



— ASHES OF THE —
SINGULARITY™

USER MANUAL

Version 0.95

TABLE OF CONTENTS

Contents	2
Our Story so far... ..	5
New RTS Players: Welcome to the Singularity.....	5
About this manual.....	5
Getting started	6
System Requirements	6
Tutorial.....	6
The Main Screen	6
Running the Benchmark.....	6
The Basics.....	7
Mouse Controls.....	7
Hot Keys	7
Game Economy	8
Streaming Resources.....	8
Strategic Resources.....	8
The Interface.....	9
Mini Map.....	9
Strategic Map	10
Unit / Structure Info Panel	11
Empire Tree.....	12
Turinium Control.....	12
Resource Panel.....	13
Player Panel.....	14
Level Panel (for Dreadnoughts)	14
Leveling Up.....	14
Veterancy	14
Meta Units.....	14
Fog of War.....	15
Terrain.....	15
• Faction: The Post-Human Coalition	16
Philosophy (Armor and reliability)	16
PHC Units	16
Frigates.....	17

Cruisers.....	18
Dreadnoughts.....	18
Aircraft	19
PHC Buildings	19
Resources	19
Production.....	19
Defenses.....	19
Orbitals.....	20
Faction: The Substrate	21
Philosophy (Shields and Energy)	21
Substrate Units.....	22
Frigates.....	23
Cruisers.....	23
Dreadnoughts.....	24
Aircraft	25
Veterancy	25
Meta Units.....	25
Substrate Buildings	26
Resources	26
Production.....	26
Defenses.....	26
Orbitals.....	26
Combat.....	27
How Armor works	27
Range	27
Ballistics.....	27
Weapons that require energy to fire	27
Victory and Defeat	27
Annihilation.....	27
Turinium Critical Mass (victory points)	27
Ascendancy Wars	28
The Ascendancy Wars	28
Background	28
Episode I: Imminent Crisis.....	29
Scenarios	29

King of the Hill.....	29
Advanced Players.....	30
Advanced Setup Options.....	30
Game Options.....	30
Player Options.....	30
Using Global Abilities.....	30
Post-Human Orbitals.....	30
Substrate Orbitals.....	31
Global Upgrades.....	31
Control Groups.....	31
Forming Control Groups.....	32
Using Control Groups.....	32
Using Armies.....	32
Forming Armies.....	32
Commanding Armies.....	32
Beyond the game.....	33
Websites.....	33
Wiki.....	33
Metaverse.....	33
Player Summary.....	33
Match History.....	33
Leaderboards.....	34
Benchmarks.....	34
Getting Support.....	36
Common Problems.....	36
FAQ.....	36
General.....	36
Gameplay.....	36
Technical Support.....	37

OUR STORY SO FAR...

Ashes of the Singularity is a real-time strategy game set in the future where descendants of humans (called Post-Humans) and a powerful artificial intelligence (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 substrate.

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
- The Wiki: 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. I will tell you how many CPUs (cores) your PC has and what type of video card you have.

MINIMUM

- 4-core CPU or better
- 6GB of system memory
- A video card with 2GB or more of GDDR 5 memory or equivalent (GeForce 660 / AMD R7 or newer)
- Windows 7 or later
- 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 entering the game you are greeted with the following choices:

- Ascendancy Wars. A series of story-driven single player episodes and scenarios
- Skirmish. 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 gameplay experience 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
- Right-Mouse button will send the 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 set up 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.

Strategic Map



1	Player 1 Owned Region (Red)	3	Supply Line Connection
2	Player 2 Owned Regions (Blue)	4	Normal Terrain
5	Hills / Plateau Terrain	6	Impassible Terrain

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)	6	Weapon Modules
2	Name	7	Hit Points
3	Self Destruct	8	Energy (if any)
4	Portrait	9	Shields (Substrate Only)
5	Armor Type (PHC 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	Metal (Income / Stored / Capacity)	2	Radioactives (Income / Stored / Capacity)
3	Player Avatar	4	Player Nickname
5	Logistics (Used / Max)	6	Quanta

In the upper-right 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 (in gold), and total storage capacity (in blue/red). 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 / Name
- 2 Player Power Rating
- 3 Player Turinium Levels (Owned / Amount 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 currently 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. A dreadnought can gain 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. For more information about the specific abilities that the dreadnoughts gain from leveling up, please see our section on PHC dreadnoughts here and our section Substrate dreadnoughts here.

