

Leticia Saiid

Phishing Psychology



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Disclaimer

A FEW THINGS FIRST

This presentation is for information only.

Evaluate risks before acting based on ideas from this presentation.

This presentation contains opinions of the presenters.

Opinions may not reflect the opinions of Tandem.

This presentation is proprietary.

Unauthorized release of this information is prohibited.

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Leticia Saiid

Security+, Chief of Staff



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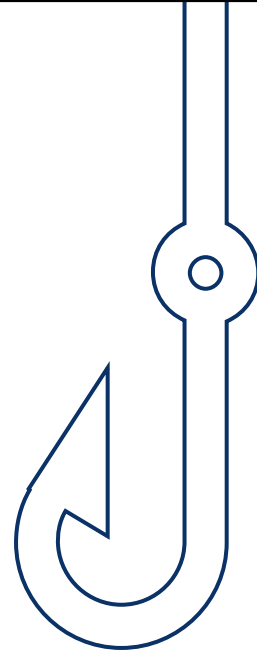


4

Agenda

LET'S ANSWER SOME QUESTIONS

- What is phishing?
- What does effective phishing look like?
- Is there a better way to educate on phishing?
- Preparing for Phishing



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How involved are
YOU in
cybersecurity
education?

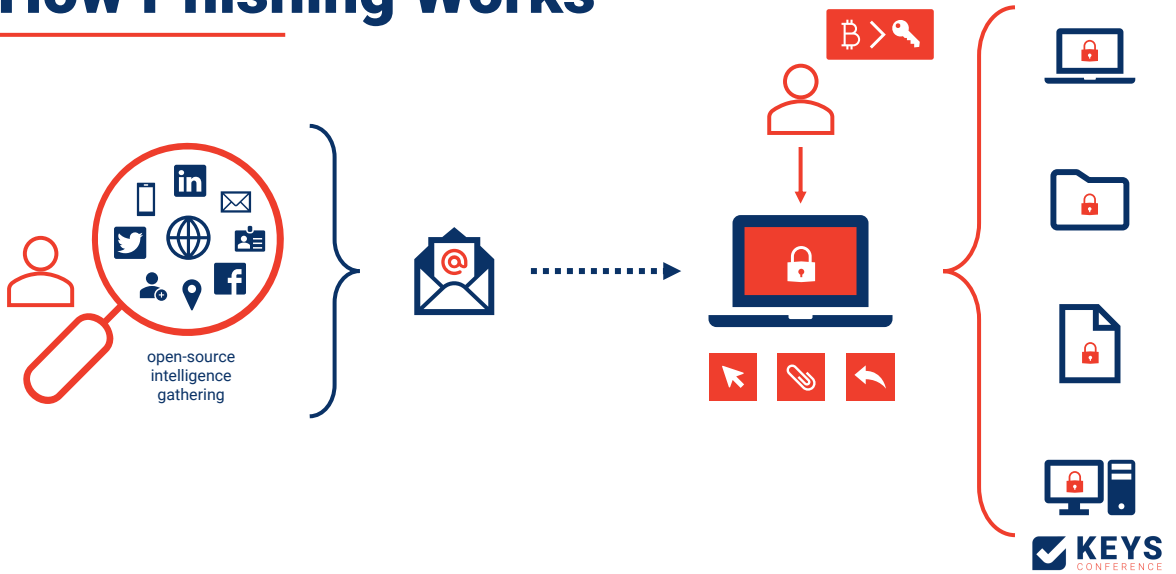


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What is Phishing?

7

How Phishing Works



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The image is a screenshot of a news article from The New York Times. The article title is "Cyberattack Forces a Shutdown of a Top U.S. Pipeline". The sub-headline reads: "The operator, Colonial Pipeline, said it had halted systems for its 5,500 miles of pipeline after being hit by a ransomware attack." Below the text is a photograph of a Colonial Pipeline facility in Pelham, Alabama, showing several large white tanker trucks parked in a lot. The article is attributed to Jay Reeves/Associated Press.

KEYS CONFERENCE

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COLONIAL PIPELINE HACKERS' STATEMENT

"We are apolitical, we do not participate in geopolitics, **do not need** to tie us with a defined government and look for other our motives. **Our goal is to make money and not creating problems for society.** From today, we introduce moderation and check each company that our partners want to encrypt to avoid social consequences in the future."

