ATLASENGINE - COMPLETE DOCUMENTATION INDEX

The Ultimate Guide to Everything

ABOUT THIS GUIDE

This is the **COMPLETE** documentation for AtlasEngine covering: - Every button and feature in the editor - All 334 T# commands with examples - Graphics 2D and 3D systems - Game mechanics and combat - Complete game examples - Tips, tricks, and troubleshooting

Total Pages: 5 parts, ~100 pages **Time to Read:** 3-4 hours for complete understanding **Commands Documented:** 334

GUIDE STRUCTURE

PART 1: Getting Started & Interface

File: `COMPLETE_GUIDE_PART1.md` **Length:** 17 KB

Contents:

- **1.1** What is AtlasEngine?
- **1.2** Installation & Launch
- **1.3** First Look at the Interface
- **1.4** Your First Script
- **1.5** Understanding T# Basics
- **2.1** Menu Bar (File, Edit, View, Tools, Help)
- **2.2** Toolbar Buttons (Every single button explained)
- **2.3** Script Editor Panel
- **2.4** Script Sidebar
- **2.5** Output Window (Text & Graphics)
- **2.6** Log Panel
- **2.7** Status Bar

Perfect For: Beginners, first-time users

PART 2: T# Language - Commands 1-110

File: `COMPLETE_GUIDE_PART2.md` **Length:** 21 KB

Contents: Category 1: Text Output (10 commands) - say, shout, whisper, show, input, print, clear, cleargraphics, warn, error

Category 2: Variables (15 commands) - is, make, set, create, change, increase, decrease, increment, decrement, etc.

Category 3: Math Operations (30 commands) - add, subtract, multiply, divide, power, root, sin, cos, tan, random, etc.

Category 4: Control Flow (15 commands) - when, if, repeat, while, for, foreach, break, continue, etc.

Category 5: String Operations (20 commands) - join, split, length, uppercase, lowercase, replace, etc.

Category 6: List Operations (25 commands) - append, pop, sort, reverse, merge, etc.

Perfect For: Learning T# programming basics

PART 3: Graphics & 3D - Commands 111-250

File: `COMPLETE_GUIDE_PART3.md` **Length:** 20 KB

Contents: Category 6: Graphics 2D (20 commands) - drawline, drawrect, drawcircle, drawtext, fillscreen - sprite, movesprite, colorsprite, animations - arc, ellipse, triangle, polygon, gradient

Category 7: 3D Viewport (80 commands) - **Objects:** create3d, color3d, scale, rotate, transform - **Camera:** camera, lookat, zoom, pivot, orbit - **Lighting:** pointlight, spotlight, directional, shadows - **Materials:** texture, metallic, roughness, emissive - **Physics:** gravity, velocity, force, impulse, torque - **Effects:** particles, fog, bloom, motion blur, DOF - **Advanced:** raycast, raytrace, reflections, volumetric - **Animation:** tween, ease, spring, paths, trajectories

Perfect For: Making 2D and 3D games

PART 4: Game Mechanics - Commands 251-334

File: `COMPLETE_GUIDE_PART4.md` **Length:** 25 KB

Contents: Category 8: Game Mechanics (84 commands)

Player Stats: - health, mana, stamina, armor, attack, defense

Weapons (20 commands): - weapon, equip, shoot, reload, ammo, recoil - pistol, shotgun, rifle, bow, sword, laser, rocket - bullet, projectile, scope, aim

Combat (15 commands): - hit, explode, burn, poison, freeze, stun - buff, debuff, critical, dodge, parry

Inventory (10 commands): - additem, removeitem, useitem, hasitem, gold

Level/XP (10 commands): - level, levelup, xp, stat, skill, powerup

Quest System (5 commands): - quest, objective, completequest, reward

Enemies (10 commands): - enemy, spawn, ai, chase, attack, patrol

Game Flow (14 commands): - gameover, win, checkpoint, respawn, score - timer, pause, trigger, teleport

Complete Examples: - Text Adventure Game (full playable) - 2D RPG Maze (full playable) - 3D FPS Game (full playable) - Physics Game (full playable)

Perfect For: Making complete games

PART 5: Reference & Troubleshooting

File: `COMPLETE_GUIDE_PART5.md` **Length:** 19 KB

Contents: Quick Reference: - All keyboard shortcuts - Command quick reference (all 334) - Color reference (hex codes) - Command categories summary

Tips & Tricks: - Performance optimization - Debugging techniques - Game design patterns - Common code patterns

Troubleshooting: - Common errors and solutions - Performance issues - Graphics problems - Parser issues

Organization: - File structure recommendations - Naming conventions - Best practices

Help Resources: - Where to get more help - Learning path - Community resources

Perfect For: Reference, problem-solving, optimization

READING GUIDE

For Complete Beginners:

1. **Start with Part 1** (Interface basics)
2. **Read Part 2 sections 1-4** (Basic commands)
3. Try the examples
4. **Read Part 4 Example 1** (Text adventure)
5. Build your own simple game
6. Return to Part 2-4 as needed

Time: 1-2 hours

For Experienced Programmers:

1. **Skim Part 1** (Know the interface)
2. **Read Part 2 section 1** (T# syntax)
3. **Reference Part 5** (Command list)
4. **Study Part 4 examples** (See patterns)
5. Start building

Time: 30-45 minutes

For Game Developers:

1. **Part 1 section 1.4-1.5** (T# basics)
2. **Part 3** (Graphics & 3D)
3. **Part 4** (Game mechanics)
4. **Part 4 examples** (Full games)
5. **Part 5** (Reference)

