March 31, 2020

Navigating the Outbreak, Part VII: The Additional Pressure the Outbreak Places on Your Information Technology Operations
Over 20 years of implementing technology within the Architecture, Engineering, and Construction market segments. Specializing in data security, virtual design & construction (VDC), mixed reality, and reality capture.
Cybersecurity

- Workstation
- Mobile Device
- Device Updates
Cybersecurity @ Home

• Map Your Home Network
• How Are You Connecting To The Office?
  • Company Issued Laptop?
  • Company Issued Desktop?

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Workstation vs. Laptop

• Workstation Configuration
  • Operating System Updates
  • Enterprise Software
  • VPN
  • Anti-Virus Updates

• Laptop Configuration
  • Operating System Updates
  • Enterprise Software
  • VPN
  • Anti-Virus Updates

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Mobile Devices

Tablets vs Smart Phones

• Physically Secure Devices
  • DO NOT Share With Family Members
• Latest Operating System Updates
• Latest Application Updates
  • Developers are Updating More Frequently
Connecting From Home

• Hard Wired?
• Wireless
• Make Sure Your Router / Modem Is Updated
• Download Speeds vs Upload Speeds
• Stress Test
  • Can You & Family Connect?
  • Any Issues?
Phishing Scheme

- File Download
- Bitcoin Extortion
- Mobile Device Scam
Attachment Phishing

- DO NOT Forward
- Call The Sender
- DELETE E-mail
- DO NOT Click
Bitcoin Extortion

- DO NOT Reply
- DELETE E-mail
- DO NOT Click
- Change Your Passwords

I am a member of a hacking group, and I have been monitoring your activities. I have obtained a copy of your videos and photos, and I am willing to sell them to anyone who is interested. I have also obtained your personal information, including your address, phone number, and email address. I have threatened to release this information unless you pay me a ransom.

Here is what I have found:

- I have your webcam footage.
- I have your phone calls and text messages.
- I have your bank account statements.
- I have your credit card numbers.

I will release all of this information unless you pay me $10,000 in Bitcoins. If you do not pay, I will release all of this information to the public. If you do pay, I will delete all of this information.

I can be reached at [redacted email address] if you have any questions.

Bitcoin Extortion
Mobile Device Scam

- DO NOT Reply
- DO NOT Forward
- DELETE Message
- Examples
  - Amazon Stimulus Money
  - Uber Eats / Door Dash, etc. Change Password
  - COVID-19 Related (Maps, etc.)
Angus Frost
Senior Consultant, Burger Consulting Group

Bio

- With over 14 years' experience providing strategic technology consulting to the construction industry, Angus is most often involved in performing situation assessments of current infrastructure, the applications that it supports, and the skills and processes needed within IT to fully support an organization. His portfolio of recent projects includes business continuity planning, data center reduction planning, IT staffing and IT risk mitigation.
The Impact on Infrastructure

- Business Continuity Planning...without the plan
- Supporting Work From Home (WFH) in a crisis
- Stress points for IT
Three Phases

- Provisioning
- Stabilizing
- Maintaining

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Current Situation

- Partnering
- Surveying
- Inventorying
- Tracking

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Equipment

• Computers
• Monitors
• Printers
• Scanners
• Headsets
• Cameras
• Phones

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Applications and Files

- Local
- Client/Server
- Cloud/Web
- Mobile
- Hybrid

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Connectivity

• Competing with Netflix and Xbox
• Redundancy
• Monitoring

Source: Angus Frost – Senior Consultant, Burger Consulting Group
Supporting Tools

• Communications
• Collaboration
• Task Tracking
• Time Tracking
• Training
• Support

Source: Angus Frost – Senior Consultant, Burger Consulting Group
With a strong background in software development, Jeff has spent the past 20 years guiding companies on the transformative value of technology. As Director of Strategic Accounts for eSUB Construction Software, Jeff conducts technology assessments for trade contractors and develops recommendations and roadmaps to adopt a secure and thriving IT ecosystem. His depth of IT experience in a variety of industries and his passion for outdoor adventures and Ironman competitions has made Jeff widely known as the “The Ironman of IT.” He is a popular speaker and vocal thought leader in construction, spending much of his time educating on a variety of topics to better the industry as a whole.
Communication Beyond the Tools

Single Source of Truth
Create a Communication Team and Hub

1. No more than 3-5 people - leadership team/corporate communications/ HR executive
2. Meet regularly to monitor situation as it evolves
3. Main source of information about the crisis
4. Regular updates to team-Daily
   - Transparent-what you know, what you don’t know, and your sources of information
   - Succinct-explain in clear language, not lawyer speak
Company Operations Tiers

Tier 1 – Normal Operations
- No business travel to high-risk areas
- Enforce adherence to sick leave / work from home guidance
- Personal travel to high-risk areas must be followed by 14 days of self-quarantine
- For the next 8 weeks, no conference attendance

Tier 2 – Abundance of Caution
- Essential business travel only (CEO must approve)
- Personal attendance at large public gatherings must be followed by 14 days of self-quarantine (ex: foreign & domestic travel, amusement parks, sporting events, 500+ attendees)
- Individuals at high risk or with family members at high risk may work from home after working out a plan with your manager’s approval
- No conference attendance

Tier 3 – Minimize Exposure
- Everyone works from home
- No business travel

Tier 4 – Community Containment
Mindset Change

- Agile Methods
- Daily Check ins
- Understanding Stress
Respect for Perspective
Introverts & Extroverts

Check in with each person

Vary the order

Know your people
Everyone can have a voice: Even if you don’t want to talk

Not everyone is comfortable talking in front of the group. Feel free to chat and post questions here. You can select who to send it to as well. Ask a public question or ask it privately. Bonus let someone know they have something on their face or are cutting out when talking!
Privacy and a little flare!
Project Management Basics

Documentation is critical

- Document work in place
  - Photos
  - Videos
  - Notes
- Centralized Document Controls
  - RFI
  - Change Orders
- Scheduling
  - Supply Chain
  - Manpower
- Real time Information
- Stored in the Cloud
We are better together
Questions?

- **Security**: Shobhit Baadkar, President, TITAN AEC  sbaadkar@titanaec.com
- **Infrastructure**: Angus Frost, Burger Consulting Group  ahfrost@burgerconsulting.com
- **People & Processes**: Jeff Sample, Director of Strategic Accounts, eSUB  jeff@esub.com
Construction firms are vulnerable to many forms of cyberattacks, including social engineering, ransomware attacks, wire fraud, and hacking.

On this episode, Nikki Ingram, a cybersecurity risk engineer with Zurich North America, talks about what you need to look out for and shares some tips and preventative measures that will help contractors protect themselves.

Subscribe to ConstructorCast on your podcast app, or stream online at www.agc.org/ConstructorCast
Thank you.