Meta Units

Ashes introduces the concept of a Meta unit. When a player forms an army, all of the units in that army behave as if they are a single unit. 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 surround 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

PHC UNITS

Unit Name	Unit Type	Description	Logistics	Metal	Radioactives
Engineer	Engineer	Constructs Buildings	3	200	0
Hermes	Frigate	Weak radar scout frigate	1	50	0
Archer	Frigate	Light rocket frigate	2	60	0
Brute	Frigate	Armored short-range frigate	4	90	0
Medic	Frigate	Healing and energy-recharging support frigate	1	108	18
Artemis	Cruiser	Long-range artillery cruiser	3	281	24
Apollo	Cruiser	Anti-air and anti-drone cruiser	3	220	12
Nemesis	Cruiser	Anti-Dreadnought sniper cruiser	3	500	64

Zeus	Cruiser	Heavy armored cruiser	3	320	28
Fury	Aircraft	Air-to-air fighter aircraft	4	120	160
Hades	Aircraft	Ground attack bomber aircraft	10	270	330
Pan	Aircraft	Weak scout aircraft	1	120	0
Hyperion	Dreadnought	Capital ship with unsurpassed staying power in the field	30	2940	544
Cronus	Dreadnought	Long-range indirect-fire capital ship. Deadly against buildings or on defense	30	2812	600
Prometheus	Dreadnought	Capital ship capable of incredible bursts of damage against single targets	30	3012	540

Frigates

Hermes

The Hermes is a small, lightly armed ship with radar coverage. It is a very fast, highly maneuverable ship, excellent for early scouting. It is equipped with an autocannon, but don't assume that the Hermes can do much fighting – this is a scout, not a fighter.

Brute

The Brute is an armored unit that gets up close and is good against other units of its class. It has a short ranged, direct line of fire and is produced in squads of 6. While it has a long visual range, it should be noted that its weapons do not reach as far as its sight.

Archer

The Archer is a ranged unit that fires less frequently, but is good to use against bigger units. It fires arcing rockets that have a large range, but units that are able to get inside of that arc will cause a big problem for an Archer. Despite its range, the Archer cannot shoot up onto plateaus.

Medic

The medic is a support frigate. It has no weaponry of its own and cannot deal any damage, but it can heal and repair units directly in the field, right in the middle of battle. Medics have low hit points and cannot heal themselves, but they are extremely important to maintaining a balanced force.

Cruisers

Apollo

The Apollo is a unit that specializes in taking out flying units. This unit utilizes a flak cannon that inflicts a wide area of damage to air or ground units. It can easily deal with drones and other air units.

Zeus

The Zeus is a heavy assault unit that gets in close and deals massive damage to cheaper little units. This unit utilizes a lightning cannon that streams out lightning and deals high damage to enemy ships. Its heavy main cannon makes quick work of other light units and it has good light artillery for additional defense.

Nemesis

The Nemesis is slow-firing, but it does massive damage. This unit has two cannons for defending against other units, but is fragile overall and highly vulnerable without proper support. It is especially effective against dreadnoughts.

Artemis

The Artemis is a long-range missile unit. It is great for taking out incoming armies full of big units. It is slow moving, but fires large clusters of anti-matter pods with a big area of effect. The Artemis' accuracy is low, but it fires with a high arc and can shoot easily up plateaus, which makes it a valuable unit to have on hand.

Dreadnoughts

Cronus

The Cronus is a long-range capital ship with indirect-fire. It is deadly against buildings or when it is defending. It fires missiles in barrages against the enemy and can support up to 4 squadrons of low-tier assault units.

• Level Up options:

- Repair (Restore Health to it and entire Meta Unit)
- Orion Cascade - Massive barrage of rocket artillery
 - Armor Piercing Rounds (All units in Meta Unit gain +8 to armor piercing in their weapons)
 - Demolish (Sonic area of effect weapon that damages all buildings in area for 500 points)
- Death Blossom L1 (adds death blossom)
 - Radar
 - Advanced Guidance System: Increase weapon range of all units in Meta Unit

Hyperion

The Hyperion is a capital ship with unsurpassed staying power in the field. Its firepower is deadly and its side cannons help to defend it against drones and aircrafts. This unit is not one you want to try and outlast; its front line assault platform has deadly firepower.

