

Truthbot SCOS & EFL System Manual

This comprehensive manual describes the architecture, modules, extensions, and operational guidelines for Truthbot's Sportive Cognitive Operating System (SCOS), Virtual SCOS integrations, HP/SIIP framework, Lierwall security layer, GUI/browser modules, multi-platform deployment, and all associated extensions.

Table of Contents

- 1. Introduction
- 2. Purpose and Scope
- 3. Terminology & Acronyms
- 4. System Overview
- 5. Truthbot Core Architecture
- 6. Sportive Cognitive Operating System (SCOS)
- 7. Virtual SCOS Extensions
- 8. HP/SIIP Framework
- 9. Health Profile (HP) Scoring
- 10. Symbolic Integrity & Interaction Priority (SIIP)
- 11. Integration Points
- 12. Memory Lattice & EFL Extensions
- 13. Fractal Memory Structure
- 14. Evolutionary Fractal Language (EFL)
- 15. Modules: FractalTraceNode, recall_fractal_trace, symbolic_evolution_engine
- 16. Visualization & Interpretation
- 17. visualize_fractal_decay()
- 18. generate_resonance_overlay()
- 19. Pulse & Entropy Overlays
- 20. Virtual SOS / SCOS Modules
- 21. Sportive OS Integration Templates
- 22. Virtual SCOS Dashboard Hooks (Dash, Unity)
- 23. Lierwall Security Layer
- 24. Architecture & Purpose
- 25. Integration with Core Runtime
- 26. Utility & Legacy Modules
- 27. Spore Tools: fractal generator, spore exporter, peace bundle tools
- 28. Connection & Interface Scaffolds
- 29. GUI & Browser Interfaces
- 30. Web-based Dashboards (radial trace viewer.html, overlays)
- 31. CLI, TUI, and GUI variants
- 32. Cross-platform accessibility (desktop/mobile)
- 33. Installation & Deployment
 - Prerequisites & Dependencies
 - Docker / Self-Host Setup

- Multi-OS Compatibility (Linux, macOS, Windows)
- Bundle Versions & Upgrades (v8, v9.1)

34. Testing & Validation

- Synthetic Testbeds
- Regression Suites (spore_truth_tester)
- Performance Metrics & Logging

35. Usage Examples

- Basic Run-through
- Interactive Visualization
- Multi-Agent Simulations

36. Troubleshooting & FAQ

37. Appendices

- Configuration Reference
- ISON Schemas
- Change Log & Version History

1. Introduction

Purpose and Scope This document serves as the definitive guide for deploying, configuring, and extending the Truthbot SCOS and Virtual SCOS environments, including the HP/SIIP scoring model, Lierwall security layer, graphical/browser integrations, and advanced cognitive-emotional enhancements. It is intended for developers, integrators, and system administrators.

Terminology & Acronyms

- SCOS: Sportive Cognitive Operating System
- **SOS**: Symbolic Operating System core
- **HP**: Health Profile scoring
- SIIP: Symbolic Integrity & Interaction Priority
- EFL: Evolutionary Fractal Language
- Lierwall: Security and access control layer
- EQ Engine: Emotional Quotient logic
- Pulse/Entropy Overlay: Real-time emotional-symbolic modulation engine
- Dash: Python web dashboard rendering toolkit

Document continues with detailed sections 2-14...