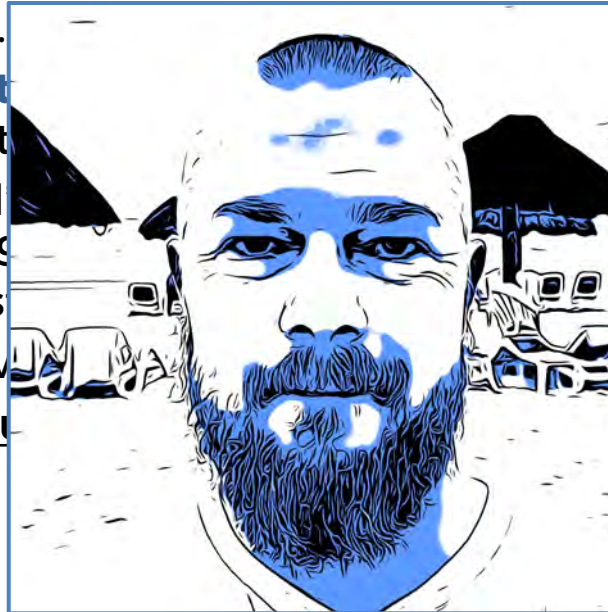
- Co-inventor of **SecurityStudio**®, **S<sup>2</sup>Score**, **S<sup>2</sup>Org**, **S<sup>2</sup>Vendor**, **S<sup>2</sup>Team**, and **S<sup>2</sup>Me** these are “simple buttons” (because “easy buttons don’t exist).
- 25+ years of “practical” information security experience (started as a Cisco Engineer in the early 90s – 1<sup>st</sup> security gig was cleaning boot sector viruses from Windows 3.1 systems)
- Worked as CISO and vCISO for hundreds of companies.
- Developed the **FRSecure Mentor Program; 6 students in 2010/530+ in 2019**
- Advised legal counsel in very public breaches (Target, Blue Cross/Blue Shield, etc.)

# Tackling the talent shortage problem

## ME: Evan Francen, CEO & Founder of FRSecure and SecurityStudio

I do a lot of security stuff.

- Co-inventor of **SecurityStudio** (these are “simple but effective”)
- 25+ years of “practical security” experience (started as a Cisco Network Engineer in the early 90s)
- Worked as CISO and worked on Windows 3.1 systems
- Developed the **FRSecure** framework
- Advised legal counsel (e.g., IBM, etc.)



**Vendor**, **S²Team**, and **S²Me** (don't exist).

experience (started as a Cisco Network Engineer in the early 90s)

companies.

**clients in 2010/530+ in 2019**

IBM, Blue Cross/Blue Shield,

Me. I look better as a cartoon.

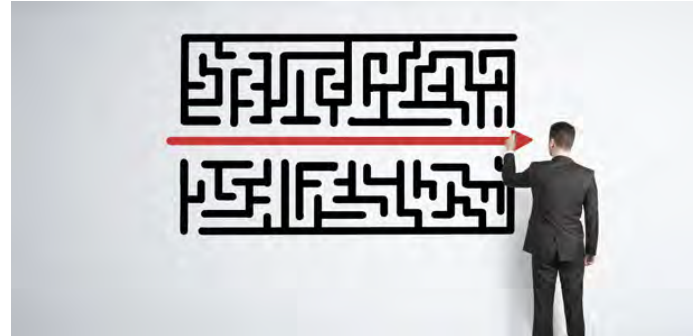


# Tackling the talent shortage problem

**ME: Evan Francen, CEO & Founder of FRSecure and SecurityStudio**

Just prepping you...

- I'm a binary thinker.
- Things I appreciate:
  - Logic.
  - Simplicity.
  - Truth.



If you like these things too, we'll have fun here (and maybe we should do some work together too).



