**NICE Working Group**

**Meeting Minutes**

**Date: April 25, 2018 Time: 3:30 PM EST**

**Click here to** [view](https://www.nist.gov/itl/applied-cybersecurity/nice) **the NICE Website**

**SharePoint:** [https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG](https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG/Pages/home.aspx)

# Introduction and Ground Rules

* Danielle Santos, NICE Program Manager, welcomed members to the meeting. The NICE Working Group is setup to provide a mechanism for collaboration between academia, government and industry and to discuss strategies and actions to aid in workforce development.
* During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.
* Danielle noted that participation in the NICE Working Group (NICEWG) is not intended for advertising and promotional purposes and to keep this in mind when participating and using the chat feature.

# NICE Program Office Updates

* Bill Newhouse, Deputy Director of NICE, spoke about recent events. Members of the NICE program office attended RSA last week, the National Science Foundation/National Security Agency workshop and the NASCIO Annual Conference. NICE is trying to place itself in areas where workforce is the big topic. Opportunities to promote the NICE strategic goals are always welcome.

# Opening Remarks

## Industry Co-Chair, Jason Hite spoke about use of the NICE Framework in the U.S. and internationally. Users continue to give accolades to the Framework. Group members are encouraged to connect with Jason so he can activity endorse efforts related to NICE. Jason Hite (@jhitehr) | Twitter.

## Members should feel free to notify others of pertinent events through the chat log and the NICE program office.

# Standing Items

## **Report Roundup**

## Brian Correia presented the "Innovation Through Inclusion: The Multicultural Cybersecurity Workforce" report.

### Brian recommends everyone look at what actions can be taken based on the [report](https://www.isc2.org/-/media/Files/Research/Innovation-Through-Inclusion-Report.ashx). Part of the goal is to take care of the community including developing a more diverse workforce. Statistics enforce this idea. Press releases are forthcoming relating to workforce and diversity. The idea is to show everyone what is out there.

### ISC2 has hired someone who performs market research. There will be more versions of this study. Brian is looking for feedback from the community.

### Email Brian at [bcorreia@isc2.org](mailto:bcorreia@isc2.org) with suggestions for additional information to see in the report.

### Grant demographics was suggested as an area where more information might be wanted.

### Human capital is also an area of interest. This type of data is useful for recruiting, pipelining, etc. Brian's organization has a connection with the Society for Human Resource Management (SHRM) and Pink Elephant in ITIL.

### The latest report can be found [here](https://www.isc2.org/-/media/Files/Research/Innovation-Through-Inclusion-Report.ashx).

## **Strategy Stories**

## Jason Rausch and Carol Kinnard presented on Project Lead the Way (PLTW) Cybersecurity's curricular resource oriented to high school students.

### PLTW is a national non-profit that provides curricular resources for pre-k to 12th grade. Their cybersecurity is informed by the NIST and NICE Frameworks. The main components consist of using an ethical approach, network security labs, and well-known exploits to utilize a problem based approach, spark interest, and connect to the industry. It creates an engaging, secure, and responsible place in the virtual labs.

### Key areas are Identify, Protect, Detect, Respond, and Recover. There are four units in the course. Students must solve a problem at the end of each unit in one of the areas. Students solve a challenging program and use this lifecycle. It reinforces solid learning and practices.

### They started with the NICE and NIST Framework and oriented it to high school students. It concentrates on ethical hacking principles and teaches students to recognize computer science concepts. It does not require knowledge of coding. A beta release is scheduled for this fall and a full release next year. There are 145 schools across the nation in all fifty states already participating. This summer teachers around the country will begin "train the trainer" classes.

### See attached presentation for more information.

## **Metric Moment**

## Bill Newhouse, Deputy Director of NICE, spoke about the “Framework for Improving Critical Infrastructure Cybersecurity”.

* + 1. The [Cybersecurity Framework Version 1.1 Fact Sheet](https://www.nist.gov/sites/default/files/documents/2018/04/12/fact_sheet-cybersecurity_framework_v1-1.pdf) describes a voluntary framework developed for industry to assist in the development of industry-led voluntary cybersecurity standards and best practices. It describes approaches to prioritizing cybersecurity resources, make risk decisions, and acting to minimize risk.
    2. It has three components: a core describing desired cybersecurity outcomes, organizational profiles with requirements and other areas, and implementation tiers describing how organizations can manage security risks.
    3. There were 22 categories and now there are 23. The number of subcategories increased from 98 to 108. People are voluntarily looking at the framework to make evaluations. It can be used to evaluate the workforce. The next steps for NICE is to map the NICE subcategories to the work roles.

