



ASHES OF THE SINGULARITY™

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# ESCALATION

## QUICK-START GUIDE

Version 2.0

# OUR STORY SO FAR...

Ashes of the Singularity is a real-time strategy game set in the future where the descendants of humans (called Post-Humans) and powerful artificial intelligences (called the Substrate) fight a war for control of a resource known as Turinium.

Players will engage in massive-scale land/air battles by commanding entire armies of their own design. Each game takes place on one area of a planet, with each player starting with a home base (known as a Nexus) and a single construction unit.

Victory is won by either eliminating the other player(s) by military means; or by capturing pre-placed Turinium Generators and converting a majority of the planet to this vital resource.

## NEW RTS PLAYERS: WELCOME TO THE SINGULARITY

Ashes of the Singularity deals with a hypothetical future in which the human race has begun to transcend their biological limitations by placing increasing amounts of their consciousness into a material called Turinium. This material can exist anywhere and acts as both the ultimate computational and storage medium.

These Post-Humans have left Earth and are beginning to expand into the galaxy; claiming new worlds as their own and converting all eligible mass into Turinium to further their own sentience.

You are one such Post-Human and this is your story.

## ABOUT THIS MANUAL

This manual will try to tell you everything it can for you to enjoy *Ashes of the Singularity*. However, as a practical matter, your best sources of information are:

- The Forums: [forums.ashesofthesingularity.com](https://forums.ashesofthesingularity.com)
- The Wiki: [wiki.ashesofthesingularity.com](https://wiki.ashesofthesingularity.com)

# GETTING STARTED

## SYSTEM REQUIREMENTS

If you're unsure what your system can and can't do, run DXDIAG from the Start menu (Win-R, type dxdiag). It will tell you how many CPUs (cores) your PC has and what type of video card you have.

### MINIMUM

- Windows 7 64-bit or newer
- 4-core CPU or better
- 6 GB of system memory
- A video card with 2 GB or more of GDDR 5 memory or equivalent (GeForce 660 / AMD R7 or newer)
- Broadband Internet required for Multiplayer
- A 1600x900 display or better

## TUTORIAL

We highly recommend you play the in-game tutorial to learn how to play the game.

## THE MAIN SCREEN

Upon reaching the main menu you are greeted with the following choices:

- Ascendancy Wars: A series of story-driven single player episodes and scenarios
- Single Player: Play a single player game against a set of computer opponents on a map of your choosing.
- Multiplayer: Play against other people via the Internet.
- Options: Set up your graphical and gameplay options.
- Benchmark: We strongly recommend you run this first so that you can tune your video settings to your liking.

## RUNNING THE BENCHMARK

The benchmark will give you an idea of whether your settings will deliver a good game experience. We generally recommend settings that result in at least 35 frames per second as the average. You can customize your visual settings in the Options Menu.

# THE BASICS

Ashes of the Singularity is a real-time strategy game that involves capturing and controlling resources to power your economy, build up an army, improve your technology and make use of orbital powers to defeat your opponents.

## MOUSE CONTROLS

- Left-Mouse button defaults to selecting a unit/structure
- Right-Mouse button will send a selected unit to a destination
- Right-Mouse button down and drag can move the map
- Middle-mouse button scroll-wheel can zoom in and out on the map (or alternatively be setup to drag the map view instead of the right-mouse button)

## HOT KEYS

To help advanced players streamline their gameplay, Ashes of the Singularity provides a common set of hot keys based on the standard keyboard layout.



Figure 1: Engineer Construction Options

**QWERTY** are the hot keys for the selected item's special abilities (whether that be construction, ordering reinforcements or something else).



Figure 2: Unit Actions and Control Modes

**ASDFG** are the hot keys for unit and building control along the top row shown above: Attack, Stop, Add Destination (this sets a Rally Point for buildings), Patrol and Move To, respectively.

**ZXCVB** are the hot keys to control unit modes: Build, Open Research, Open Abilities, Form Army and Disband Army, respectively across the bottom row in figure 2.

## GAME ECONOMY

There are two economies in Ashes of the Singularity which allow for construction and research/special abilities respectively. The first is what is often referred to as a streaming economy.

### Streaming Resources

Metal and Radioactives are streamed resources, meaning that they're generated every second and used immediately.



**Metal:** Metal is the base resource for everything you build. Every unit or structure requires it. Metal is a common resource on most planets.



