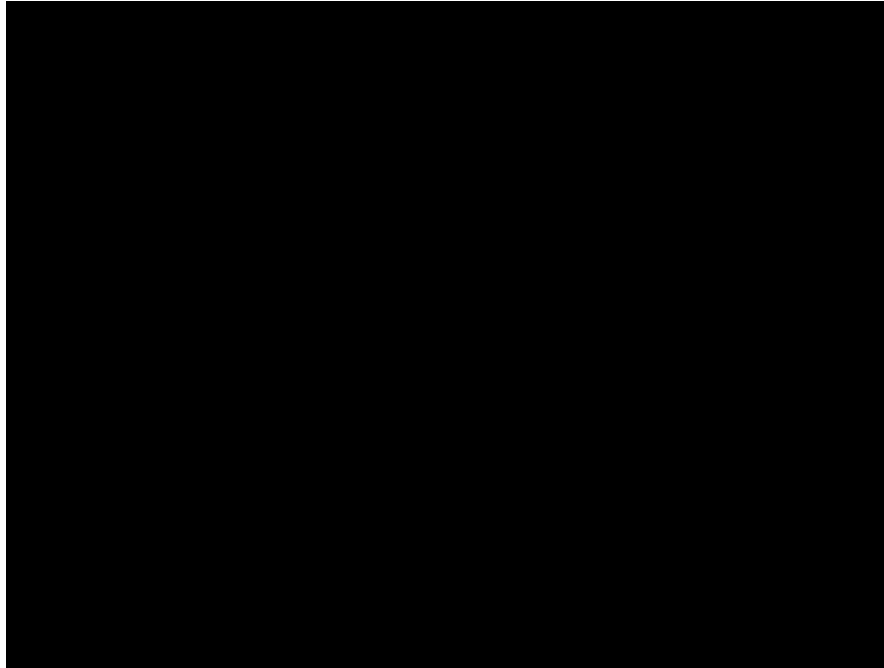


It May Be Simple But How Is It Useful *Smack Me Now!*

Michael Demeter
Casey Schaufler

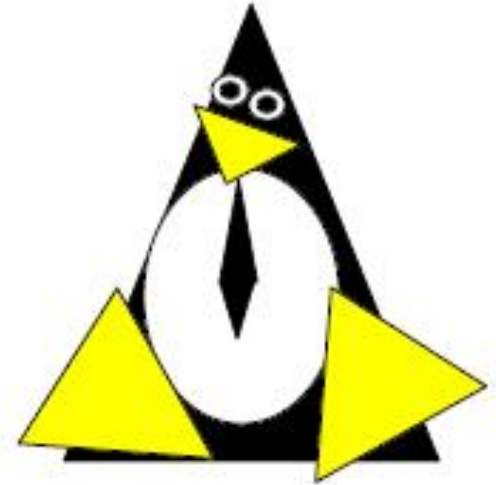
TIZEN[™]
**DEVELOPER
CONFERENCE**
2013
SAN FRANCISCO