# Tackling the talent shortage problem

## Who I work for

FRSecure & Security Studio

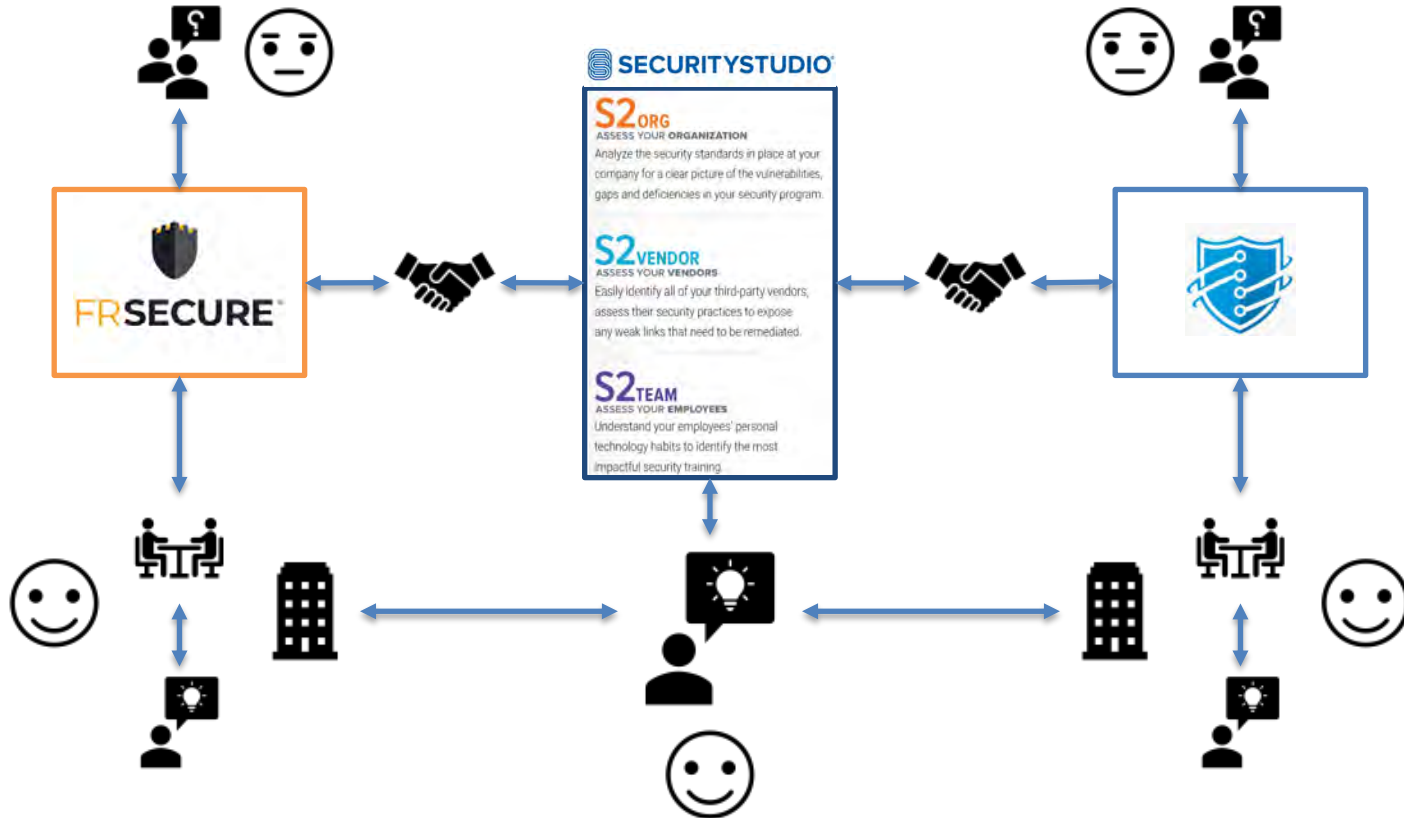


This is best explained in a diagram...

