CSAMN cloud security alliance®
Minnesota Chapter

“It’s still Rock and Roll to me”

Identity Management for the Cloud

Steven Hawkins, VP Security Technology Services
shawkins@clango.com
651-631-1010

Thank you to our sponsors!

Agenda

- Speaker Bio
- Learning Objectives
  a. What is Identity and Access Management (IAM)?
  b. On-Prem vs Cloud (Your computer vs Someone else's computer)
  c. How should I approach IAM?
  d. Should I place IAM in the Cloud?
- Q&A
- Wrap-Up

Speaker Bio

- **Steven Hawkins**
- VP, Security Technology Services, Clango
- Adjunct Professor at University Of Minnesota Technological Leadership Institute
- Lead in Clango's Advisory Practice
- Family of 6 all at home for Covid
- I like to bike!

CONFIDENTIAL | ©2020 CSA MN Chapter

The more things change

même chose"

e Karr

The more things stay the same

Back

When poll is active, respond at **PollEv.com/stevehawkins283**

Text **STEVEHAWKINS283** to **22333** once to join

What is Identity and Access Management?

Logout

CSAMN cloud security Minnesota Chapter alliance®

Identity management system

From Wikipedia, the free encyclopedia

An **identity management system** refers to an information system, or to a set of technologies that can be used for enterprise or cross-network identity management

Additional terms are used synonymously with "identity management system" including;

- Access governance system
- Identity and access management system
- Entitlement management system
- User provisioning system

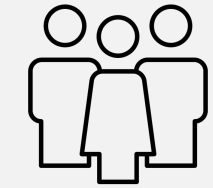
Identity management (IdM) describes the management of individual identities, their authentication, authorization, roles and privileges[1] within or across system and enterprise boundaries[2] with the goal of increasing security and productivity while decreasing cost, downtime, and repetitive tasks.[3]

"Identity management" and "access and identity management" (or AIM) are terms that are used interchangeably under the title of identity management while identity management itself falls under the umbrella of IT security.[4]

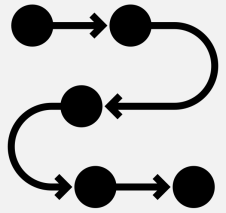
Source Wikipedia

What is Identity and Access Management?

Identity and Access Management is the **people**, **process,** and **technology** that grants users access to the resources of an organization.



Created by Made x Made from Noun Project



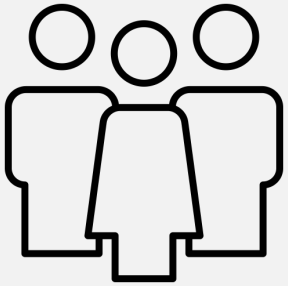
Created by Becris from Noun Project

Created by Creative Stall from Noun Project

Right access to the right people to the right resources at the right time

The People

Right access to the right people to the right resources at the right time



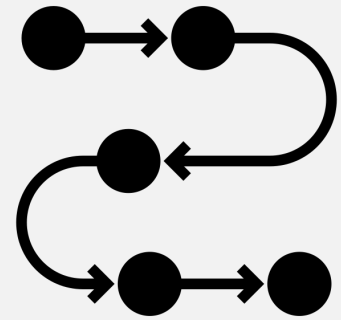
Created by Made x Made from Noun Project

- Knowing who in your organization should manage identities
  - Approvers and doers
  - IT Admins
- Knowing what roles people in your organization should have
  - Job roles and technical roles
  - Customers, Employees, Contractors, Partners, etc
- Having the right training for people to do their jobs
  - Process training and technology training

The Process

Right access to the right people to the right resources at the right time

- How do you provide access
- How do you Document the roles in an organization
- Document the workflow/approval process to granting access
- External regulations
- Internal policy
- The policies, rules, and methods that implement identity creation, authentication, authorization, access control, and audit of digital identities



Created by Becris
from Noun Project

The Technology

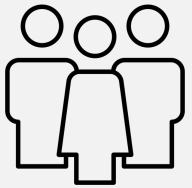
Right access to the right people to the right resources at the right time

Created by Creative Stall
from Noun Project

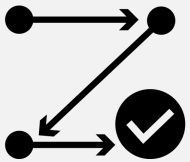
- What do you do manage access?
- What do you do authenticate users?
- What do you do store users?
- What do you do to report on user's usage?
- Examples
  - IdM – Identity Management System
  - PAM – Privilege Access Management
  - AM – Access Management System
  - Directory – Identity Store (LDAP, AD, DB)