• Level Up options:

- Repair (Restore Health to it and entire Meta)
- Passive Self Heal
 - Healing Drones
 - Duranthium Armor (gains +4 armor)
- Offensive Drones (grants 16 offensive drones)
 - Stun (1% chance of a shot from a unit stunning when it hits)
 - Overload Engines (10% speed boost for Meta)

Prometheus

The Prometheus is a dreadnought that is built to take on other dreadnoughts head-to-head. Other dreadnoughts don't stand a chance against this massive battleship.

• Level Up options:[\[CE1\]](#)

- Repair (Restore Health to it and entire Meta Unit)
- Overload
 - Annihilate (All units in Meta have their cooldowns shortened by 25%)
 - (all units in meta get extra HP)
- Drain (Two beams deal 250 damage each and give this unit 500 HP)
 - Precision (All hits from units in the Meta Unit do 10% more damage to Dreadnoughts)
 - Duranthium Armor (Armor increased by 4, texture change to unit)

Aircraft

Fury

The Fury is a fighter aircraft that is meant to take on other enemy aircraft. While it has the capability to shoot ground units, its real power is in air-to-air combat.

Hades

The Hades is bomber aircraft that is capable of unleashing devastating volleys upon ground units and buildings. It is weak against other air units, so it is best to send this unit in with some support.

Pan

The Pan is a fast, nimble scout craft. It has some anti-building and harassment capabilities, but is not an offensive unit and won't do much good in your armies. This is best produced early game and used to spy on your opponents. The Pan's greatest benefit as a scout is that it is able to fly over any and all terrain unhindered.

PHC BUILDINGS

Resources

- **Metal Extractor:** Produces 1 metal per second and must be built on a metal deposit
- **Radioactives Extractor:** Produces 1 radioactive per second and must be built on a radioactives deposit
- **Quantum Archive:** Generates Quanta used to unlock global bonuses or call down orbital support actions
- **Amplifier:** Place on a power generator to increase the output of all resources in that region

Production

- **Factory:** Constructs frigates (Hermes, Archer, Brute, Medic)
- **Sky Factory:** Constructs aircraft (Fury, Hades, Pan)
- **Armory:** Constructs cruisers (Artemis, Apollo, Nemesis, Zeus)
- **Dread Launch:** Constructs Dreadnoughts (Prometheus, Hyperion, Cronus)

Defenses

- **Smarty System:** Multi-purpose rocket battery, effective against light air or ground units
- **Sensor Array:** Radar station that detects enemy structures and units at extreme range

- **Sentinel Turret:** Heavy cannon, effective against cruisers and dreadnoughts
- **Falcon AA:** Flak-firing anti-air turret
- **Drone Bay:** Maintains a devastating defensive drone swarm that is vulnerable to enemy anti-air
- **Repair Bay:** Maintains a potent repair drone swarm that is vulnerable to enemy anti-air

Orbitals

- **Orbital Fabricator:** Unlocks the “Engineer Drop” and “Incursion” global abilities
- **Weapons Lab:** Unlocks the “Plasma Storm” and “Carving Turret” global abilities
- **Power Regulator:** Unlocks the “Amplify” global ability
- **Orbital Command:** Unlocks “Orbital Strike” global ability
- **Energy Projector:** Unlocks “Intensive Care” and “EMP Pulse” global abilities
- **Orbital Nullifier:** Prevents enemy orbital actions nearby

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.

SUBSTRATE UNITS

Unit Name	Unit Type	Description	Logistic	Metal	Radioactives
Constructor	Engineer	Constructs buildings	3	200	0
Reaper	Frigate	Medium-range frigate.	3	130	0
Martyr	Frigate	Short-range frigate.	3	100	0
Capacitor	Frigate	Energy-recharging support frigate	1	110	20
Sky Cleanser	Frigate	Anti-air and anti-drone frigate	1	100	0
Destructor	Cruiser	Anti-building cruiser	3	300	32
Avenger	Cruiser	Anti-frigate cruiser	3	212	24
DroneHive	Cruiser	Are control cruiser	3	340	38
Mauler	Cruiser	Heavy short-range cruiser	3	355	30
Dominator	Aircraft	anti-air and anti-ground fighter	3	100	220
Punisher	Aircraft	Ground Assault Aircraft	3	200	360
Searcher	Aircraft	Unarmed scout aircraft	3	100	12
Overmind	Dreadnought	Area control.	30	3012	540
Retributor	Dreadnought	Assault Dreadnought	30	2995	540
Savager	Dreadnought	Anti-Dreadnought	30	2860	580

Frigates

Reaper: Medium-range frigate. Focus fires on one enemy at a time.

