CINC UP: COLLABORATIVE INNOVATION COMMUNITY
MEETING: IOT, E2ET&S, SMART CAMPUS

April 25, 2017
CINC UP: Collaborative Innovation Community Meeting: IoT, E2ET&S, Smart Campus

AGENDA

• Welcome
• Collaborative Innovation Community (CINC UP) Working Groups Update: Internet of Things (IoT), End-to-End Trust & Security (E2ET&S), Distributed Big Data & Analytics (DBDA), Emily Nichols, Internet2
• Smart Campus Initiatives Update, Emily Nichols, Internet2
• Smart Campus: IoT Systems Risk Management Task Force Update, Chuck Benson, University of Washington and Jan Cheetham, University of Wisconsin-Madison
• Trust, Identity, Privacy, Protection, Safety & Security (TIPSSS) for IoT: ITANA Collaboration and White Paper, Ken Klingenstein, Internet2 and Ed Aractingi, Marshall University
• Smart Campus Cybersecurity Transition to Practice (TTP) Researchers, Aranya Chakrabortty, NCSU, Raju Gottumukkala, University of Louisiana-Lafayette, Fareena Saqib, FIT
• IoT Pedagogy, Ed Aractingi, Marshall University
• Next Steps, Florence Hudson and Emily Nichols, Internet2
Collaborative Innovation Community is the combination of three member-led innovation working groups, focused on areas related to our top two priorities of advanced networking plus trust & identity.

**E2E Trust & Security (E2ET&S):**
- TIPPSS for IoT – Trust, Identity, Privacy, Protection, Safety, Security
- NSF EAGER Cybersecurity Transition to Practice (TTP) Acceleration
- SDP (Software Defined Perimeter), Network Segmentation for IoT

**Distributed Big Data & Analytics (DBDA):**
- Health & Life Sciences / Genomics
- Smart Campuses and Cities
- NSF Big Data Hub Collaboration

**Internet of Things (IoT):**
- IoT Sandbox
- Smart Campuses and Cities
- Smart Grid Testbed
Collaborative Innovation Community (CINC UP) includes Special Interest Groups pertinent to use cases identified by members.

- Healthcare & Life Sciences / Genomics
- Smart Campus
- Smart Grid
- IoT Ethics
- Cybersecurity TTP

Join us! Email CINO@Internet2.edu
Internet2 Collaborative Innovation Community has grown to 335+ individuals representing 135 institutions.
CINC UP Community and CINO Deliverables

• Collaborative Innovation Community / Innovative Working Group Monthly CINC UP Calls
  – Presentations & discussions from members, SMEs on topics of interest to CINC UP Community

• Cybersecurity Research Transition to Practice Acceleration Matchmaking
  – 2016: TechEx 2016 kickoff, Matchmaking Webinar November with cyber researchers and practitioners
  – 2017: Workshop and Showcase at Global Summit, Regional Workshops, more webinars

• Develop & Communicate Key Information Communications & Technology Trends for R&E
  – Present broadly – 30 times across regional and university meetings

• Internet2 Smart Campus Initiative
  – Share best practices and recommendations to deploy IoT and Smart Campus capabilities
  – Global Summit and TechEx meetings
  – Engage industry members in collaboration with universities/regionals: IBM, Microsoft, Cisco
  – Microsoft Campus Connections Summit enabling new smart campus initiatives with Internet2 members

• IoT Systems Risk Management Task Force
  – Goal is to increase IoT systems risk awareness and provide deliverables to address risks, including:
    • Brochure on leveraging Shodan and Censys.io
    • IoT Systems Vendor Requirements Document

• Member-led Thought Leadership
  – ITANA / Internet2 led Enterprise IoT working group and TIPPS for IoT whitepaper effort
  – Enable collaboration across R&E in focal areas. e.g., Smart Grid and Smart Campus/Communities

• Connect member-led innovation initiatives to Internet2 services organizations to inform future services
Smart Campus Initiative created based on member input & innovation working group use cases, with kickoff meeting at Global Summit 2016.

- Share best practices and recommendations to deploy Smart Campus capabilities
- Guided by a Smart Campus CIO Advisory Council
- Commissioned IoT Systems Risk Management Task Force
- Microsoft and Internet2 co-convened first annual Campus Connections Summit, Feb 2017, 140+ university “CIO + 1” attendees from around the world
Research & Education activities are growing in Smart Campus, IoT, End-to-End Trust & Security, Big Data & Analytics, Smart Grid.
Internet2 Smart Campus Initiative Next Steps.

- **Increase** IoT systems risk awareness leveraging Shodan and Censys.io, demos at GS17
- **Share** IoT Systems Vendor Requirements Document at GS17
- **Planning Workshop** with Princeton University Center for Information Technology Policy (CITP) on TIPPSS and Ethics in Campus IoT Networks, 2017
- **Create** thought leadership on TIPPSS for IoT for smart & connected campus/communities
  - **White paper collaborations:** Enterprise IoT ITANA Collaboration and Internet2 CINO PAG-led White Paper
- **Participate** in new initiatives and collaborations toward a Smart Campus
- **Identify** additional smart campus best practices across the community and enable sharing
CINO Sponsored Schedule of Events at GS17

- Sunday, April 23, 4:15-5:30pm: CINC UP: CINO Program Advisory Group Meeting (Open), Meeting Room 15
- Tuesday, April 25, 8-10am: CINC UP: Collaborative Innovation Community Meeting: IoT, E2ET&S, Smart Campus, Renaissance Ballroom West B
  - Collaborative Innovation Community & Innovation Working Groups Update: IoT, E2ET&S, DBDA
    - Smart Campus Initiatives Update and invitation to participate
    - TIPPSS for IoT: ITANA Collaboration and White Paper
  - Smart Campus-themed Cybersecurity Transition to Practice Researcher Presentations
  - IoT Pedagogy
- Wednesday, April 26, 7:30-8:30am: CINC UP: NSF Big Data Innovation Hubs, Meeting Room 10/11
  - NSF Big Data Hubs and Spokes Overview by Fen Zhao, NSF, and René Bastón Northeast Big Data Innovation Hub ED
  - How to get involved, connections for researchers, regional networks, and IT
- Wednesday, April 26, 12:30-5:30pm: CINC UP: Cybersecurity Research Acceleration Transition To Practice (TTP) Workshop and Showcase (NSF #1650445), Meeting Room 8/9
  - Join us for an interactive discussion to determine how – working together – we can accelerate Transition To Practice (TTP) of cybersecurity research into operational environments. Regional networks, IT, industry, labs, students: everyone is invited.
  - University CIO Perspective on Leveraging Cybersecurity Research
  - Discussion, Pilot Opportunities, and Feedback, tell us what cybersecurity assets you need
  - Poster Session & Networking at breaks. Additional poster sessions on Monday and Tuesday: breakfast, lunch, breaks.
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