### The Forum of Incident Response and Security Teams (FIRST)



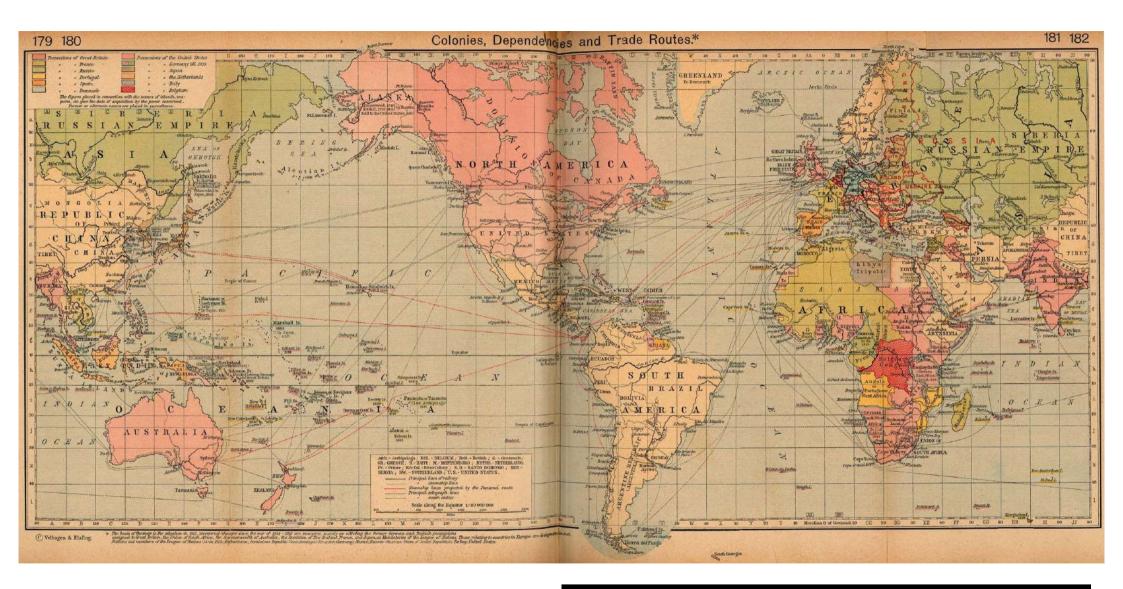
Dr. Serge Droz Chair, Board of Directors serge.droz@first.org

