

WELCOME TO AUTO-ISAC!

MONTHLY VIRTUAL COMMUNITY CALL

June 7, 2023

This Session will be recorded.





AUTO-ISAC ANTITRUST STATEMENT

As Members of the Auto-ISAC, we strictly comply with EU and US antitrust laws. Please do not discuss anything that your company considers commercially sensitive and/or confidential such as pricing or future product plans. A violation of any of the above-mentioned issues will result in us having to quickly terminate the meeting.

Finally, please remember to keep these deliberations confidential. Please do not discuss the substance of these meetings outside of this group.

This meeting is being held at

TLP:CLEAR

Disclosure is not limited.





TRAFFIC LIGHT PROTOCOL (TLP)

VERSION 2.0 DEFINITIONS

Color		WHEN SHOULD IT BE USED?	How May It Be Shared?	
TLP:RED	Not for disclosure, restricted to participants only.	Sources may use TLP:RED when information cannot be effectively acted upon without significant risk for the privacy, reputation, or operations of the organizations involved. For the eyes and ears of individual recipients only, no further.	Recipients may not share TLP:RED information with any parties outside of the specific exchange, meeting, or conversation in which it was originally disclosed. In the context of a meeting, for example, TLP:RED information is limited to those present at the meeting. In most circumstances, TLP:RED should be exchanged verbally or in person.	
TLP:AMBER+STRICT	Limited disclosure, restricted to participants' and its organization.	Sources may use TLP:AMBER+STRICT when information requires support to be effectively acted upon, yet carries risk to privacy, reputation, or operations if shared outside of the organization.	Recipients may share TLP:AMBER+STRICT information only with members of their own organization on a need-to-know basis to protect their organization and prevent further harm.	
TLP:AMBER	Limited disclosure, restricted to participants' organization and its clients on a need-to- know basis.	Sources may use TLP:AMBER when information requires support to be effectively acted upon, yet carries risk to privacy, reputation, or operations if shared outside of the organizations involved. Note that TLP:AMBER+STRICT should be used to restrict sharing to the recipient organization only.	Recipients may share TLP:AMBER information with members of their own organization and its clients on a need-to-know basis to protect their organization and its clients and prevent further harm.	
TLP:GREEN	Limited disclosure, restricted to the community.	Sources may use TLP:GREEN when information is useful to increase awareness within their wider community.	Recipients may share TLP:GREEN information with peers and partner organizations within their community, but not via publicly accessible channels. Unless otherwise specified, TLP:GREEN information may not be shared outside of the cybersecurity or cyber defense community.	
TLP:CLEAR	Disclosure is not limited.	Sources may use TLP:CLEAR when information carries minimal or no foreseeable risk of misuse, in accordance with applicable rules and procedures for public release.	Recipients may share this information without restriction. Information is subject to standard copyright rules.	



TLP:CLEAR

Source: https://www.us-cert.gov/tlp

AGENDA

Time (ET)	Topic			
11:00	Welcome➤ Why We're Here➤ Expectations for This Community			
11:05	 Auto-ISAC Update ➤ Auto-ISAC Activities ➤ Heard Around the Community ➤ Intelligence Highlights 			
11:15	 DHS CISA Community Update Jeff Terra, Consulting Support, Joint Cyber Defense Collaborative (JCDC), Cybersecurity and Infrastructure Security Agency (CISA) 			
11:20	Featured Speaker: ➤ Justin Montalbano, <i>President</i> , Car Hacking Village ➤ Title: "What is the Car Hacking Village (CHV)?"			
11:45	Around the Room ➤ Sharing Around the Virtual Room			
11:55	Closing Remarks			





WELCOME - AUTO-ISAC COMMUNITY CALL!

Purpose: These monthly Auto-ISAC Community Meetings are an opportunity for you, our **Members & connected vehicle ecosystem Partners, to:**

- √ Stay informed of Auto-ISAC activities
- ✓ Share information on key vehicle cybersecurity topics
- ✓ Learn about exciting initiatives within the automotive community from our featured speakers

Participants: Auto-ISAC Members, Potential Members, Strategic Partners, Academia, Industry **Stakeholders and Government – the whole of the automotive industry**

Classification Level: TLP:GREEN - May be shared within the Auto-ISAC Community and "off the record"

How to Connect: For further info, questions or to add other POCs to the invite, please contact us!