Time: 1-2 hours

As a Reference:

Jump directly to: - **Need a command?** → Part 5 (Quick reference) - **Graphics question?** → Part 3 - **Game mechanics?** → Part 4 - **Error message?** → Part 5 (Troubleshooting) - **How do I...?** → Part 5 (Tips & Tricks)

COMMAND COUNT BY CATEGORY

Category	Commands	Part
Text Output	10	2
Variables	15	2
Math	30	2
Control Flow	15	2
Strings	20	2
Lists	25	2
Graphics 2D	20	3
3D Objects	15	3
Camera & View	10	3
Lighting	10	3
Effects	20	3
Physics	25	3
Animation	15	3
Stats	15	4
Weapons	20	4
Combat	15	4
Inventory	10	4
Level/XP	10	4
Quest	5	4
Enemies	10	4
Game Flow	15	4
TOTAL	**334**	**1-5**

WHAT'S COVERED

Editor Interface

- Every menu item explained
- Every button documented
- Every keyboard shortcut
- Every panel and window

T# Language

- All 334 commands
- Syntax for each command
- Multiple examples per command
- Common use cases

Game Types

- Text adventures
- 2D RPG games

- 3D FPS games
- Physics games
- Puzzle games
- Arcade games

Complete Examples

- 4 full playable games
- Copy-paste ready
- Well commented
- Step-by-step

Advanced Topics

- Performance optimization
- Debugging techniques
- Design patterns
- Best practices

QUICK LINKS

Start Here:

- **Never used AtlasEngine?** → Part 1, section 1.1
- **Want to code right away?** → Part 1, section 1.4
- **Need a specific command?** → Part 5, Quick Reference

Learn By Example:

- **Text game** → Part 4, Example 1
- **2D game** → Part 4, Example 2
- **3D game** → Part 4, Example 3
- **Physics** → Part 4, Example 4

Get Help:

- **Error message?** → Part 5, Troubleshooting
- **Slow performance?** → Part 5, Tips & Tricks
- **Graphics not working?** → Part 5, Troubleshooting

FILES IN THIS GUIDE

```
COMPLETE_GUIDE_INDEX.md        ← You are here
COMPLETE_GUIDE_PART1.md        ← Interface & Getting Started
COMPLETE_GUIDE_PART2.md        ← Basic Commands
```

```
COMPLETE_GUIDE_PART3.md          ← Graphics & 3D
COMPLETE_GUIDE_PART4.md          ← Game Mechanics & Examples
COMPLETE_GUIDE_PART5.md          ← Reference & Troubleshooting
```

Total Documentation: ~95 KB, 5 files

HOW TO USE THIS GUIDE

Linear Reading

Read Part 1 → Part 2 → Part 3 → Part 4 → Part 5 **Best for:** Complete understanding

Targeted Learning

Jump to specific sections as needed **Best for:** Experienced users

Reference

Keep open while coding **Best for:** Everyone

Problem Solving

Search for error messages in Part 5 **Best for:** Troubleshooting

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WHAT YOU'LL LEARN

After reading this guide, you will:

Know every feature of the editor   Understand all 334 T# commands   Be able to make 2D games   Be able to make 3D games   Understand game mechanics   Know how to debug problems   Be able to optimize performance   Have 4+ complete game examples

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SKILL LEVELS

Beginner (Parts 1-2)

- Use the editor
- Write basic scripts
- Create variables
- Use math and logic
- Make simple programs

Intermediate (Parts 2-3)

- Create 2D graphics
- Build text adventures
- Use control flow
- Work with strings/lists
- Make simple games

Advanced (Parts 3-4)

- Create 3D games
- Use game mechanics
- Implement combat
- Build complete games
- Add physics and effects

Expert (All Parts)

- Optimize performance
- Debug complex issues
- Design patterns
- Large game projects
- Help others

ESTIMATED TIME

Activity	Time
Read entire guide	3-4 hours
Understand basics	30 min
First game	1-2 hours
2D game mastery	5-10 hours
3D game mastery	10-20 hours
Expert level	40+ hours

SUPPORT

Found an Error?

- Report on GitHub: github.com/elianjamal
- Create an issue
- Or fix and submit PR

Need Help?

- Read Part 5 (Troubleshooting)
- Check examples in Part 4
- Review command syntax in Parts 2-3

Want to Contribute?

- Add examples
- Improve documentation
- Report bugs
- Help others

VERSION INFO

Guide Version: 1.0 **AtlasEngine Version:** 1.0 **T# Commands:** 334 **Date:** December 2025 **Author:** Complete documentation **Maintained by:** elianjamal

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CHANGELOG

Version 1.0 (December 2025)

- Complete editor documentation
- All 334 commands documented
- 4 complete game examples
- Full troubleshooting guide
- Quick reference tables
- Tips and tricks section

START YOUR JOURNEY

Ready to Begin?

New to AtlasEngine? → Open `COMPLETE_GUIDE_PART1.md` → Section 1.4: Your First Script

Want to make games? → Open `COMPLETE_GUIDE_PART4.md` → Pick an example and start coding!

Need help now? → Open `COMPLETE_GUIDE_PART5.md` → Troubleshooting section

HAPPY GAME MAKING!

You now have the complete knowledge to: - Master the editor - Learn all 334 commands - Create amazing games - Solve any problem

Let's build something awesome!

Created with   for the AtlasEngine community