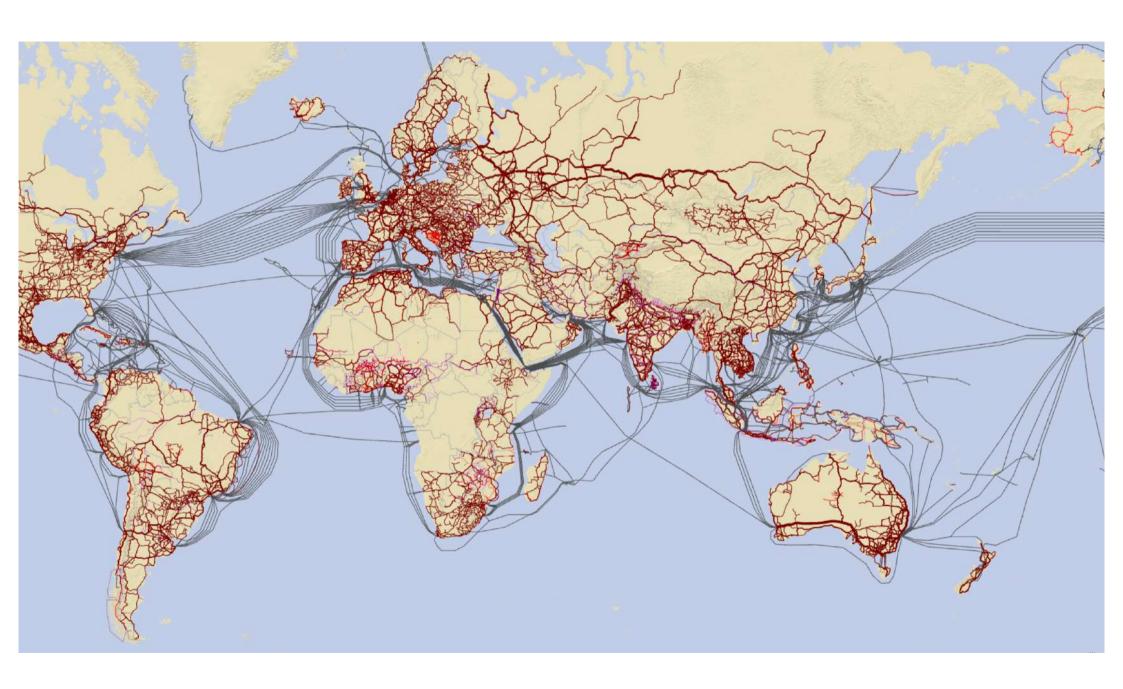
### **Agenda**



- What we want
- Introduction to FIRST
- Overview of projects and initiatives
- FIRST in 2020
- Questions and Answers







### **State of Cyberspace**



### Access to knowledge

### Collaboration

**Prosperity** 

### **State of Cyberspace**



# SUSTAINABLE DEVELOPMENT GENALS

### **Threats**



### **Criminals**

**States** 

**Disinformation** 

Hate

Surveillance

### Remedies



### Norms

### **Education**

### **Incident Response**

### Remedies



### Norms

### **GGE 2015**

(k) States should not conduct or knowingly support activity to harm the information systems of the authorized **emergency response teams** (sometimes known as computer emergency response teams or cybersecurity incident response teams) of another State. A State should not use authorized emergency response teams to engage in malicious international activity.

### Incidents are global





**Diginotar:** National Crisis in NL, Discovered by Iranian User, Reported by Germany, dependance on US, Victims in Iran

### **Trust inhibitors**



Hidden Agendas

Placing the CERT in the wrong spot

Sanctions

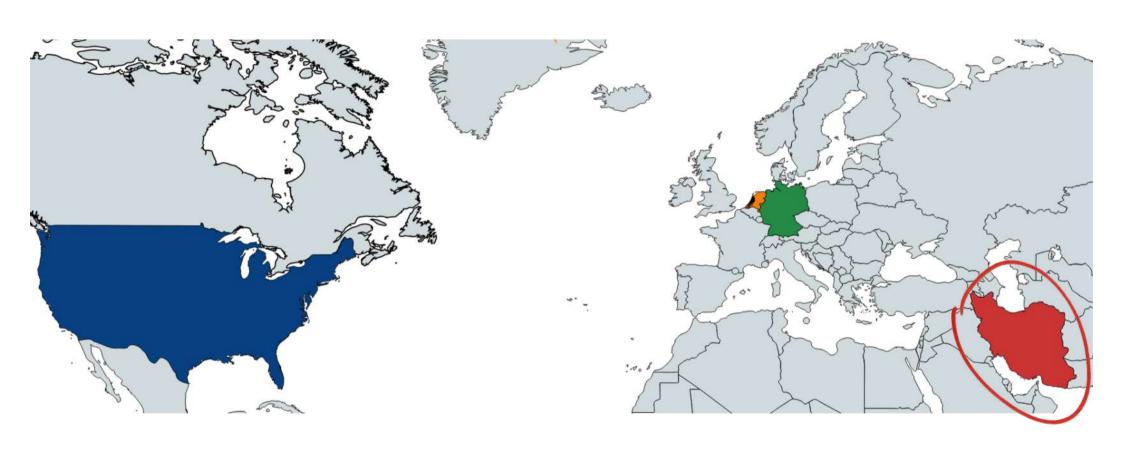
### **Trust inhibitors: Wrong spot**



(k) States should not conduct or knowingly support activity to harm the information systems of the authorized emergency response teams (sometimes known as computer emergency response teams or cybersecurity incident response teams) of another State. A State should not use authorized emergency response teams to engage in malicious international activity.