(sharmilakhadka@automotiveisac.com)







ENGAGING IN THE AUTO-ISAC COMMUNITY

- ❖ Join
 - **❖** If your organization is eligible, apply for Auto-ISAC Membership
 - ❖ If you aren't eligible for Membership, connect with us as a Partner
 - Get engaged "Cybersecurity is everyone's responsibility!"



Participate

- **❖** Participate in monthly virtual conference calls (1st Wednesday of month)
- ❖ If you have a topic of interest, let us know!
- Engage & ask questions!

21 *Navigator Partners*

- 46 Supplier & Commercial Vehicle Members
- ❖ Share "If you see something, say something!"
 - **❖** Submit threat intelligence or other relevant information
 - **❖** Send us information on potential vulnerabilities
 - Contribute incident reports and lessons learned
 - Provide best practices around mitigation techniques

19 Innovator Partners

Membership represents 99% of cars and trucks on the road in North America

Coordination with 26 critical infrastructure ISACs through the National Council of ISACs (NCI)



OEM Members

2023 BOARD OF DIRECTORS

Thank you for your Leadership!



Josh Davis
Chair of the
Board of the Directors
Toyota



Kevin Tierney Vice Chair of the
Board of the Directors **GM**



Stephen Roberts
Secretary of the
Board of the Directors
Honda



Tim Geiger
Treasurer of the
Board of the Directors
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Andreas Ebert Chair of the EuSC Volkswagen



Andrew Hillery
Chair of the CAG
Cummins



Ravi Puvvala
Chair of the SAG
Fleet Defender



Monica Mitchell Polaris



Bob Kaster Bosch



Brian Witten Aptiv



As of June 1, 2023

Aisin	Flex	Luminar	Qualcomm
Allison Transmission	Ford	Magna	Renesas Electronics
American Axle & Manufacturing	Garrett	MARELLI	Rivian
Aptiv	General Motors (Cruise-Affiliate)	Mazda	Stellantis
AT&T	Geotab	Mercedes-Benz	Subaru
AVL List GmbH	Harman	Mitsubishi Electric	Sumitomo Electric
Blackberry Limited	Hitachi	Mitsubishi Motors	thyssenkrupp
BMW Group	Honda	Mobis	Tokai Rika
BorgWarner	Hyundai	Motional	Toyota (Woven Planet-Affiliate)
Bosch (ETAS-Affiliate)	Infineon	Navistar	Valeo
Bose Automotive	Intel	Nexteer Automotive Corp	Veoneer
ChargePoint	John Deere Electronic	Nissan	Vitesco
Continental (Argus-Affiliate)	JTEKT	Nuro	Volkswagen
Cummins (Meritor-Affiliate)	Kia America, Inc.	Nuspire	Volvo Cars
Denso	Knorr Bremse	NXP	Volvo Group
e:fs TechHub GmbH	KTM	Oshkosh Corp	Waymo
Faurecia	Lear	PACCAR	Yamaha Motors
Ferrari	LG Electronics	Panasonic (Ficosa-Affiliate)	ZF
Fleet Defender	Lucid Motors	Polaris	

Pending: CNH Industrial, Daimler Truck, Micron, Stoneridge





AUTO-ISAC BUSINESS UPDATES AND EVENTS

Upcoming Meetings:

- ➤ Members Teaching Members: Wednesday, June 21st Time: 10:00am 11:30 a.m. TLP:AMBER; Speaker: Amit Geynis, Security Researcher, Argus Title: "Tales From a Penetration Testing Team"
- ➤ Auto-ISAC's first European Summit will be June 13th-14th, 2023 with June 12th having Members-only activities. https://automotiveisac.com/2023-europe-summit Register now!
- Auto-ISAC Summit will be Tuesday, October 17th-18th, 2023 in Torrance, California. You can find more information and registration here: https://automotiveisac.com/2023-annual-summit Register now! Early bird pricing for US summit ends September 8th.

NOTE: If you wish to submit a proposal to be a featured speaker on our monthly Community call, please reach out to Sharmilakhadka@automotiveisac.com. The presentation must be educational and relevant to Automotive cybersecurity.