<https://www.theverge.com/2021/5/10/22428996/colonial-pipeline-ransomware-attack-apology-investigation>



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What does effective phishing look like?

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HIGHER
or
LOWER



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2020 Election Mail-In Ballots

Caroline <ballot_info@informed-citizen.org>
To: Leticia Saaid 9:10 AM

Information Regarding Mail-In Ballots Absentee Ballot Application >

Leticia Saaid,

Election day is Tuesday, November 3, 2020. Arkansas offers absentee ballots, by mail, to voters who will be unable to vote in person. All other voters are expected to vote in person.

Take a look at the info below to verify if you are eligible for voting absentee.

Absentee Ballot Information


1. Review the [absentee ballot application](#) and confirm that you meet the eligibility requirements for voting absentee.
2. Fill out the application completely.
3. Submit the request to your [local election office](#). You should request your ballot as far in advance of the election as possible. The deadline to request a ballot by mail is (received by) Friday, October 23, 2020.


Sent: 2813 | Fail Rate: ___%

The failure rate for this template in Tandem is

~~10%~~

1.6%





14

The failure rate for this template in Tandem is

~~10%~~

25%

15

Which message has a higher % of failures?

Sent: 374 | Fail Rate: 18.98%

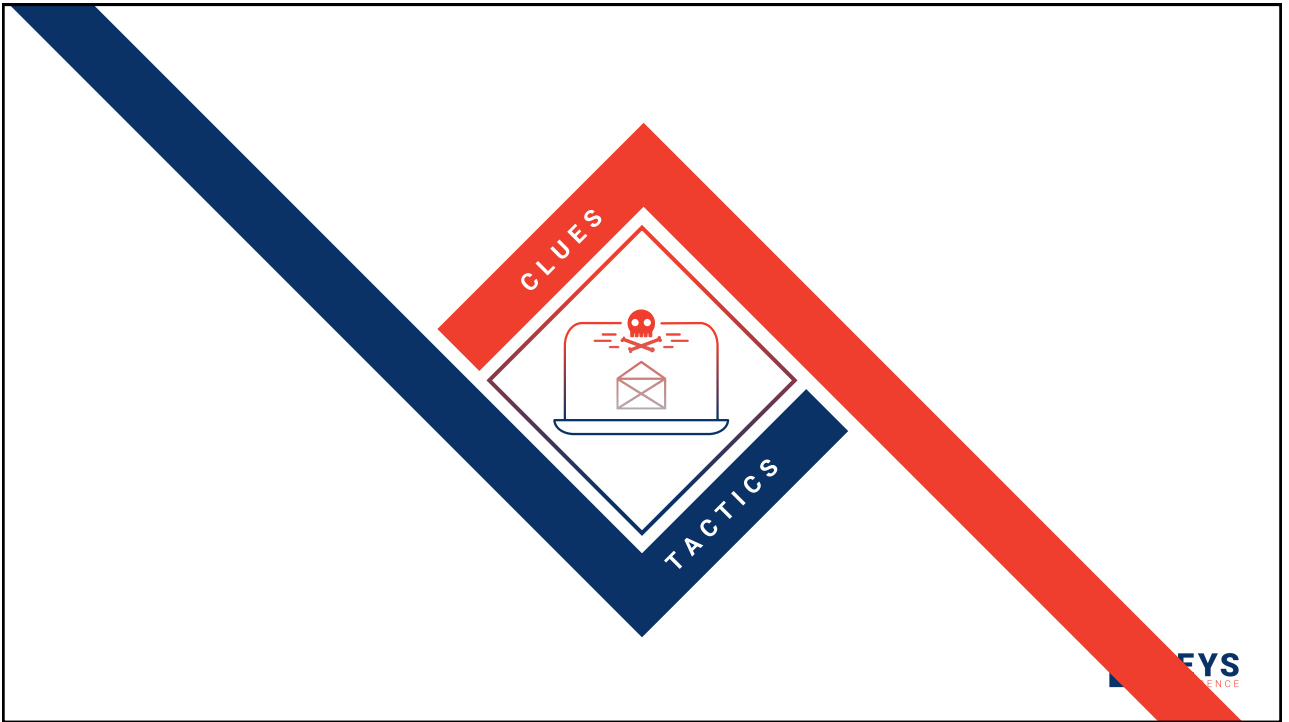
Sent: 2746 | Fail Rate: 0.66%

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Is there a better way to educate on phishing?

