

# **PROPOSAL TO SIGSAC**

## **A New Annual ACM Conference on Data and Application Security and Privacy (CODASPY)**

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This proposal is based on discussions with a number of fellow cyber security researchers and the enthusiastic encouragement I have received from them to pursue it. The proposal is to create a new annual SIGSAC-sponsored ACM Conference on Data and Application Security and Privacy (CODASPY). This note lays out the context and rationale for this new conference.

### **PROPOSAL SYNOPSIS**

*Conference name:* ACM Conference on Data and Application Security and Privacy (CODASPY)

*Sponsorship:* 100% SIGSAC (with possible in-cooperation with other entities)

*Dates:* Annually in roughly the February timeframe

*Location:* Warmer regions of USA (international locations may be considered eventually)

*Inaugural Conference:* February 2011 in San Antonio, Texas

*Event Format:* 2 ½ day conference, single-track, initially no add-on events (i.e. tutorials, workshops, etc.)

*Timeline:* Announce at 2009 ACM CCS conference Nov. 9-13, CFP published concurrently or soon after

### **ACM CONTEXT**

High-quality conferences continue to play a major role in all aspects of Computer Science research. As specialized areas such as cyber security mature and grow it is inevitable that new conferences will be needed to accommodate the growth in high-quality research. Newer conferences are likely to focus on sub-areas within the bigger discipline as opposed to covering the entire breadth of the field. High-quality conferences are essential to the ACM brand and to its Digital Library. Hence growth in conferences is inevitable and in ACM's interest. The growth is ultimately self-limiting since there are only so many slots to position new conferences in an already crowded annual calendar. Workable time slots in the high growth areas of Computer Science are likely to be soon exhausted.

### **SIGSAC CONTEXT**

SIGSAC's stated mission is "to develop the information security profession by sponsoring high quality research conferences and workshops." To this end SIGSAC currently offers a strong suite of annual conferences.

1. ACM CCS + workshops: the all topic flagship conference, Oct-Nov timeframe, founded 1993
2. ACM AsiaCCS: the all topic Asia-Pac conference, Mar-Apr timeframe, founded 2006
3. ACM SACMAT: the access control conference, June timeframe, founded 1995
4. ACM WiSEC: the wireless security conference, Mar-Apr timeframe, founded 2008

These conferences are all highly regarded and generate high-quality content for ACM's Digital Library. The events themselves return a respectable profit to ACM and SIGSAC but even more so produce hits in the Digital Library which produce revenue for ACM and SIGSAC. Consequently SIGSAC has built up a strong reserve fund. As a healthy and successful SIG it is well positioned to take on additional initiatives as opportunities arise.

### **CYBER SECURITY CONTEXT**

Cyber security is a growing field within Computer Science. Its importance is recognized at the highest levels of national and corporate leadership. With the rapid global penetration of the Internet and cell phones and the resulting productivity gains the world is becoming increasingly dependent on its cyber infrastructure. However, criminals, spies and predators of all kinds have learnt to exploit this landscape perhaps even quicker than defenders have advanced in their technologies. Security and Privacy has become an essential concern of new applications and systems as they are deployed. Security concerns have moved up the software stack over time. The importance of long established sub-fields of cyber security such as operating system security, database management systems security, network security and cryptography continues, and is likely to continue indefinitely, even as advances are made. In recent years there has been increasing awareness amongst security researchers and practitioners that there are significant security problems at the application and data layer that need to be researched. Hence the proposal for CODASPY.

### **RELATIONSHIP TO EXISTING SIGSAC CONFERENCES**

The topic of the proposed conference obviously overlaps the two all-topic SIGSAC conferences, CCS and AsiaCCS. These conferences are very competitive (CCS particularly so) and even between them can hardly accommodate a couple of sessions specific to Data and Application Security and Privacy (DASPY). CCS includes an annual workshop WPES on Privacy in the Electronic Society. WPES is focused on Privacy and does not directly consider the bigger picture of Security, so it has only a limited overlap with the proposed CODASPY. Further, it is limited to just one day. Likewise SACMAT's focus is on access control models and technologies and accommodates only a limited number of papers dealing specifically with application concerns. WiSEC has essentially no overlap with CODASPY. While CODASPY will no doubt attract a subset of authors and attendees from existing SIGSAC conferences, it is anticipated that a significant number of new researchers who are not yet actively engaged with SIGSAC will be attracted to CODASPY.