June 12 Members Only: TLP:AMBER Monday, June 12: 11:00 – 20:00 CET

Open to Auto-ISAC Members only Register here

June 13-14 Open to Public: TLP:CLEAR Tuesday, June 13: 8:00 – 20:00 CET

Wednesday, June 14: 8:00 – 16:00 CET

Open to Auto-ISAC Members and External Partners

Register here





HONDA

The Power of Dreams

AUTO-ISAC

7th Annual Auto-ISAC Cybersecurity Summit

> October 17-18, 2023 Torrance, CA



AUTO-ISAC INTELLIGENCE HIGHLIGHT





AUTO-ISAC INTELLIGENCE

- ➤ Know what we track daily: <u>subscribe</u> to the DRIVEN; TLP:GREEN Auto-ISAC 2022 Threat Assessment released with Auto-ISAC Automotive Cyber Threat Ecosystem (1st Iteration) included.
- Send feedback, contributions, or questions to <u>analyst@automotiveisac.com</u>
- > Intelligence Notes
 - Geopolitical tensions involving Russia, China, North Korea, and Iran remain high with Russia- Ukraine in crisis. Threat of cyberattack spillover increases if: (1) the Russia-Ukraine war leads to kinetic clashes with the West (possible but unlikely), and (2) any other hotspots escalate into crises (possible) (Russia-Ukraine 1, China 234, North Korea, Iran 5).
 - Ransomware ⁶ Groups Targeting Automotive: <u>BlackSuit</u>, <u>Darkrace</u>, <u>Trigona</u>, <u>Abyss</u>*, <u>Rancoz</u>*, <u>Monti</u>, <u>Cl0p</u> ⁷, <u>AlphV/BlackCat</u>, <u>BianLian</u>, <u>Snatch</u>, <u>Black Basta</u>, <u>LockBit 3.0 Royal</u>, <u>Nokoyawa</u>, <u>Play</u>, <u>Dunghill</u>*
 - Anonymous Sudan appears to be a potent distributed denial-of-service threat and claims to have targeted a tactical vehicle manufacturer (<u>Trustwave</u>, <u>Cybernews</u>).
 - Threat actors continue to use Telegram to advertise access to automotive organizations' databases or files containing stolen data.
 - Notable TTPs and Tools: Fooling ChatGPT into recommending malicious packages planted by threat actors (<u>Vulcan</u>); Mass exploitation of MOVEit MFT zero-day (<u>BleepingComputer</u>); iOS zero-click, SMS-delivered malware with code execution capabilities (<u>Securelist</u>).



CISA Resource Highlights

Joint Cyber Defense Collaborative





CISA and FBI Release Joint Advisory in Response to Active Exploitation of Papercut Vulnerability

- CISA and FBI have released a joint Cybersecurity Advisory (CSA), Malicious Actors Exploit CVE-2023-27350 in PaperCut MF and NG.
- In early May 2023, FBI observed a group self-identifying as the BI00dy Ransomware Gang attempting to exploit vulnerable PaperCut servers against the Education Facilities Subsector.
- The advisory further provides detection methods for exploitation and details known indicators of compromise (IOCs) related to the group's activity.
- This vulnerability occurs in certain versions of PaperCut NG and PaperCut MF and enables an unauthenticated actor to execute malicious code remotely without credentials. PaperCut released a patch in March 2023.





CISA and Partners Update the #StopRansomware Guide, Developed through the Joint Ransomware Task Force (JRTF)

- CISA, the Federal Bureau of Investigation (FBI), the National Security Agency (NSA), and the Multi-State Information Sharing and Analysis Center (MS-ISAC) published an updated version of the #StopRansomware Guide
- Ransomware actors have accelerated their tactics and techniques since its initial release in 2020.
- The update incorporates lessons learned from the past two years and includes additional recommended actions, resources, and tools to maximize its relevancy and effectiveness and to further help reduce the prevalence and impacts of ransomware.





CISA and Partners Release Cybersecurity Advisory Guidance detailing PRC state-sponsored actors evading detection by "Living off the Land"

- CISA joined the National Security Agency (NSA), the Federal Bureau of Investigation (FBI), and international partners in releasing a joint cybersecurity advisory highlighting recently discovered activities conducted by a People's Republic of China (PRC).
- This advisory highlights how PRC cyber actors use techniques called "living off the land" to evade detection by using built-in networking administration tools to compromise networks and conduct malicious activity.
- The authoring agencies have identified potential indicators associated with these techniques. To hunt for this activity, CISA and partners encourage network defenders to use the actor's commands and detection signatures provided in this advisory.