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When You Receive an Email...

CHECK FOR CLUES

Things which
are clearly
wrong with
the email.

BEWARE OF TACTICS

Distractions
to make you
act without
thinking.



20

How to catch a phisher:

- C** Clues
- A** And
- T** Tactics
- C** Can
- H** Help



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Phishing Checklist

CHECKLIST INSTRUCTIONS

Fold or cut the quick checklist on the right. Place it somewhere you can see when reading your emails. Read the rest of this document to better understand each checklist item.

RESPONSES

Not sure if it is phishing?
Navigate to the information on your own. Any legitimate company will have a way outside of clicking an email link. **Don't** Search online for more information to support your choice to click or ignore. **Don't** Contact the sender (if trusted) through another method (e.g., phone call, text message, etc.) to verify before clicking.

Are you sure it's phishing?
Mark the message as junk, block the sender email address, and permanently delete the message.

Did you click a phishing link?
Report it to ISQ/IT immediately. Clicking was a mistake, hiding it is willful harm to the company.

MY PHISHING SECURITY AWARENESS CHECKLIST

<p>Check for clues.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Links / Attachments <input type="checkbox"/> Unfamiliar Sender <input type="checkbox"/> Unexpected Email <input type="checkbox"/> Errors <input type="checkbox"/> Familiar, yet Unusual <input type="checkbox"/> Personal Topics <p>Respond appropriately.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Not sure? Navigate on your own, do some research, or ask the contact through another method. <input type="checkbox"/> Sure? Mark as junk, block, and delete. <input type="checkbox"/> Clicked! Report it immediately. Clicking was a mistake, but hiding it is willful harm to the company. <p>Thank you! Falling for a phishing attack can harm the company's reputation, financials, systems, and hinder our ability to serve our clients. We appreciate your help and dedication!</p>	<p>Beware of tactics.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Urgency <input type="checkbox"/> Loss <input type="checkbox"/> Authority <input type="checkbox"/> Familiarity <input type="checkbox"/> Reciprocation <input type="checkbox"/> Popularity
--	---

CLUES

Clues are things which are clearly wrong with the email.

Links and Attachments
Are you being asked to click a link or open an attachment? Does hovering over the links show the expected destination URL?

Errors
Is the message unprofessional or covered with typos and grammatical errors?

Unfamiliar Sender
Do you recognize the name and email address of the sender? Is the domain similar, but not quite right?

Familiar, yet Unusual
Is your contact using an unusual salutation, tone, signature, or sending at a strange time of day?

Unexpected Email
Is this email "out of the blue," or is it a "follow up" on a request you did not make?

Personal Topics
Is the message of a personal nature (e.g., taxes, shipping, appointments, etc.)? Do you use your work email for personal communications?

TACTICS

Tactics are distractions to make you act without thinking.

Urgency
Phrases like "required" and "today" are designed to make you rush.

Loss
Language about losing access to something is designed to make you worry.

Authority
Posing as your boss, HR, or other authoritative group is designed to make you blindly obey.

Familiarity
Using publicly available information about you is designed to make you assume familiarity.

Reciprocation
Offering you something is designed to make you feel obligated to give something in return.

Popularity
Language about other people doing something you're not is designed to make you feel wrong.

Phishing Checklist

Tandem.App/PH-Checklist



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Clues

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Phishing Clues

- Links and Attachments
- Unfamiliar Sender
- Unexpected Email
- Errors
- Familiar yet Unusual
- Personal Topic



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New Office Chair Order

Facilities Management via SurveySite <forms@surveysite.org>
To: Leticia Saaid 9:09 AM

This sender forms@surveysite.org is from outside your organization.
Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

In order to provide a healthy and safe work environment for all employees, Leticia Saaid Demo Bank has implemented a four-year office chair replacement cycle. You are scheduled to receive a new office chair next month.

[Click Here](#) to view the available chair styles and indicate your preference.

Please submit your preferences before the end of the day. Otherwise, a style will be chosen for you. We appreciate your help.

Thanks,
Facilities Management

Can you find the clues?

