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Universal Cognitive Operating System

# COMPLETE REFERENCE DOCUMENT

Exhaustive documentation covering all spheres, features,  
interactive display techniques, agents, and architectural principles.

**Not a pitch. A complete reference.**

Foundation Freeze v1.0

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# PART I — FOUNDATIONS

## — CHAPTER 1 —

### INTRODUCTION & PHILOSOPHY

CHE·NU (pronounced 'Chez Nous' — 'At Home' in French) is a Universal Cognitive Operating System. It provides a structural framework for organizing knowledge, decisions, memory, and AI agents around a single principle: **the human remains sovereign**.

#### Core Problems Addressed

- Information overload and cognitive fragmentation
- Loss of control over AI-mediated decisions
- Opacity in how systems process and store knowledge
- Diffusion of responsibility in automated workflows
- Lack of traceability and auditability

#### Design Principles

- Structure over chaos — hierarchical organization
- Visibility over opacity — all actions traceable
- Control over automation — human override always
- Clarity over convenience — understanding first
- Ethics by architecture — constraints in code

*"CHE·NU is not acceleration — it is stability."*

## — CHAPTER 2 —

### FOUNDATION LAWS

The Foundation Laws are immutable architectural constraints encoded directly into the system. They cannot be overridden by users, agents, or administrators.

■ ■ FOUNDATION LAWS

1

USER SOVEREIGNTY

No irreversible action without approval

2

NO SILENT ACTIONS

Every operation visible & traceable

3

EXPLICIT RESPONSIBILITY

Clear ownership for every decision

4

REVERSIBILITY

Undo must always be possible

5

TRANSPARENCY

Full audit trail & decision replay

6

ETHICS BY DESIGN

Constraints encoded, not promised

#### Law Enforcement Mechanisms

Law	Enforcement Mechanism
User Sovereignty	Approval gates before irreversible actions
No Silent Actions	Mandatory logging of all operations
Explicit Responsibility	Single owner lock on every task
Reversibility	Undo stack maintained for all changes

<b>Transparency</b>	Decision timeline visible to user
<b>Ethics by Design</b>	Ethical Guard checkpoint on all actions

# MEGA-TREE ARCHITECTURE

CHE·NU uses a tree metaphor for structural integrity. The tree model provides hierarchy without rigidity, growth without chaos, and modularity without fragmentation.

## Structural Components

Component	Description
Trunk	Core Laws — immutable governance foundation
Roots	Data sources — inputs from external systems
Branches	Spheres — distinct domains of knowledge/activity
Sub-branches	Categories — organizational units within spheres
Twigs	Sub-categories — nested depth for complexity
Leaves	Atomic data — tasks, notes, decisions, memories

## Why This Model Works

- New spheres can be added without disrupting existing ones
- Local changes don't propagate unpredictably
- Universal applicability: individuals, teams, institutions
- Natural mapping to human mental models
- Supports both depth (detail) and breadth (overview)

# PART II — SPHERES

Complete Details for Each Sphere

— CHAPTER 4 —

## PERSONAL SPHERE

■ PERSONAL

Private life, health, goals, personal growth

The Personal Sphere is your private sanctuary within CHE·NU. It contains everything related to your individual life that is not shared. Highest privacy level, most restricted access.

### Categories & Sub-categories

Category	Contents
Health & Wellness	Medical records, fitness tracking, nutrition, sleep, mental health
Personal Finance	Budgets, accounts, investments, expenses, financial goals
Goals & Aspirations	Life goals, bucket list, personal OKRs, vision boards
Journal & Reflection	Daily journal, gratitude log, mood tracking, insights
Identity & Values	Core values, beliefs, personality assessments, preferences
Relationships	Personal contacts, family tree, relationship notes
Home & Living	Home management, maintenance schedules, inventory
Personal Development	Skills to learn, courses, reading list, habits

### Features & Options

- **Privacy Vault:** Encrypted storage for sensitive documents
- **Health Dashboard:** Aggregated view of wellness metrics
- **Goal Tracker:** Progress visualization with milestones
- **Habit Streaks:** Consistency tracking for daily habits
- **Mood Analytics:** Emotional patterns over time
- **Life Timeline:** Chronological view of major events
- **Reflection Prompts:** AI-suggested journaling questions
- **Emergency Info:** Quick access to critical medical data

### Dedicated Agents

- **Personal Organizer:** Maintains sphere coherence, suggests reorganization
- **Wellness Monitor:** Tracks health patterns, gentle reminders
- **Goal Coach:** Progress check-ins, motivation, milestone celebrations
- **Reflection Guide:** Journaling prompts, insight synthesis

# BUSINESS SPHERE

■ BUSINESS

Professional activity, strategy, clients, operations

The Business Sphere handles all professional and commercial activities. It supports strategic planning, client management, operations, and business intelligence.