Security/Software Updates

For the period of 5/1/23 - 5/31/23:

- CISCO Releases Security Advisories: Multiple products
- Microsoft Releases Security Updates: Multiple products
- Mozilla Releases Security Updates: Multiple products

Best practices:

- Leverage automatic updates for all operating systems and third-party software
- Implement security configurations for all hardware and software assets
- Remove unsupported or unauthorized hardware and software from systems





CISA Releases Industrial Control Advisories

- These advisories provide timely information about current security issues, vulnerabilities, and exploits surrounding ICS.
- CISA encourages users and administrators to review the newly released ICS advisories for technical details and mitigations
- For the period of 5/1/23- 5/31/23 approximately 33 advisories have been issued
- The advisories span the following sectors: Information Technology, Critical Manufacturing, Energy and Multiple Sectors
- Cybersecurity Alerts & Advisories | CISA





KEVs Catalogue

CISA strongly urges all organizations to reduce their exposure to cyberattacks by prioritizing timely remediation of Catalog vulnerabilities as part of their vulnerability management practice.



CISA added 19 new vulnerabilities to its Known Exploited Vulnerabilities (KEV) Catalog in the month of May. These types of vulnerabilities are a frequent attack vector for malicious cyber actors and pose significant risk to the federal enterprise.





Additional Resources from CISA

- □CISA Homepage https://www.cisa.gov/
- CISA NCAS https://cisa.gov/resources-tools/all-resources-tools
- □CISA Shields Up https://www.cisa.gov/shields-up
- Free Cybersecurity Services and Tools https://www.cisa.gov/free-cybersecurity-services-and-tools
- CISA News Room https://www.cisa.gov/cisa/newsroom
- □CISA Blog https://www.cisa.gov/blog-list
- □CISA Publications Library https://www.cisa.gov/publications-library
- □CISA Cyber Resource Hub https://www.cisa.gov/cyber-resource-hub
- □CISA Cybersecurity Directives https://cyber.dhs.gov/directives/







For more information:

cisa.gov

Questions?

Central@cisa.dhs.gov

1-888-282-0870



AUTO-ISAC COMMUNITY MEETING

Why Do We Feature Speakers?

- **❖** These calls are an opportunity for information exchange & learning
- **❖** Goal is to educate & provide awareness around cybersecurity for the *connected vehicle*

What Does it Mean to Be Featured?

- Perspectives across our ecosystem are shared from Members, government, academia, researchers, industry, associations and others.
- ❖ Goal is to showcase a rich & balanced variety of topics and viewpoints
- * Featured speakers are not endorsed by Auto-ISAC nor do the speakers speak on behalf of Auto-ISAC

30+
Featured
Speakers to
date

How Can I Be Featured?

❖ If you have a topic of interest you would like to share with the broader Auto-ISAC Community, then we encourage you to contact us!

7 Best
Practice
Guides
available on
website

2000+
Community
Participants







FEATURED SPEAKER





JUSTIN MONTALBANO

PRESIDENT, CAR HACKING VILLAGE



Justin is the problem and the solution. He's been apart of the Car Hacking Village (CHV) since year one in 2015 and has been crucial in bringing together the automotive security community. Aside from hacking things, he's typically out in the woods enjoying the complex chaos of nature!

Justin is no stranger to the security industry, with over 10 years of experience, his array of expertise include; leadership, penetration testing, incident response, forensics, research & development, public speaking, running Capture the Flag (CTF) events, and training in the art of exploitation.

Justin's varied expertise and background helps provide the perfect foundation of knowledge and understanding to assist in the corporate integration of hackers.

















What is the Car Hadking Village (CHV)?

carhackingvillage.com

Justin Montalbano President







About Me

Justin Montalbano - Sr. Cybersecurity Engineer, Boom Supersonic | President, Car Hacking Village











· APTIV ·

DELPHI







Overview

- → What is DefCON?
- → What is the Car Hacking Village (CHV)?
- → Capture the Flag (CTF) / Challenges
- → Badges
- → Past Sponsors
- → How to get involved?
- → Contact Details





What is DefCON?

defcon.org

- → One of the world's largest and most renowned hacker conventions
- Talks on a wide range security related topics across all industries (automotive, aerospace, information security, industrial controls, maritime, IoT)
- → Villages, SkyTalks and the "Wall of Sheep"
- → Prestigious Capture the Flag competition
- → One-of-a-Kind Badge Community