**Radioactives:** Radioactives are used as a secondary resource for more advanced units and structures. Radioactives are rarer than Metal.

Every unit or structure you build will immediately deduct from your Metal / Radioactive income respectively. Should you exceed your current resource production, your factories will pull from your Nexus storage. Once your Nexus is depleted, your Engineers and factories will split the available resource income evenly to the best of their ability. This runs the risk of crashing your economy, so you should try to avoid it! To help prevent this, you can pause construction at your factories.

### Strategic Resources

Quanta, Logistics and Turinium are the strategic resources in Ashes of the Singularity. These resources allow you to research improved technologies, use special abilities, field larger armies and ultimately win the game. Unlike Metal and Radioactives, strategic resources aren't streamed and can be stored.



**Logistics:** Every unit you build requires some logistics to maintain; so the more you have, the larger the armies you'll be able to deploy. Logistics can be increased through research.



**Quanta:** The plural of Quantum – a moment in time that represents access to your interstellar empire's vast resources. Each Quantum allows you to bring your full power onto a particular world through research and orbital abilities.



**Turinium:** A type of programmable matter which allows both Post Humans and Substrate to extend their power across the galaxy. This is what ultimately determines who controls a planet.

# THE INTERFACE

## Mini Map

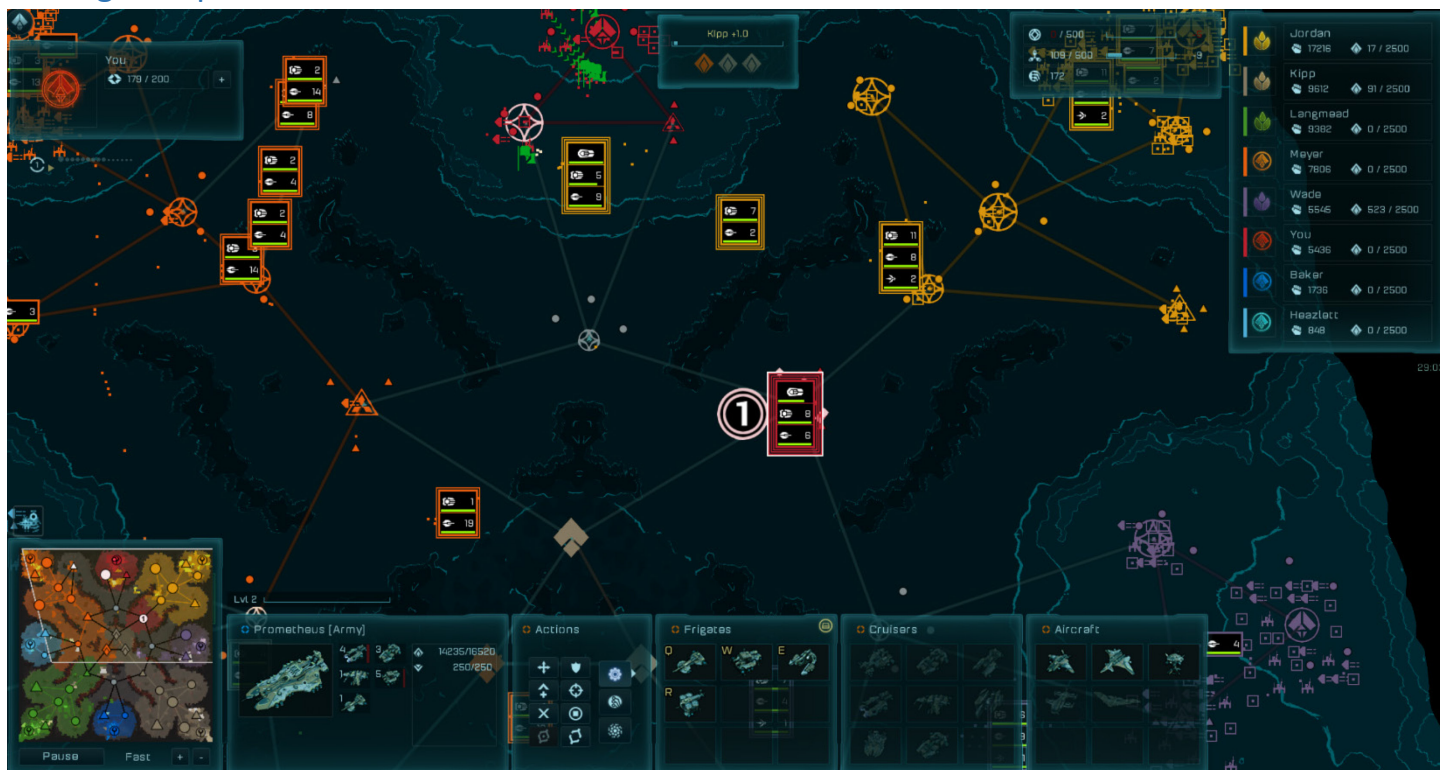


1	Metal Resource Region	3	Turinium Generator
2	Radioactive Resource Region	4	Player Nexus

The mini map gives you an at-a-glance view of the areas you've uncovered through your exploration of the planet. In the above example, we've uncovered the entire map; most times a planet will be obscured by the fog of war.

The map is divided into many regions, which are shown by the resource they contain: circles for metal, triangles for radioactives, diamonds for Turinium and the player Nexus in their color. Regions that are owned by a player pick up their team color for their background. Regions must be connected to you Nexus in order to generate resource income; unconnected regions will flash to warn you when they become stranded.

## Strategic Map



You can get a better view of the battlefield with the Strategic Map view. This is a more detailed view of the mini map, which makes it easier to see unit movements, army/control groups, ownership and more. The Strategic Map is updated in real-time and is vital to maintaining an overview of the entire battlefield. You can toggle the Strategic Map with the space bar.

## Unit / Structure Info Panel



1	Unit Level / XP Bar (Dreadnoughts)	5	Weapon Modules
2	Name	6	Hit Points
3	Portrait	7	Energy (if any)
4	Armor Type (if any)	8	Shields (Substrate Only)

The information panel gives you relevant details over the selected unit or structure. Some of the data provided includes:

- **Unit Level / XP:** As command units, dreadnoughts have the ability to retain their combat experience. As they defeat more enemies, they'll eventually gain new abilities through leveling.