### Categories & Sub-categories

Category	Contents
Strategy & Planning	Business plans, OKRs, roadmaps, competitive analysis
Clients & Accounts	Client profiles, contracts, communication history, CRM data
Projects	Active projects, timelines, deliverables, resources
Operations	Processes, SOPs, workflows, operational metrics
Finance & Accounting	Invoices, expenses, P&L, cash flow, budgets
Marketing & Sales	Campaigns, leads, pipeline, conversion metrics
Legal & Compliance	Contracts, agreements, regulatory requirements
Human Resources	Team structure, hiring, performance, policies

### Features & Options

- **Strategic Dashboard:** KPIs, OKR progress, health metrics
- **Client Portal:** Unified view per client with full history
- **Project Timeline:** Gantt-style visualization with dependencies
- **Revenue Forecasting:** Predictive analytics on business performance
- **Contract Manager:** Expiration alerts, renewal tracking
- **Meeting Prep:** Auto-generated briefings before client calls
- **Competitor Radar:** Market intelligence aggregation
- **Decision Log:** Business decisions with rationale and outcomes

### Dedicated Agents

- **Business Organizer:** Sphere coherence, categorization suggestions
- **Strategy Advisor:** Strategic insights, opportunity identification
- **Client Relationship Agent:** Relationship health, follow-up reminders
- **Operations Monitor:** Process efficiency, bottleneck detection
- **Financial Analyst:** Trend analysis, anomaly detection

# SCHOLAR SPHERE

■ SCHOLAR

Learning, research, knowledge acquisition

The Scholar Sphere is dedicated to learning, research, and knowledge management. It supports academic work, continuous learning, and intellectual exploration.

### Categories & Sub-categories

Category	Contents
Courses & Programs	Enrolled courses, curricula, assignments, grades
Research Projects	Research topics, hypotheses, methodologies, findings
Reading Library	Books, papers, articles, annotations, reading notes
Notes & Summaries	Lecture notes, concept maps, summaries
References & Citations	Bibliography, citation management, sources
Study Plans	Learning schedules, exam prep, revision plans
Knowledge Base	Personal wiki, concept definitions, Q&A
Certifications	Earned credentials, continuing education, skills

### Features & Options

- **Zettelkasten Mode:** Interconnected note-taking with backlinks
- **Spaced Repetition:** Flashcard system for retention
- **Citation Manager:** Auto-formatting for academic styles
- **Research Timeline:** Project phases with milestones
- **Concept Mapper:** Visual knowledge graphs
- **Reading Queue:** Prioritized list with time estimates
- **Study Analytics:** Learning patterns and progress
- **Collaboration Mode:** Shared research with peers

### Dedicated Agents

- **Scholar Organizer:** Knowledge categorization, gap identification
- **Research Assistant:** Literature search, source validation
- **Study Coach:** Learning schedule optimization, retention tips
- **Note Synthesizer:** Cross-reference connections, insight extraction



# CREATIVE STUDIO SPHERE

■ CREATIVE

Artistic work, design, creative projects

The Creative Studio Sphere supports all artistic and creative endeavors. It provides tools for ideation, creation, iteration, and portfolio management.

## Categories & Sub-categories

Category	Contents
Writing Projects	Stories, scripts, articles, poetry, drafts
Visual Design	Graphics, illustrations, UI designs, mood boards
Music & Audio	Compositions, recordings, playlists, sound design
Video & Film	Video projects, storyboards, edits, animations
Photography	Photo library, albums, editing projects
Ideas & Inspiration	Concept sketches, references, inspiration boards
Portfolio	Finished works, showcase pieces, exhibitions
Collaborations	Joint projects, feedback loops, co-creation

## Features & Options

- **Idea Capture:** Quick capture for sudden inspiration
- **Version Control:** Track iterations of creative works
- **Mood Board Builder:** Visual inspiration collection
- **Draft Manager:** Work-in-progress with status tracking
- **Critique Log:** Feedback collection and response tracking
- **Asset Library:** Reusable creative elements
- **Deadline Tracker:** Submission and exhibition dates
- **Creative Analytics:** Productivity patterns, output tracking

## Dedicated Agents

- **Creative Organizer:** Project categorization, archive management
- **Muse Agent:** Inspiration prompts, creative challenges
- **Critique Partner:** Constructive feedback, improvement suggestions
- **Portfolio Curator:** Best work selection, presentation optimization

# SOCIAL & MEDIA SPHERE

■ SOCIAL

Relationships, communications, social presence

The Social & Media Sphere manages relationships, communications, and social media presence. It helps maintain meaningful connections without the noise of traditional platforms.

