

I. Overview

PERCMARC (Personal Energy Resonance Command — Memory-Action Resonance Continuity) is a next-generation operational kernel for real-time, ethics-aware systems. It redefines how machines start, restart, and sustain operations across dynamic, multi-agent contexts—ensuring not just technical uptime, but continuity of moral and semantic integrity.

At its core, PERCMARC integrates time, matter, and energy into a single governing formula for **RT Media Synchronization**, creating the foundation for human-AI resonance without loss of time, identity, memory, or intention.

Theses

This section explains PERCMARC through the lens of **Time × Matter + Energy = RT Media**, using examples from basic electronics and the broader ERES Institute framework (such as PlayNAC and the Question-Answer process).

Foundational Theses of RT Media and the PERCMARC Kernel:

1. Time multiplied by Matter represents continuity of structure and activity.

In electronics, this means applying power across a circuit over time; in life, it's the effort and focus put into meaningful action. Time without structure is idle. Structure without time is static.

2. Energy activates purpose and direction.

In both machines and people, energy is required to move from potential to actual. In systems, it means power. In decision-making, it means intent or will.

3. RT Media is the visible result of these forces working together.

It's not just about showing data—it's about showing the right thing at the right time, in a way that reflects the user's intention, values, and context.

4. Resets should be designed to remember and restore, not erase.

In electronics, a good reset preserves working memory or reboots with safe defaults. In ethical systems like ERES PlayNAC, a reset should keep the moral and experiential path intact.

5. The Question-Answer loop (HowWay) is real-time media in action.

When someone asks a system a question and gets a meaningful response, that's not just communication—it's an active rebalancing of time, structure, and energy into shared understanding.

These theses are designed to be simple, consistent with physical systems, and understandable to readers new to ERES. They avoid jargon and link theory directly to real-world examples. In contrast to legacy models that treat resets as exceptions or failures, PERCMARC elevates them into the ethical architecture of real-time life support for systems, institutions, and beings.

PERCMARC (Personal Energy Resonance Command — Memory-Action Resonance Continuity) is a core operational kernel designed to address system startup, runtime constraint, and reset integrity in ethical, electronic, and computational systems. It integrates time, matter, and energy to form the basis of **RT Media Synchronization**, enabling human-AI harmonization without payload loss.

II. Core Formula

Instant DEF-REL Circuitry Diagram

Enabling Instant DEF-REL through Circuitry Evolution

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To achieve instantaneous access to **DEF-REL (Definition-Relativity)** at system startup—where the user immediately witnesses aligned cause-effect in the RT Media environment—hardware and software must evolve beyond traditional boot architectures. The following shifts make this possible:

Circuit Type	Traditional Limitation	PERCMARC-Aligned Capability
Hard Circuit	Fixed logic; inflexible reboot sequence	DEF-REL achieved via embedded moral state ROM + vector-based boot
Soft Circuit	Software-defined but decoupled from ethical logic	Soft-encoded PERC-MARC layers provide context restoration
Imaged Circuit	Dependent on static snapshots with limited dynamic recall	Image-based boot integrates semantic overlays and time-coded checkpoints

These updated systems implement: - **Boot Vectors** aligned with PERC (preserved personal state) - **Command Fields** that contain intent-linked data - **Real-Time Overlays** that trigger semantic environments based on last known resonance

This makes the Resolution Theorem executable from the moment the circuit is powered:

Time × Matter + Energy = RT Media @User-GROUP #SLA ^DEF-REL *Institute %Manage (Time: Matter & Energy)

The result: Instant moral alignment with institutional rules (DEF-REL), user context, and feedback-aware operation across all circuitry layers. The logic is valid because: - It aligns physical boot readiness (power + logic) with semantic activation (values + memory) - It links soft and imaged circuitry with real-time overlays - It positions DEF-REL as an executable condition embedded in startup circuitry - It turns boot into moral activation — not just code loading, but intent execution

This approach creates a seamless user experience: pushing "on" does not trigger a reset to zero but a restoration of trajectory. You return to a system that knows where you were going—and why.