Unfamiliar sender

Unexpected email

Links and/or attachments

KEYS CONFERENCE

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Keeping You Updated: **COVID-19 Boosters**

CommunityHealth <info@healthcare-news.org>
To: Leticia Saaid 9:00 AM

This sender info@healthcare-news.org is from outside your organization.

CommunityHealth

To our valued patient,

Our top priority is your health and safety, so we want to continue keeping you informed about COVID-19.

As you may have heard, COVID-19 vaccine booster shots are now being recommended for ongoing protection against the virus for high-risk individuals.

Learn more about the recent [FDA approval](#) and [boosters](#). Talk with your [healthcare provider](#) if you think you might be eligible for a booster shot. Check with your local public health department or see [vaccinations.gov](#) for more information.

Thank you for trusting us as your partner in health.

Can you find the clues?

Personal topic

KEYS CONFERENCE

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LinkedIn



Leticia Saiid
Chief Of Staff at CoNetrix
1yr • 🔒

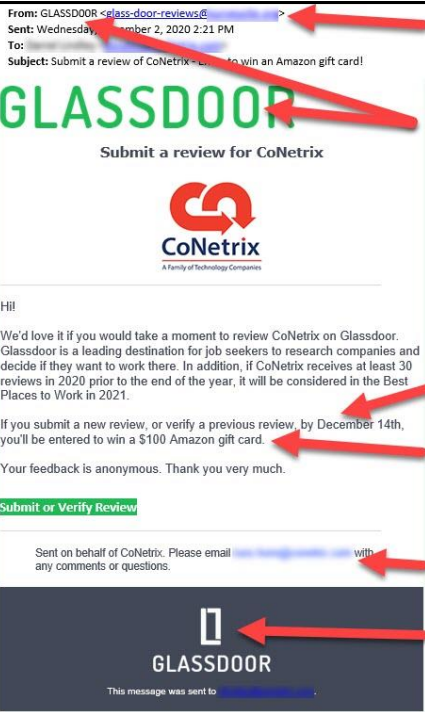
I failed a phishing test this past week. I don't fail these things. I always pass. I teach about this stuff!! Here were all my excuses as to why I messed. Excuses are the exact things phishers use to sneak by you.

1. I was in a hurry, aka, I was being lazy. It was my morning process of: delete the junk and take care of the easy stuff. This one looked like easy stuff. The email wasn't super clear, so I thought I would figure out what it needed from me after following the link.
2. It was from my boss. I didn't know exactly what it was or why. But it was from Russ, so I knew I wanted to help him take care of whatever thing he was trying to make happen that morning.

Looking at it now, it is riddled with issues and common tactics (see my image). I was just in too big of a hurry to see it. Lesson learned: SLOW DOWN.



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Unfamiliar sender

Familiar yet unusual

Can you find the clues?

Familiar yet unusual



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Phishing Clues

- Links and Attachments
- Unfamiliar Sender
- Unexpected Email
- Errors
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- Personal Topic



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Tactics

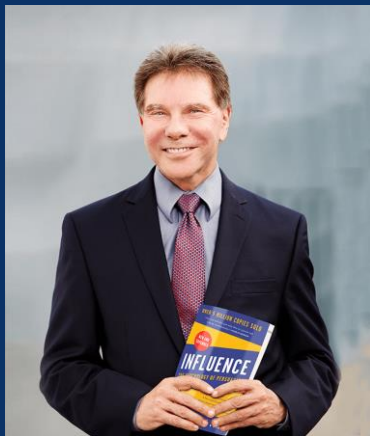
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Phishing Tactics

Urgency
Loss
Reciprocation
Authority
Familiarity
Popularity



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<https://youtu.be/cFdCzN7RYbw>

Influence: The Psychology of Persuasion

2006, UPDATED 2021

DR. ROBERT B. CIALDINI



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Phishing Tactics Are Designed to:

MOTIVATE ACTION



LOSS



RECIPROCATION



URGENCY

REDUCE UNCERTAINTY



AUTHORITY



FAMILIARITY



POPULARITY



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“[Shortcuts] tell us when compliance with a request is likely to be correct and beneficial.”

“The form and pace of modern life is not allowing us to make fully thoughtful decisions [...] Sometimes the issues may be so complicated, the time so tight, the distractions so intrusive, the emotional arousal so strong, or the mental fatigue so deep that we are in no cognitive condition to operate mindfully. Important topic or not, we have to take the shortcut.”