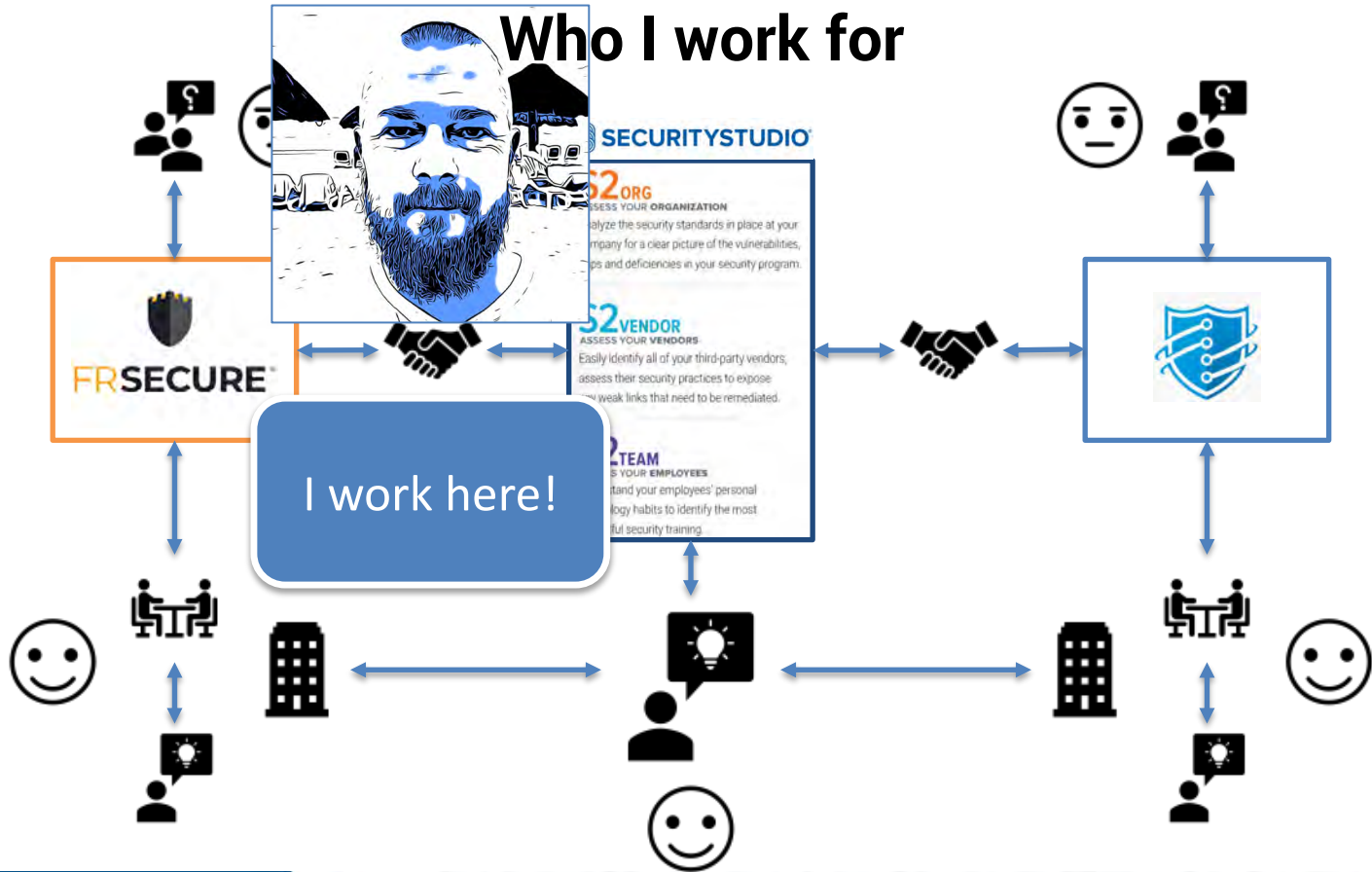




# Who I work for



# Who I work for



# Tackling the talent shortage problem

OK, now let's dive in.



# Tackling the talent shortage problem

The subtitle for this presentation is “An **honest** look at challenges related to finding and retaining information security talent”.

- The keyword is “honest”, I think
- Other important words are “finding” and “retaining”.



# Tackling the talent shortage problem

## Honesty

- If you read the news, you'd think that we have nobody to do security work, **but is this true?**
- To answer the question, "*Do we have a talent shortage problem?*" we need to examine from (at least) three different perspectives:
  - The industry itself - **We** need talent.
  - Those who are hiring - **You** need talent.
  - Those who are seeking - **You** are talent.

Who are you?

# Tackling the talent shortage problem

## We need talent. – The problem(s)

- Security Magazine – **The Cybersecurity Talent Gap = an Industry Crisis**
  - By one estimate, there will be 3.5 million unfilled cybersecurity jobs by 2021.
  - Lack of qualified staff.
  - Using under skilled practitioners.
  - Security tool sprawl.

