

0 C.E.

Year Zero Common Era — Open-Source MMORTS

Game Design Document & Player Wiki · GitHub · License: TBD

About This Document

This wiki is the single source of truth for **0 C.E.** — covering game mechanics, systems design, technical architecture, and modding. It serves simultaneously as the internal GDD and the public-facing player reference.

Everything here is open: if you spot an error or want to contribute, open a pull request on GitHub. Sections marked as *post-launch* describe systems planned beyond the initial release.

Overview

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| Changelog | History of significant design decisions and revisions. |
| Glossary | Key terms and abbreviations used throughout the wiki. |
| Roadmap | MVP scope, post-launch phases, and milestone tracking. |
| Vision | Design pillars, target audiences, and playstyle philosophy. |

Gameplay — Core

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| Game Loop | Tick system, real-time phases, and session structure. |
| Progression | Player growth curve, unlock thresholds, and pacing. |
| Victory & Prestige | Win conditions, prestige scoring, and end-game. |

Gameplay — Economy

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| Balancing | Tuning parameters, formulas, and simulation targets. |
| Overview | Economy model, resource loop, and design goals. |
| Production Chains | Input/output ratios, chain efficiency, bottlenecks. |
| Resources | Food, Wood, Stone, Gold, Population — definitions and caps. |
| Trade | Trade routes, Market mechanics, inter-player exchange. |

Gameplay — Buildings

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| Overview | Building tiers (1–8), slot rules, and upgrade logic. |
| Market Place | Local trade capacity and tax revenue. |
| Senate | Governance, policy slots, and decree costs. |
| Academy | Research speed and scholar capacity. |
| Shrine / Temple | Faith generation and deity favour. |

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| Barracks | Unit training queues and capacity. |
| City Walls | Defensive rating, repair, and breach mechanics. |
| Harbor | Naval trade routes and fleet support. |
| Farm | Food production, fertility modifiers. |
| Foundry | Metal processing, fuel consumption. |
| Granary | Food storage and spoilage mechanics. |
| Lumber Camp | Wood production and deforestation limits. |
| Quarry | Stone extraction and terrain constraints. |
| Warehouse | General storage, overflow penalties. |
| Central Storehouses | Alliance-level shared storage. |
| Governor's Palace | Regional control and administrator assignment. |
| Grand Bazaar | Wonder-class; trade network hub. |
| Grand Temple | Wonder-class religious building, civ-specific. |
| Great Library | Wonder-class; unlocks unique tech branches. |
| Guild District | Artisan bonuses and trade-good unlocks. |
| Public Baths | Happiness bonus and disease mitigation. |
| Siege Workshop | Siege engine construction and deployment. |
| Theatre | Culture output and unrest reduction. |
| Watchtower | Visibility radius and early-warning triggers. |

Gameplay — Military

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| Combat Resolution | Battle formula, modifiers, and outcome calculation. |
| Navy | Naval units, sea lanes, and coastal combat. |
| Overview | Military design philosophy and scope. |
| Sieges | Siege phases, wall mechanics, and defender bonuses. |
| Unit Types | Infantry, cavalry, ranged, siege — stats and counters. |

Gameplay — Research

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| Overview | Research system design and pacing goals. |
| Research Mechanics | Research points, speed modifiers, prerequisites. |
| Tech Trees | Full technology trees per civilisation. |

Gameplay — Territory

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| Fog of War | Visibility rules, scouting, and intel decay. |
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| Territory Control | Border expansion, influence, and contested zones. |
| Villages | Neutral villages, capture mechanics, and bonuses. |
| World Map | Map generation, tile types, and region structure. |

Gameplay – Social

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| Alliances | Alliance structure, roles, and shared objectives. |
| Diplomacy | Diplomatic actions, treaties, and reputation. |
| Forums | In-game communication, announcements, and councils. |

Civilizations

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| Overview | Shared traits, differentiation axes, and design rules. |
| Sumer | Foundation Builder – construction efficiency, Ziggurat, Anunnaki pantheon. |
| Greece | Naval / Trade – Triremes, Hoplites, full Olympian pantheon. |
| Egypt | Hybrid Builder + Divine – capital compounding, Pharaoh mechanics. |
| Rome | Administrative Builder – multi-city scaling, Provincial Administration. |
| Maya | Divine / Sacrifice – blood offering economy, Sacred Calendar. |

Advanced Systems

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| Cultural Events | Seasonal events, festivals, and timed bonuses. |
| Divine System | Deity favour, miracles, and religious conflict. |
| Espionage | Spy networks, sabotage, counter-intelligence. |
| Event System | Engine architecture for scripted and random events. |
| Heroes | Hero units, traits, levelling, and narrative hooks. |
| Scripting Engine | Lua/Rhai hooks for events and modding scripts. |

Technical

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| API | REST endpoints, WebSocket protocol, auth flow. |
| Architecture | Rust crate layout, Actix-web, async runtime design. |
| Contributing | PR workflow, code conventions, test requirements. |
| Data Models | PostgreSQL schemas, entity relationships, migrations. |
| Modding | Mod format, data overrides, hook points, packaging. |
| Performance | SBC benchmarks, profiling targets, tick optimisation. |
| UI / UX | Leaflet.js integration, Canvas/WebGL, design system. |