

82nd IFIP WG 10.4 Meeting
Old Town Alexandria, VA, USA
June 23— 26, 2022

Business Meeting



Agenda

- DSN 2022
- Future DSN editions
- Related Conferences
- JCL Award 2022
- Future WG Meetings: Locations, Organizers & Topics
- Virtual Workshops

- Private Part: Members only!

82nd WG Meeting: Thanks to Organizers!

- Organization:
 - Chris Walter (WW Technology Group, US)
- Workshop on Intelligent Vehicle Dependability and Security:
 - Jay Lala (Raytheon, US)
 - John Meyer (University of Michigan, US)
 - Carl Landwehr (George Washington University, US)
 - Charles Weinstock (Carnegie Mellon University, US)
 - Homa Alemzadeh (University of Virginia, US)
 - Cristina Nita-Rotaru (Northeastern University, US)
 - Wilfried Steiner (TTTech, Austria)

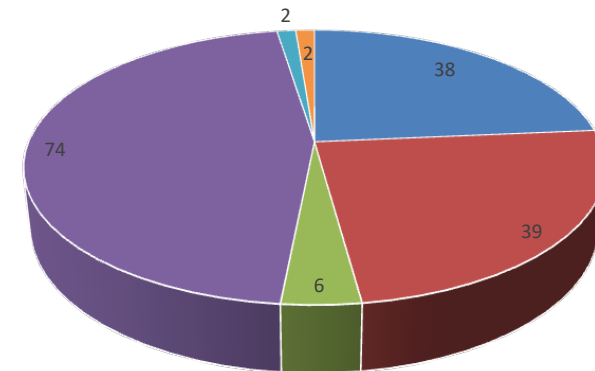
82nd WG Meeting – Participants

- 47 participants
 - Europe: 16
 - Middle East: 1
 - North America: 29
 - South America: 1
- 24 members
- 9 invited speakers
- 14 guests

Thanks everyone!

DSN 2022 @ Baltimore, Maryland, US

- Papers submitted: 262
- Papers accepted: 49
- Acceptance ratio: 18.7%



■ Asia ■ Europe ■ Middle East ■ North America ■ Oceania ■ South America



- Participants (Jun. 20): 161
 - 81 authors
 - 57 non-authors
 - 23 workshop authors
 - 28 Student travel grants

DSN 2022 - Program at a glance

- Workshops:
 - 8th Workshop on Safety and Security in Intelligent Vehicles (SSIV)
 - 5th Workshop on Dependable and Secure Machine Learning (DSML)
 - 4th Workshop on Data-Centric Dependability and Security (DCDS)
 - 2nd Workshop on Artificial Intelligence To Security (AITS)
- 3 Keynotes:
 - Elaine Shi (CMU)
 - Nicholas Carlini (Google Brain)
 - Franck Cappello (Argonne National Laboratory)