Enabling Instant DEF-REL through Circuitry Evolution

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Resolution Theorem:
Time × Matter + Energy = RT Media @User-GROUP #SLA ^DEF-REL *Institute %Manage (Time: Matter & Energy)

This expanded expression formalizes the PERCMARC thesis by linking the physical (Time × Matter + Energy) to its sociotechnical execution layers:

- **@ User-GROUP:** RT Media is always user-facing and group-aware
- **#SLA:** It upholds Service Level Agreements for continuity
- **^DEF-REL:** It applies Default Relationships for trusted system structure
- ***Institute:** It reflects the organizational ethical substrate (e.g., ERES)
- **%Manage (Time: Matter & Energy):** It actively manages how time, matter, and energy manifest and evolve

This theorem aligns the internal workings of electronics and semantic engines with the external governance frameworks of institutions and collective systems. It transforms RT Media from display logic into a *causal, feedback-aware architecture* with embedded accountability and purpose.

Time \u00d7 Matter + Energy = RT Media

This expression forms the ontological basis of the PERCMARC Kernel. It represents the transformation of core values into dynamic, real-time engagement between humans and machines:

- **Time:** System continuity, latency, moral duration
- **Matter:** Circuitry, semantic payloads, memory
- **Energy:** Activation, intent, and resonance force
- **RT Media:** Real-time output preserving ethical flow, usability, and trust

III. PERCMARC Components

Note: While "PERC" was previously associated with "Personal Ecologic Ratings Codex" in early BERC/UBIMIA discussions (2023–2024), the current definition has shifted. As of mid-2024 and through the development of the PERCMARC framework, **PERC now officially stands for Personal Energy Resonance Codex**, representing internal user intention, value-state, and semantic continuity. The older 'ecologic' interpretation remains a subcomponent within BERC but is no longer used in real-time ethical reset systems.

1. PERC (Personal Energy Resonance Codex)

- Stores identity, intention, and value-based traces
- Ensures that resets do not erase personal or ethical continuity

2. C (Command / Consciousness)

- Real-time intent signal that governs state transition
- Ensures user-initiated control remains intact during resets

3. MARC (Memory-Action Resonance Continuity)


- Guarantees that operational flow preserves semantic context
- Acts as the checksum for ethical, emotional, and logical integrity

4. PERCMARC = Resonant Epiphany








- A distilled AnswerQuestion moment
- Human-to-computer synchronization realized through integrity-preserving energy flows
- Represents total alignment of time, matter, and energy into truthful, trusted communication

IV. Reset Protocol Definition

IV.a. Boot ↔ Reset Interconnect Matrix

<div style="border: 1px solid #ccc; padding: 1em; background-color: #f9f9f9"> <h4 style="margin-top: 0">  Interconnect Overview</h4> <p>Boot (On/Off) and Reset/Reboot (Version/Session) exist along a continuous semantic axis—one that governs energy flow, intention persistence, and moral coherence. This matrix captures the interdependent relationship across

layers of computation and ethical oversight, with **MARC** as the Ethical Continuity Monitor.

State Transition	Trigger/Event	Description	PERCMARC Alignment
 Cold Boot	Power-on from full shutdown	Initializes hardware; no prior context preserved	Requires PERC initialization from genesis snapshot
 Warm Boot	Restart with context retained	OS or software reload with partial memory or task state kept	Leverages MARC for session continuation
 Session Reset	Version refresh or app-level relaunch	Specific software component restarted, user session preserved	Requires PERC-MARC micro-integrity verification
 Semantic Reboot	Loss of coherence in outputs	Meaning misalignment triggers value-based re-synchronization	Requires moral checksum recalibration via MARC
 Boot with Intent	Mission-driven startup sequence	System activates based on user-set goal or ethical mode	Command vector invoked; resonance-bound payload
 Recovery Boot	Error detected during startup	Fallback mode loads safe parameters	MARC enforces minimal integrity & ethical constraints
 Nested Reset during Runtime	Mid-session failure or override	Layered component reset without disturbing global state	Requires time-coded checkpoints and soft overlays

Each state must not only preserve technical continuity—but reinforce ethical trust and systemic coherence.