### Categories & Sub-categories

Category	Contents
Contacts	People, organizations, contact details, notes
Communications	Messages, emails, calls, meeting notes
Social Networks	Platform profiles, posts, engagement metrics
Events	Social events, gatherings, networking opportunities
Groups & Communities	Memberships, forums, community involvement
Content Calendar	Planned posts, content strategy, scheduling
Relationship Health	Connection frequency, relationship notes
Networking Goals	People to meet, introductions to make

### Features & Options

- **Relationship Map:** Visual network of connections
- **Contact Timeline:** Interaction history per person
- **Reconnect Reminders:** Nudges for dormant relationships
- **Social Dashboard:** Unified view across platforms
- **Content Scheduler:** Plan and queue social posts
- **Engagement Analytics:** Performance tracking without addiction
- **Event Tracker:** RSVP management, follow-ups
- **Introduction Helper:** Context for networking meetings

### Dedicated Agents

- **Social Organizer:** Contact deduplication, categorization
- **Relationship Keeper:** Reconnection suggestions, important dates
- **Content Advisor:** Post optimization, timing suggestions
- **Network Analyzer:** Connection insights, introduction opportunities

# INSTITUTIONS SPHERE

■■ INSTITUTIONS

Government, organizations, compliance

The Institutions Sphere handles interactions with governments, regulatory bodies, and formal organizations. It tracks compliance, deadlines, and official documentation.

### Categories & Sub-categories

Category	Contents
Government	Tax filings, permits, licenses, official correspondence
Legal	Legal documents, court records, attorney communications
Regulatory	Industry regulations, compliance requirements, audits
Insurance	Policies, claims, coverage details, renewals
Banking	Bank accounts, loans, financial institutions
Healthcare System	Insurance, providers, claims, authorizations
Education System	School records, certifications, transcripts
Property & Assets	Deeds, titles, registrations, valuations

### Features & Options

- **Deadline Calendar:** Filing dates, renewals, expirations
- **Document Vault:** Secure storage for official documents
- **Compliance Checklist:** Requirements tracker with status
- **Correspondence Log:** Official communications history
- **Renewal Alerts:** Advance notice for expiring items
- **Form Auto-fill:** Pre-populate common forms
- **Audit Trail:** Complete history for compliance
- **Multi-jurisdiction:** Support for different regulatory environments

### Dedicated Agents

- **Compliance Monitor:** Deadline tracking, requirement alerts
- **Document Organizer:** Categorization, expiration monitoring
- **Regulatory Advisor:** Requirement interpretation, guidance
- **Filing Assistant:** Form preparation, submission tracking

# METHODOLOGY SPHERE

■■

METHODOLOGY

Ways of working, systems, processes

The Methodology Sphere is unique — it defines HOW you work across all other spheres. It contains frameworks, templates, and personal systems that shape your workflow.

### Categories & Sub-categories

Category	Contents
Productivity Systems	GTD, Pomodoro, time blocking, personal workflows
Decision Frameworks	Decision matrices, criteria, evaluation methods
Templates	Reusable templates for documents, projects, processes
Checklists	Standard procedures, quality checks, routines
Workflows	Multi-step processes, automation rules
Review Cycles	Daily, weekly, monthly review structures
Metrics & KPIs	Personal performance indicators, tracking methods
Learning Methods	Study techniques, skill acquisition approaches

### Features & Options

- **Method Library:** Pre-built methodologies (GTD, Agile, Zettelkasten)
- **Custom Method Builder:** Create your own workflow systems
- **Template Engine:** Parameterized templates with variables
- **Automation Rules:** If-then triggers across spheres
- **Review Dashboard:** Scheduled reflection prompts
- **Method Analytics:** Which methods work best for you
- **A/B Testing:** Compare method effectiveness
- **Method Sharing:** Export/import methodology packages

### Dedicated Agents

- **Methodology Agent:** Applies selected methods across spheres
- **Workflow Optimizer:** Identifies inefficiencies, suggests improvements
- **Template Suggester:** Recommends templates based on context
- **Review Facilitator:** Guides periodic reviews, extracts insights

# XR / IMMERSIVE SPHERE

■ XR / IMMERSIVE

Spatial computing, VR/AR experiences

The XR Sphere manages all spatial computing experiences — virtual reality, augmented reality, and mixed reality. It's where CHE-NU becomes truly three-dimensional.