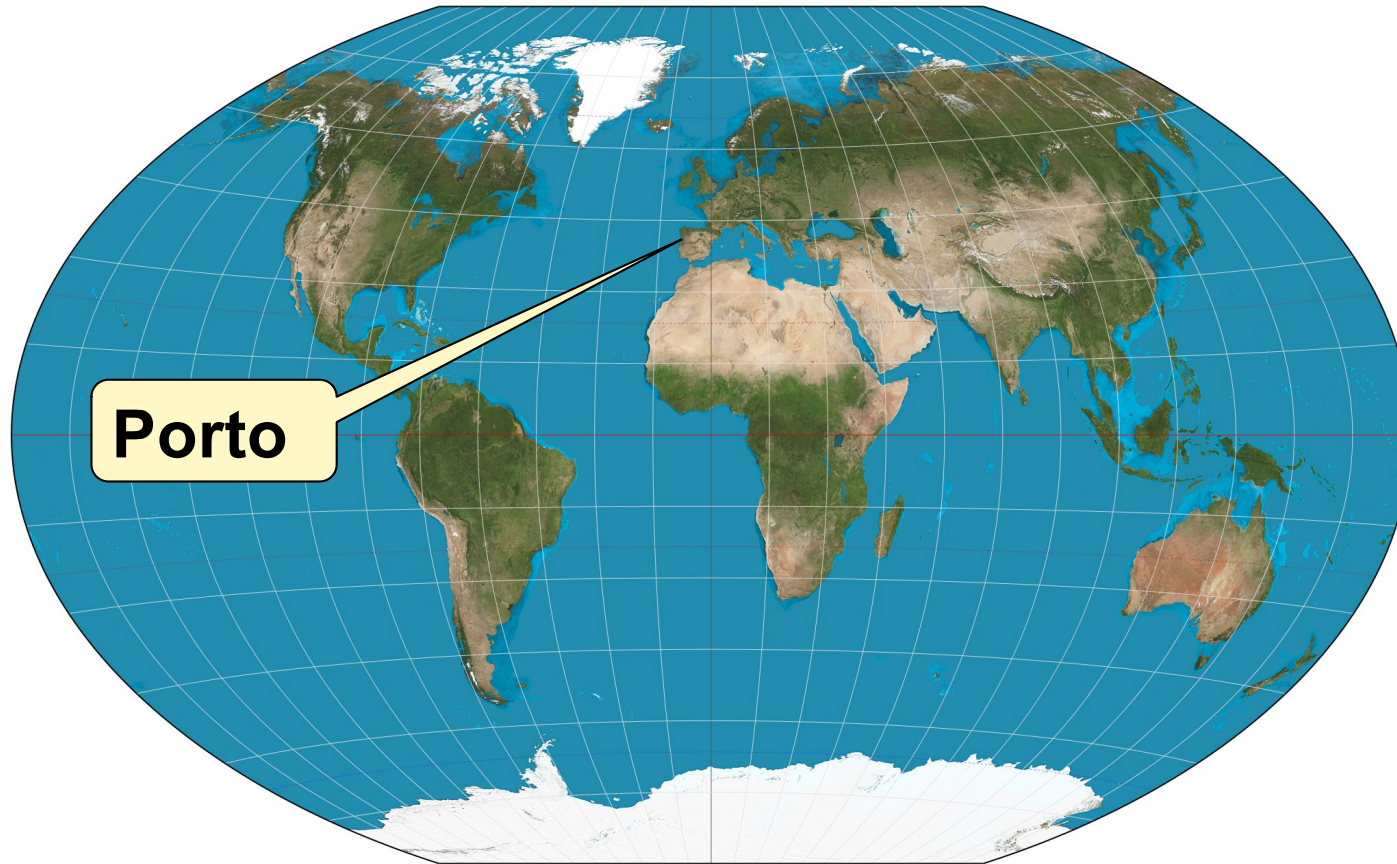
DSN 2022 - Program at a glance

- Research Track – 16 sessions, 49 papers
- Industry Track – 2 sessions, 6 papers
- Best of SELSE – 1 session, 3 papers
- Fast Abstracts – 2 session, 7 papers
- Doctoral Forum – 1 session, 3 papers

DSN 2023

- *Palácio da Bolsa*, Porto, Portugal
- June 27th-30th
- General Chairs:
 - Henrique Madeira (University of Coimbra, Portugal)
 - Marco Vieira (University of Coimbra, Portugal)
- PC Chairs:
 - Onur Mutlu (ETH Zurich, Switzerland)
 - Xavier Défago (Tokyo Institute of Technology, Japan)

Porto, Portugal













DSN 2024

- Brisbane, Australia
- 24th-27th June (tentative)
- General Chair:
 - Dan Dongseong Kim (University of Queensland, Australia)
 - Ryan Ko (University of Queensland, Australia)



DSN 2025 – Proposal

- Naples, Italy



- General Chair:

- Domenico Cotroneo (University of Naples Federico II, Italy)
- Marcello Cinque (University of Naples Federico II, Italy)

