California Community Colleges

Systemwide Architecture Committee

Bi-Monthly Meeting

August 25, 2022

The *Vision* + Digital Equity

Anyone in California seeking a postsecondary education, regardless of what they look like, where they live, time since high school, and their preferred education modality should have on-demand access.

California Community Colleges

Agenda

- Welcome
- Systemwide Application Inventory
- Systemwide Service Catalog
- ID Proofing RFI
- 22/23FY Information Security Funding
- Re-establish/confirm CO priorities for 22/23FY
- Wrap-up

California Community Colleges

Systemwide Application Inventory

Application Inventory Tool - Status Update and Trend Analysis

- Completed 117 colleges out of total 118 (116 community colleges + 2 continuing education colleges)
- The scoring is applied to the colleges and the scoring is based on the adoption of Systemwide Applications and their usability by the Student(s)
- The scoring uses applications adopted with 'LIVE' status only* (LIVE here assumes that the application is used by the students)
- This maturity model scoring is a point in time and will be further improved when more data attributes and analytics become available in terms of the usage of the application(s) by the end users.

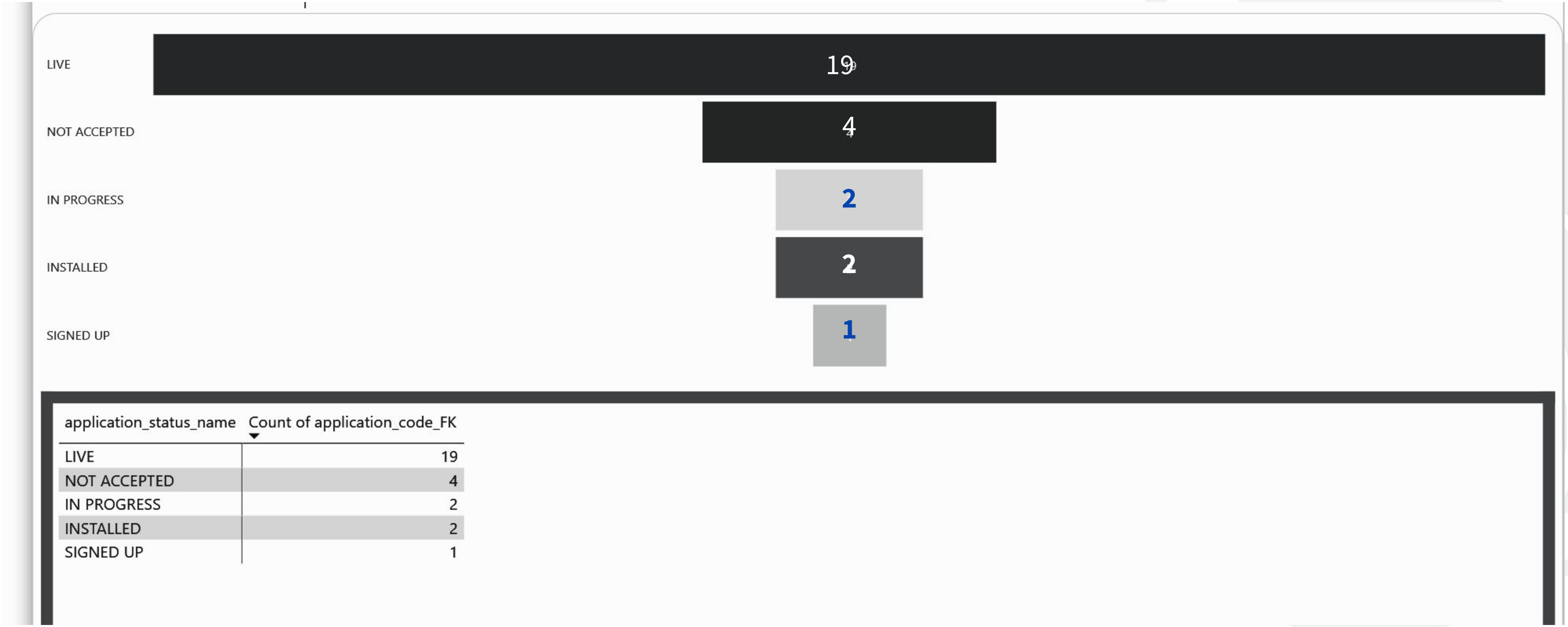
Application Inventory Tool - Business Rule(s)