# Subgroup Updates

## **Apprenticeship**

## Marian Merritt, Lead for Industry Engagement, provided the update.

1. The first meeting of the Apprenticeship subgroup is this Friday April 27th, at 11 am, Eastern time. There are about 130 people signed up as members and more are welcome.
2. People who are interested in joining should send an email to [nicewg.app@nist.gov](mailto:nicewg.app@nist.gov), or find instructions on the [website](https://www.nist.gov/itl/applied-cybersecurity/nice/apprenticeship-sub-working-group) and email [Marian](mailto:marian.merritt@nist.gov).
3. Co-chair Jennifer Carlson, Apprenti, will share the workings of an intermediary and west coast employers. Co-chair Girish Seshagiri, has developed an apprenticeship model for secure software development.
4. The Department of Labor (DOL) has assisted with cybersecurity apprenticeships. They will also be sharing on cybersecurity programs. The group has momentum already, and looking for new members. People can also learn what apprenticeships are like for non-skilled trades.
5. Visit the Apprenticeship website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/apprenticeship-sub-working-group).

## **Collegiate**

## Stephen Miller, Eastern New Mexico University, provided the update.

1. The subgroup has two projects. The Academic Pathways has gotten some new volunteers. They hope to work with the K12 subgroup on K12 pathways.
2. The Tools, Technologies, and Skillsets team is seeking sponsorship to help fund student fees required to access the National Cybersecurity Student Association ([NCSA](https://www.cyberstudents.org/)) portal. They are working on the white paper including an executive summary and layout out the process model describing the whole project. The group hopes to be finished by mid-July.
3. The project team meeting is this Friday at 2 pm, Eastern time. New participants are welcome. Please email [Stephen](mailto:​stephen.miller@enmu.edu) if interested.
4. New project ideas for this subgroup are also welcome.
5. Visit the Collegiate website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/collegiate-sub-working-group).

## **Competitions**

## Bill Newhouse, Deputy Director of NICE, provided the update.

## The subgroup meeting is tomorrow (4/46) at 3:30 Eastern time. Fourteen new members will hopefully join the call tomorrow. There is a good mix of groups represented in the membership.

## Podcasts are now available on the [CyberCompex](https://www.cybercompex.org/) site.

## The group is working on documents that describe how to run competitions and how to become a competitor. Doug Logan will also be talking about [Cyber Quests](https://uscc.cyberquests.org/) 2018.

## Visit the Competitions website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/competitions-sub-working-group).

## **K-12**

## Patrick Schultz, Bay-Arenac ISD Career Center, provided the update.

## The April 11th meeting was well attended with an influx of new members. The presentation focused on a cybersecurity guide oriented to middle and high school students. The guide covers many related topics to get information out to students. It describes how to get on a cybersecurity career pathway. Digital samples of the book were offered at no cost.

## There are multiple activities for [NCCAW](https://www.nist.gov/itl/applied-cybersecurity/national-initiative-cybersecurity-education-nice/events/national), scheduled for November 12-17, 2018. ComicBee, daily webinars, and women in cyber, hosted by IWTTS. There are lots of other hands on activities for schools to get involved in. The planning committee is working on industry commitments such as job shadowing, and with academia for how they will celebrate. Let [Davina](mailto:davina.pruitt-mentle@nist.gov) know if you want to get involved. The next meeting for the planning group is May 24th.

## The K12 Conference is scheduled for Dec. 3-4 and the website is now up and running. There will be blocks of rooms available at hotels in the San Antonio area.

## Development of the K12 report is in the works. The culmination of all the activities will be an infographic that will provide an overview of subgroup activities over the last few years.

## There are several one-pagers in the works including CTE and cross mapping education standards, creating cybersecurity standards, and how to make them available to teachers.

## In STEM, the K12 subgroup has provided input into the CSTA standards and are working on cross-mapping the NICE Framework with other standards (New Generation Science Standards NGSS). It is a way of overlaying cybersecurity into other domains.

## The next K12 subgroup meeting is May 9th.

## Visit the K12 website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/k-12-sub-working-group).

## **Training and Certifications**

## Linda Montgomery, Cyber World Institute, provided the update.

## They continue work on the mapping matrix. The matrix was published to the full T&C group and comments were received. They are in the review process now and are looking to retool for the next version. The relevancy and future evolution of the matrix was discussed at RSA. C3's recent work will be incorporated into the matrix. The goal is to share with Federal CIO Council and others. The credential engine will be part of the next iteration. Discussions will continue offline.

## The Cyber Range project team is back. They held their first meeting last month. The group meets the second Tuesday of every month at 4 pm Eastern Time.

## Anyone interested in joining please email [Linda](mailto:lmontgomery@tlclasvegas.com) or [NICE Associates](mailto:nicesupt@nist.gov).