Smack Me Now



Simplified Mandatory Access Control Kernel

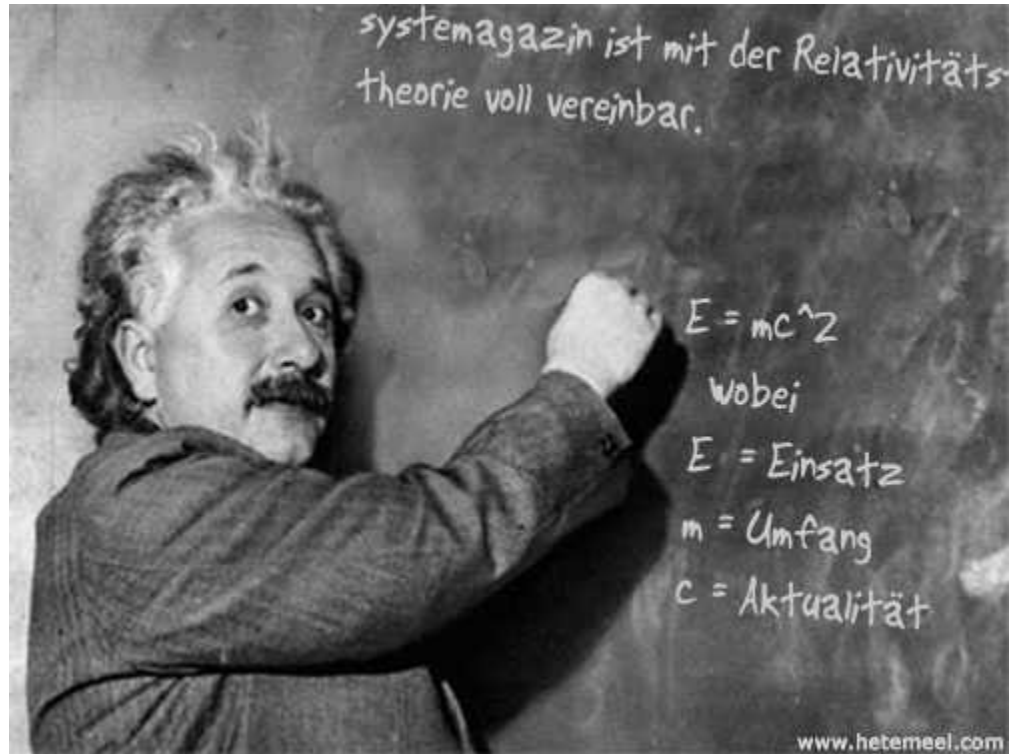
- **Mainline Linux since 2008**
- **Standard in Tizen**



Basic Rule

- **What' s mine is mine**
- **What' s yours is yours**

***“Everything Should Be Made
as Simple as Possible, But
Not Simpler”***



Isolation Is Easy



Sharing Is Hard



How Does An Application Get Its Smack Label?

- `/proc/self/attr/current`
- `SMACK64EXEC`

Privilege

- **Linux capabilities**
- **cap_mac_override**
- **cap_mac_admin**

Domains

- All processes labeled **Mike**
- All files labeled **Mike**

Access Rules

- **Process Smack label**
- **Smack label on the thing**
- **What kind of access**