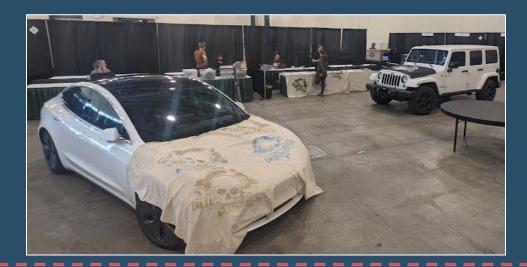


What is the Car Hacking Village?

carhackingvillage.com

- → Founded in 2015 by Robert Leale of CanBusHack
- → 501c3 Non-profit organization
- → G-W can be found in the US, Japan, UK, Hong Kong, and Philippines









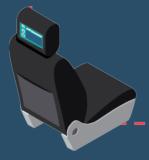
What is the Car Hacking Village?

carhackingvillage.com

- → Automotive Capture the Flag event
- → Badge Life
- → CHV Contributors teach AutoISAC CASE classes







Where is the Car Hacking Village?

carhackingvillage.com



















Capture the Flag (CTF) / Challenges Semi-truck hacking



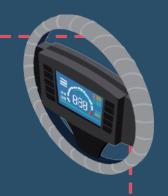


Capture the Flag (CTF) / Challenges

Air Brake Air Darts

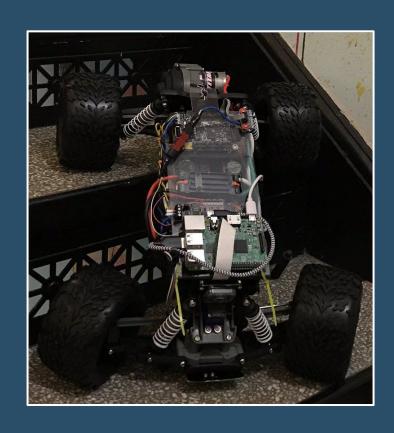






Capture the Flag (CTF) / Challenges

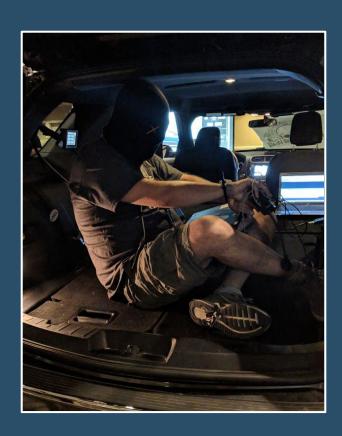
RoboCars







Escape Challenge







Car Simulator

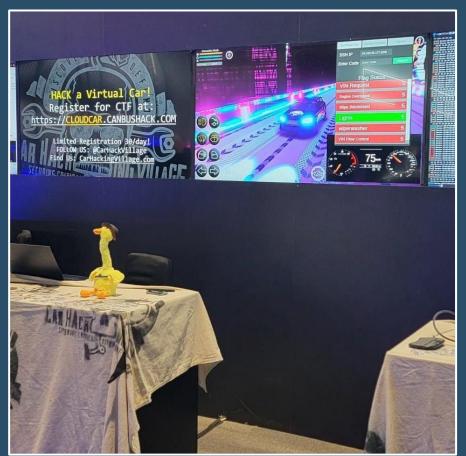




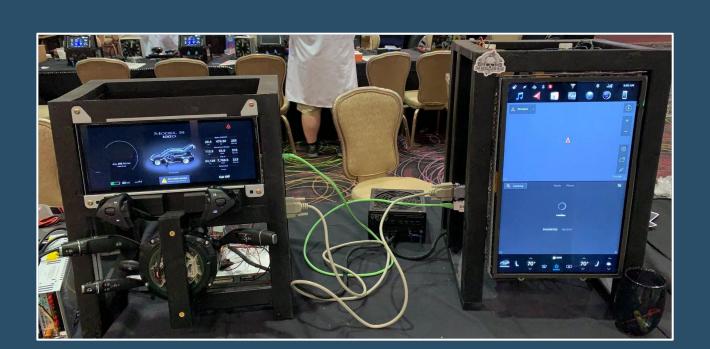








Tesla in the Loop





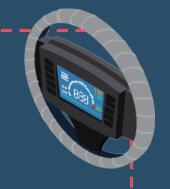




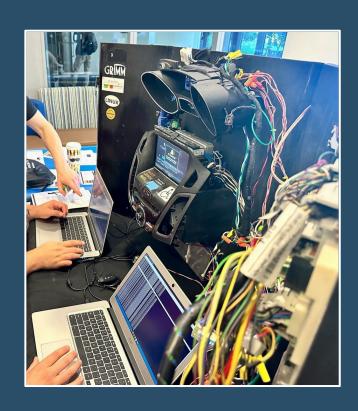
Car in a Case

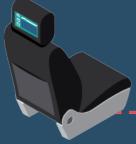












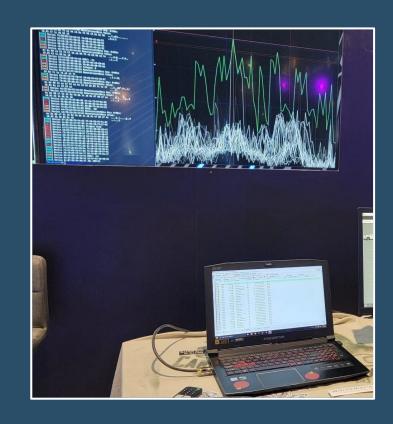
Capture the Flag (CTF) / Challenges Head Unit Hackathon







Capture the Flag (CTF) / Challenges Bluetooth Challenges







Capture the Flag (CTF) / Challenges Honda Key Fob 2022 CVE









CTF Prizes



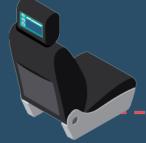








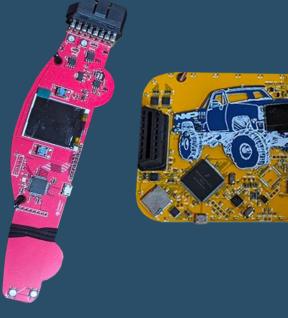






Badges Previous Years









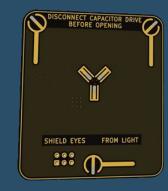






Badges This Year (2023)

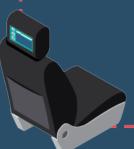








github.com/linted/CHV_SAO_Specification



Past Sponsors











































- Develop CTF flags / challenges or Volunteer
- → Attend DefCON 31 to access CHV
- → Attend other conferences to access **G-V**







Contact Details

Email: justin@carhackingvillage.com

