



**ANDERSON**

*College of Business and Computing*

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**REGIS UNIVERSITY**

# A PRACTICAL APPROACH TO APPLYING ACCESS CONTROLS

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Anderson College of Business  
and Computing



## **PURPOSE**

To provide a simplified practical approach in enforcing your access controls.

# ABOUT OUR PROGRAM OF STUDY

We were the first university in Colorado to receive a CAE in 2007

We offer two specializations in our master's programs

- Masters in Information and Cybersecurity (MSICS)
- Masters in Cybersecurity - Policy Management

We have two Cybersecurity Certificates for career enhancers

- Cybersecurity Certificate
- Cybersecurity Certificate – Policy Management

Upcoming new certificate

- Cybersecurity Essentials Certificate for students without any prior experience
- Allows students to test the waters to see if cybersecurity is a good fit for them.

Cybersecurity Iconic Event

- Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC)

# MY BACKGROUND

My name is Robert (Bob) Bowles

Department of the Army Civilian for 32 years

Served six years active duty in the Army, five years in the reserves.

Desert Shield/Storm Veteran

Eight (8) years with the Department of the Interior

23 years Affiliate Faculty with Regis University

2 ½ years Director, Center for Information Assurance Studies,  
Regis University

- In my opinion there are two (2) absolutes in cybersecurity.
  - You must have an enforceable security policy and controls.
  - Never allow “split tunneling.”
- If either of these principles are broken, it is a recipe for disaster.

## **POLICIES AND CONTROLS**

# STICK WITH THE BASICS



**We must practice the foundation truths day-in and day-out to be successful.**



**Be diligent and persistent.**



**Keep a cybersecurity daily operational focus 24/7 365 days a year.**



**We can't practice advanced monitoring, if we do not first practice the basics**



**Why?**

An intruder is in your network on average 291 days prior to launching an attack.

1.3 billion security events per day

80 C2 networks are taken down each month

178 million compromised computers on any given day

# **A SIMPLE APPROACH OVERVIEW**

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Inventory your assets and keep the database current.

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Certify your devices and user accounts every 90 days.

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If possible, invest in a Governance Risk Compliance (GRC) solution.

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Simple policy; No access request, no access, no exceptions.

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Test your controls quarterly to ensure they are effective and operating as designed.

# ONBOARDING NEW EMPLOYEES

All new user requests must be formal and signed by a supervisor (written or digital).

Only assign access privileges commensurate with their duties. No group inherent rights.

If possible, invest in a Governance Risk Compliance (GRC) solution.

Simple policy; No access request, no access, no exceptions.



# THE CERTIFICATION PROCESS

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Every 90 days provide a list of your user accounts and their privileges to your directors, or division chiefs, or branch chiefs.

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Leave it up to them on how they wish to distribute internally.

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Give a solid suspense date.

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Have the director, division or branch chief certify or attest to the accuracy of those accounts, sign and date.

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Note: I normally like to have the highest in the chain attest or certify.

# GRC

1

If you are using a GRC, make sure it is in prohibited mode, not passive.

2

Run every access request through your GRC to validate there are no separation of duty violations or escalated privileges before granting access.

3

Run an access report weekly just as a check and balance to ensure there are no anomalies in your process.

# DEPARTING EMPLOYEES

## Make

Make sure user accounts are terminated at the time of employee departure.

## Run

Run a report to validate all accounts the employee had access to are terminated.

## Run

Run a monthly report just as a check and balance to ensure there are no orphan accounts.

# QUESTIONS AND ANSWERS





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