The colleges are scored from 1-4, 1 being the lowest maturity tier and 4 being the highest maturity tier. Ideally, colleges should be targeting to be in either level 3 or level 4 to have most benefits of Systemwide application(s)

Business Rule(s)

Rule #1
if CVC Cross Enrolled Status = 'NOT ACCEPTED' , score =1
Rule #2
if colleges pass BR#1, check Ransomware attack = true , score =1
Rule #3
if colleges pass BR#1 and BR#2, check SSO Proxy status = 'NOT ACCEPTED' , score = 1
Rule #4
if colleges pass BR1 through BR#3, check superglue adoption status, if status = 'NOT ACCEPTED' , score =1
Rule #5
if colleges pass BR#1 through BR#4,check Count of 'LIVE' status Rule, higher applications adopted and LIVE , higher the maturity rate.

Data Visualization Graph (ex: Butte College) Score -2



application_status_name	Count of application_code_FK
LIVE	19
NOT ACCEPTED	4
IN PROGRESS	2
INSTALLED	2
SIGNED UP	1

Systemwide Service Catalog

What is an IT Service Catalog?

IT Best Practices defines it as a centralized database of accurate information about active IT service offerings, and a subset of the IT service provider's service portfolio. The service catalog provides end users clarity on the services offered, and typically includes the following information:

- Service category
- Service description
- Service availability
- Service-specific SLAs
- Service owner
- Service costs

Scope and Requirements – Immediate Goal(s)

1. Who should be included as Service Providers in this Service Catalog?
    - CCCTC Products and Services
        - Accessibility Center Services and Tools
        - Security Center Services and Tools
    - CVC-OEI services and tools
    - Foundation for CCC
        - CollegeBuys
        - Vision Resource Center
    - Others
2. Who will be the End User(s) of the service catalog?

Scope and Requirements – Improvement(s)

What entities and attributes should be added on?

- Define various data attributes for each service
- Common attributes we would like to collect across all services like
    - Cost, pricing, vendor contract(s), licenses
    - Ability to provide Analytics about each service
    - Pro(s) and Con(s) of each service
    - Define Service Level Agreement (SLA)
    - Onboarding, and Offboarding procedures

What is the Process Going Forward?

- Operational aspects and Delivery Schedule
  - Who should build the catalog for Systemwide use
  - How will it be available to the users
    - A Web application with ACL (Access Control List)
    - Subscription model
    - Pilot Rollout
    - Rollout with Districts
- Timeline and Schedule
  - Next Slide

Timeline and Delivery Schedule

- Once the scope is approved, we will start by collecting an approved list of Service Offerings from two main organizations/service providers for California Community Colleges
    - CCC TechCenter (Target Completion – End of Sept '22)
    - CVC OEI (Target Completion – End of Nov'22)
- Pending timeline validation proceed as planned, we will start to build the service catalog portal and target completion by the next Fall in 2023, potentially having a UAT build-out ready in March 2023.

ID Proofing RFI

ID Proofing Overview

- Four primary outcomes that identity proofing must accomplish:
  - Resolve a claimed identity to a single, unique identity within the context of the population of users.
  - Validate that all supplied evidence is correct and genuine.
  - Validate that the claimed identity exists in the real world.
  - Verify that the claimed identity is associated with the real person supplying the identity evidence.

RFI vendor summary

- Non-binding ID Proofing RFI issued in May 2022
- Five vendors responded:
  - Data Magnum
  - ID.me
  - Lexis Nexis
  - Oxford Computing
  - Gcom
  - Pending response from one other

Review process

- Committee met on 8/5 to discuss process and receive materials
- Meeting for group review set for 9/2
- Goal will be to identify top 2 or 3 candidates to ask for more information (e.g. demos, etc.)
- Representatives from Information Technology, Financial Aid, and Student Services, from both Chancellor's Office and local districts included