## Visit the Training and Certifications website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/training-and-certifications-sub-working-group).

## **Workforce Management**

## Maurice Uenuma, co-chair, provided the update.

## Their primary project involves preparing a guidebook ("The Resilient Workforce: Cybersecurity is Everyone's Job."). They are in the process of finalizing the edits received from the working group reviews last month.

## Maurice thanked everyone for providing feedback. They anticipate the guidebook will be ready for public comment in the next week or two. The document will be posted on the NICE website, and broadcast on social media, the listserv and possibly a webinar (being discussed with the program office).

## They are looking for feedback from business professionals and associations for additional perspectives. The final phase of the review project is forthcoming.

## The current draft of the guidebook is located on the SharePoint site [here](https://nistgov.sharepoint.com/:w:/r/sites/NICEProgram/NICEWG/WorkforceManagement/_layouts/15/Doc.aspx?sourcedoc=%7BB550EA56-DB17-4666-A721-FDFE0B9C0417%7D&file=Cyber-SecureWorkforce_Master_02.26.2018-FOR_REVIEW.docx&action=default&mobileredirect=true).

## Visit the Workforce Management website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/workforce-management-sub-working-group).

# Project Progress Reports

## **CAE Community**

## Anastacia Webster, California State University, San Bernardino, provided the update.

## Workshops are being held in Huntsville, AL on May 17th, and June 5th.

## Registration for the Virtual Career Fair on October 5th is open. Organizations will have the ability to meet the talent the CAE community is producing. Vendors are welcome.

## There is a call for a proposal for the symposium following the NICE conference in the fall.

## Find out more [here](https://www.caecommunity.org/).

## **NICE K-12 Cybersecurity Education Conference**

Davina Pruitt-Mentle, NICE Academic liaison provided the update.

## The conference is scheduled for December 3-4, 2018 at the Grand Hyatt Hotel in San Antonio, TX.

## The call for proposals and registration for the conference will be out shortly.

## A fully packed 2-day schedule is planned that includes an evening social following day 1.

## There will also be a cyber draft during lunch on day one to make corporate commitments to externships/internships for students.

## Find out more [here](https://www.k12cybersecurityconference.org/).

## **NICE Annual Conference**

### Danielle Santos, NICE Program Manager provided the update.

### The NICE Annual Conference and Expo is scheduled for November 6-7 in Miami, Florida. There will be half day seminars on the 5th and the CAE symposium on the 8th.

### Florida International University (FIU) and New America are new partners in the conference. A save the date will be out soon for November 6-7.

### The CAE Community Symposium will follow on November 8th. They are working on identifying a theme and tracks. It will be sent to the group for feedback. FIU and New America will continue activity throughout the year.

### Updates will be available to the group as they develop.

### Find out more [here](https://www.nist.gov/itl/applied-cybersecurity/nice/events/nice-conference-expo).

## **NICE Challenge Project**

### Alexander Hillock provided the update.

### They will be releasing the second official NICE challenge environment for protect and defend including ten new challenges.

### New this year, ten co-workings will be conversing with the challengers.

### They look forward to getting the environment out and getting feedback. The rest of the year will involve specialty work areas and KSAs for protect and defend.

### Find out more [here](https://nice-challenge.com/).

# New Business

## Bill Newhouse presented on, "Strengthening the Cybersecurity of Federal Agencies through Improved Identity, Credential, and Access Management".

OMB is releasing a [new memo](https://policy.cio.gov/identity-draft/) on improving Identity, Credentials, and Access Management (ICAM) and strengthening cybersecurity, asking federal agencies to comment. Threats are described in three main areas, but each of the five areas will be relevant. Policies will have a federal focus and the ability to communicate about such policies will be important. The memo has a comment period.

Agencies have a specified amount of time to respond. Teams responding ought to include the CIO, CISO, etc. that manage identity credentials and access capabilities. The policy should have emphasis on the NICE Framework.

Work roles where managing identity credentials and access capabilities appear in the Framework in the cyber defense analyst and security architect. NIST SP 800-63 and some of the things we do with smart cards also is relevant. [GitHub](https://github.com/ombegov/policy-v2/labels/identity-draft) shows the initial reactions.

* + 1. Will there be new work roles to cover ICAM? Bill hasn’t seen submissions on this space but will be considered in the process. There is no guidance on legacy devices. The hope is the Framework will keep up with the needs of the nation. The change process for the Framework should make sure there is emphasis.

# Summary of Action Items

# NICE Associates will send out the minutes and materials used today.

# Next Meeting Reminder

# The next meeting is May 23, 2018 at 3:30 p.m. Eastern Time.