

Engine Design Document

By Tucker Langseth

Contents

[Low-Level Engine Systems 3](#_Toc518494894)

[Start-up and Shut-down 3](#_Toc518494895)

[Memory Management 3](#_Toc518494896)

[User Created Containers 3](#_Toc518494897)

[File System 3](#_Toc518494898)

[Resource Manager 3](#_Toc518494899)

[Game Loop 3](#_Toc518494900)

[SIMD (Single Instruction, Multiple Data) 3](#_Toc518494901)

[Networked Multiplayer Game Loop 3](#_Toc518494902)

[HID (Human Interface Devices) Debugging 3](#_Toc518494903)

[Performance Analysis 3](#_Toc518494904)

[Game View 3](#_Toc518494905)

[Rendering Engine 3](#_Toc518494906)

[Animation Systems 3](#_Toc518494907)

[Collision and Rigid Body Dynamics 3](#_Toc518494908)

[Gameplay Systems 3](#_Toc518494909)

[Battle For Midgard 3](#_Toc518494910)

# Low-Level Engine Systems

## Start-up and Shut-down

## Memory Management

## User Created Containers

## File System

## Resource Manager

## Game Loop

## SIMD (Single Instruction, Multiple Data)

## Networked Multiplayer Game Loop

## HID (Human Interface Devices) Debugging

## Performance Analysis

# Game View

## Rendering Engine

## Animation Systems

## Collision and Rigid Body Dynamics

## Gameplay Systems

# Battle For Midgard