

# Access Control Policy Mining and Management



## Challenge:

- Access control policies are increasingly large, complex, decentralized, and dynamic.
- Administrators need better tools that help them develop correct policies.

## Solution:

- **Policy mining** algorithms that produce high-level policies from low-level policies or logs, with attribute data.
- **Verification** algorithms to check safety of access control policies and administrative policies.

## Scientific Impact:

- Improved techniques for **developing** and **administering** attribute-based and relationship-based access control policies.

## Broader Impact:

- **Facilitate adoption** of flexible access control models that promote security and information sharing.
- **Reduce cost** of policy development, and **increase confidence** in policy correctness.