Website: carhackingvillage.com

Discord: discord.gg/JWCcTAM

Twitter: twitter.com/CarHackVillage

YouTube: youtube.com/@carhackingvillage







OPEN DISCUSSION

ANY QUESTIONS ABOUT THE AUTO-ISAC OR FUTURE TOPICS FOR DISCUSSION?





How to Get Involved: Membership

IF YOU ARE AN OEM, SUPPLIER OR COMMERCIAL VEHICLE, CARRIER OR FLEET, PLEASE JOIN THE AUTO-ISAC!

> REAL-TIME INTELLIGENCE SHARING

- > DEVELOPMENT OF BEST PRACTICE **GUIDES**
- > Intelligence Summaries
- > Exchanges and Workshops

> REGULAR INTELLIGENCE **MEETINGS**

> TABLETOP EXERCISES

> CRISIS NOTIFICATIONS

- WEBINARS AND PRESENTATIONS
- MEMBER CONTACT DIRECTORY
 ANNUAL AUTO-ISAC SUMMIT EVENT

To learn more about Auto-ISAC Membership, please contact melissacromack@automotiveisac.com. For Partnership, please contact sharmilakhadka@automotiveisac.com.



AUTO-ISAC PARTNERSHIP PROGRAMS

Strategic Partnership

- For-profit companies such as "Solutions Providers" that sell connected vehicle cybersecurity products & services.
- Examples: Hacker ONE, Upstream, IOActive, Karamba, Grimm
- Must be approved by Executive Director and the Membership & Benefit Standing Committee (MBSC).
- 2. Formal agreements: NDA, SPA, SoW, CoC required.
- 3. In-kind contributions allowed. Currently no fee.
- 4. Does not overtly sell or promote product or service.
- 5. Commits to support the Auto-ISAC's mission.
- Engages with the automotive ecosystem, supporting & educating Auto-ISAC Members and its Community.
- 7. Develops value added Partnership Projects to engage with the Auto-ISAC, its Member, and Community.
- 8. Summit Sponsorship allowed for promotion. Summit Booth priority.
- 9. Engagement must provide Member awareness, education, training, and information sharing
- 10. Builds relationships, shares, and participates in information sharing Auto-ISAC activities.
- 11. Supports our mission through educational webinars and sharing of information.