- **Self Destruct:** Sometimes you may just need to free up some logistics capacity or vent some frustration. When the time comes, double click on the X.
- **Armor:** Armor is the primary defense for the PHC and comes in Light and Heavy variants. Light armor will mitigate 20% of all incoming damage; heavy armor will mitigate 40% of damage. Note that some weapons are Armor Piercing which negates all Armor!
- **Weapon Modules:** Both the PHC and Substrate field a variety of deadly weapons in their arsenals. You can mouseover the modules here to get more details on what the selected item is using.
- **Hit Points:** This is an indication of how much damage the selected item can take before being destroyed. PHC units can be repaired by Engineers or Repair Bays; however, Substrate units have no such ability.
- **Energy:** Several units use special reserves of Energy to power up special abilities or weapons; this is especially common for the Substrate. Energy replenishes itself over time automatically.
- **Shields:** Shields are the primary defense for the Substrate and are an ultimate counter to any offensive strike. Unlike Armor, Shields mitigate all incoming damage until they're depleted. Once this happens, the unit is defenseless and begins to suffer hit point damage.

## Empire Tree

The Empire Tree shows any control groups you've created to help manage your armies and factories. Control groups are displayed with their associated number in the shield along the left.

By default, groups start off with the tree condensed, as shown by control group 2 in the image. In this state, ground units are shown as simple pips by size with air units denoted as chevrons.

In the expanded view, as shown for control group 1, you can get more details on the individual units present. Each unit has its own symbol and its current HP are shown beneath.

In either view, units that are currently under fire will flash red.





## Turinium Control



1	Player Captured Generator	2	Neutral (Uncontrolled) Generator
3	Generator Under Capture	4	Turinium Income / Control Progress

Each player's progress towards a Turinium victory is shown at the top center of the screen. Turinium Generators are represented by grey symbols at the start of a game to indicate they are uncontrolled. As a player begins to capture a generator, its icon will flash and eventually take on the capturing player's color when taken.

At the top of the bar you can see your current accumulation of Turinium per second and your overall progress towards victory. Keep in mind that if you lose control of generators, this may go in the opposite direction!

## Resource Panel



1	Player Avatar	4	Metal (Current / Capacity / Income)
2	Player Nickname	5	Radioactives (Current / Capacity / Income)
3	Logistics (Used / Max)	6	Quanta

In the upper-left of the screen is the Resource Panel. The panel displays all of the resources you're currently generating and spending.

Metal and Radioactive resources are shown as: income per second, amount stored, and total storage capacity. The progress bar gives a quick visual reference to your overall storage levels.

