ABAC Panel

Prof. Ravi Sandhu
Executive Director and Endowed Chair

ACM Workshop on Attribute-Based Access Control
March 24, 2017, Scottsdale, AZ

ravi.sandhu@utsa.edu
www.profsandhu.com
www.ics.utsa.edu
1. What do you see as the need for ABAC in practice?
   Automation, Adaptability, Analytics, Anonymity

2. What ABAC issues, if any, have been well-studied and addressed by our community?
   Foundational understanding

3. What challenges remain?
   Adoption

4. How can academia, industry and NIST engage effectively?
   Develop consensus, e.g., XACML ≠ ABAC
The 4 A’s

- Automation
- Adaptability
- Analytics (Review)
- Anonymity (Privacy)
Foundational Understanding

Discretionary Access Control (DAC), 1970

Mandatory Access Control (MAC), 1970

Role Based Access Control (RBAC), 1995

Attribute Based Access Control (ABAC), ????

Relationship Based Access Control (ReBAC), ????
Historically, industry has built access control mechanisms that are:
- Mathematically incomprehensible
- Lack rigorous foundations
- Are over-featured
- Are under-utilized

Can this be changed? How do we make it to 5 A’s?
Maybe start with some elementary issues, e.g.,
- XACML ≠ ABAC
- User-Subject distinction is fundamental
1. What do you see as the need for ABAC in practice? Automation, Adaptability, Analytics, Anonymity

2. What ABAC issues, if any, have been well-studied and addressed by our community? Foundational understanding

3. What challenges remain? Adoption

4. How can academia, industry and NIST engage effectively? Develop consensus, e.g., XACML ≠ ABAC