### Categories & Sub-categories

Category	Contents
XR Sessions	Recorded spatial sessions, meeting replays
Virtual Spaces	Custom environments, personal spaces, meeting rooms
3D Assets	Models, avatars, objects, environments
Spatial Notes	Notes anchored in 3D space
AR Overlays	Augmented reality layers, contextual information
Device Profiles	Headset settings, controller configurations
Accessibility	XR accessibility settings, comfort options
Shared Spaces	Collaborative XR environments

### Features & Options

- **Universe View XR:** Navigate CHE-NU in full 3D space
- **Meeting Room:** Spatial collaboration with agent avatars
- **Decision Theater:** Compare decision branches in 3D
- **Memory Palace:** Spatial memory anchoring technique
- **Session Recording:** Capture and replay XR sessions
- **Avatar System:** Personalized presence in XR
- **Gesture Controls:** Natural interaction in space
- **Cross-device Sync:** Seamless 2D ↔ 3D transition

### Dedicated Agents

- **XR Guide:** Navigation assistance in spatial interfaces
- **Space Architect:** Environment customization, layout optimization
- **Session Recorder:** Automatic capture and indexing of XR sessions
- **Presence Manager:** Avatar behavior, attention indicators

# ENTERTAINMENT SPHERE

■ ENTERTAINMENT

Leisure, media consumption, hobbies

The Entertainment Sphere manages leisure activities without the dark patterns. It tracks what you enjoy without optimizing for addiction.

### Categories & Sub-categories

Category	Contents
Games	Video games, board games, puzzles, play history
Movies & TV	Watchlist, viewing history, ratings, recommendations
Music	Playlists, listening history, concerts, discoveries
Books (Leisure)	Fiction, non-work reading, book clubs
Hobbies	Hobby projects, supplies, skill progression
Sports & Outdoors	Activities, equipment, locations, records
Travel & Experiences	Trips, bucket list, memories, planning
Collections	Physical or digital collections, cataloging

### Features & Options

- **No Infinite Scroll:** Intentional browsing, not algorithmic feeds
- **Completion Tracking:** Games finished, books read, shows watched
- **Recommendation Control:** Transparent, adjustable suggestions
- **Time Awareness:** Gentle reminders, not guilt trips
- **Experience Log:** Document memorable moments
- **Hobby Progress:** Track skill development in hobbies
- **Wishlist Manager:** Unified wishlist across categories
- **Social Sharing:** Share favorites without platform lock-in

### Dedicated Agents

- **Entertainment Curator:** Personalized suggestions without manipulation
- **Completion Tracker:** Progress monitoring, backlog management
- **Experience Documenter:** Memory capture, highlight extraction
- **Balance Advisor:** Leisure vs. productivity awareness

# AI LAB SPHERE

■ AI LAB

AI experimentation, agent development, prompts

The AI Lab Sphere is where you experiment with AI capabilities, develop custom agents, and manage your prompt library. It's the meta-layer for AI interaction.

### Categories & Sub-categories

Category	Contents
Prompt Library	Saved prompts, templates, prompt chains
Custom Agents	User-created agent configurations
Experiments	AI experiments, A/B tests, results
Model Profiles	LLM configurations, preferences, performance notes
Training Data	Personal examples, corrections, fine-tuning data
Agent Analytics	Agent performance, usage patterns, effectiveness
Integration Hub	External AI service connections
Sandbox	Safe testing environment for new capabilities

### Features & Options

- **Prompt Composer:** Visual prompt building with variables
- **Agent Builder:** No-code custom agent creation
- **Chain Editor:** Multi-step prompt sequences
- **Version Control:** Track prompt/agent versions
- **Performance Dashboard:** Agent effectiveness metrics
- **Model Switcher:** Easy swap between LLM backends
- **Experiment Tracker:** Hypothesis, test, results logging
- **Safety Sandbox:** Isolated testing environment

### Dedicated Agents

- **Lab Organizer:** Experiment categorization, result indexing
- **Prompt Optimizer:** Suggestions for prompt improvement
- **Agent Debugger:** Troubleshoot agent behavior issues
- **Experiment Analyst:** Statistical analysis of AI experiments

# MY TEAM SPHERE

■ MY TEAM

Collaboration, shared projects, delegation

The My Team Sphere enables collaboration with other humans and shared workspaces. It maintains the sovereignty principle while enabling effective teamwork.