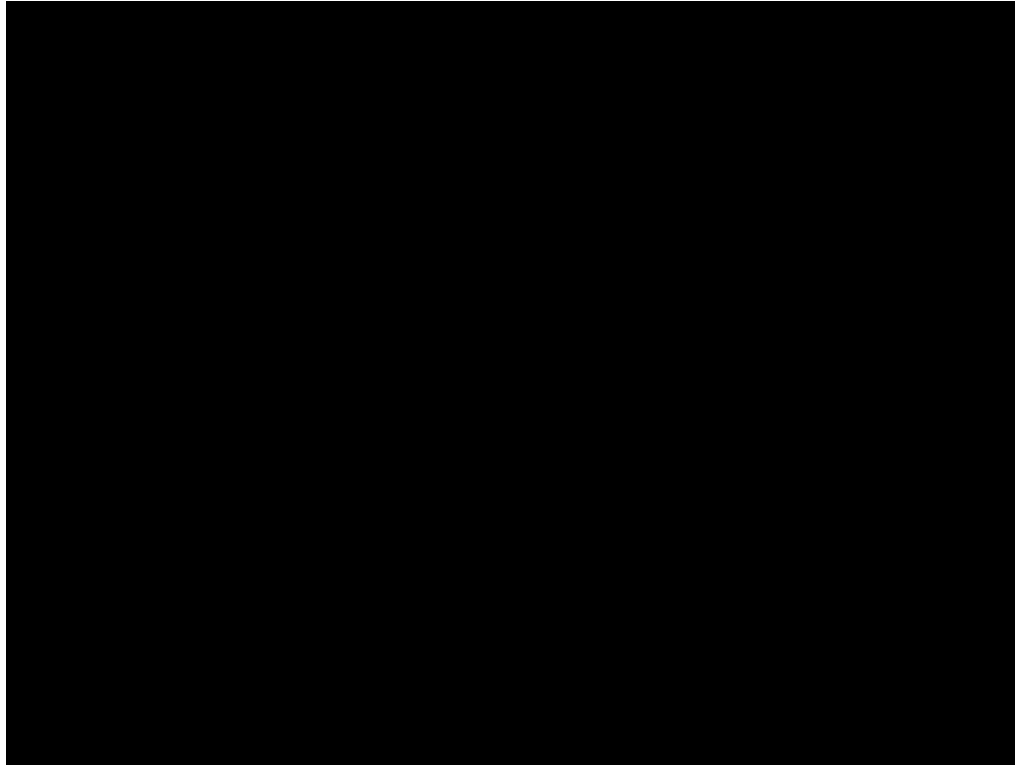
How Files Work

- You can't change what you can't see
- Read or execute access to look and see
- Write or append access to change

How Communications Work

- **Messages need write access**

You have the ingredients



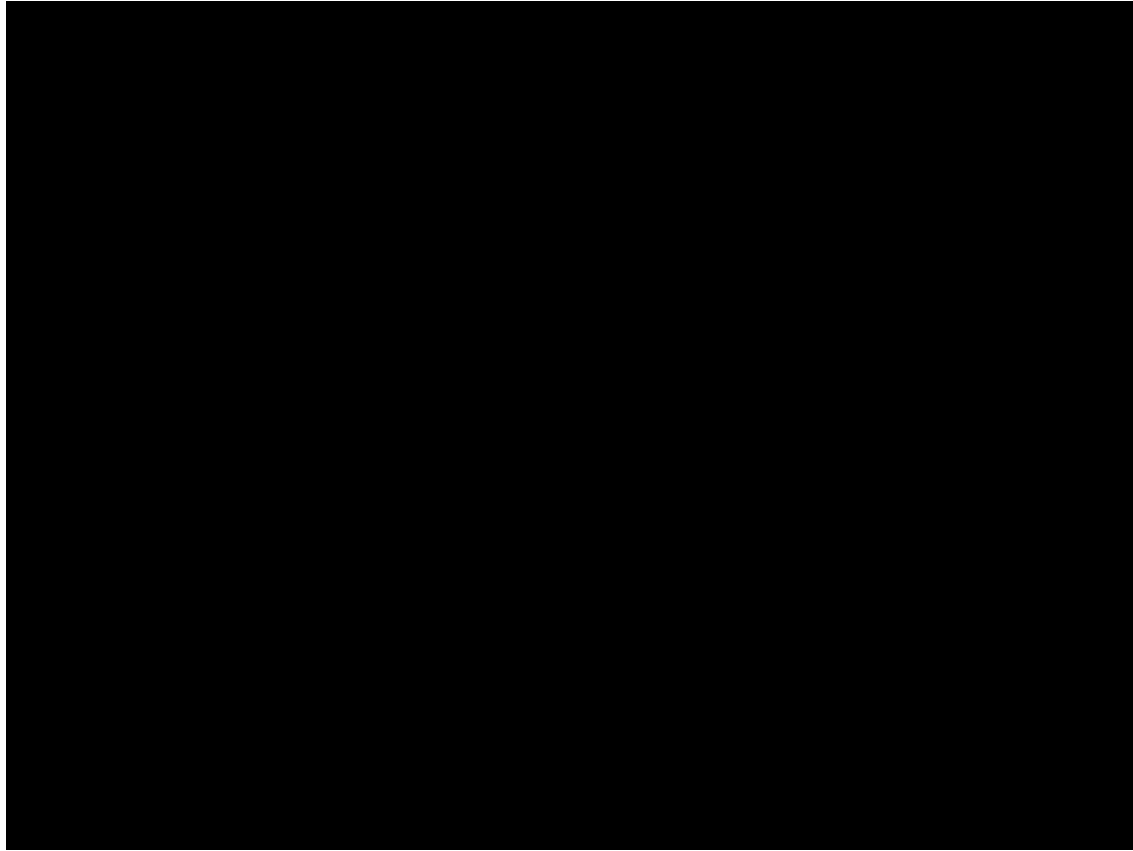
Domain Granularity



**“You
security
people
are
insane!”**



Finally ...





TIZEN™

**DEVELOPER
CONFERENCE**

2013

SAN FRANCISCO