### **Trust inhibitors: Sanctions**







## 

### Who are we?



- Association of Incident Response and Security Teams
- Founded in 1989
- We enable incident responders
  - To engage with their peers
  - To have a shared understanding of security problems
  - By developing technologies and standards
  - By foster an environment conductive to their work



# FIRST's Mission



**Global Coordination:** In an emergency you can always find the teams you need to support you in our global community.



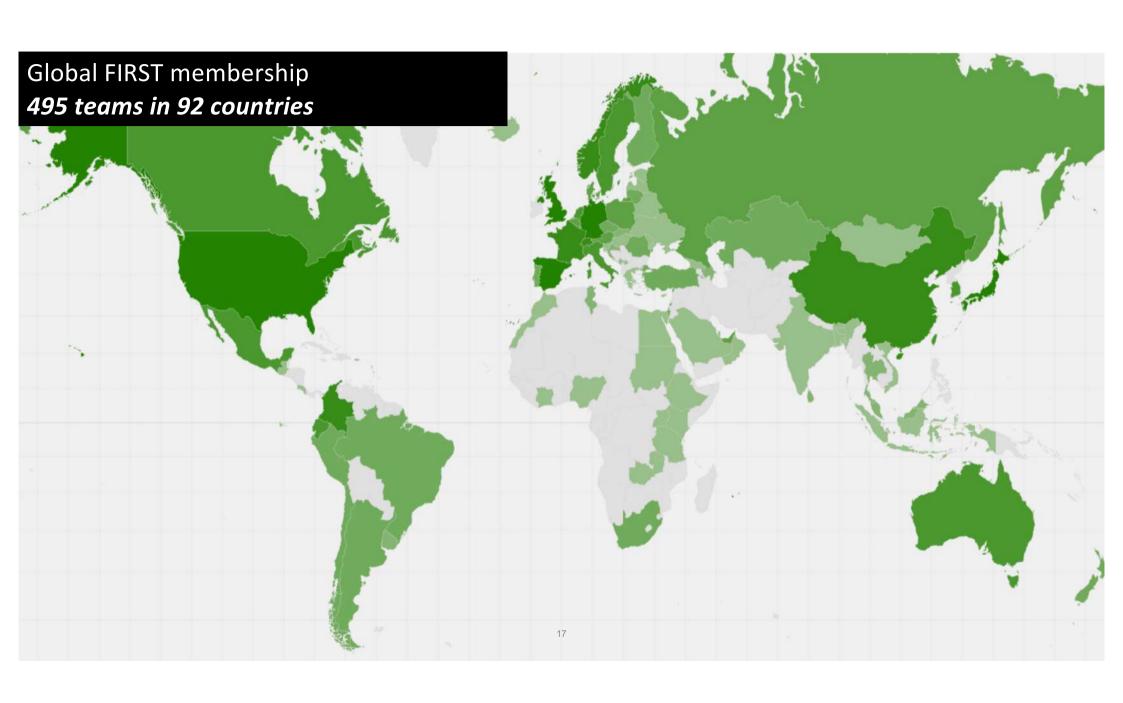
**Global Language:** Incident responders around the world speak the same language and understand each other's intents and methods.