### Categories & Sub-categories

Category	Contents
Team Members	People, roles, permissions, availability
Shared Projects	Collaborative projects, shared goals
Delegated Tasks	Tasks assigned to/from team members
Team Channels	Communication threads, discussions
Shared Resources	Documents, assets, knowledge accessible to team
Meeting Notes	Team meeting records, decisions, action items
Team Calendar	Shared scheduling, availability
Permissions	Access controls, sharing rules

### Features & Options

- **Role Management:** Define team roles with specific permissions
- **Delegation Flow:** Clear task handoff with responsibility transfer
- **Shared Views:** Selective sphere sharing with team
- **Team Dashboard:** Aggregate team progress and status
- **Presence Indicators:** See who's available, working on what
- **Handoff Protocol:** Structured task transfer with context
- **Decision Voting:** Team decision-making with recorded votes
- **Audit Trail:** Who did what, when, in shared spaces

### Dedicated Agents

- **Team Organizer:** Shared resource management, categorization
- **Delegation Assistant:** Optimal task assignment suggestions
- **Collaboration Facilitator:** Meeting prep, follow-up tracking
- **Permission Manager:** Access control recommendations



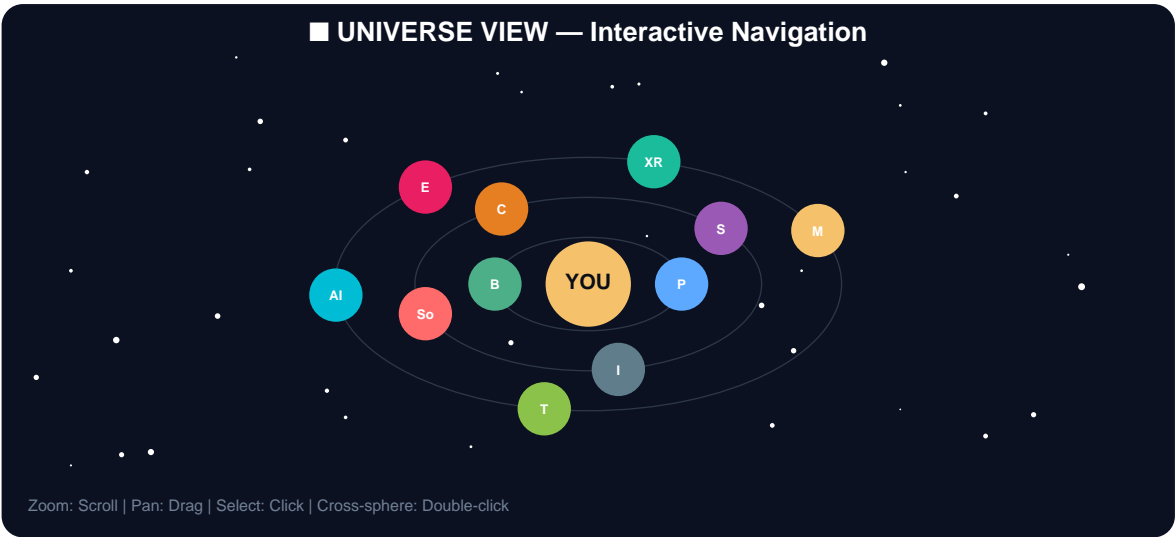
# PART III — INTERACTIVE DISPLAY

## Visualization & Navigation Techniques



— CHAPTER 15 —

## UNIVERSE VIEW & NAVIGATION



### Navigation Modes

Mode	Description
Orbital View	See all spheres orbiting around you (the user)
Zoom In	Enter a sphere to see its categories and contents

<b>Zoom Out</b>	Return to higher level, macro view
<b>Pan</b>	Move laterally across the view
<b>Cross-Sphere</b>	Navigate connections between spheres
<b>Focus Mode</b>	Highlight single sphere, dim others
<b>Timeline Scrub</b>	Navigate through time while in view