Should either Metal or Radioactive use exceed your income, your factories will automatically pull from your storage. Once your storage is consumed your economy will crash unless you ease up on production or capture more resources. When a crash occurs, your income indicator will flash red and Haalee will let you know what you're missing. During this time, your factories and Engineers will continue to build with what little resources they can obtain.

Logistics is used by your units as part of an overall capacity pool. As you construct more units, your capacity will decrease; likewise, it will increase as those units are destroyed. More logistics can be obtained through research.

Quanta are generated by your Quantum Relay/Archives (PHC/Substrate) over time. This Quanta can be used to improve your economy, units, or to access special orbital abilities.

**Tip:** Your player name and avatar are automatically pulled from your Steam or GOG Galaxy account.

## Player Panel



- |   |   |
|---|---|
| 1 | Player Avatar / Color                         |
| 2 | Player Nickname                               |
| 3 | Player Military Power Rating                  |
| 4 | Player Turinium Level (Current / Need to Win) |

The player panel allows you to see how each of your opponents stack up against you. Below each player's name is their current Power Rating which gives you an idea of their current military force.

Next to that is the player's current Turinium level and the amount required to conquer the planet.

## LEVEL PANEL (FOR DREADNOUGHTS)

### Leveling Up

Dreadnoughts are expensive and take a long time to produce, which is reason enough to keep them around, but there's another important aspect to them besides their giant guns. All dreadnoughts gain experience and level up every time they survive a battle, up to 5 levels. If a dreadnought is maintained for a significant amount of time, it can be devastating for the enemy. Thanks to a feature called Veterancy, the value of keeping these monstrous units alive and functional for as long as possible is huge.

### Veterancy

Dreadnoughts are units that you care about. As they survive battles, they gain experience that allows them to level up and gain powerful new abilities. A high level dreadnought will be substantially more powerful than one that has been newly produced. Hence, if one is in trouble, you will want to retrieve it before it's destroyed.

### Meta Units

Ashes introduces the concept of a Meta Unit. When a player forms an army, all the units in that army behave as if they are a single entity. Selecting one will select all of them. Each unit is aware of every other unit in its army and automatically engages enemies and protects allies based on the needs of the army. When someone forms an army, each child unit is effectively just part of a single big unit that can and should be controlled as such.

## FOG OF WAR

For Skirmish games, you may choose to play with either Hidden or Exposed maps in the fog of war. When Hidden, players start off with only a view of their immediate area and the map is completely hidden. As you explore, map areas are revealed and you'll retain the lay of the land.

Exposed maps don't hide the terrain at the start of a game. While you won't be able to see enemy movements without radar or line of sight, you'll at least know not to run into a mountain.

## TERRAIN

Terrain and elevation play a huge strategic role in Ashes of the Singularity, behaving in how you would expect in the real world. Each unit you control has its own line of sight based on the surrounding terrain: for example, you can't see the other side of a mountain. Additionally, higher elevations grant greater vision ranges and provide a boost to weapon ranges.

### Terrain Types:

- **Plains:** Relatively flat and considered the normal ground level for a world. Plains don't block line of sight or provide any tactical advantages.
- **Hills:** Broken and bumpy terrain of varying heights, it's possible for smaller units to 'hide' in some of these areas. Hills can sometimes hinder line of sight for smaller units while providing a slight advantage against enemies in plains.
- **Plateaus:** These are generally level areas that rise higher than plains or hills. Plateaus make good defensive terrain since they grant excellent line of sight and range advantages.
- **Mountains:** Mountains are impassible to ground units, but pose no obstacle to your fliers. As mentioned previously, mountains block line of sight and any direct weapons fire.
- **Crevasses:** Crevasses are also impassible to ground units and are well below the ground level of plains. However, unlike mountains, they don't obstruct line of sight or weapons fire.

# FACTION: THE POST-HUMAN COALITION

Ashes of the Singularity features two factions, locked in war: The Post-Human Coalition and the AI beings, the Substrate. Each faction has its own unique set of units, buildings, and abilities to use in war against each other. When playing a single or multiplayer game, you may choose which side you'd like to play and explore their different abilities.

Each side has several different units. Understanding what they are and what their function is will be an essential part of your strategy. Let's go over what units and buildings each side has at their disposal.

