

# OASIS Protocol – Foundational Conversation Whitepaper

## Executive Summary

OASIS (Open Advanced Secure Interoperable System) represents an open protocol designed to enable persistent digital identity, shared inventory, and cross-engine interoperability across games and virtual worlds.

## Core Architectural Principles

- Holonic architecture with globally unique entities
- Avatar-based SSO identity layer
- Engine-agnostic persistence
- Async job batching to prevent gameplay blocking
- Provider-agnostic abstraction

## Engine Integration Model

- Fork native engine (Doom, Quake, Doom 3)
- Inject C# STAR wrapper bridge
- Async batching for remote API calls
- Local optimistic execution with server authority

## Transport Roadmap

- REST (Current)
- gRPC (Planned)
- GraphQL (Planned)

- WebSocket (Planned)

## **Proof of Interoperability**

A keycard collected in one engine unlocks a door in another.

This demonstrates protocol-level persistence and cross-engine continuity.