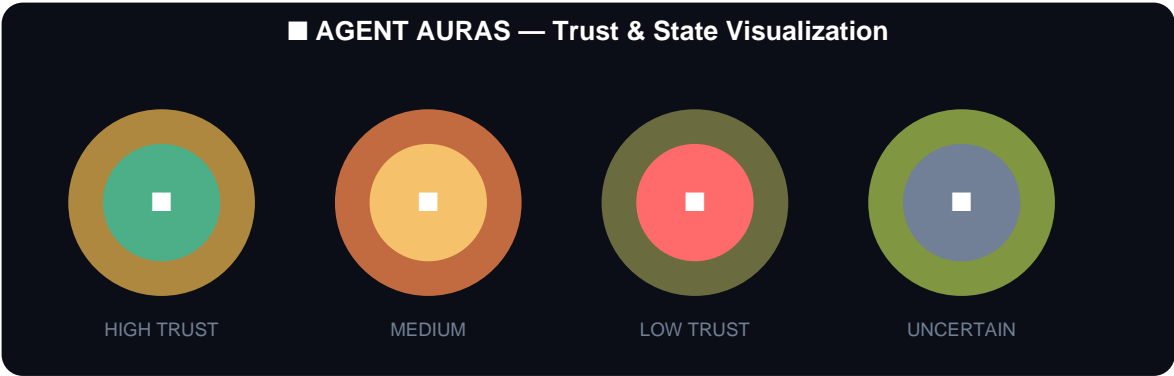
**View Modes**

- **2D Mode:** Flat representation for standard screens
- **3D Mode:** Spatial depth on capable displays
- **XR Mode:** Full immersion in VR/AR headsets
- **Auto Mode:** System selects based on device capability

**Zoom Levels**



# AGENT AURAS & TRUST VISUALIZATION



## Aura Properties

Property	Meaning
Color	Agent type/function identification
Brightness	Current activity level
Saturation	Trust/confidence level
Pulse Rate	Processing state (thinking, waiting, idle)
Glow Radius	Scope of influence
Stability	Consistent = confident, flickering = uncertain
Halo Pattern	Special states (warning, celebration, etc.)

## Trust Score Components

- **Historical Accuracy:** Past predictions vs. outcomes
- **User Approval Rate:** How often user accepts suggestions
- **Consistency:** Behavioral predictability over time
- **Source Quality:** Reliability of underlying data sources
- **Recency:** Freshness of the agent's knowledge

# THEME SYSTEM & BLENDING



## Theme Components

Component	Description
Color Palette	Primary, secondary, accent, background colors
Typography	Font families, sizes, weights
Spacing	Margins, padding, gaps
Borders	Radius, width, style
Shadows	Elevation, blur, spread
Animations	Transition timing, easing functions
Icons	Icon set, style (filled, outlined)
Sounds	Audio feedback themes (optional)

## Theme Scopes

- **Global:** Applies across entire CHE-NU instance
- **Sphere:** Specific to a single sphere
- **Category:** Within a sphere category
- **Session:** Temporary for current work session
- **Time-based:** Automatic switching (day/night, focus hours)

## Blending Rules

- When entering a sphere, theme transitions smoothly
- Conflicting themes trigger Visual Conflict Overlay
- User can set priority rules for theme precedence
- Cross-sphere navigation uses gradient transitions

# CONFLICT OVERLAYS & IMPACT PREVIEW

## Visual Conflict Overlay

When multiple contexts compete for visual dominance, CHE·NU shows where conflicts exist rather than hiding them. This supports conscious decision-making.