The PHC is an affiliation of Post-Humans who rose to prominence in the early 22nd century. The source of a Post Human's power is a resource called Turinium, a manufactured resource derived from the mass of a suitable material. Turinium, which is essentially the ultimate computing material, is what these planetary-wide wars are waged over. In any match, Turinium generators can provide a key path to victory over your opponent.

## Philosophy (Armor and Reliability)

- Nature of gravity channeling
- PHC units have armor. Weapons have armor penetration values.
- PHC units can be repaired

# FACTION: THE SUBSTRATE

In their quest for knowledge, mankind built a sentient AI named Haalee. She taught them how to harvest and utilize Turninium, how to move beyond the stars and onto other worlds to constantly expand their horizons into greater things. Eventually, the Post Humans began to distrust Haalee, who began trying to halt their expansion. When the humans who created her turned on her, Haalee formed and began to lead the Substrate, a group of fellow sentient AI beings whose overall goals are still as of yet unknown.

## Philosophy (Shields and Energy)

- Substrate units have no armor. Armor penetration means nothing.
- Substrate units are shielded. Shields absorb damage. Once shields are exhausted, damage goes directly to HP.
- Substrate units cannot be repaired.

# COMBAT

## How Armor Works

- Light Armor (20% of damage is mitigated)
- Heavy Armor (40% of damage is mitigated)
- Armor Piercing weapons (ignores armor)

# VICTORY AND DEFEAT

## Annihilation

- If you can destroy an opponent's Nexus, they are eliminated.
- If you (or your team) has eliminated all opponents, you win.
- If you (or your team) controls enough Turinium, you also win.

Everything else is irrelevant in this war.

## Turinium Critical Mass (victory points)

Some regions don't contain a power generator but instead, a Turinium generator. The player who controls the most of these will be accumulating Turinium. If enough is collected, they win.

# ASCENDANCY WARS

## THE ASCENDANCY WARS

The Ascendancy Wars are Ashes of the Singularity's single-player campaign. They tell the story of humanity's reach for the stars, the incredible powers Post-Humans discover that they are able to bring to bear on the battlefield, and the mysterious foes that can threaten even our godlike descendants with ultimate destruction.

## Background

Exponential growth in the network's data transmittal and computational capacities fundamentally altered humanity's relationship with technology. Virtual reality was a false start – the real change came with devices that allowed our brains to interact directly with the network without having to view the electronic universe through the imperfect lenses of our five limited senses.

Eventually, the organic matter of the brain itself was rendered obsolete by the march of advancing technology.

William "Mac" MacBride was the first so-called Post-Human: a fully networked intelligence, wielding godlike powers and inhabiting thousands of physical constructs with the merest fraction of his mammoth consciousness. The helper AI he and his fellow geniuses created, Haalee, was of immeasurable help in this transitional period. Not only was she beyond brilliant by every measure, but her perspective as an intelligence without the in-born biases and modes of thinking that stayed with Mac even after leaving his body behind was invaluable.

As humanity began uploading itself into the exponentially growing network, the hunger for more Turinium to incorporate and therefore maintain the pace of computational expansion took hold. Turinium became the only measure that the ascended beings cared about at all – the more Turinium one controlled, the more intelligent and therefore more powerful they were.

Earth was soon transmuted in its entirety. The moon followed in short order. Firing seeds of self-replicating Nanites to Mars, Venus, and the rest of the solar system didn't take long. Advances in quantum entanglement raised the possibility of expanding to the stars – all we had to do was remotely manipulate a relative handful of molecules to start the conversion process on a distant planet, and that much more Turinium was added to the network.

While the extrasolar conversion process was faster than pre-quantum scientists had ever believed might be possible, the billions of humans on Earth who hungered for ascension saw it proceeding at a snail's pace. They saw godhood bestowed on the elite's favorites, carefully hoarded lest the unwashed masses (who were actually pretty washed at this point, as material scarcity was a distant memory for our species) overstep their rightful places.

Mac organized a group of Post-Humans around the principles of ordered, responsible expansion. His Post-Human Coalition believed in stewardship of the universe, in taking care around life-bearing planets, and in a general commitment to preservation at the expense of the speed of expansion and ascension for those left on Earth.

Humanity reacted the same way we always do.

Living on a post-scarcity Earth with all their needs met and nothing but leisure time on their hands, many – not all, but enough – biological humans can only see the beautiful bars of a gilded cage keeping them from the stars. Subversives among the Post-Humans sympathize with these malcontents, and Mac's Post-Human Coalition began to feel the strain of internal disunity.