Created by Adrien Coquet
from Noun Project

Whos -> People

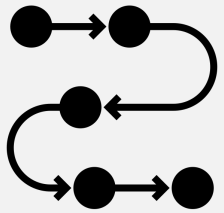


Created by Made x Made
from Noun Project

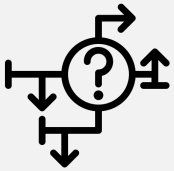


Created by Peipei Feng
from Noun Project

Hows -> Process



Created by Becris
from Noun Project



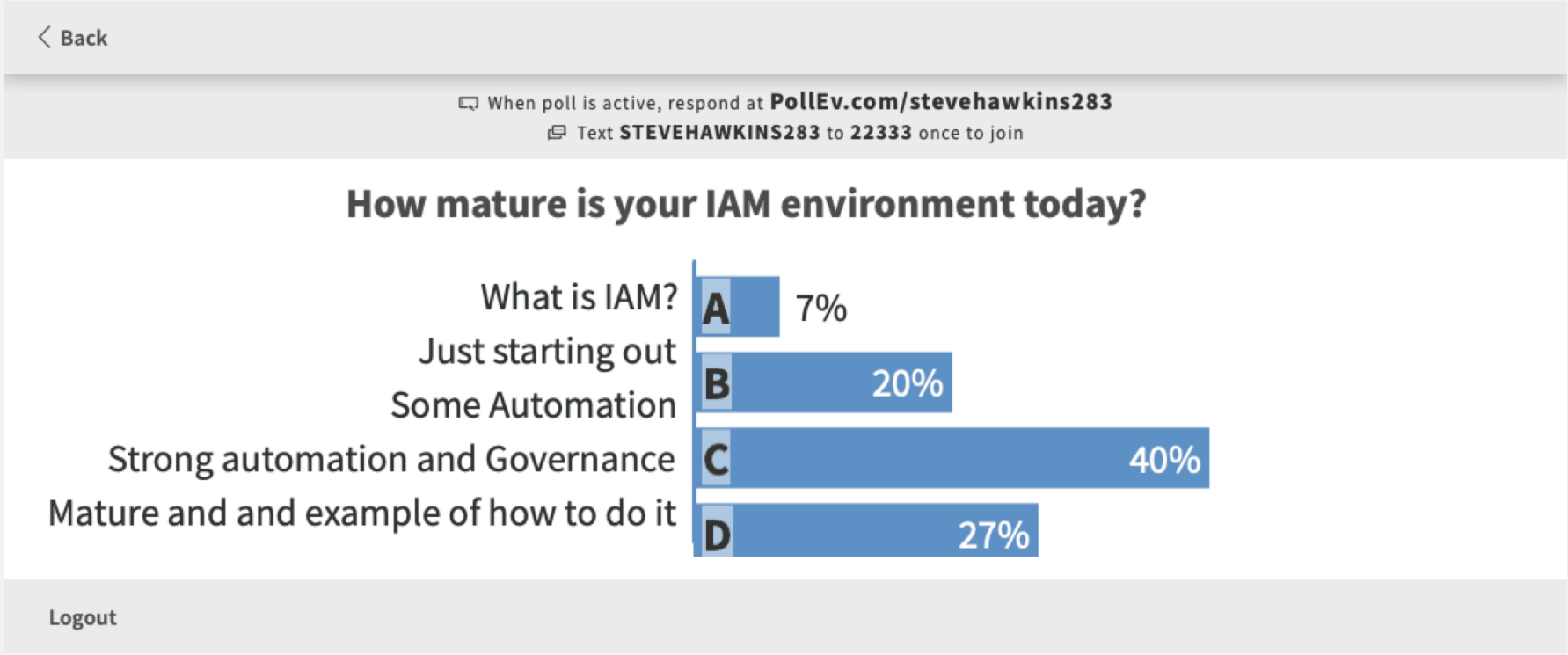
Created by Brandon Shields
from Noun Project

Whats -> Technology

Created by Creative Stall
from Noun Project

Right access to the right people to the right resources at the right time

Question


Back
When poll is active, respond at PollEv.com/stevehawkins283
Text STEVEHAWKINS283 to 22333 once to join
How mature is your IAM environment today?
What is IAM?
Just starting out
Some Automation
Strong automation and Governance
Mature and and example of how to do it
A
7%
B
20%
C
40%
D
27%
Logout

Back

When poll is active, respond at **PollEv.com/stevehawkins283**
Text **STEVEHAWKINS283** to **22333** once to join

Do you have an identity management roadmap?