Community Partnership

- Community Partners are companies, individuals, or organizations with a complementary mission to the Auto-ISAC, with the interest in engaging with the automotive ecosystem, supporting, and educating Members and the community.
- Includes Industry Associations, Government Partners, Academia, Research Institution, Standards Organizations, Non- Profit, Technical Experts, Auto-ISAC Sponsors.
- Examples: Autos Innovate, ATA, ACEA, JAMA, MEMA, CLEPA, CISA, DHS, FBI, NHTSA, NCI, UDM etc.
- 1. No formal agreement required.
- 2. No approval required.
- Added to Auto-ISAC Community Distro List to stay engaged in Community events and activities.
- 4. Participate in Auto-ISAC Monthly Community Calls.
- 5. Learn what is trending in the ISACs and hear from key leaders during the special topic of interest presentation.
- 6. Added to Auto-ISAC DRIVEN list to receive our daily cyber automotive newsletter.
- 7. Part of the Network with Automotive Community and the extended automotive ecosystem.
- 3. Invitation to **attend and support** our yearly Summit.

CURRENT PARTNERSHIPS

MANY ORGANIZATIONS ENGAGING

Thanks for your Support to our Many Partners

COMMUNITY PARTNERS

INNOVATOR

Strategic Partnership (19)

ArmorText

BlockHarbor

Cybellum

Deloitte

FEV

GRIMM

HackerOne

Irdeto

Itemis

Karamba Security

KELA

Pen Testing Partners

Red Balloon Security

Regulus Cyber

Saferide

Security Scorecard

Trustonic

Upstream

Vultara

NAVIGATOR

Support Partnership

AAA

ACEA

ACM

American Trucking

Associations (ATA)

ASC

ATIS

Auto Alliance

EMA

Global Automakers

IARA

IIC

JAMA

MEMA

NADA

NAFA

NMFTA

RVIA

SAE

TIA

Transport Canada

COLLABORATOR

Coordination **Partnership**

AUTOSAR

Billington Cybersecurity

Cal-CSIC

Computest

Cyber Truck Challenge

DHS CSVI DHS HQ

DOT-PIF

FASTR

FBI

GAO

ISAO

Macomb Business/MADCAT

Merit (training, np)

MITRE

National White Collar Crime Center

NCFTA

NDIA

NHTSA

NIST

Northern California Regional Intelligence

Center (NCRIC) NTIA

OASIS

ODNI

Ohio Turnpike & Infrastructure Commission SANS

The University of Warwick

TSA

University of Tulsa

USSC

VOLPE

W3C/MIT

Walsh College



BENEFACTOR

Sponsorship Partnership

2022 Summit Sponsors-

Argus

BGNetworks

Bosch

Blackberry

Block Harbor

BlueVoyant

Booz Allen Hamilton

C2A

Cybellum

CyberGRX

Cyware

Deloitte

Denso

Finite State

Fortress

Itemis

Keysight Technologies

Micron

NXP

Okta Sandia

Securonix

Tanium

UL

Upstream

VicOne

AUTO-ISAC BENEFITS

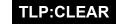
- Focused Intelligence Information/Briefings
- Cybersecurity intelligence sharing
- Vulnerability resolution
- Member to Member Sharing
- Distribute Information Gathering Costs across the Sector
- Non-attribution and Anonymity of Submissions
- Information source for the entire organization
- Risk mitigation for automotive industry
- Comparative advantage in risk mitigation
- Security and Resiliency





Building Resiliency Across the Auto Industry





THANK YOU







OUR CONTACT INFO

Faye Francy Executive Director



20 F Street Northwest Suite 700 Washington, DC 20001 703-861-5417 fayefrancy@automotiveisac.com



AUTOMOTIVEISAC.COM

Sharmila Khadka

Information Technology Executive Coordinator



20 F Street NW, Suite 700 Washington, DC 20001 443-962-5663 sharmilakhadka@automotiveisac.com

This document is Auto-ISAC Sensitive and Confidential.





59