- Constructed from the Assembly.
- Heavily shielded, reasonable HP
- Powerful beam that requires energy to fire.
- Medium range unit.

Martyr: Short-range frigate. Good against small units.

- Constructed from the Assembly.
- Shoots a spray of charged guided drones (lots of little blue lights that indirectly hit the enemy) that do bits of area damage. Terrible at short range.
- Light Shields
- Short-Range

Sky Cleanser: Anti-air and anti-drone frigate.

- Constructed from the Assembly.
- Targets air units and drones only

Capacitor: Energy-recharging support frigate.

- Constructed from the Assembly.
- Provides energy to nearby units that need energy for their weapons or abilities.

Cruisers

Cruisers gain additional benefits from research and provide a single, powerful buff once integrated into a Meta Units. These units are highly specialized to fulfill their battlefield role.

Mauler: Heavy short-range cruiser.

- Constructed from the Assembly.
- Primary weapon is lethal against heavy units.
- Very heavily shielded.

Destructor: Anti-building cruiser.

- Long-Range with a very high (and obvious firing arc) disintegration particles.
- Can only target buildings.

Avenger: Anti-frigate cruiser.

- Constructed from the Assembly.
- Very fast moving
- Hose of charged particles that do damage to light units.

Drone Hive: Are control cruiser.

- Sends out swarms of drones
- Low HP, weak shields.
- Drones remain within 1,500 meters

Dreadnoughts

Dreadnoughts anchor positions at the front, center and rear echelons with their power and unique abilities. Only 3rd tier units are able to utilize special abilities.

Overmind: Capital ship that serves as an armed and mobile drone platform.

- Designed to take and hold areas.
- **Level Up options:**
 - Restore Health to Meta
 - Additional Drone Squadron
 - Armor + 4
 - Drone Factory (Drones are respawned twice as fast)
 - Shield Projector (Pulse that quickly fills shields)
 - Static Charge (Resets all nearby enemy unit cooldowns, mild stun)
 - Power Plant (Increases energy recharge)



Savager: Capital ship with a tendency to quickly vaporize whatever it focuses on.

- Destroys Dreadnoughts.
- **Level Up options:**
 - Repair
 - Maneuvering Thrusters
 - Sky Scour (Enables anti-air weapons that does massive damage to air)
 - Demolish (Weapons do 50% more damage against structures)
 - Heavy Armor (gains +12 armor)
 - Shield Amplifier (Shield recharge rate doubled)
 - Executor (Main death beam does 50% more damage, replaces main effect with a scary orange beam)



Retributor: Offense-minded capital ship with a variety of weaponry.

- Strong against frigates and cruisers
- **Level Up options:**
 - Repair (Restore health to all of Meta)
 - Backup Generator (increases maximum shields by 50%)
 - Armor (gives Retributor +8 armor, ideally updates textures)
 - Havok (death blossom thing - all the weapons appear to go crazy for a few sec)
 - Targeting Computer (Increase rate of fire for meta by 25%)
 - Energy Transfer (increases damage of meta by 10%)
 - Inertial Dampeners (increases speed of meta by 15%)

Aircraft

Air units in the age of the Singularity are highly specialized, fast (as compared to ground units), and capable of reaching any point of the world with ease.

Dominator: Versatile anti-air and anti-ground fighter.

- Air dominance with ground assault capabilities.

Punisher: Heavy bomber with armor-piercing weaponry.

- Dive bomber

Searcher/Sparrow: Unarmed scout aircraft.

- Light scout, harasser



Veterancy

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

Meta Units

Ashes introduces the concept of a Meta unit. When a player forms an army, all of the units in that army behave as if they are a single unit. 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.