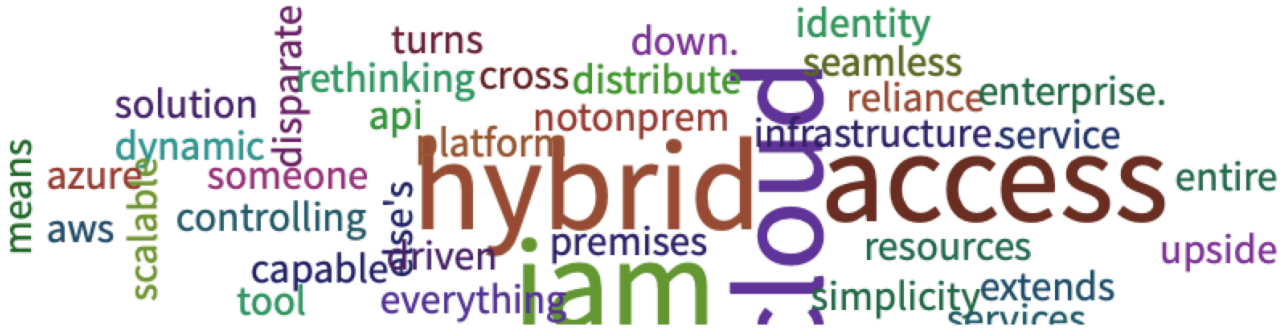
Logout

Back

When poll is active, respond at **PollEv.com/stevehawkins283**

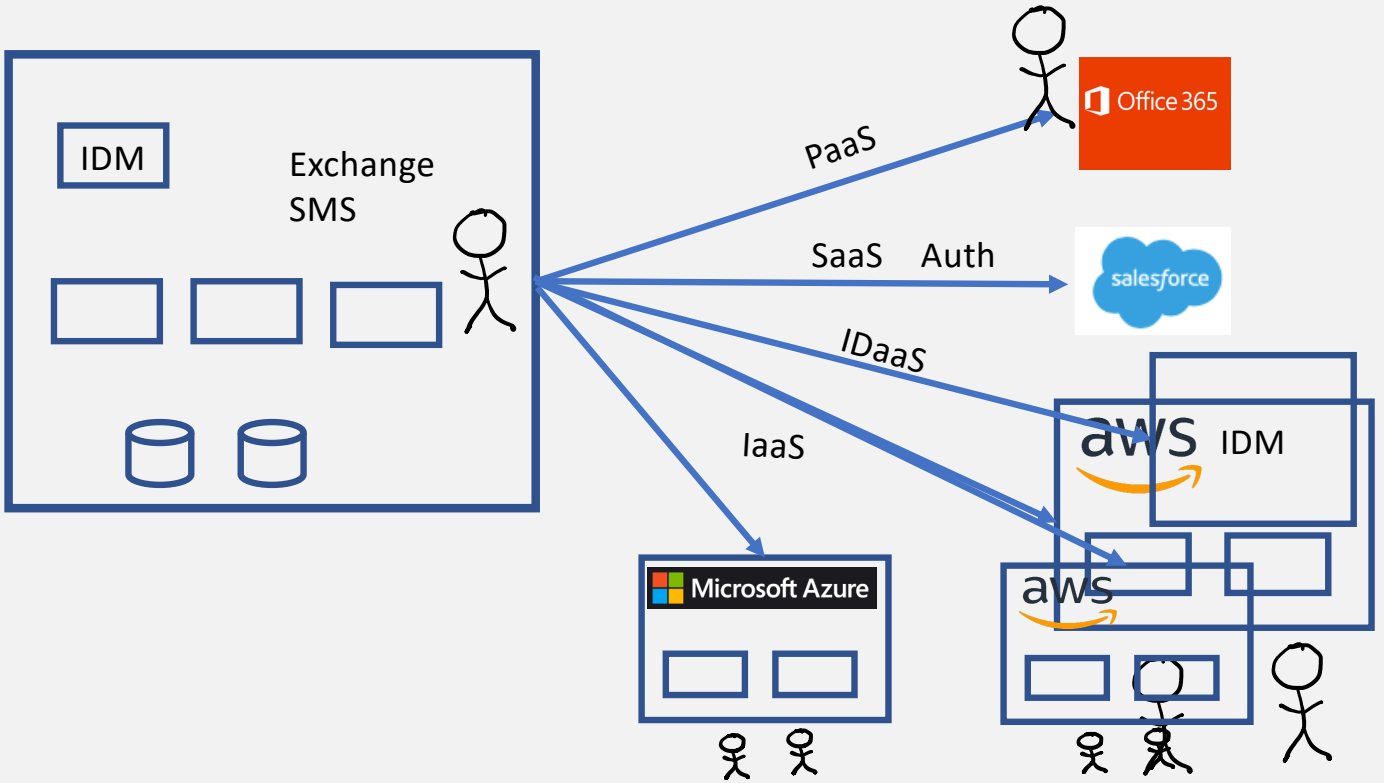
Text **STEVEHAWKINS283** to **22333** once to join

What does identity management in the cloud mean?



