# Module XX – Legacy Compatibility Capsule

Version: 4.1 | Classification: CTO Mandatory (Legacy Interoperability & Policy Mapping)

Scope: Capsule adaptation for legacy IAM, audit systems, and rule-based infrastructures

## 0. Purpose & Migration Relevance

This module defines how legacy systems (e.g. SSO, policy engines, audit pipelines, SIEM tools) can be adapted to the MaxOneOpen capsule architecture. It provides mapping profiles and adapter schemas to preserve trust logic, audit trails, and enforcement flow integrity during migration or dual operation.

## 1. Compatibility Scope

- IAM Systems: Active Directory, LDAP, OAuth2  
- Audit Engines: SIEM (Splunk, Graylog), auditdbs  
- Policy Controllers: Open Policy Agent, proprietary compliance rulebases  
- Legacy Runtime Trust Frameworks (e.g. Zero Trust, RBAC logic)

## 2. Capsule Mapping Patterns

- Legacy user roles → Role Declaration Capsule (RDC)  
- Policy rules → Policy Injection Capsule (PIC)  
- SIEM log event → Alert Capsule (TVC/PCC/RAC)  
- Trust zone config → Capsule Federation Capsule (FCC)  
- Access logs → Simulation Confirmation Capsule (SCC) for test tracks

## 3. Integration Adapter Capsule Format

`{ adapter\_id, legacy\_type, mapping\_set[], trust\_equivalence, expiration, signed\_by, compatibility\_tag }`  
- Each Adapter Capsule must declare explicit compatibility level (e.g. full, partial, emulated)  
- Mapping set is version-controlled and audit-traceable  
- Signed by Tier 1 or authorized conversion authority

## 4. Migration Flow Recommendation

Stepwise migration:  
- Identify static audit/policy/role artifacts  
- Generate Adapter Capsule with mapped output  
- Run simulation track via Sandbox Engine  
- Validate trace and audit log consistency  
- Sign and approve Adapter Capsule for federation use

## 5. Compatibility Assurance Caveats

- Capsule model assumes hash traceability – not always feasible in legacy audit systems  
- Role tiers may not be fully reconcilable with hierarchical IAM  
- Federation declarations must be confirmed before operational merge