SUBSTRATE BUILDINGS

Resources

- **Metal Extractor:** Produces 1 metal per second and must be built on a metal deposit
- **Radioactives Extractor:** Produces 1 radioactive per second and must be built on a radioactives deposit
- **Quantum Archive:** Generates Quanta used to unlock global bonuses or call down orbital support actions
- **Amplifier:** Place on a power generator to increase the output of all resources in that region

Production

- **Assembly:** Constructs primary battle forces
- **Advanced Assembly:** Constructs overwhelming battel forces.

Defenses

- **Annihilator:** Cheap single purpose defense platform. Only attacks ground.
- **Listening Post:** Detects enemies based on their sound signatures.
- **Drone MRV:** Fixed artillery defense platform. Massive area damage.
- **Blossom:** Precision anti-air defense platform.
- **Regenerator:** Restores shields of nearby Substrate technology

Orbitals

- **Gateway:** Unlocks the Avatar summon ability.
- **Quantum Jammer:** Prevents the enemy from using orbital abilities in a given area.
- **Energy Modulator:** Unlocks the over-charge ability.
- **Subspace Streamer:** Unlocks the Detonate ability.
- **Orbital Drone Relay:** Unlocks Drone swarm ability.

COMBAT

How Armor works

- Light Armor (20% of damage is mitigated)
- Heavy Armor (40% of damage is mitigated)
- Armor Piercing weapons (ignores armor)
- Nemesis primary weapon ignores armor
- Destructor (anti building) ignores armor

Range Ballistics Weapons that require energy to fire

- Reaper
- Mauler
- Avenger

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 begin 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.

At launch, the Ascendancy Wars consist of one episode - Imminent Crisis - with seven core missions and three optional missions. Stardock looks forward to releasing more Ascendancy Wars content in the coming months.

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?

ADVANCED PLAYERS

Ashes of the Singularity is a deep, complex real-time strategy game that supports many styles of play and alternative strategies. Here are some tips to help you get the most out of your massive planet-crushing armies.

ADVANCED SETUP OPTIONS

In multiplayer games and offline skirmishes, you have several ways to customize your game.

Game Options

- **Map Terrain Hidden/Exposed** - Exposed will display the contours of the land and locations of Turinium Generators and Power Generators before you explore them.
- **Neutral Defenders On/Off** - Small armies of neutral frigates will guard neutral Power Generators and Turinium Generators if this is set to On.
- **Victory Points** - How much Turinium is required to win a VP victory. You can set this to the map default, a specific number, or turn off Victory Points entirely.
- **Public/Private Game** - Whether your multiplayer lobby is listed in the main list and joinable by anyone.

Player Options

- **Faction** - Play as the Post-Human Coalition or the Substrate.
- **Team** - Players on the same team share victory points and supply lines.
- **Resource Bonus** - How many bonus resources a player receives during the game. Useful for handicapping more skilled players.
- **Start Location** - Random or set start location. Useful for starting teams next to each other.
- **Player Color** - What paint colors your swarms of manufacturing nanobots are partial to.
- **Open/Closed/AI Slot** - Set the size of your lobby, and add AI players. You can kick players by setting their slot to "closed."

Using Global Abilities

Calling orbital support actions and installing global upgrades to your forces are both accomplished by spending Quanta, which is generated by Quantum Relay (PHC) and Quantum Archive (Substrate) buildings.

Each building produces one Quantum per second. Building multiples is generally recommended.

Every time you call an orbital or install a global upgrade, that action's cost increases. Orbitals also have cooldowns between uses.

Orbitals are powerful single-shot actions that have an often-dramatic effect on the battlefield. Additionally, both the PHC and Substrate have economic orbitals that have subtler but equally important effects.

Post-Human Orbitals

PHC Support Orbitals

- **Sensor Sweep** - Focusing orbital assets grants sight over an area for a time.
- **Amplify** - An Amplifier has its output further permanently boosted with a quantum link to your Nexus. Note: You must first build an Amplifier on a controlled Power Generator.
- **Engineer Drop** - Calls an emergency Engineer down from low orbit to any location your forces can see.
- **Intensive Care** - A swarm of healing drones is fired from a specialized orbital railgun to any site you have direct vision of.