### **RELATIONSHIP TO EXISTING NON-SIGSAC CONFERENCES**

There are two non-SIGSAC conferences that focus on security whose names suggest overlap with CODASPY. (I should mention I have served as Program Chair for both these conferences and have frequently published and presented in these venues so I speak with some familiarity.) Neither has the brand name of ACM or IEEE attached to it. Partly because of that fact they tend to be viewed as being

lower-tier than ACM or IEEE conferences. The bigger of these is the Annual Computer Security Applications Conference (ACSAC) held in the early Dec timeframe and celebrating its 25<sup>th</sup> anniversary this year. ACSAC Proceedings are published by IEEE, but it is not IEEE sponsored. ACSAC is properly viewed as an all-topic conference with more emphasis on applied rather than theory. For instance, it typically includes papers on Intrusion Detection and Malware Detection using network-based techniques and papers on Certification and Accreditation practice. A quick look at their programs will show that most papers are out of scope for the DASPY topic. The second and smaller one is the Annual IFIP WG 11.3 Working Conference on Data and Applications Security held in the Jul-Aug timeframe founded in 1987. This conference clearly overlaps CODASPY. However, it is not an ACM property and as such should not necessarily exclude ACM presence in this topic area. It is generally accepted that the IFIP brand name includes many conferences of lower standard than ACM or IEEE, which thereby realistically bounds the reputation that an IFIP branded conference can gain, regardless of the intrinsic quality of that specific conference. As argued above DASPY is an expanding area and deserving of an ACM branded conference. It is an area where SIGSAC should establish its leadership. Note that the suggested timeframe of Feb versus July-Aug puts maximal separation between these two events. The creation of CODASPY will grow the overall area and paradoxically may actually benefit the existing IFIP 11.3 event by drawing more attention, credibility and interest to this area.

#### **RELATIONSHIP TO EXISTING CONFERENCES IN THE DATABASE AREA**

There are several major database conferences that publish papers related to DASPY, e.g. ACM SIGMOD Conference, VLDB Conference, IEEE ICDE. However these conferences publish very few DASPY papers; for example, ICDE 2010 received about 40 submissions in the security area and only accepted 5 regular research papers. Other conferences have shown similar trends. In recent years most papers accepted to these conferences mainly focus on data anonymization issues and in most cases PC of these conferences do not include many reviewers who are expert on DASPY. Leadership for DASPY should properly be anchored in SIGSAC.

#### **RATIONALE FOR PROPOSAL**

The foregoing establishes the opportunity for ACM and SIGSAC to continue building its strong reputation in the cyber security field by means of establishing CODASPY. The CODASPY proposal comes from a seasoned veteran and leader of SIGSAC (past Chairman, co-founder of CCS, co-founder of SACMAT, founding EIC of ACM TISSEC). As a volunteer initiated proposal this presents an excellent opportunity for SIGSAC. With respect to the details, the time frame of Feb is proposed to avoid conflict with the existing SIGSAC conferences and related non-SIGSAC conferences. In the Feb timeframe it would be advisable to locate in the warmer areas of the USA. San Antonio in particular is a terrific city for the inaugural offering. It is well-connected by air and has relatively lower cost. Also there is strong interest in cyber security in the local community. Texas universities in Austin, Dallas, Arlington, Denton, College Station and Houston are active in cyber security research. The Air Force cyber command is located in San Antonio as are numerous other military and intelligence operations. The city has a number of corporations, banks and insurance companies representing the commercial sector. Last but not least February is a balmy month in South Texas.