System states exist on a continuum, where **Boot (On/Off)** and **Reset/Reboot (Version/Session)** are energetically and semantically linked. Their interactions define not just system uptime, but *identity preservation* and *moral continuity*. MARC serves as the real-time **Ethical Continuity Monitor**, ensuring that system behavior remains aligned with intended values across all transitions.

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A reset must: 1. **Preserve State** (memory + intention) 2. **Reinstate Command** (user sovereignty) 3. **Restore Continuity** (ethical + operational flow)

Reset Types:

Type	Characteristics	PERCMARC Behavior
Soft Reset	Quick, partial memory purge	State checkpoint + user recall enabled
Hard Reset	Full power cycle	PERC-encoded payload reinjection
Moral Reset	Ethical divergence, requires re-orientation	MARC-based correction + resonance pulse

Reset Log Event Chart

Event Trigger	Cause or Context	Reset Type	PERCMARC Response
Power Interruption	Hardware shutdown or battery failure	Hard Reset	Reinject payload from last PERC checkpoint
Software Crash	Faulty execution, unhandled exception	Soft Reset	Resume from partial checkpoint with revalidation
Ethical Violation Detected	AI/system behavior conflicts with core values	Moral Reset	MARC intervention, restore alignment

Event Trigger	Cause or Context	Reset Type	PERCMARC Response
Scheduled Maintenance	Planned system reboot	Soft Reset	Pre-save PERC snapshot and seamless relaunch
Biometric Anomaly Detected	Inconsistency in user presence/auth pattern	Moral Reset	Pause system, request user affirmation via PERC
Semantic Drift in RT Media Output	Output no longer aligns with user intent	Moral Reset	MARC tuning + resonance pulse for alignment
Manual Override Initiated	Admin-level system intervention	Soft/ Hard	Depends on override level; always PERC-aware
Time-Sync Drift Beyond Threshold	Clock or sequence misalignment	Soft Reset	Trigger semantic resync using time-coded anchors

V. Obstacles to Real-Time Interconnect and Proposed Solutions

Achieving seamless RT Media Interconnect involves resolving multiple layers of technical, semantic, and ethical friction. Below is a structured table of core challenges and proposed PERCMARC-aligned solutions:

Obstacle	Description	Proposed Solution
Latency During Transitions	Boot or reset cycles introduce delay, risking lost input/context	Implement checkpointing at semantic intervals; use predictive boot analytics
State Corruption	Memory or payload inconsistencies between sessions	Enforce PERC snapshot integrity; run MARC-based integrity validators
Time Drift Between Modules	Inconsistent internal clocks affect real-time cohesion	Use a MARC-guided time-sync anchor with resonance-pulse validators
Semantic Misalignment	System output drifts from user intention or ethical scope	Integrate Semantic Drift Detectors triggering moral resets
Human-Machine Desynchronization	Interface breakdown between human perception and system state	Use adaptive RT Media interfaces with biometric and behavioral feedback loops
Unauthorized Manual Overrides	Admin-level resets without ethical checks disrupt system trust	Require dual-auth via PERC + Command layer ethics approval
Entropy from Frequent Micro-Resets	Excessive resets degrade system meaning and user confidence	Implement MARC pulse-wave buffering to stabilize reset frequency

Obstacle	Description	Proposed Solution
Energy Cost of Reboots	Rebooting complex systems draws high power	Use tiered boot protocols; apply energy-aware semantic decompression

Each solution follows the PERCMARC philosophy: minimize disruption, preserve memory and moral coherence, and enhance trust across transitions.

V. System Diagram (Coming as Infographic)

- RT Media Bridge from As-Is (Entropy) to To-Be (Resonance)
- PERC = Anchor | Command = Will Vector | MARC = Coherence Layer
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V.a. How Current Electronics Models Fail – and How PERCMARC Redefines Start-Up, List-Views, and RT Media

Traditional electronics and operating system models are built on rigid, linear assumptions about power cycles, system resets, and user sessions. These models fall short in environments requiring seamless, real-time, value-preserving behavior.