PHC Offensive Orbitals

- Plasma Storm - A localized storm of destructive plasma is created by creatively warping the ionosphere.
- Incursion - A small raiding force materializes through an unstable teleport to any location you can see.
- Orbital Strike - Causes massive destruction in an area by dropping a tungsten rod from orbit.
- Carving Turret - A horribly powerful Carving Turret is temporarily instantiated at any location you can see.
- EMP Pulse - Drops all shields in a localized area by detonating a small hydrogen weapon in the upper atmosphere.

Substrate Orbitals

Substrate Support Orbitals

- Overcharge - Temporarily boost a single Power Generator or Amplifier's output with a short-lived unstable quantum linkage.
- Regenerate - Quickly restores shield integrity in a small area via controlled disruption of the magnetosphere.
- Sensor Drone - Teleports a sensor drone in to scan the target location and provide live intelligence until it is destroyed.
- Boost - Permanently increase a Power Generator or Amplifier's output via careful modulation of quantum pairs. This can be done three times per region, with diminishing returns.

Substrate Offensive Orbitals

- Drone Swarm - Gate an assault drone swarm to any location you can see with medium-range quantum teleportation.
- Kill - Cause incredible damage to a single Dreadnought by teleporting a swarm of destructive nanites directly into its inner systems.
- Avatar - Summons an armed and battle-ready scout craft from orbit.
- Detonate - Enormous destructive force in an area is concentrated with a sprinkling of small antimatter charges from orbit.

Global Upgrades

Quanta can also be spent on permanent, global upgrades to your forces. These are shared by both the PHC and the Substrate. Like Orbitals, they get more expensive the more you use them.

Economic Upgrades

- Metal Storage - Increases your maximum Metal storage.
- Radioactives Storage - Increases your maximum Radioactives storage.
- Logistics - Increases the number of units you can have in the field.

Combat Upgrades

- Increased Damage - Increases all damage done by units and structures.
- Increased Health - Increases the maximum hit points of all units and structures.
- Increased Radar Range - Increases the radar range of units and structures that already have radar.

CONTROL GROUPS

Like many real-time strategy games, Ashes of the Singularity allows players to assign units and structures to “control groups” in order to quickly recall and command their forces in the field.

Ashes of the Singularity goes further by then “pinning” your control groups to the Empire Tree on the left side of the screen, so you can keep tabs on your most-important assets at a glance.

Forming Control Groups

With any units or structures selected, press CTRL and a number key [0-9]. This will assign the selection to that number. You will see an entry appear in the Empire Tree as well, which can be expanded via the small triangle next to its number for more detailed information.

Using Control Groups

Tapping the number key (or clicking its entry in the Empire Tree) will select the assigned units or structures so you can give them further orders.

Double-tapping that number key (or double-clicking it in the Empire Tree) will center the camera on the control group. Assigning a new group of units or structures to a number will overwrite whatever was previously assigned. Units that join an army are automatically assigned to that army's control group, if any.

TIP: Using the SHIFT key to add units to a selection can be useful when updating control groups. For example, you can press the assigned key to recall a control group, then hold SHIFT and drag-select additional units, then press CTRL+[number] to quickly add units to a control group.

TIP: Assigning factories to a control group can be incredibly helpful. If a group of factories are in a control group, rerouting their new production (via a new rally point) is as simple as one keypress and a right-click.

USING ARMIES

Armies are a unique feature of Ashes of the Singularity, which are only possible thanks to the Nitrous engine's advanced multi-core architecture. By grouping units together into armies, they will automatically fight and move together so that you can direct your attention elsewhere.

Forming Armies

To create an army, simply select a group of units and click the [FORM ARMY] button (or press the [V] hotkey). The units will form up around their automatically assigned leader, and will fight and move together until broken up or destroyed.

To break up an army, select one or more armies and click the [DISBAND ARMY] button (or press the [B] hotkey). The units will revert to their individual behaviors

Commanding Armies

Armies are commanded as single units. In addition, enemies cannot deliberately focus fire on one member of an army - they can only issue attack orders against the army itself, and their units will target the units in the army as they see fit. Units can also be joined to armies by giving them a default right-click order onto another unit.

Armies can also order reinforcements directly. With the army selected, click the [CONSTRUCTION] button to activate the construction panels, then order the desired reinforcements. The build orders will be automatically distributed to your factories, and the reinforcements will move to and join the army as soon as they're built. Only one Dreadnought can be in each army. If you have additional Dreadnoughts, well, that's a good problem to have.