**Automation:** Let machines do the boring calculations, so humans can focus on the hard questions.

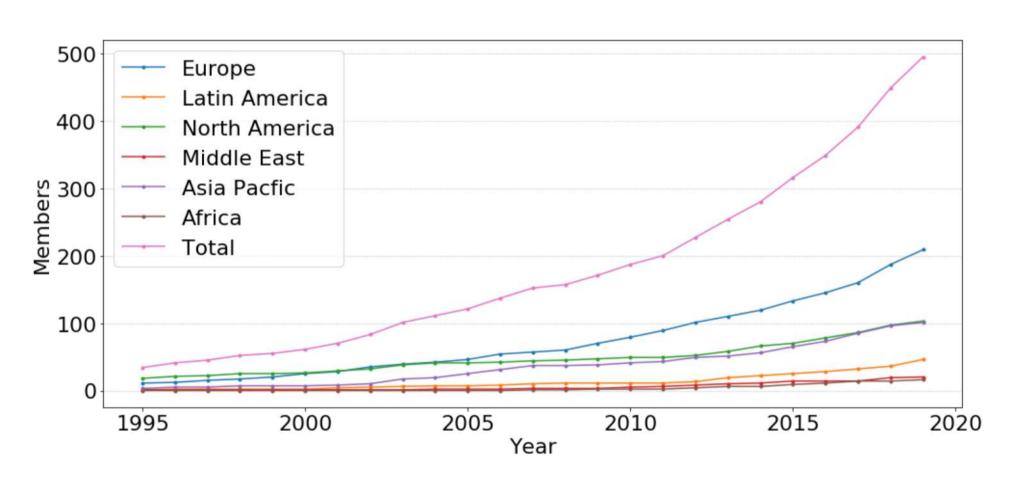


**Policy and Governance:** Make sure others understand what we do, and enable us rather than limit us.



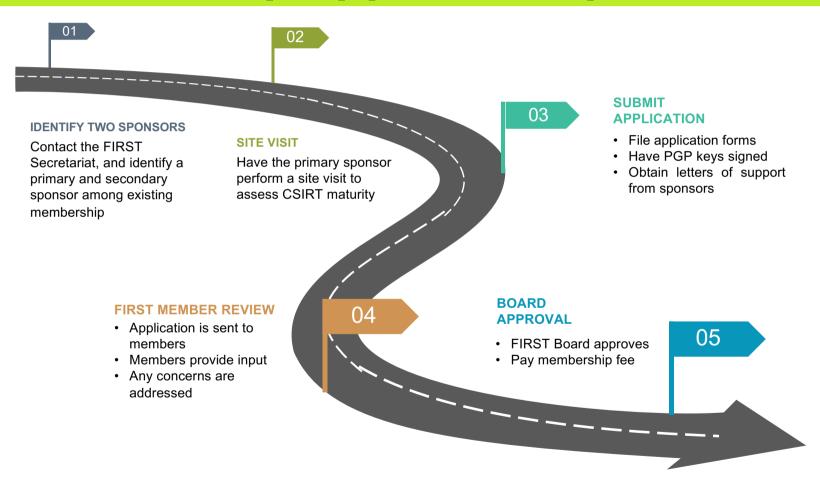
### Membership





### Membership application process





### Fellowship Program



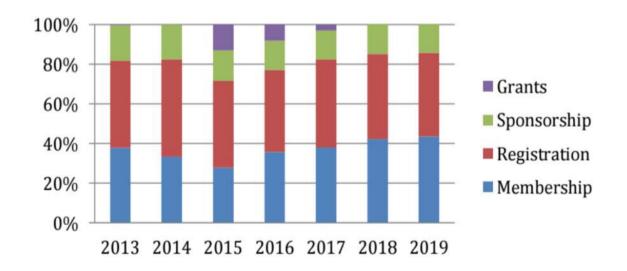
- FIRST funds participation for up to four new teams each year
- Open to CSIRTs with some level of national responsibility



### FIRST as an organisation



- Lead by a 10-person Board of Directors, elected by Members
- No headquarters, but secretariat in Chicago
- 501c3 non-profit incorporated in the United States
- Funded primarily through membership and conference fees



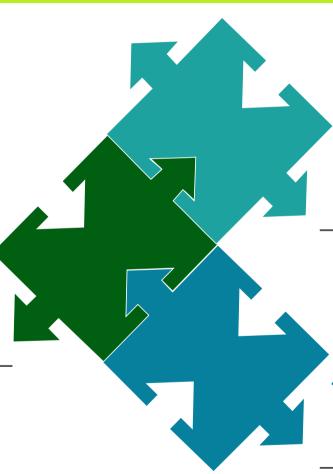
### **Events**





### **Symposia**

- Four per year
- In each major region (Africa, Europe, Latin America, Asia)
- · Hosted by FIRST and often a partner



### Conference

- Flagship event
- · Once per year, travels between regions
- ~500-800 attendees

### **Technical Colloquium**

- Organized by individual members
- National or regional event
- Typically 10-15 events per year





### **Training and Education**



- FIRST maintains a CSIRT and PSIRT Services Framework
  - Details all services typically offered by CSIRT
  - Offers a roadmap and guide for CSIRT as they expand capability
- FIRST develops training materials for individual services
  - CSIRT Fundamentals, Incident Coordination, Information Sources
  - All materials are Creative Commons licensed and available for free
- FIRST delivers training with partners and at events
  - Roster of trainer-practitioners