22/23 FY Information Security Funding

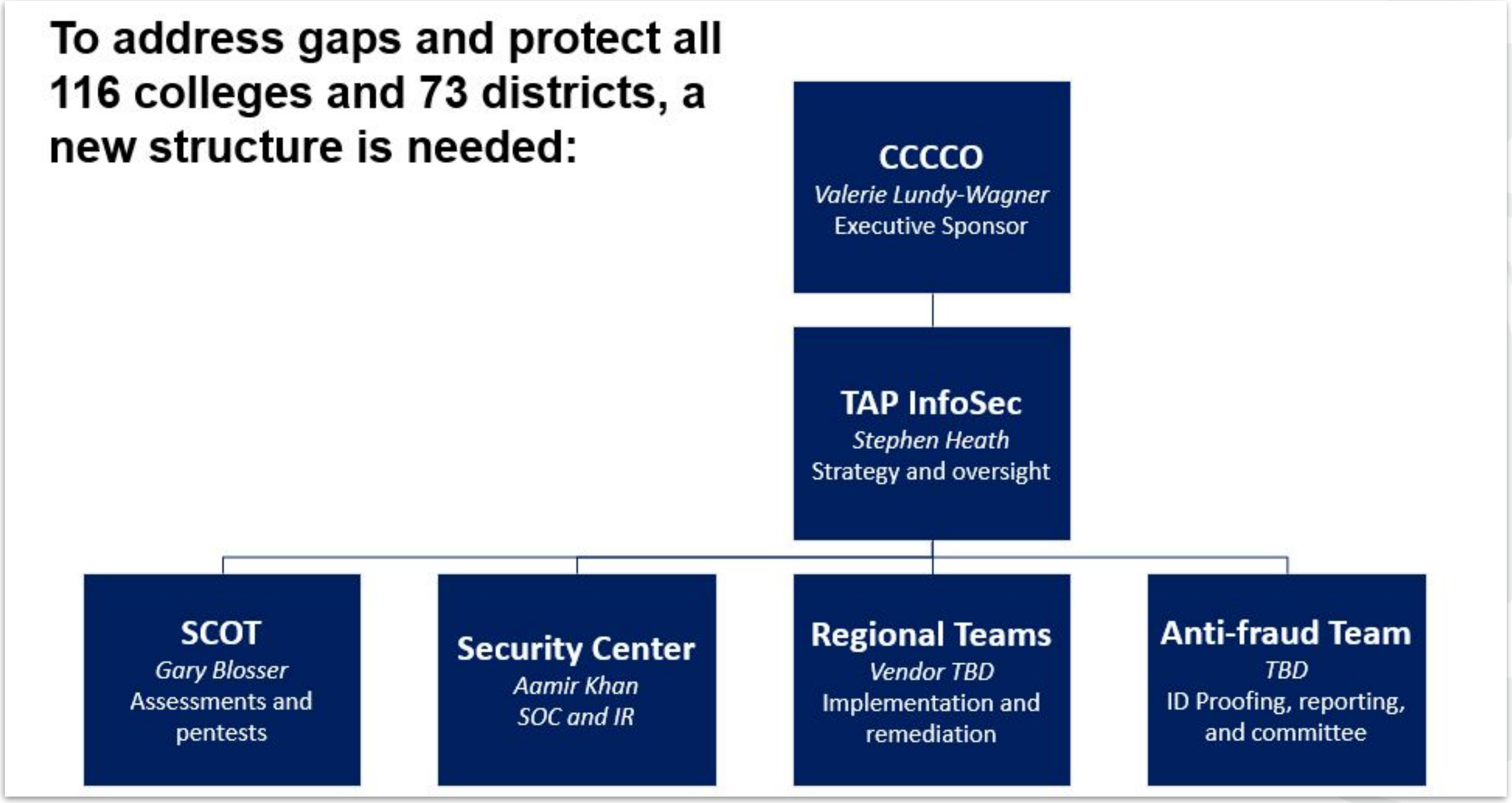
22/23 FY Information Security Funding

- FY 22/23 budget provides enormous opportunity for improvement of cybersecurity for the system
  - AB 178 provides $25 million on ongoing funding
  - AB 183 provides $75 million in one-time funding

22/23 FY Information Security Funding

- The prior approach was not effective, equitable, or comprehensive.
  - Tools-based approach
  - Lack of clarity in roles and responsibilities
  - Limitations in the level of service
  - Little-to-no remediation assistance
  - Does not attend to institutional inequities

22/23 FY Information Security Funding



To address gaps and protect all 116 colleges and 73 districts, a new structure is needed:

CCCCO
Valerie Lundy-Wagner
Executive Sponsor

TAP InfoSec
Stephen Heath
Strategy and oversight

SCOT
Gary Blosser
Assessments and pentests

Security Center
Aamir Khan
SOC and IR

Regional Teams
Vendor TBD
Implementation and remediation

Anti-fraud Team
TBD
ID Proofing, reporting, and committee

Security self-assessment

- due from colleges by 9/30/22

- Acknowledge vulnerabilities in the system
- Provide visibility and identify trends in system cybersecurity standards and needs
- Clarify opportunities for local and systemic resource allocation and support
- Allocate state funds equitably and transparently
- Comply with AB 178
- Guide the design of Regional Teams

Security self-assessment

- due from colleges by 9/30/22

  - Based on NIST Cyber Security Framework (CSF) & Center for Internet Security (CIS) controls.
  - Questions should be answered with your best approximation:
    - Completely (~100%)
    - Mostly (~75%)
    - Somewhat (~50%)
    - A little (~25%)
    - None (~0%)

Security self-assessment

due from colleges by 9/30/22

- Six districts have already completed
- Office hours available for Q&A:
  - Tuesday, August 23rd @ 2:30 PM to 3:30 PM
  - Friday, August 26th @ 10:00 AM to 11:00 AM
  - Monday, August 29th @ 11:00 AM to 12:00 PM
  - Thursday, September 8th @ 2:00 to 3:00 PM
  - Wednesday, September 14th @ 12:30 PM to 1:30 PM
  - Wednesday, September 21st @ 9:00 AM to 10:00 AM
  - Tuesday, September 27th @ 3:30 PM to 4:30 PM
  - Thursday, September 29th @ 12:00 PM to 1:00 PM
  - Friday, September 30th @ 9:00 AM to 10:00 AM

Microsoft A5 Security Suite Funding

- A5 Security includes features such as:
  - Basic Identity and Access Management
  - Multi-Factor Authentication
  - Endpoint Detection and Response
  - Data Loss Prevention
  - Privileged Identity Management
  - Identity Governance and Auditing

Microsoft A5 Security Suite Funding

- Credit of approximately $31.44 per “Education Qualified User” (EQU) to cover the cost of the upgrade from Microsoft A3 licensing to A5 Security
- ComputerLand requesting orders by 8/26

Security Operations Center

- Providing a Managed Detection and Response service to the system is a priority for AB 178 and AB 183 funding
- Operations model will be proposed by the Security Center and reviewed by TAP Team
- Service should include:
  - SIEM platform
  - 24x7x365 coverage
  - Service Level Agreement based on criticality
  - Ability to perform triage based on playbook
  - Threat Hunting and Incident Response support

Security Operations Center (Next steps and recommendations)

- Discussion and request for feedback:
  - What should a SOC look like for the system?
  - Should it include in-house staff or third-party service with oversight and management?
  - What technologies should it support?
  - What SIEM platform?
    - Splunk?
    - MS Sentinel?
    - Other?

22/23 FY CO Priorities

Re-establish/Confirm CO priorities from TTAC

- Validate college technology inventory
- Eliminate end of life software and hardware
- Implement multi-factor authentication locally systemwide
- Provide guidance on patching and software updates
- Mature systemwide technology support (i.e., Security Center, regional cybersecurity teams, and InfoSec TAP)
- Document system technology architecture via grant renewal process
- Progress demonstrably on implementation of change control

MISC topics if time permits

Ellucian Engagement

- Should the system make specific requests for configuration or enhancements to Ellucian tools in order to better support colleges?
  - New required field additions?
    - Implications for MIS reporting
  - Specific to workflows between colleges in multi-college districts?
    - Single CCCApply application with multiple local data implications
- Based on ongoing communication between CCCCO / CollegeBuys and Ellucian, to inform future requests

Best practices/systemwide guidance

- AWS / Cloud / Hybrid strategies
  - Should all colleges be supported to the cloud?
- Integrations / technical support
  - With specific tools?
- Software / Services
  - CRM software
  - Self-service tools
  - Transcripts / degrees - printing / mailing
  - Messaging tools - staff / faculty / students
- Purchasing / negotiating
- Is this the right list / what's missing from above?

Wrap Up

Wrap-up

Looking forward

- Next SAC meeting to be held 10.13.22 from 1:30-3pm
  - invite will be sent later today
- Designate note taker for future SAC meetings (committee member)

California Community Colleges

Thank you!

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