

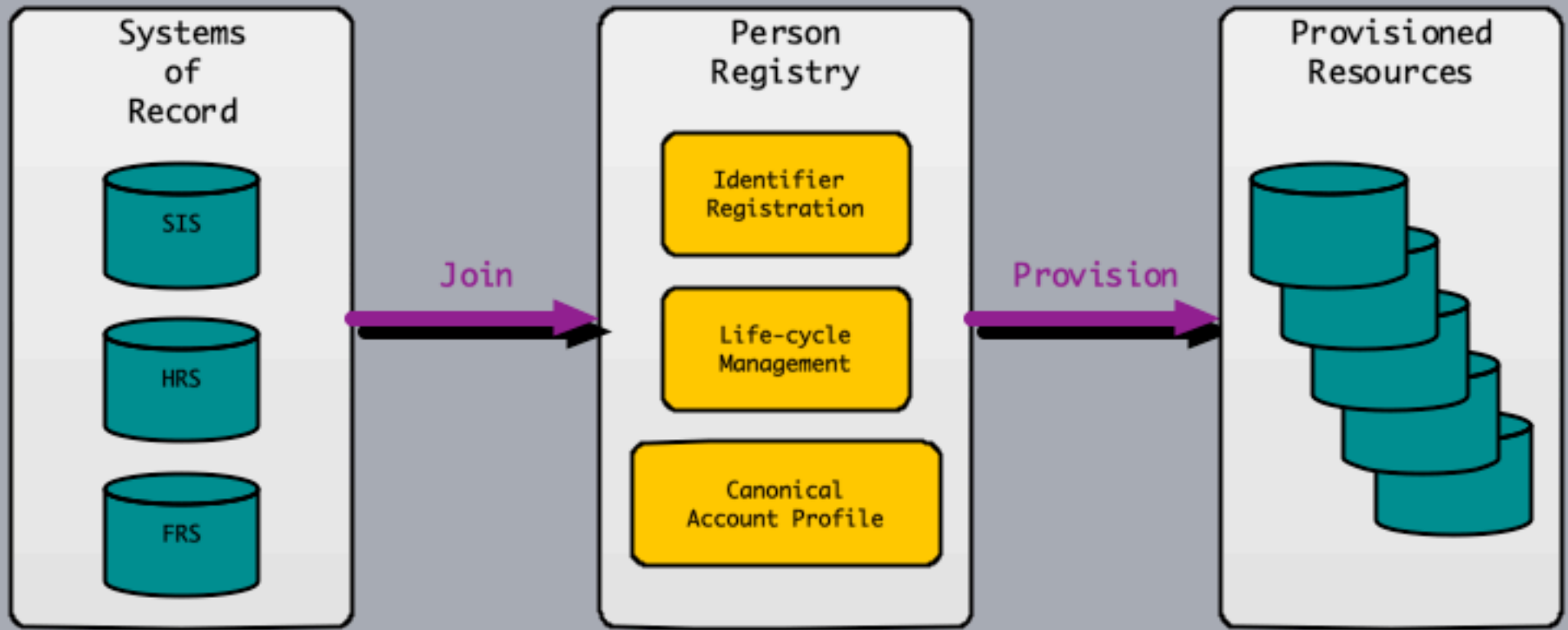
Nexus Provisioning System

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IdM at the U of M

- Central person registry
 - Life-cycle management
 - Identifier registration
 - Account profiles
- Multiple authoritative business systems
- Ever growing host of managed resources

IdM Architecture



Challenges

- Difficult to maintain
- Expanding list of managed resources
- Outdated technology
- New ERP
- Expanding customer base

Evolution vs. Revolution

- Validate approach along the way
- Realize the benefits sooner
- Avoid extended design process
- Ease the pain of conversion