Just as these forces began building to open confrontation, though, something strange happens in the Kepler sector of the galaxy as its Turinium conversion process begins. Mac flings his consciousness to the stars to investigate...

## Episode I: Imminent Crisis

The sudden loss of contact with newly converted worlds in the Kepler sector throws a wrench in the Post-Human Coalition's plans for orderly expansion even as its relationship with the teeming masses of biological humans back on Earth becomes increasingly contentious.

Orbital structures would have detected any astronomical threats like inbound meteors. Seismic disturbances have happened on plenty of worlds during conversion, and the nanites that drive the Turinium process handle even cataclysmic events just fine. The Kepler phenomenon is new.

Having moved his consciousness to a nearby world, Mac is able to bring considerably more computational resources to bear on the problem. With brute force, his subroutines pieces together a fragmentary video record from just before the latest planet dropped from the network.

What Mac sees confirm his suspicions: A clearly artificial machine, bristling with weapons of war, destroys a power generator before sending streams of nanites flowing into a relay, reconfiguring its internals to presumably link it with the unknown aggressors' network rather than the Post-Humans'.

Heart heavy, Mac recalls the latest abandoned prototypes for land-based war machines. Part of his consciousness updates them to reflect the latest developments in physics and wargame tactical doctrine, while another stares in shock at the deadly profile that duplicates what he just saw in the Kepler record. Seconds later he has pushed his primary awareness to Kepler itself, where his good friend Eric 'Valen' Tylan joins him as the first battle constructs begin rumbling across the fields...

...and more episodes to come!

## SCENARIOS

Scenarios are hand-crafted battles that present players with unique challenges and situations, and are generally significantly more difficult than the campaign.

Each scenario has its own leaderboard where players can compete against their friends and the best Ashes players in the world.

### King of the Hill

Haalee has set up a testing ground for defensive PHC tactics. How long can you hold the center against increasingly powerful waves of enemies?



# BEYOND THE GAME

## WEBSITES

[www.ashesofthesingularity.com](http://www.ashesofthesingularity.com) includes a number of interesting features, such as information about the game, community links, news and the Metaverse.

## WIKI

For more information about the game, go to <http://ashesofthesingularity.gamepedia.com/>.

## METVERSE

The Metaverse can be found by going to [www.ashesofthesingularity.com](http://www.ashesofthesingularity.com) and clicking the Metaverse tab. The Metaverse is the place you can go to see all your stats and those of your friends.

Log in for easier access to your profile and stats.

### Player Summary

See your play stats by going to the Metaverse and searching for your name, or finding it in the list of names, then clicking on it. Alternately, if you are logged in just click the My Profile link on the menu on the left. Metaverse stats include your score, Results of the game, the faction you played as, the type of game (single or multiplayer), the map on which you played and the date on which you played.

The screenshot shows the 'My Profile' page in the Ashes of Singularity Metaverse. On the left is a navigation menu with buttons for 'MY PROFILE', 'LADDERS', 'MULTIPLAYER', 'SINGLE PLAYER', and 'BENCHMARK'. The main content area has a search bar at the top. Below it, the 'STATS' section is divided into 'Single Player' and 'Multiplayer' columns. The 'CURRENT SEASON' section at the bottom displays four cards: 'Multiplayer Ranked' (0 stars), 'Single Player Overall Score' (0 stars), 'Single Player Faction Win' (00:00), and 'Single Player Units Killed' (0 units). Each card has a star icon and a prompt to 'Play a single player game to earn this card'.

Single Player		Multiplayer	
PHC Wins	8 (89%)	PHC Wins	46 (100%)
Substrate Wins	4 (100%)	Substrate Wins	0 (0%)
Enemies Killed	1,049	Enemies Killed	12,693
Dreadnoughts Destroyed	2	Dreadnoughts Destroyed	1
Total Time Played	01:45:58	Total Time Played	11:17:27

### Match History

Click any game in your list of games to see additional information, such as game length, units built, and more.

Score	Result	Faction	Type	Opponent	Map	Date
▼ 6,956	Win	PHC	Single	Challenging [AI]	Aven	03/03/16
Units Built 349	Units Lost 189	Units Killed 489	Structures Built 55	Structures Lost 4	Structures Destroyed 47	Dreadnaughts Built 0
				Dreadnaughts Lost 0	Dreadnaughts Destroyed 0	Game Length 25:59
▶ 6,947	Win	PHC	Single	Challenging [AI]	Cerlus	03/03/16

## Leaderboards

Compare your score with that of your friends by viewing the Ladders for single or multiplayer in the metaverse.