JCL Award 2022

An Empirical Study of the Reliability of UNIX Utilities

Barton P. Miller, Louis Fredriksen, and Bryan So

Communications of the ACM, Volume 33, Issue 12, Dec. 1990

- 8 nominations
- Chair: Domenico Cotroneo (University of Naples Federico II, Italy)
- Committee:
 - Evgenia Smirni (College of William & Mary, US)
 - Fumio Machida (University of Tsukuba, Japan)
 - Homa Alemzadeh (University of Virginia, USA)
 - Lorenzo Strigini (City, University of London, UK)
 - Mootaz Elnozahy (KAUST, Saudi Arabia)
 - Susanna Donatelli (University of Torino, Italy)

DSN 2022 – Other Awards

- The William C. Carter PhD Dissertation Award in Dependability
 - Minesh Patel, “Enabling Effective Error Mitigation in Memory Chips That Use On-Die Error-Correcting Codes”
- Test-of-Time Awards
 - Yubin Xia, Yutao Liu, Haibo Chen and Binyu Zang, "CFIMon: Detecting violation of control flow integrity using performance counters", DSN 2012
 - Amiya K. Maji, Fahad. A. Arshad, Saurabh Bagchi and Jan S. Rellermeier, "An empirical study of the robustness of inter-component communication in Android", DSN 2012

DSN 2022 – Other Awards

- Rising Star Award:
 - Roberto Natella (University of Naples Federico II, Italy)
- Best Paper Award Candidates:
 - Kaiwen Shen, JianYu Lu, Yaru Yang, Jianjun Chen, Mingming Zhang, Haixin Duan, Jia Zhang, Xiaofeng Zheng, “HDiff: A Semi-automatic Framework for Discovering Semantic Gap Attack in HTTP Implementations”
 - Dimitra Giantsidi, Maurice Bailleu, Natacha Crooks, Pramod Bhatotia, “Treaty: Secure Distributed Transactions”
 - Shreshth Tuli, Giuliano Casale, Nicholas R. Jennings, “CAROL: Confidence-Aware Resilience Model for Edge Federations”

Related Conferences

- ISSRE 2022
 - Charlotte, NC, US
 - Oct. 31 – Nov. 3
- EDCC 2022
 - Zaragoza, Spain
 - Sep. 12-15
- PRDC 2022
 - Beijing, China + Virtual
 - Nov. 28 – Dec. 1
 - [Deadline: Jul. 18](#)
- LADC 2022
 - Fortaleza, CE, Brazil
 - Nov. 21-24
 - [Deadline: Aug. 1](#)

WG Meetings

- The pandemic had a great impact on our workshops
- A medium-term plan for the organization of our winter and summer meetings should exist
- Scientific topics and local organizers (and the corresponding locations) need to be decided in advance!
- We need to understand what makes people to attend our meetings and work to improve

Reflection: Why members attend meetings?

- Generous time for presentations and in-depth discussions
- Staying connected with old friends, and catching up on emerging topics
- Enjoy technical and social interaction with close friends and invited guests
- Interesting topics with top notch speakers
- Engaging with the other members of the working group
- Good discussions on interesting topics
- World-class talent, who provide unique insights on important topics
- Sense of community, discussing important engineering hard problems and their possible solutions
- International experts bringing their unique knowledge and perspectives in a discussion format
- The opportunity to contribute to establish vision and solution courses for the community at large
- Not attending:
 - Difficulty of getting visa (US in particular) for in person meetings
 - Budgetary issues at work
 - I don't attend when the location is just too much of a pain to get to

Reflection: Good technical workshop?

- Good topic, focusing real/relevant/ interesting dependability challenges
- Good speakers, especially external speakers to get other views on the topics
- Generous time time for discussions
- A nice report at the end
- Narrow technical focus, where invited speakers outnumber those from the WG
- Time to discuss the topics presented
- Impromptu technical discussions that occur during the social gatherings also makes for a great workshop.
- Outsiders with fresh views
- Really important to have discussion. Speakers who run long and don't leave time for questions are disappointing
- Maybe we should do 20 minutes talk + 20 minutes discussion (20+20) rather than 30+15
- 15 minutes talk with no mid-stream Q&A and then 30 minutes panel discussion on their topic