Logout

Future State



CONFIDENTIAL | ©2019 CSA MN Chapter

Right access to the right people to the right resources at the right time

- What is important in this future state?
  - How do I gain visibility? (Audit, Alert, Analytics)
  - How do I ensure only the right people have access? (Certification)
  - How do I enable developers?

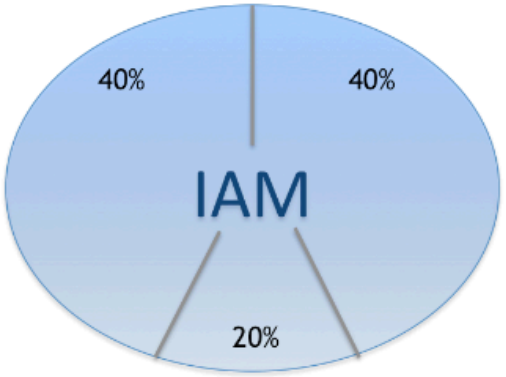
Is it specific to cloud?

CSAMN cloud security alliance® Minnesota Chapter

IAM is more than technology

- Program must involve all stakeholders
- Clear processes must be defined
- Choose technology that solves 80%

People
- Human Resources
- IAM Governance
- Technology
- Operations
- Compliance
- Risk Management
- Information Security



Policy & Process
- Mover, Joiner, Leaver
- Access Controls
- User Certifications
- Privileged Access Review

Technologies

Solution Suites and Component Technologies
IBM, Oracle, CA, NetIQ
Aveksa, SailPoint
RSA Authentication Manager etc..

IAM Program: Components and Purpose

CSAMN cloud security alliance® Minnesota Chapter

IAM Programs are cross-functional efforts requiring active participation and alignment from strategy through execution

Architecture

Plan & Budget

Vision & Strategy

Roles & Responsibilities

Process Definition

Infrastructure Design

Policy & Controls Definition

Executive Support

Steering Committee

Risk Assessment

Delegation of Authority

Communication

Technology Selection & Implementation

- ✓ Maximize investment
- ✓ Increase cybersecurity maturity
- ✓ Address gaps while avoiding overlap
- ✓ Improve corporate efficiency
- ✓ Protect valuable assets and privileges
- ✓ Improve company revenue
- ✓ Break down silos

CSAMN cloud security alliance® Minnesota Chapter

Goal – Establish Maturity state

- Understand where you are
- Evaluate current state
- Establish desired state
- Create a plan to move to desired state