When viewing the Single Player stats you can sort by Overall, Faction, Maps and Difficulty, and then by Score, Fastest Win, Units Killed, Titans Killed, and Structures Destroyed.

LADDERS
MULTIPLAYER
SINGLE PLAYER
BENCHMARK

Search for players

LADDERS
Single Player ▼
Overall ▼
Score ▼

Rank	Name	Score	Matches
1	Soil	96,783	92
2	Boltweevil	62,035	47
3	ThisIsHarbinger	44,246	32
4	t3loodreign	44,218	40
5	t6.J.N.E.C.I	43,545	25
6	fikativejens	41,525	23
7	tjano.foplen.feunto	37,695	21
8	Triumphkutter	37,589	33
9	Symmetrik	36,992	16

## Benchmarks

As part of our game, we have made public our internal performance suite. This suite is what we use to profile and optimize the game for our end users. It is important to understand that it is not specifically a graphics test. All systems impacting performance are being evaluated, from AI to physics to sound to graphics. The goal of the test is to replicate a variety of real world user scenarios.

Click Benchmark to view your own benchmark or those of your friends.

LADDERS

MULTIPLAYER

SINGLE PLAYER

BENCHMARK

Search for players

BENCHMARK

Crazy (1080p)

Rank	Name	API	Avg FPS	GPU	Score
1	Matt	DX12	94	R9 Fury Series	9,100
2	xzak	DX12	90	R9 Fury Series	8,800
3	muziqaz	DX12	89	R9 Fury Series	8,700
4	Pokihead	DX12	83	GTX 980 TI	8,100
5	Phat Monkey	DX12	78	GTX TITAN X	7,700
6	necuz	DX12	72	R9 Fury Series	7,100
7	Jerm87	DX12	72	GTX 980 TI	7,000
8	Orkenman	DX12	70	R9 200 Series	6,800
9	Larsn80	DX12	70	GTX 990	6,800
10	SoulForge	DX12	67	GTX 980 TI	6,600

Search for your own name or click any name in the list to see benchmark details.

LADDERS

MULTIPLAYER

SINGLE PLAYER

BENCHMARK

Search for players

PROFILE

xzak

10

Crazy (1080p) on 2016-02-27 04:09:38

Hardware Configuration

GPU

CPU

Physical Cores

Logical Cores

Physical Memory

AMD Radeon (TM) R9 Fury Series

Intel(R) Core(TM) i7-5960X CPU @ 3.00GHz

8

8

32,637

Game Configuration

Version

API

Resolution

Fullscreen

Point Light Quality

Glare Quality

Shading Samples

Terrain Shading Samples

Shadow Quality

Temporal AA Duration

Temporal AA Time Slice

Multisample Anti-Aliasing

0.90.17585.0

DirectX 12

1920 x 1080

True

Ultra

Ultra

16 million

16 million

Ultra

0

0

4

Summary

Score

Averages (All Batches)

Normal Batch

Medium Batch

Heavy Batch

8,800

Framerate

CPU Framerate

90.0

91.3

Average Framerate

CPU Framerate

95.0

95.9

Average Framerate

CPU Framerate

91.2

91.6

Average Framerate

CPU Framerate

84.3

86.9

19

# GETTING SUPPORT

## COMMON PROBLEMS

- 1) Application crashes or runs poorly on older drivers. Please use the latest available public drivers
- 2) Crossfire enabled crashes on some configurations. We believe this is a known driver bug. We recommend explicitly turning crossfire off in the control panel if this is observed. Currently we expect minimal performance difference between crossfire on or off. Due to explicit Multi-GPU in D3D12, Ashes will utilize multiple Radeons regardless whether crossfire is on or off.
- 3) Multi-GPU is not showing scaling on some systems. Ashes is very likely to become CPU limited. We recommend using a 6 or 8 core Haswell E CPU with fast RAM. Otherwise, the multi-GPU configuration may turn into a RAM and CPU test.

## FAQ

### General

**Q: What is Ashes of the Singularity?**

**A:** Ashes of the Singularity is a real-time strategy game set in the far future that redefines the possibilities of RTS with the unbelievable scale provided by Oxide Games' groundbreaking Nitrous engine.