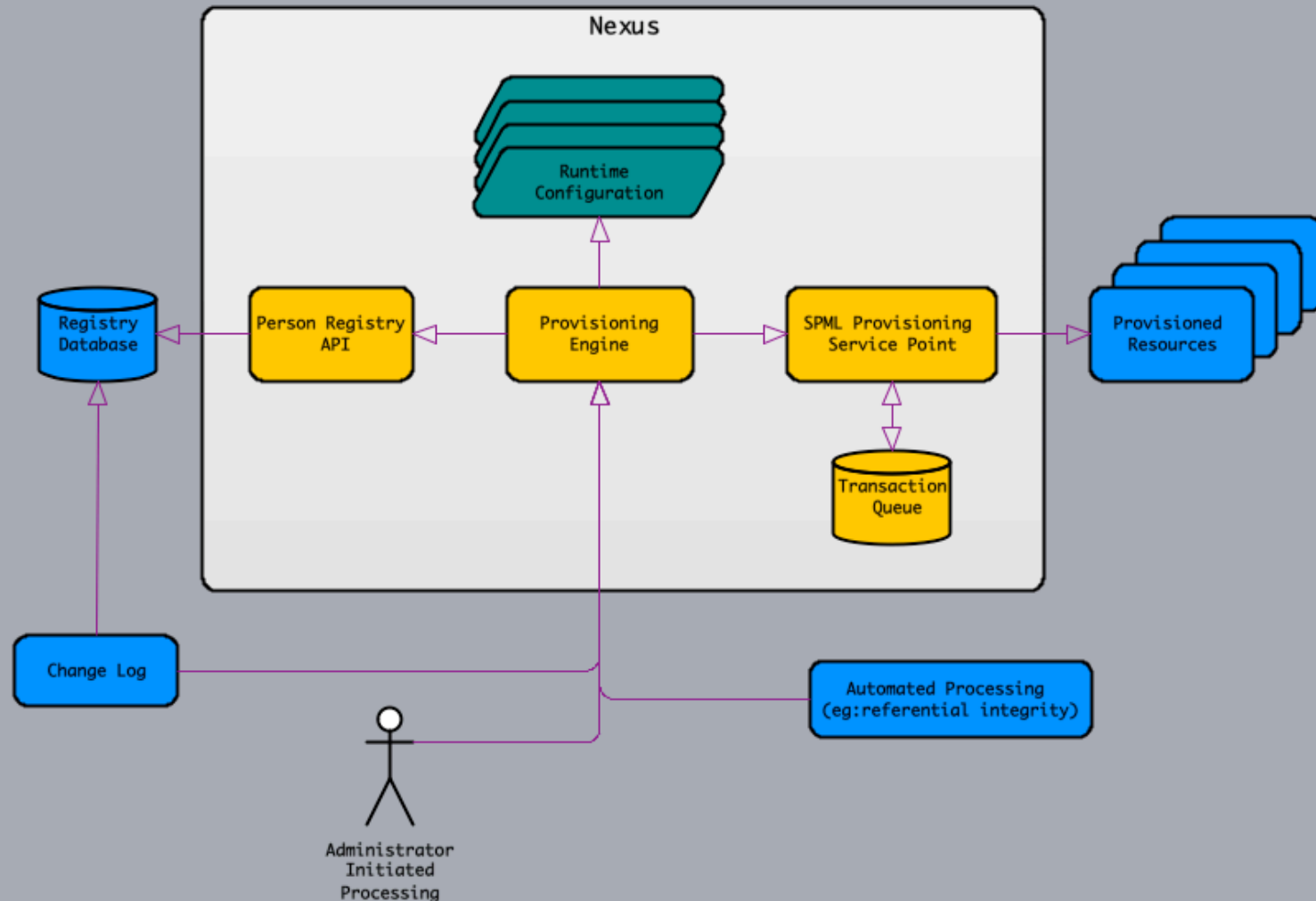
Strategy

- Three discreet design & development phases
 - Phase 1: Provisioning
 - Phase 2: Registry
 - Phase 3: Join
- We are currently about 2/3 through phase 1

Basic Requirements

- Robust technologies
- Resource connector API
- Timely updates to consumer systems
- Resource integrity verification
- Change Management / Component Testing
- Administrative interfaces

Nexus Architecture



Nexus Features

- Runtime configuration (mapping logic)
- Single engine
- Integrity verification / repair
- Dependency analysis
- Abstract consumer interface (SPML)
- Robust queueing

Provisioning Configuration

```
<ProvisioningConfiguration
    xmlns="urn:mace:memphis.edu:idmanagement:provisioning">
  <!-- Declare all registry attributes -->
  <RegistryAttribute id="accountState" />
  <RegistryAttribute id="username" />
  <RegistryAttribute id="nick" />
  <!-- Declare each resource that is managed by Nexus -->
  <ProvisionedResource
    id="urn:mace:memphis.edu:IDM:provisioning:resource:enterpriseDS">
    <ProvisioningControl />
    <IdentifierMapping />
    <ProvisionedAttribute id="nickName" />
  </ProvisionedResource>
</ProvisioningConfiguration>
```

Provisioning Configuration (cont.)

```
<ProvisionedResource
    id="urn:mace:memphis.edu:IDM:provisioning:resource:enterpriseDS">
  <ProvisioningControl>
    <RegistryDependency id="accountState" />
    <Scriptlet>return ProvisioningStatus.ENABLED;</Scriptlet>
  </ProvisioningControl>

  <IdentifierMapping>
    <RegistryDependency id="username" />
  </IdentifierMapping>
  <!-- Mapping rules for each attribute -->
  <ProvisionedAttribute id="nickName" />
    <RegistryDependency id="nick" />
  </ProvisionedAttribute>
</ProvisionedResource>
```

Benefits of runtime configuration

- Clearer data relationships
- Re-use
- Change management

Nexus command modes

Daemon

Show

Verify

Repair

Nexus Provisioning System

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