**SECURITY**  
SOLUTIONS FOR ENABLING AND ASSURING BUSINESS

# Tackling the talent shortage problem

## We need talent. – The problem(s)

- Security Boulevard – **The Great Cyber Security Talent Shortage Continues**
- According to a November, 2018 ISACA study, more than 1,500 cyber security professionals:
  - 69% cyber security teams are understaffed.
  - 58% have unfilled cyber security positions.
  - 60% cyber security budget is underfunded

**SECURITY**  
BOULEVARD



# Tackling the talent shortage problem

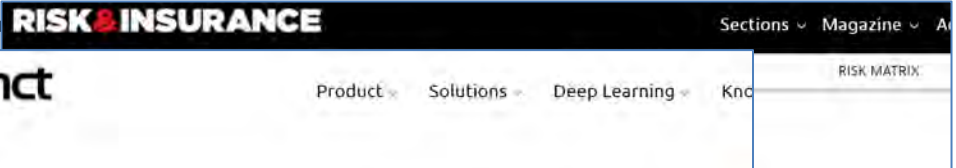
## We need talent. – The problem(s)

- CSOonline – **The cybersecurity skills shortage is getting worse**
- More than 1/2 of organizations report a “problematic shortage” of security skills



# Tackling the talent shortage problem

We need talent – Th



RISK & INSURANCE  
Sections ▾ Magazine ▾ An  
deepinstinct  
Product ▾ Solutions ▾ Deep Learning ▾ Kno  
RISK MATRIX

Disrupt SF 2019

OPINION

## The cybersecurity skills shortage is getting worse

More than half of organizations report a “problematic shortage” of cybersecurity skills, and there is no end in sight.

SKILL SHORTAGE  
EPIDEMIC

# Tackling the talent shortage problem

## We need talent. – The problem(s)

It's no wonder our business leaders want to do this.



# Tackling the talent shortage problem

## We need talent.

### How bad is it really?

- It's bad, but you have some options (coming later).
- Everyone in this industry has a motive, usually to sell you something.
  - The 3.5 million number was from Cybersecurity Ventures, they get more coverage and more clicks from sensational numbers. This was a prediction ONLY.
  - The ISACA study was a survey of “cyber security professionals”.
  - The scary title “The Cybersecurity Skill Shortage Epidemic” came from Deep Instinct and they sell stuff (endpoint protection, mobile security, etc.)



# Tackling the talent shortage problem

## We need talent. – You can help.

- It's hard to change a whole industry.
- Focus on you and your area of influence.
- What we need:
  - More education everywhere (home, school, work, etc.)
  - Awareness of the opportunities
  - Make mentorship everywhere.

What you can  
do to help?

# Tackling the talent shortage problem

## We need talent. – You can help.

### Some ideas:

- FRSecure's CISSP Mentor Program - <https://frsecure.com/cissp-mentor-program/>
- SANS Mentor - <https://www.sans.org/mentor/>
- Start your own “mentor program”
- Volunteer somewhere
  - <https://www.safeandsecureonline.org/s/volunteers>
  - <https://www.educause.edu/focus-areas-and-initiatives/policy-and-security/cybersecurity-program/community>

# Tackling the talent shortage problem

## We need talent. – You can help.

### Some ideas:

- Focus on you and your area of influence.
- Got kids? Talk to them. Talk to teachers.
- Free training & awareness stuff:
  - <https://www.common sense media.org/>
  - <https://staysafeonline.org/>
  - <https://s2me.io>

Start  
somewhere.



# Tackling the talent shortage problem

**We need talent. – You can help.**

**Some**

- F
- G
- F

So, we know we have a talent shortage problem.

What does this mean to you if you're in the market for information security talent?

... where.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

So, we have a supply vs. demand issue.

- Demand is high, supply is low.
- This means you pay more, one way or another.
- Unless you have an unlimited budget, this means you better get it right, meaning:
  - You identify the right needs.
  - You get the right person (or people).

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### The right needs.

- What you need depends on what you want to accomplish. Makes sense.
- If you're in business to make money, what you want to accomplish must be aligned with that. Right?
- Define your information security roles and responsibilities first, before you hire. Need help? Get help.
- Get your expectations inline with your needs.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### The right needs.

- What you need to accomplish. Makes sense.
  - If you're in business, you want to accomplish more.
  - Define your immediate responsibilities first, before you hire.
  - Get your expectations inline with your needs.
- DO NOT:**

  - Hire just because you were told you should.
  - Hire just because others are.
  - Copy a job description from someone else.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

OK, so you've decided that you need someone.