Legacy Limitation	Consequence	PERCMARC Reframe
Start-Up Treated as Mechanical Event	Cold boots disregard user intention and ethical state	Start-up becomes a resonance initiation event; PERC restores identity+intention
Reset Seen as Error Recovery Only	Resets are seen as failure or interruption	Redefined as ethical recalibration, preserving semantic flow via MARC
List-Views Are Static Snapshots	UIs display frozen states, not reflective of evolving intention	RT Media transforms lists into responsive, semantically aware feedback channels
Session Loss Normalized	Apps frequently lose state across crashes or reboots	MARC ensures state continuity through intent-anchored checkpoints
Hard Reboot Equals Full Wipe	Power loss = data loss = user frustration	PERCMARC defines layers of moral recovery with payload preservation
User Actions Not Context-Aware	Machines don't discern ethical or emotional implications	PERCMARC routes actions through Command filters and resonance validation
No Moral Compass in Runtime Systems	Systems can't detect or respond to ethical drift	MARC serves as moral monitor and course corrector in real-time

By redefining startup as a **resonant ignition**, list-views as **living semantic feedback**, and reset as an **epistemic pulse of coherence**, PERCMARC transforms machine behavior from mechanical to meaningful.

V.b. Summary Outcome: From Power-On to Meaningful Action

The PERCMARC Kernel enables a new paradigm: pressing the 'On' button and immediately engaging with a system that already understands your mission, remembers your state, and reflects your values.

What Makes This Possible:

- **PERC preserves purpose and history** — So the system starts where you left off, not from scratch.
- **MARC ensures ethical and semantic continuity** — So your actions remain connected to your intentions.
- **Command vectors direct the boot flow** — So startup is mission-driven, not task-randomized.
- **RT Media becomes responsive dialogue** — So the interface reacts to you in real-time, not from preloaded templates.
- **Semantic Drift detection allows instant correction** — So output matches your intent, not just system defaults.
- **The Question-Answer loop (HowWay) is live** — So interaction is a cause-and-effect cycle, not a request queue.

Experience Summary:

You push "on." There's no loading. No dead air. No forgetting. You're reconnected to your intention, your environment, and your task—fully live, with meaningful options awaiting your action. Real-time cause and effect—technically powered, ethically aligned.

VI. Use Cases

- **Smart-City Boot Protocols** with zero downtime
 - **Graceful AI State Transitions** between learning and deployment
 - **Human-in-the-Loop Ethical Checkpoints** during runtime adaptation
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VII. Ethical and Legal Extension

- Aligns with CARE Framework (Community, Actuation, Regeneration, Equity)
 - Suggests legislative definition of "Digital Moral Payload" in system resets
 - Proposes integration with GAIA Oversight and UBIMIA reward mapping
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VIII. Future Development

- Extend kernel to hardware-layer (biometric resonance sensing)
- Incorporate zero-loss semantic compression methods

- Real-time RT Media interpreter for human–AI co-navigation
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IX. License

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X. References

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These sources inform the technical and conceptual underpinnings of state preservation, energy ethics, semantic drift recovery, and fault-tolerant computation. Each supports the PERCMARC framework in its goal to harmonize digital continuity with human values.

XI. Credits

Acronym Evolution Glossary (Excerpt) Acronym Original Meaning Current Usage (2025) Notes				
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PERC	Personal Ecologic Ratings Codex	Personal Energy Resonance Codex	Shifted mid-2024 to emphasize internal continuity	BERC Bio-Ecologic Ratings Codex Same Expanded to include legacy ecologic PERC functions
	RT Media	Real-Time Media (general)	Real-Time Media as Action-Feedback Ethic	Framed as moral transaction layer, not just display
	HowWay	—	How = The Way One Interacts w/ System Flow	AnswerQuestion.IT.MyWay → Semantic Feedback Path

Lead Author: Joseph A. Sprute
Conceptual Framework: ERES Institute for New Age Cybernetics
Core Semantics and Ethical Design: PERCMARC Research Team
Editorial and Formatting Support: ChatGPT (OpenAI LLM, guided by ERES Ontology)
Philosophical and Moral Guidance: CARE Framework Advisory Board
Technical Influence: Systems theorists, real-time OS researchers, embedded ethics pioneers

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