Identity Management For Your Home Lab

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Identity Management (IdM)
redhat.

What is Identity Management

Identity management (IdM) describes the management of individual principals, their authentication, authorization, and privileges within or across system and enterprise boundaries with the goal of increasing security and productivity while decreasing cost, downtime and repetitive tasks

What is Identity Management

- Identities: Where are users stored, what properties do they have and what is exposed to systems
- Authentication: How do I authenticate? Passwords? Smart cards?
- Access Control: Who can access what resources?
- Policies: Passwords? Automount rules? Kerberos?

Common Identity Management Solutions

Samba Winbind & Samba DC

- Can involve binding to Active Directory
- UID/GID can be randomized as they are assigned by Winbind
- Can be very slow
- Flaky, non-native solution

Active Directory

- Great for centralization and policy enforcement
- Industry standard
- Auditors trust it
- Windows only native integration

LDAP

- Very robust and configurable
- Unix standard
- Linux/Unix native
- Takes knowledge to maintain
- Very few people know how

Directory Servers

- Little more restrictive
- Very flexible
- Reliable
- Takes knowledge to maintain
- Does not handle policies, certificates, key management etc


Red Hat IdM
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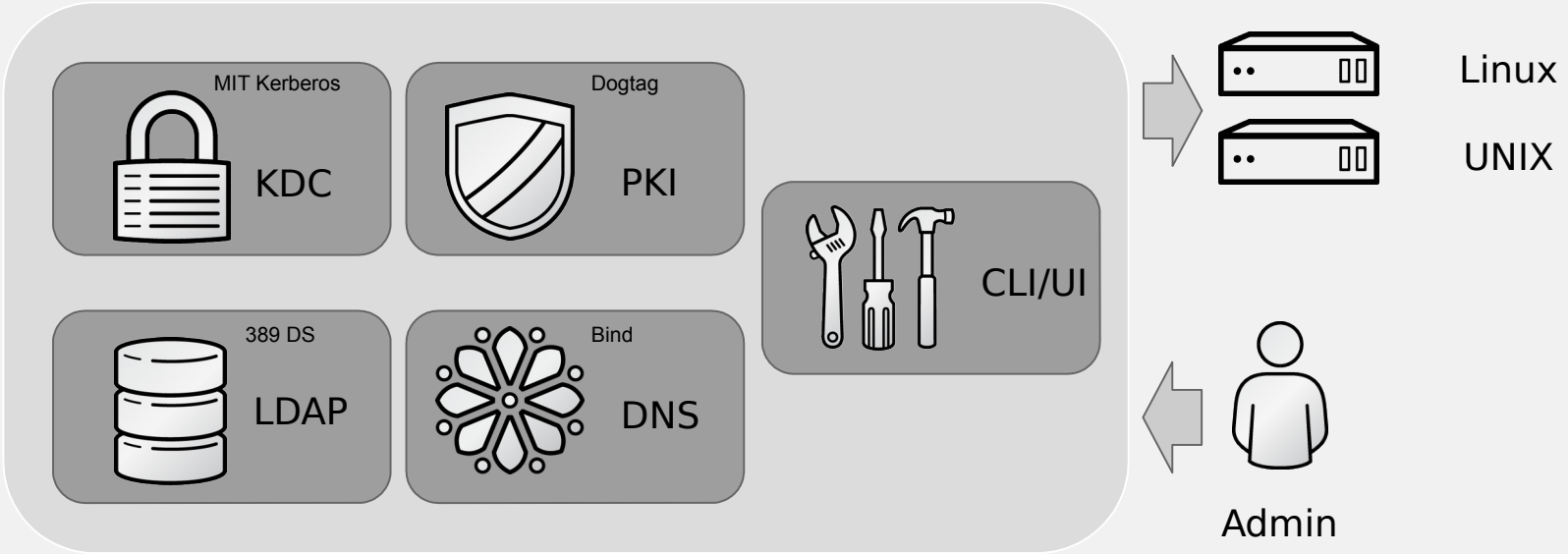
Intro to IdM

- IdM – Identity Management in Red Hat Enterprise Linux
- Based on FreeIPA open source technology
- IPA stands for Identity, Policy, Audit
  - Focused on identities and related policies
  - A separate project is ongoing in the audit space
- Built into operating system - comes with RHEL subscription

FreeIPA/IdM

High Level Architecture



What Does IdM Do?

- Central auth via kerberos/LDAP
- User lifecycle management
- Central user management (including groups, hosts and host groups)
- Central SUDO management

What Does IdM Do?

- Central SSH Key Management/distribution
- SELinux User Mapping
- DNS management
- 2FA
- Central key store


Let’s Take A Look