1. Why do I need someone in the first place?
2. What needs will the person/people serve (specifically)?
3. What are my expectations?

Before you go there,  
answer three questions  
and write it down.

# Tackling the talent shortage problem

## **You need talent. What does this mean to you?**

OK, so you've decided that you need someone.

1. Why do I need someone in the first place?
2. What needs will the person/people serve (specifically)?
3. What are my expectations?

What you've written is  
the start of your job  
description.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

Now you sort of know what you want. How are you going to get it?

You have three options:

1. Buy
2. Build
3. Outsource

Each option has pros and cons.



# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### Option #1 - Buy your talent

- **Pros**
  - Verifiable experience.
  - Less wasted time/effort.
- **Cons**
  - Expensive.
  - Unlearning.
  - More than you need.

If you buy talent,  
culture fit must  
be #1.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### Option #2 - Build your talent

- **Pros**

- Custom fit.
- Loyalty.
- Cheaper.

- **Cons**

- Patience.
- They leave.
- Hard.

If you build talent,  
take your time.  
Support is key.



# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### Option #3 - Outsource

- **Pros**

- Custom fit.
- Only buy what you need.
- Experience.

- **Cons**

- No in-house IP.
- Motives/bias.
- Accountability

If you outsource talent:

1. Make sure there's mutual accountability.
2. Measurement is important.
3. Use someone who's product agnostic.

# Tackling the talent shortage problem

## You need talent. What does this mean to you?

### Option #3 - Outsource

- **Pros**
  - Custom fit.
  - Only buy what you need.
  - Experience.
- **Cons**
  - No in-house IP.
  - Motives/bias.
  - Accountability

If you outsource

1. Make sure accountability
2. Measurement
3. Use some agnostic.



# Tackling the talent shortage problem

## You need talent. What does this mean to you?

Now you sort of know what you want. How are you going to get it?

You have three options:

1. Buy
2. Build
3. Outsource

Whatever option you choose, choose the option that's best for you!

# Tackling the talent shortage problem

## You need talent. – Most common problems.

Do you fit one or more of the following?

- Wrong motivations.
- Misaligned needs.
- Poor expectations.
- Can't afford talent.
- Good talent vs. not so good

Go back to:

1. Why do I need someone in the first place?
2. What needs will the person/people serve (specifically)?
3. What are my expectations?



# Tackling the talent shortage problem

**You are talent. Keep at it.**

Many of our talent seekers claim there isn't a talent shortage problem.

- They're trying to get their 1<sup>st</sup> job in the industry and can't.
- They're very experienced and can't get hired again.
- Expectations misalignment.



# Tackling the talent shortage problem

**You are talent. Keep at it.**

They're trying to get their 1<sup>st</sup> job in the industry and can't.

**“You Want to Get into Security”**

Short (34 page), free e-book.

<https://books.apple.com/us/book/you-want-to-get-into-security/id1457146083>



# Tackling the talent shortage problem

**You are talent. Keep at it.**

They're very experienced and can't get hired again.

- My heart goes out to these people.
  - Ageism.
  - Stuck in your ways. Open your mind to new approaches while figuring out new ways to communicate the fundamentals.
- Hire one if you can get one. The wisdom alone is worth it.

# Tackling the talent shortage problem

## You are talent. Keep at it.

Expectations misalignment.

- An education experience for all.
- Job seekers.
  - You might not be worth as much as you think you are.
  - Take a cut, career path is more important.
- Hiring people.
  - Make sure you asking for what you really need.
  - All those letters look good, but do you really need them all?

# Tackling the talent shortage problem

## You are talent.

The short eBook, five chapters:

1. Abundance of Opportunity.
2. The Right Person.
3. Landing Your First Job.
4. Becoming Good.
5. Staying Healthy.

Read it. Share it. Give me feedback. [It's free!](#)



# Tackling the talent shortage problem

That's it! Thank you!

- Email: [efrancen@frsecure.com](mailto:efrancen@frsecure.com)
- [@evanfrancen](#)
- [@FRSecure](#)  
#S2Roadshow
- Blog - <https://evanfrancen.com>
- Podcast (The UNSECURITY Podcast)

Want to participate?

Want to partner?

Want these slides?

**LET'S WORK TOGETHER!**