

U.S. Department of Homeland Security (DHS)

Professionalizing the Field of Cybersecurity Incident Response

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Who am I?



Member of US-CERT since 2007

- + Served as a Network Analyst, Senior Watch Officer, and Chief of Communications
- + Led the implementation of Traffic Light Protocol (TLP) across US-CERT's entire product line beginning in 2011
- + Supported initial conception and development of the Structured Threat Information eXchange (STIX) and Trusted Automated eXchange of Indicator Information (TAXII)

Currently assigned as a Technical Advisor to the Under Secretary of the National Protection and Programs Directorate in DHS

Co-chair of the FIRST Traffic Light Protocol SIG and FIRST Ethics SIG

Professionalization: What it Means

“To make an activity into a job that requires specialized education, training or skill”*

Professions are more than just specialized work, however. Consider:

- + Doctors
- + Nurses
- + Lawyers
- + Accountants

All of these fields have another thing in common besides specialized knowledge. They require, and provide, trust and confidence.

* (from <http://www.learnersdictionary.com/definition/professionalize>)



Building Blocks of a Profession

“A profession relies on **specialized knowledge and skills that require a long period of study;**

The occupational group **has a monopoly on the carrying out of the occupation;**

The assessment of whether the professional work is **carried out in a competent way is done by, and it is accepted that this can only be done by, professional peers;**

A profession provides society with products, services or values that are useful or worthwhile for society, and is **characterized by an ideal of serving society;**

The daily practice of professional work is **regulated by ethical standards, which are derived from or relate to the society-serving ideal of the profession.”***

*<https://plato.stanford.edu/entries/technology/>



From Here to Professionalization: Gap Analysis



Current certification and education schemes are “in the middle” - technical, vocational training, tests of overall knowledge, some with limited codes of conduct.

We may need a range of certifications, academic / educational tracks, and associations - similar to nurses and surgeons, or global, management and public accountants, or regional / local bar associations.

Regardless, **we need to acknowledge the society-serving ideal of our career field**, and that must be reflected in our ethics and conduct.

What, Who, How? When AND Where?

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- ▶ An accreditation system of peers is necessary, and it has to start somewhere.
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- ▶ A diverse coalition of experienced and respected members of the field is also necessary
 - + it will also be necessary for them to agree on things (yes, I know)
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- ▶ Organizational and funding models have to be sorted out, but should not come before the principles and long-term goals of the field.
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- ▶ The time is **NOW** - the technical has become political, and our field is lacking a unified voice in matters that affect our work (another thing that professional associations can do).
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- ▶ “Where” - choosing the forum or venue in which to do this work - is up to us.
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