WG Meetings: Locations & Organizers

- Winter 2023 – proposal for Melbourne, Australia
 - Jiangshan Yu (Monash University), Dan Kim (University of Queensland), Gernot Heiser (University of New South Wales)
- Summer 2023 – Minho, Portugal (together with DSN 2023)
 - Henrique Madeira (Univ. of Coimbra), Marco Vieira (Univ. of Coimbra)
- Winter 2024 – two options being explored
 - Georgia, US – Doug Blough (Georgia Tech)
 - Brazil – Eliane Martins (UNICAMP), Andrey Brito (UFCG)
- Summer 2024 – Brisbane, Australia (together with DSN 2024)
 - Dan Dongseong Kim (Univ. of Queensland, Australia)

Winter 2023 – Melbourne, Australia



Summer 2023 – Minho, Portugal

- Most probable location: Arcos de Valdevez
- North of Portugal, one hour drive from Porto (we will have a bus)
- Great location, great food, fantastic (green 😊) wine

- Two options for dates:
 - Before DSN: June 23-26
 - After DSN: June 20-July 4



Summer 2023 – Minho, Portugal

WG Meetings: Technical Topics

- We are missing proposals for technical topics!
- Winter 2023
 - Future of Blockchains, Jiangshan Yu (Monash University, Australia)
 - Blockchain consensus and fault tolerance protocols
 - Smart contracts and decentralised applications
 - Security, privacy and trust of blockchain and decentralised applications
 - Performance and scalability of blockchain
 - Formal verification of blockchain-based systems
 - Game Theory for Security, Privacy, and Blockchain
 - Blockchain and AI
 - Blockchain in critical infrastructures



WG Meetings: Technical Topics


- Summer 2023
- Volunteers?

Virtual Workshops

- Spring 2022 – May 11th
 - Two talks: John Rushby (SRI International, US) & Phil Koopman (CMU, USA)
 - 43 attendees
- Fall 2022 – Late October
 - Date and agenda will be defined soon
- Plan is to alternate the format of the workshops
- Involve the younger members of the group
- ...

Communications and Outreach

- **Committee**
 - Institutional Knowledge
 - Chuck Weinstock, SEI
 - Rick Schlichting, Naval Academy Annapolis (retired)
 - Social Outreach, and everything else!
 - Homa Alemzadeh, University of Virginia
 - Andrea Ceccarelli, University of Florence
- **Existing WG10.4 website?**
 - It needed a refresh, but wasn't "awful" (thanks guys!)
- **Dependability issue: I was a single point of failure. The only one with "keys" to the website, capable of making changes, etc. Plus I owned the server.**
- **Decided on a combined reintegration of the IFIP WG10.4, IEEE TCFT, and DSN websites under a new dependability.org on a cloud server that is owned by the TC.**
- **Thanks to Karthik's help it is now based on WordPress allowing easy updates of news by multiple people.**

 Dependable Computing and Fault Tolerance
IFIP Working Group 10.4 on Dependable Computing and Fault Tolerance

[dependability.org](#) [TCFT](#) [WG 10.4](#) [Officers](#) [Members](#) [Laprie Award](#) [News](#) [Other](#)

IFIP Working Group 10.4

Increasingly, individuals and organizations are developing or procuring sophisticated computing systems on whose services they need to place great reliance. In differing circumstances, the focus will be on differing properties of such services — e.g., continuity, performance, real-time response, ability to avoid catastrophic failures, prevention of deliberate privacy intrusions.

The notion of **dependability**, defined as *the trustworthiness of a computing system which allows reliance to be justifiably placed on the service it delivers*, enables these various concerns to be subsumed within a single conceptual framework. Dependability thus includes as special cases such attributes as **reliability, availability, safety, security**.

The Working Group is aimed at identifying and integrating approaches, methods and techniques for specifying, designing, building, assessing, validating, operating and maintaining computer systems which should exhibit some or all of these attributes.