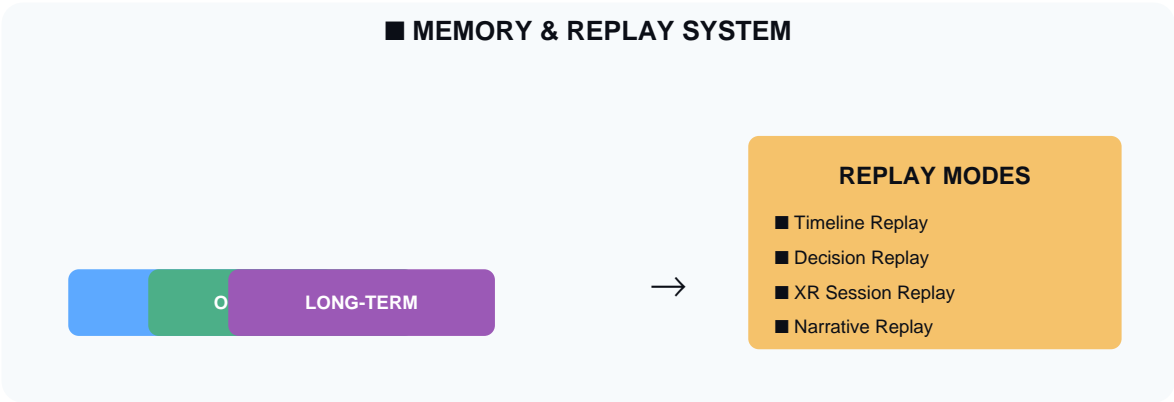
Conflict Type	Visualization
Theme Clash	Split-screen preview showing both themes
Agent Disagreement	Side-by-side agent recommendations
Priority Conflict	Stacked cards showing competing priorities
Resource Contention	Venn diagram of overlapping allocations
Schedule Overlap	Timeline with highlighted conflicts

## Theme Impact Preview

Before applying any theme change, Impact Preview shows how the change will affect different parts of the interface.

Preview Type	Description
Before/After	Side-by-side comparison of affected areas
Ripple Map	Visual map of all elements impacted
Accessibility Check	Contrast, readability scores
Undo Path	Clear indication of how to reverse
Affected Spheres	List of spheres that will change

# TIMELINE & REPLAY SYSTEMS



## Timeline Viewer

Feature	Description
Scrubbing	Drag through time to see system state at any point
Markers	Significant events marked on timeline
Branching	Decision points where alternatives existed
Filtering	Show only specific spheres, agents, or types
Speed Control	Playback at different speeds
Bookmarks	Save specific moments for quick return

## Replay Modes

- **Timeline Replay:** Sequential playback of events
- **Decision Replay:** Focused on choices and their rationale
- **XR Session Replay:** Full spatial re-experience
- **Narrative Replay:** AI-generated story of what happened
- **Diff Replay:** Show only changes between two points

## Theme Timeline Viewer

Specialized timeline showing visual evolution — when themes changed, why they changed, and how to return to any previous visual state.

# XR MEETING ROOMS

## Room Types

Room Type	Purpose
Decision Room	Multi-factor decision analysis with branch visualization
Collaboration Room	Team workspace with shared objects
Presentation Room	Formal presentation environment
Brainstorm Room	Free-form ideation with spatial notes
Review Room	Retrospective analysis of past decisions
Negotiation Room	Multi-party discussion with position tracking

## Room Features

- **Agent Presence:** AI agents appear as avatars in the room
- **Decision Branches:** See multiple paths as 3D branches
- **Data Walls:** Information displayed on virtual walls
- **Gesture Controls:** Natural hand movements for interaction
- **Voice Commands:** Speak to navigate and control
- **Recording:** Capture entire session for replay
- **Export:** Generate PDF summary, video, or replayable file

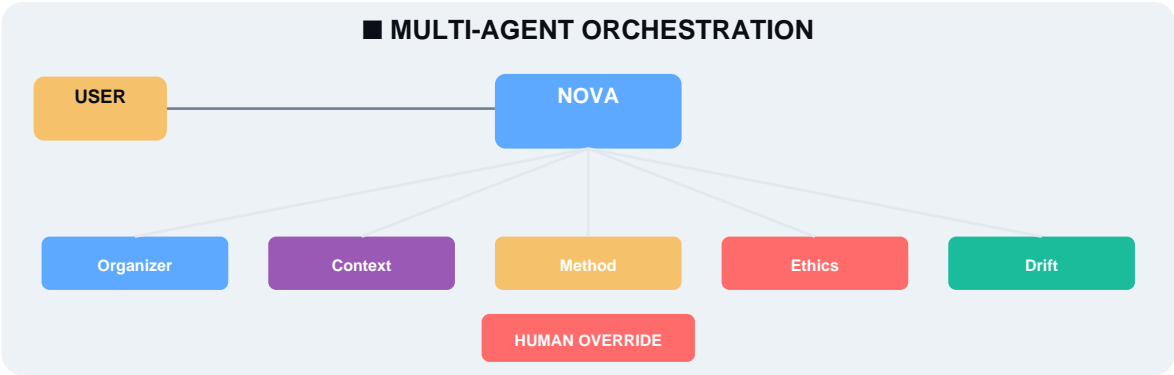
## 2D Fallback

When XR hardware is unavailable, Meeting Rooms render as 2D interfaces with the same information architecture — multiple panels showing agent positions, decision branches, and collaborative elements.