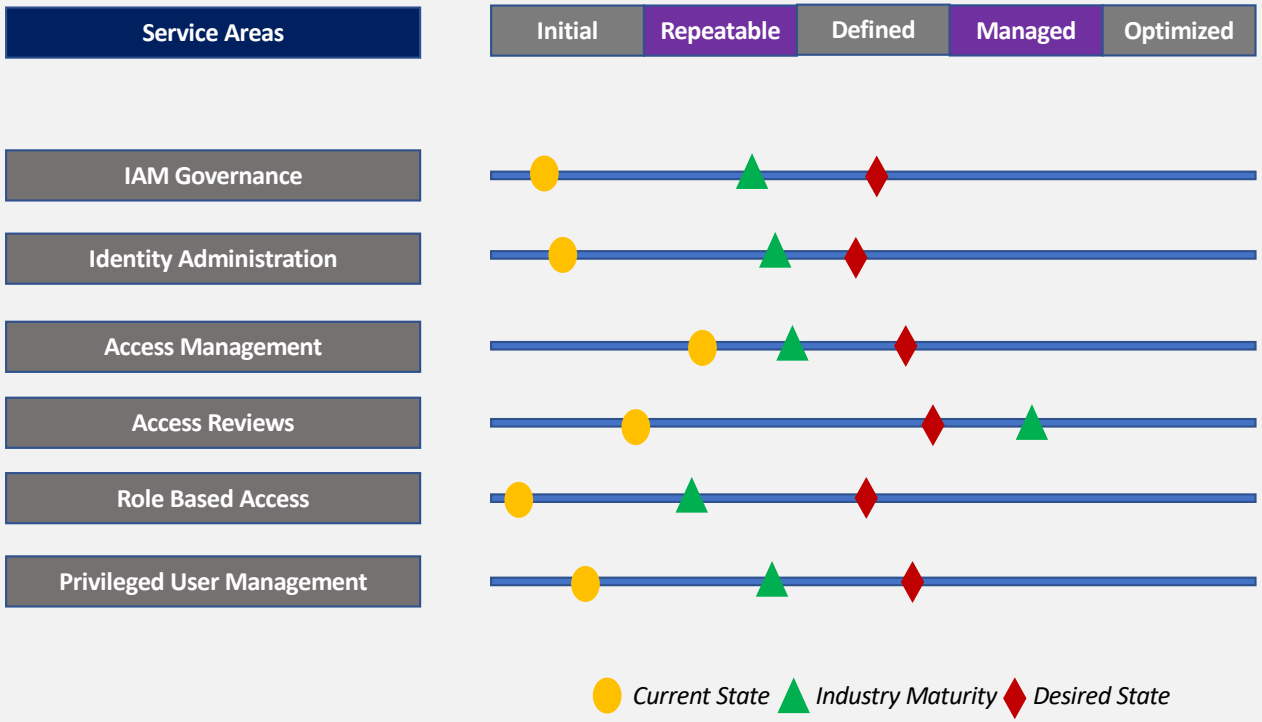


Figure 1 : Example Maturity rating

CSAMN cloud security alliance® Minnesota Chapter

Make plans, Plan to Change

- Take a strategic direction and turn it into operational goals
- Establish how you will measure success
- Modify your path as organization learns and grows
- Seek assistance in developing the plan and growing with the plan

The Roadmap!!

Top 10 of a Great Roadmap

10 Include People, Process, and Technology
9 Know where you are, Know where you want to get to
8 Accept you can change your path and should change
7 Invest in communication to all levels in your organization
6 Discover and understand your technical and business use cases
5 Define and use Key Performance Indicators (KPIs)
4 Don’t boil the ocean, plan and manage for incremental success
3 It’s a strategic document not a tactical one, revisit and revise regularly
2 Understand your industry and your peer group
1 Use crayons and not a ball point pen

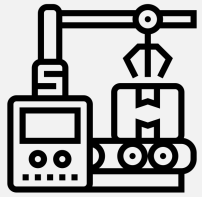
Now what?

No silver bullet

Created by Alex Muravev
from Noun Project

IAM is a program so build a roadmap

Now do the **work** to build your cloud centric, on prem, or hybrid IT environments



Created by Eucalyp
from Noun Project

Created by Eucalyp
from Noun Project

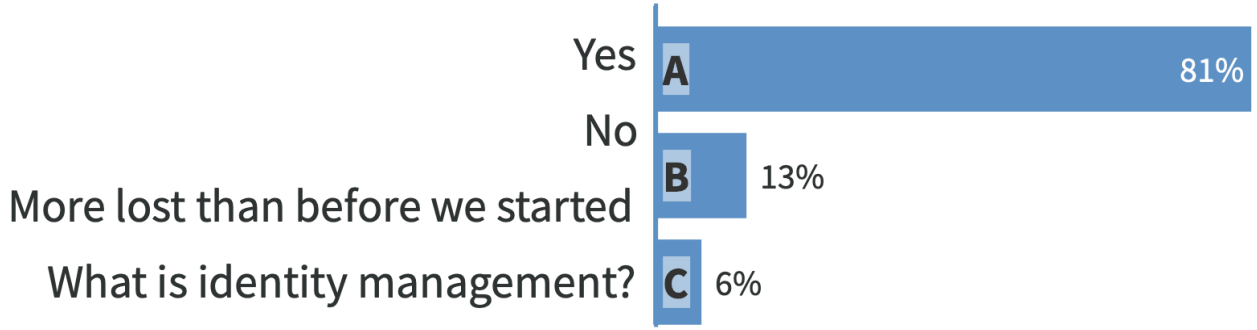
Question

Back

When poll is active, respond at **PollEv.com/stevehawkins283**

Text **STEVEHAWKINS283** to **22333** once to join

Are you better prepared for identity management and the cloud?



Logout

CSAMN cloud security Minnesota Chapter alliance®

Thank You for your time today!

Steven Hawkins, VP Security Technology Services
shawkins@clango.com
651-631-1010