



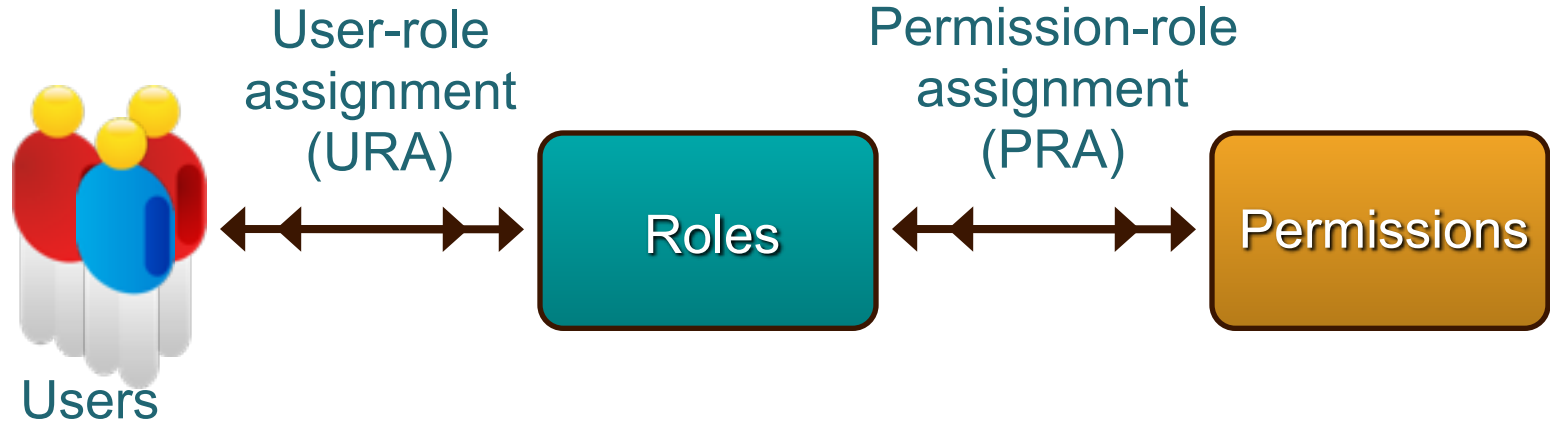
Week 3

Role-Based Access Control Models (RBAC)

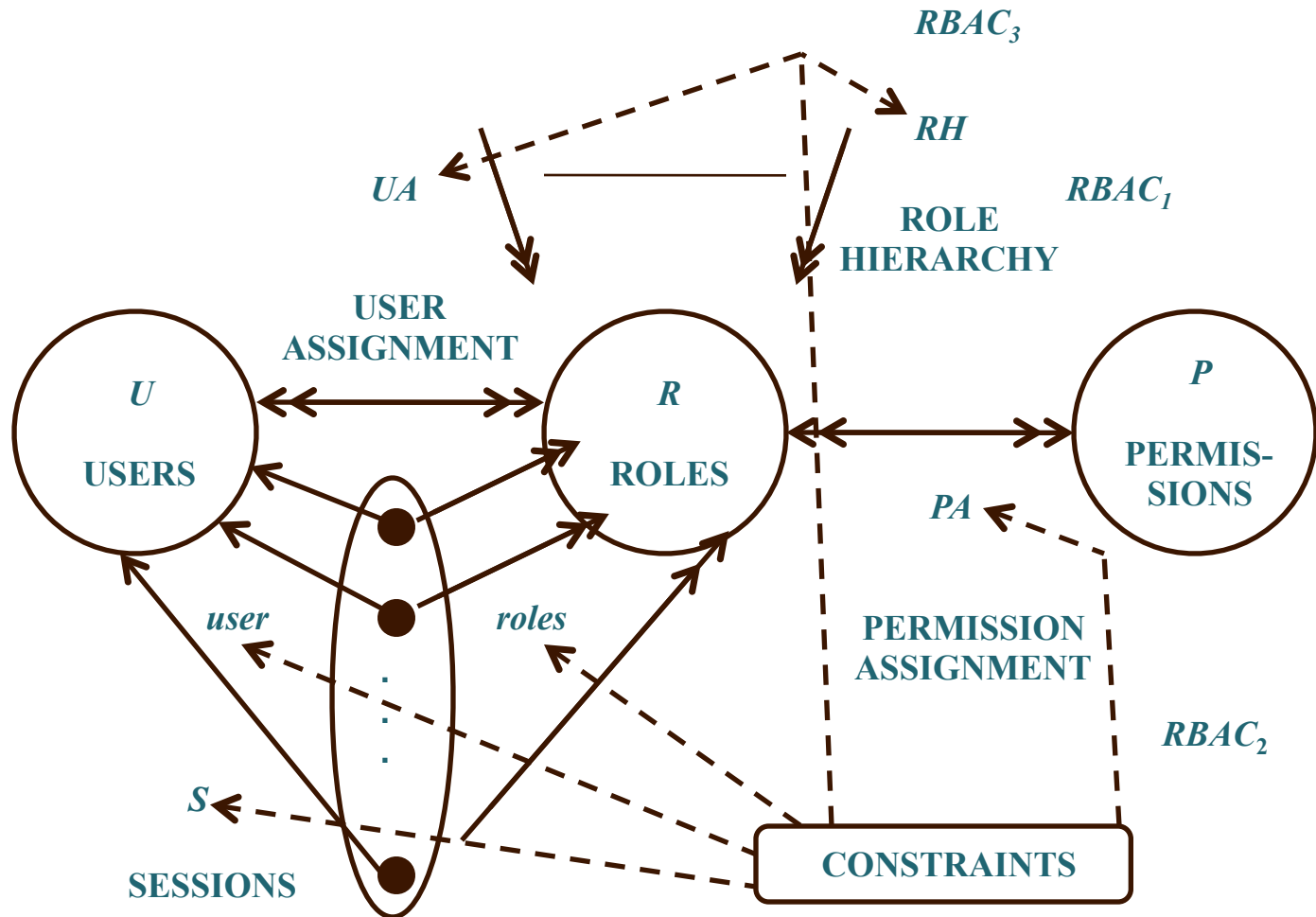
RBAC Model (Sandhu, 1996)