TIP: Retreating usually isn't the best move in Ashes of the Singularity, as units can fire while moving and so you tend to just lose your forces anyway. However, sometimes it is tactically sound (like when an enemy position is more fortified than you'd hoped). Breaking up an army will allow them to retreat faster.

TIP: Armies move at the speed of the slowest unit in them. This is incredibly useful for keeping supporting units near a lumbering Dreadnought, but can limit the mobility of scouting/raiding/harassing forces.

TIP: Aircraft can be assigned to armies, but an army cannot consist solely of aircraft. Putting a bunch of aircraft in their own control group can be extremely effective as a quick-response force, however.

BEYOND THE GAME

WEBSITES

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 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 player profile for Cordelia in the Metaverse. On the left is a navigation menu with buttons for MY PROFILE, LADDERS, MULTIPLAYER, SINGLE PLAYER, and BENCHMARK. The main area features a search bar at the top with the text "Search for players". Below the search bar is the "STATS" section, which is divided into "Single Player" and "Multiplayer" columns. The "Single Player" stats are: PHC Wins (8 [89%]), Substrate Wins (4 [100%]), Enemies Killed (1,049), Dreadnoughts Destroyed (2), and Total Time Played (01:45:58). The "Multiplayer" stats are: PHC Wins (46 [100%]), Substrate Wins (0 [0%]), Enemies Killed (12,693), Dreadnoughts Destroyed (1), and Total Time Played (11:17:27). Below the stats is the "CURRENT SEASON" section, which displays four cards. The first card is "Multiplayer Ranked" and shows a star icon. The other three cards are "Single Player Worst Score", "Single Player Fastest Win", and "Single Player Longest Round", each with a prompt to "Play a single player game to earn this card". The player's name "Cordelia" is visible at the bottom of each card.

Category	Stat	Value	Percentage
Single Player	PHC Wins	8	[89%]
	Substrate Wins	4	[100%]
	Enemies Killed	1,049	
	Dreadnoughts Destroyed	2	
	Total Time Played	01:45:58	
Multiplayer	PHC Wins	46	[100%]
	Substrate Wins	0	[0%]
	Enemies Killed	12,693	
	Dreadnoughts Destroyed	1	
	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
6,847	Win	PHC	Single	Challenging [AI]	Carius	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.

The screenshot shows the 'LADDERS' menu with options for 'MULTIPLAYER', 'SINGLE PLAYER', and 'BENCHMARK'. The 'SINGLE PLAYER' section is active, displaying a search bar and a list of players sorted by 'Overall' score. The list includes player names, their scores, and the number of matches played.

Rank	Name	Score	Matches
1	Solt	96,783	92
2	Bollweevil	62,035	47
3	ThisIsHarbinger	44,246	32
4	l3loodreign	44,218	40
5	I.G.I.N.E.C.I	43,545	25
6	fiktivejens	41,525	23
7	tjono.foplen.feuntio	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	muzlqaz	DX12	89	R9 Fury Series	8,700
4	Poklhead	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	Larsn90	DX12	70	GTX 980	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

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

Hardware Configuration		Summary	
GPU	AMD Radeon (TM) R9 Fury Series	Score	8,800
CPU	Intel(R) Core(TM) i7-5960X CPU @ 3.00GHz	Averages (All Batches)	
Physical Cores	8	Framerate	90.0
Logical Cores	8	CPU Framerate	91.3
Physical Memory	32,637	Normal Batch	
Game Configuration		Average Framerate	95.0
Version	0.90.17585.0	CPU Framerate	95.9
API	DirectX 12	Medium Batch	
Resolution	1920 x 1080	Average Framerate	91.2
Fullscreen	True	CPU Framerate	91.6
Point Light Quality	Ultra	Heavy Batch	
Glare Quality	Ultra	Average Framerate	84.3
Shading Samples	16 million	CPU Framerate	85.9
Terrain Shading Samples	16 million		
Shadow Quality	Ultra		
Temporal AA Duration	0		
Temporal AA Time Slice	0		
Multisample Anti-Aliasing	4		

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	Stardock Support
Troubleshooting	Ashes Knowledge Base All Stardock Games Knowledgebase
Forums	http://forums.ashesofthesingularity.com
Website	http://www.ashesofthesingularity.com
Wiki	http://ashesofthesingularity.gamepedia.com