### **Special Interest Groups**



- Convene members around topics of common interest
- Often have a formal charter, timeline and deliverables
- Types of SIGs:
  - Working groups: Big Data, Ethics, Red Team
  - Standards groups: CVSS, IEP, TLP, Passive DNS exchange
  - Discussion groups: Vendors, Metrics, Industrial Control Systems
  - Bird of a Feather session: legal issues, specific temporary topics

### **Standards**





### Common Vulnerability Scoring System

- Scoring system for software vulnerabilities
- Allows integration of environmental factors
- Interactive training

### Traffic Light Protocol

- Allows data senders to encode how information may be distributed
- Focused on human sharing, simple to

**TLP** 

### **IEP**

### Information Exchange Protocol

- More fine grained specification of Handling, Action, Sharing and Licensing policies
- Focused on machine sharing (JSON)

### **Passive DNS**

- Enable easier sharing of passive DNS information
- Standard contributed to the IETF

### Passive DNS

### **Technical resources**



Membership database

A FIRST member database with contact information for incident responders at other members. Including PGP keys.

FIRST Incident Response Team API

Poll information on other members using a **public API**.

Malware Information Sharing Platform

Share machineparseable incident descriptions with members using the MISP platform. Mailing lists and IRC

Immediate communications channels with other FIRST members.

### **Internet Governance and Policy**



- Be a trusted security expert to the policy community
- FIRST regularly participates in policy forums, such as the Internet Governance Forum, Global Conference on Cyberspace to educate policy makers on incident response
- Lead experts to the IGF Best Practices Forum on Cybersecurity
- Help develop technology expertise and capability

### **Partners**



### Partners share our vision of a strong incident response community



















### **Program this morning**



Time	Talk	Presenter
9:00	Welcome	Serge Droz
9:30	Remediation Ballet: Choreographing your team to victory	Simon Freiberg and Jason Solomon (Google)
10:30	Integrating red teaming and CSIRT	Jordi Aguilà (e-la Caixa CSIRT, ES)
11:00	Coffee break	
11:15	A Field Guide to communicating a security incident	Izzi Lithgow (CERT NZ)
12:00	DFIR Acquisition presentation	Sam Bonanno (ACSC)
12:30	Lunch	

### Program this afternoon



Time	Talk	Presenter
13:45	The Policy Implications of Incident Response	Maarten Van Horenbeeck (Zendesk), Serge Droz (OS- CERT)
14:45	IR using Jupyter Notebooks	Serge Droz (OS-CERT)
15:15	Coffee Break	
15:30	Measuring CSIRT Maturity using SIM3	Maarten Van Horenbeeck (Zendesk)
16:00	Responding to Incidents in Industrial Environments	Hinne Hettema (Port of Auckland, NZ)
17:00	Closing remarks	Serge Droz (OS-CERT)
19:00	Networking reception - Sandy Court @ Westin Denarau Fiji Resort	

### And our training days



Wednesday, November 6th 2019	Thursday, November 7th 2019
Breach workshop 1: Cyber Extortion Adli Abdul Wahid (APCERT) Frangipani (Ballroom B)	CSIRT Basic Training - Part 1 Maarten Van Horenbeeck (Zendesk) Frangipani (Ballroom B)
Breach workshop 2: Critical Infrastructure Attack Serge Droz (OS-CERT) Gardenia (Ballroom C)	CSIRT Advanced Training - Part 2 Serge Droz (OS-CERT) Adli Wahid (APNIC) Gardenia (Ballroom C)
Malware Analysis When You're in A Hurry Hinne Hettema (Port of Auckland) Frangipani (Ballroom B)	CSIRT Basic Training - Part 1 Maarten Van Horenbeeck (Zendesk) Frangipani (Ballroom B)
CSIRT Advanced Training - Part 1 Serge Droz (OS-CERT) Adli Wahid (APNIC) Gardenia (Ballroom C)	CSIRT Advanced Training - Part 3 Serge Droz (OS-CERT) Adli Wahid (APNIC) Gardenia (Ballroom C)

### Reception





## Coco Palms 7-9pm

### This could be the beginning ...









### **Questions?**

first-sec@first.org https://www.first.org