- Permissions are associated with roles, and users are assigned to appropriate roles, thereby acquiring the roles' permissions
- Facilitates
 - Administration of permissions
 - Articulation of policy
 - Potential for reducing the complexity, cost, and errors of security administration

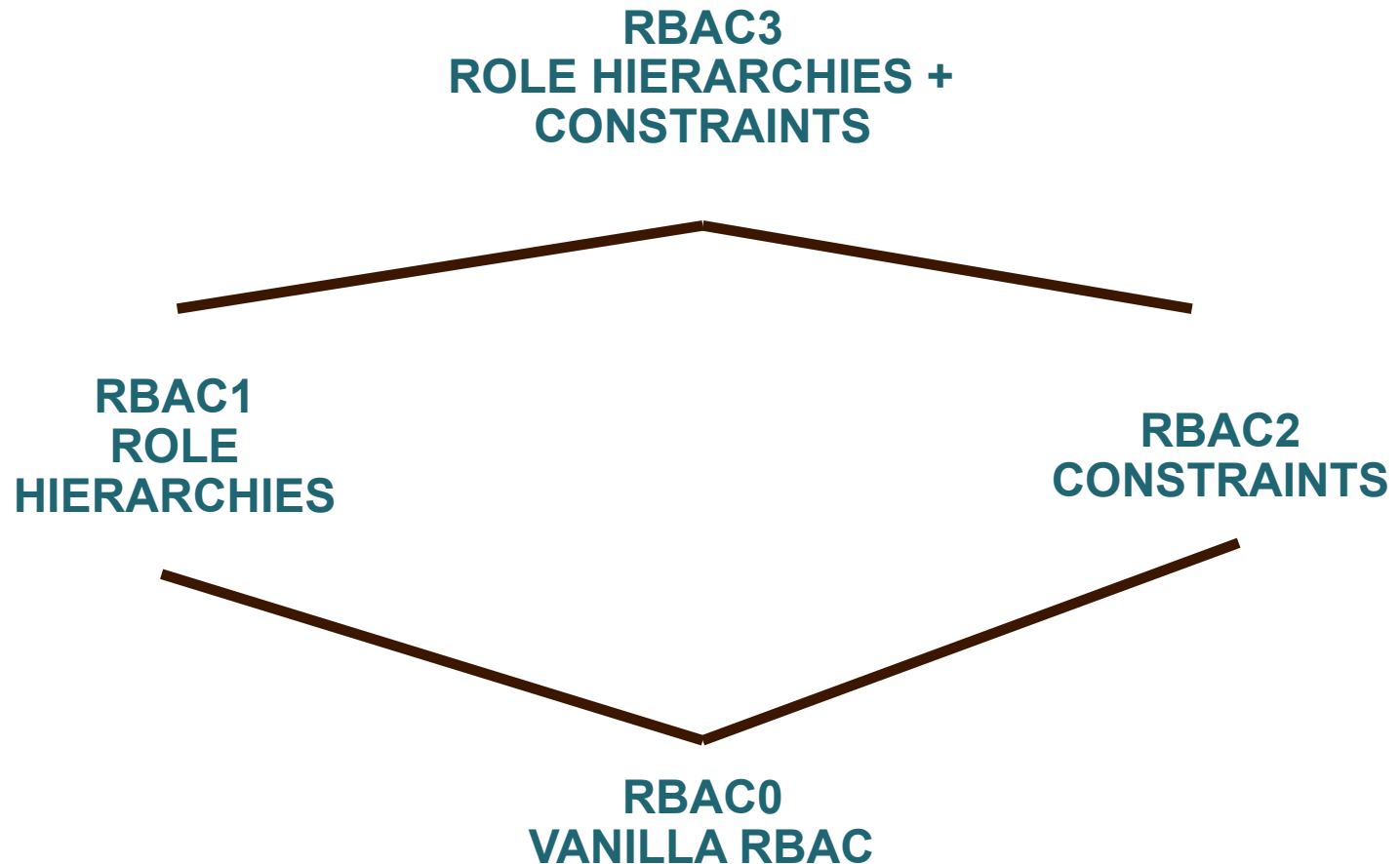
A Simplified RBAC Model



A Family of RBAC Models



RBAC96 FAMILY



RBAC

- Policy neutral
- Policy oriented
 - Least privilege
 - Separation of duties
 - Encapsulation of primitive permissions
- Ranges from simple to sophisticated
 - RBAC0, RBAC1, RBAC2, RBAC3



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