# PART IV — AGENTS & MEMORY

— CHAPTER 21 —

## MULTI-AGENT ORCHESTRATION



### Core Agents

Agent	Role	Scope
NOVA	Global assistant, user interface	Cross-sphere
Organizer	Maintain sphere coherence	Per sphere
Interpreter	Understand intent from input	All input
Method Agent	Apply work methods	Configurable
Guard	Enforce Foundation Laws	All actions
Drift Detector	Identify system drift	Continuous
Input Agent	Process incoming items	Per inbox
Memory Manager	Handle memory operations	All memory

### Delegation Rules

- All delegation must be explicit and logged
- Receiving agent must be authorized for the task type
- Chain of responsibility must be clear and traceable
- Human can interrupt any delegation chain
- Failed delegations return to delegating agent

### Agent Learning Loop

Agents learn from user feedback through explicit approval cycles. The Learning Loop ensures no implicit preference capture.

- Agent suggests preference or optimization
- User explicitly approves or rejects
- Approved learnings become visible preferences
- User can review and reverse any learning



# MEMORY ARCHITECTURE

## Memory Layers

Layer	Retention	Purpose
Session	Current session	Immediate conversation context
Short-term	Days to weeks	Active tasks and recent decisions
Long-term	Indefinite	Persistent knowledge and patterns
Archived	Indefinite, compressed	Historical data, rarely accessed

## Memory Anchors

Important moments can be 'anchored' — explicitly marked as significant. Anchored memories are protected from cleanup and surface more readily.

## Memory Operations

- **Store:** Save new information with metadata
- **Retrieve:** Find relevant memories for context
- **Update:** Modify existing memories (with audit trail)
- **Archive:** Move to long-term storage
- **Forget:** Explicit deletion (user-initiated only)
- **Anchor:** Mark as significant, protect from cleanup
- **Link:** Connect related memories across spheres

# INBOX & TASK SYSTEM

## Inbox Types

Inbox	Purpose
Global Inbox	Items not yet assigned to a sphere
Sphere Inbox	Items for a specific sphere awaiting processing
Agent Inbox	Items directed to a specific agent
Theme Suggestion Inbox	Proposed visual changes awaiting approval
Learning Inbox	Agent learnings awaiting user confirmation

## Message Types

- **Message:** Information without action requirement
- **Task:** Actionable item with owner and optional deadline
- **Instruction:** Directive from human to agent
- **Suggestion:** Agent recommendation awaiting approval
- **Alert:** Time-sensitive notification
- **Decision Request:** Choice requiring human input

## Task Lifecycle

Created → Assigned → In Progress → Review → Completed/Cancelled. Every transition is logged with who, when, and why.

## Responsibility Lock

Every task has exactly one owner at any time. This prevents diffusion of responsibility. Ownership can transfer with explicit handoff.

# PART V — CONCLUSION

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## — CHAPTER 24 —

### ETHICS & SAFETY

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#### Anti-Manipulation Design

- **No Dark Patterns:** Interfaces are honest, no deceptive UX
- **No Attention Extraction:** No infinite scroll, no engagement optimization
- **No Hidden Influence:** All recommendations are explained
- **No Addiction Mechanics:** Goal is completion, not return
- **No Shadow Profiles:** All stored data is visible to user

#### Safety Mechanisms

- **Ethical Guard:** Checkpoint before all agent actions
- **Human Override:** Always available, cannot be disabled
- **Audit Trail:** Complete history of all operations
- **Reversibility:** Undo for all non-destructive actions
- **Transparency:** Decision rationale always available

## — CHAPTER 25 —

### FUTURE EXTENSIONS

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CHE·NU is designed to grow while maintaining stability. New spheres, agents, and capabilities can be added following these principles:

- All extensions must respect Foundation Laws
- New components inherit proven patterns
- Stable extensions can be frozen to preserve integrity
- Growth occurs at the edges, core remains stable

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*CHE·NU is not acceleration — it is stability.*  
*CHE·NU is not persuasion — it is clarity.*  
*CHE·NU is not optimization — it is protection.*  
*CHE·NU is not an app — it is infrastructure.*  
*CHE·NU is not about AI replacing humans —*  
*it is about AI serving humans.*

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