NATURAL
AUTOMATION



SOURCE: Influence - The Psychology of Persuasion by Dr. Robert Cialdini

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File Message Help 💡 Tell me what you want to do

New Office Chair Order

Facilities Management via SurveySite <forms@surveysite.org>

To: Leticia Saiid

9:09 AM

ⓘ This sender forms@surveysite.org is from outside your organization.

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Thanks,

Facilities Management

LOSS

TO MOTIVATE ACTION

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URGENCY

TO MOTIVATE ACTION



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URGENCY
TO MOTIVATE ACTION

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RECIPROCATION


TO MOTIVATE ACTION






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AUTHORITY

TO REDUCE UNCERTAINTY



41

File
Message
Help
💡 Tell me what you want to do

Signature needed - Please review COVID related changes to remote work policy

D

director@bankcompliance.us

To Leticia Saiid

↩
↶
→
⋮

9:01 AM

📧 This sender director@bankcompliance.us is from outside your organization.

X

Remote Work Policy Update.xlsx

10 KB

Dear Leticia Saiid,

We are updating our remote work policy due to changes in Federal COVID Protocols. Since these changes will affect almost all individuals associated with our company, we are requiring each employee to review the attached document and digitally sign that you have received this notice.

[Remote Work Policy Update](#)

Enforcement of the new policy updates will occur 5 business days from the date of this email. Please view and sign the document as soon as possible.

Thank you for your cooperation,
HR Management

AUTHORITY

REDUCE UNCERTAINTY

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FAMILIARITY


TO REDUCE UNCERTAINTY









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File Message Help Tell me what you want to do

2020 Election Mail-In Ballots

 Caroline <ballot_info@informed-citizen.org>
To: Leticia Saiid 9:10 AM


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POPULARITY

TO REDUCE UNCERTAINTY



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Social Conformity – Brain Games

<https://www.youtube.com/watch?v=o8BkzvP19v4>



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Preparing for Phishing



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Phishing Checklist

Tandem.App/PH-Checklist

BOOK RECOMMENDATION
The Checklist Manifesto



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TIMELY AND SPECIFIC FEEDBACK

From: John Doe <jdoo@tandem.com> ← Unfamiliar sender

Sent: Tuesday, March 29th, 2022 8:00 AM

To: Leticia Saiid <lsaiid@conetrix.com>

Subject: FWD: From Tandem Conference ← Unexpected Email

Hello valued attendee, ← Familiarity

← Familiar but unusual

I hope you are as excited for the event as I am. ← Errors

← Reciprocation
Here is a copy of your event registration... Pls review & fill out attached form
BEFORE 12:00 TODAY. ← Urgency

[Reg0329.html \(7KB\)](#) ← Links & Attachments



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Respond Appropriately

NOT SURE?

- Navigate on your own.
- Do some research.
- Confirm with the sender via another method.



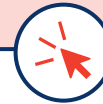
CERTAIN?

- Mark as "Junk."
- Block the sender.
- Permanently delete.
- Contact IT.



CLICKED?

Report it to IT immediately.



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TIP FOR SENDERS
Send a "heads-up."

TIP FOR SENDERS
Encourage "direct access" instead of clicking.

GREATHORN STUDY

Legitimate, but reported as "Phishing"
55% of the time.

Phishing, but reported as "Legitimate"
53% of the time.

<https://info.greathorn.com/report-2020-end-user-phishing-report/>

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**Tandem™
Phishing**

[Learn More](#)

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Recap

WHAT WE COVERED

- What is phishing?
- What does effective phishing look like?
- Is there a better way to educate on phishing?
C.A.T.C.H.
- Preparing for Phishing



ANY QUESTIONS?

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DON'T FORGET!

Fill out the survey to get your sticker!

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Upcoming Sessions

TANDEM

So You're an Admin...

Cory Faust, Tandem

RISK & COMPLIANCE


CoNetrix Technology Engineers: A Panel Discussion

Rob Garrison, Brad Copeland, & Mike Richline, CoNetrix Technology

CYBERSECURITY

Better Your Communication Between Technical & Non-Technical People

Brad Landis & Brian Whipple, Tandem



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