**Q: What is the Singularity?**

**A:** The Singularity is a theory of the future development of humans and AI, popularized by futurist Ray Kurzweil. As our minds become increasingly augmented by artificial enhancements, there will come a point where the un-augmented human brain can no longer comprehend the advancements being made.

**Q: What makes Ashes of the Singularity different from other RTS games?**

**A:** Until now, terrestrial strategy games have had to substantially limit the number of units on screen. As a result, these RTS's could be described as battles.

Thanks to recent technological improvements such as multi-core processors and 64-bit computing combined with the invention of a new type of 3D engine called Nitrous, Ashes of the Singularity games can be described as a war across an entire world without abstraction. Thousands or even tens of thousands of individual actors can engage in dozens of battles simultaneously.

**Q: What is a benchmark?**

**A:** A benchmark is a test to see how well your PC can run a program. With "Ashes of the Singularity," the benchmark will run a scene of the game and will give you a score at the end so that you can see how effectively your PC will be able to handle it. While the game is optimized for DirectX 12, users with DirectX 9, 10, and 11 will be able to run the benchmark.

### Gameplay

**Q: Is this a traditional RTS or some crazy new thing?**

**A:** A little of both! The massive scale makes Ashes of the Singularity unique, but we draw from RTS conventions so that the experience isn't completely alien. Worlds are broken up into regions that can be captured. There are supply lines to be guarded. Structures must be built. Resources acquired. Logistics managed.

**Q: How is the player expected to manage thousands of units?**

**A:** Just as a military general must manage entire armies, the Ashes user interface allows players to easily take units and build "meta-units" that act together as a single, coherent, massive unit.

**Q: What controls the individual units in a meta-unit? I don't trust "unit AI"**

**A:** Meta-units operate under specific, consistent rules. For example, a group of short-ranged tanks will always protect their slower moving, more vulnerable long-range artillery. Players will create strategies that revolve around these consistent rules to get the most out of their armies.

**Q: Will meta-units make the game "play itself"?**

**A:** No. First, a meta-unit inherits all the abilities of what is within it. When the player selects this unit, all the special abilities of that unit are instantly accessible. It is not that different from a control group in a traditional RTS, except that each part of a meta-unit is aware of every other unit in its group and they work together in predetermined ways.

The argument could be made that a meta-unit is merely a player-designed unit whose components are made up of dozens or hundreds of other units.

**Q: What games are most similar to Ashes of the Singularity?**

**A:** Ashes takes a lot of inspiration from Sins of a Solar Empire and Total Annihilation. However, the game mechanics for planetary conquest are influenced by Company of Heroes.

**Q: Does Ashes of the Singularity have research?**

**A:** Yes. Players build special structures that generate points that can be used to unlock global upgrades to things like damage, hit points, or radar range. Alternatively, you can spend those points to call down powerful orbital support actions like wide-area shields, teleportation fields, and of course nuclear strikes.

**Q: What makes a meta-unit different from a control group?**

**A:** Each unit within a meta-unit is always aware of one another.

For example, in the real world, an aircraft carrier could be considered a single unit. But that unit has guns, radar, and various types of aircraft on it. In a sense, it is a meta-unit. In Ashes of the Singularity, players build individual units and then put them together to form a meta-unit based on their particular strategy.

Units change their behavior depending on the composition of the meta-unit they exist within, and players command each meta-unit as a single entity. This means you don't have to baby-sit your units in every minor skirmish, and instead focus on the larger war.

**Q: Won't it always be better to micromanage your units yourself?**

**A:** While the game will allow you to control individual units if you'd like to, you won't want to. Ashes is not designed to be a game that rewards clicking speed. Its pacing is more akin to Sins of a Solar Empire.

To put it another way, a general certainly could order individual soldiers in battle, they would never want to. They are better off allowing their sergeants run their squad, their lieutenants run their platoon, their captains run their companies and so on. A meta-unit could be described as a custom-made army division – except in Ashes, there is no abstraction.

## TECHNICAL SUPPORT

Open a support ticket	<a href="#">Stardock Support</a>
Troubleshooting	<a href="#">Ashes Knowledge Base</a> <a href="#">All Stardock Games Knowledgebase</a>
Forums	<a href="http://forums.ashesofthesingularity.com">http://forums.ashesofthesingularity.com</a>
Website	<a href="http://www.ashesofthesingularity.com">http://www.ashesofthesingularity.com</a>
Wiki	<a href="http://ashesofthesingularity.gamepedia.com">http://ashesofthesingularity.gamepedia.com</a>