Recent Posts

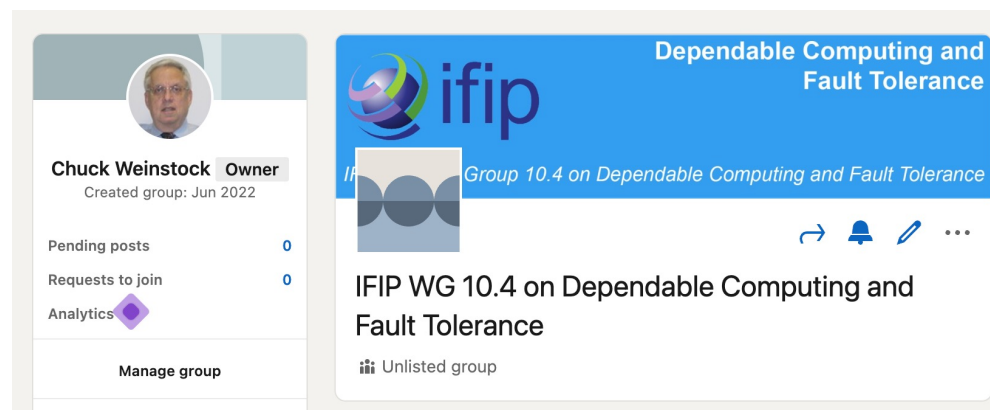
- [2022 Dependable Systems and Networks Symposium](#)
May 21, 2022
- [Miller, Fredriksen, and So win the 2022 Jean-Claude Laprie Award](#)
May 14, 2022
- [Popov and Yu Elected as New Members at Winter 2022 Meeting](#)
January 31, 2022
- [Vieira Succeeds Elnozahy as IFIP WG10.4 Chair](#)
January 25, 2022
- [Kim, Steiner, and Ceccarelli Elected New Members at Summer 2021 Meeting](#)
July 4, 2021

Archives

- [May 2022](#)
- [January 2022](#)
- [July 2021](#)
- [May 2021](#)

- DSN
 - Historic editions of DSN are either on the server or pointed to by the server
 - Current edition of DSN is pointed to by the server
- 10.4 Past Workshops are in mixed locations
 - Recent workshop slides, etc. are hosted on our server
 - Older workshop slides, etc. are hosted at LAAS
 - Proposal: consolidate all historic workshop information on the server
- Dependability.org is designed to be a community resource. We're interested in your ideas.

- For an external presence within the technical community LinkedIn seems the only reasonable venue
 - Twitter not useful: likely not enough volume of “tweets” to make it worthwhile
 - FaceBook: maybe useful as a tool for members, but not for the public for similar reasons
- How to best make use of a LinkedIn page? (WG discussion)
 - A public dialog seems important. We can discuss now briefly but please send me your thoughts.



Congratulations Al Avizienis! 😊

- Distinguished Professor Emeritus, UCLA
- Rector Emeritus, Vytautas Magnus Univ, Lithuania



Tribute to Gilles Muller ☹️

- November 17th, 2021
- In Memoriam *Giles Muller* @ DSN 2022
 - Tuesday June 28, 10:30am



Memories...

“Gilles always gave me the impression of serenity and thoughtfulness. He was a music lover too; what a great loss for our community”

“He always enjoyed sharing scientific exchanges and discussions combined with moments of conviviality and friendship. We will miss him”

“Gilles was a fantastic person, generous and always committed to his work. He made great research contributions to our community, both in scientific and human aspects”

“He always made me feel welcome, and with his *Amitiés* e-mail signature, even a bit special”

“Gilles welcomed me to the community since I was a student, always supportive and encouraging”

“He published in the best conferences and chaired the committees of many of them. He was a top researcher. Yet, he was remarkably low-key and humble, the marks of a true scholar and a gentleman.”

“Gilles came across as excellent in his work, somewhat understated, which indeed made me think ‘here is someone who knows’. He will be missed”

“I had the privilege to interact with Gilles on many occasions. As I remember it, his paper reviews were always meticulous, to the point and well balanced. I will miss him.”

Private Part!

Members only!

Obrigado

