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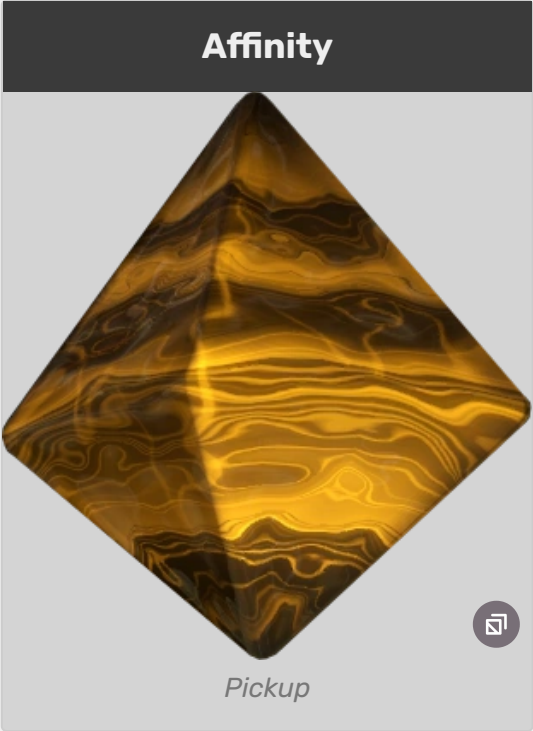
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Affinity is the in-game mechanic for experience points. [Warframes](#), [Archwings](#), [Companions](#) and [weapons](#) are all capable of earning Affinity. It is earned by killing enemies, [hacking](#) terminals, completing objectives/[Missions](#), using Warframe powers, or picking up [Affinity Orbs](#).

Overview

Affinity is only shown numerically in the player's profile. Elsewhere, they are shown only as progress bars to the next level for that piece of equipment, such as in the Arsenal, during missions, or in the end-mission report.

Upon gaining enough Affinity, equipment will rank up and (once the equipment's rank exceeds a player's [Mastery Rank](#)) gain one extra point of [Mod](#) capacity (two points when supercharged via an



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1. Overview

applying mods. Affinity is stored in each specific item, not the player's character/account; if an item is sold or used in crafting, it loses all of its associated Affinity and ranks.

Affinity indirectly affects a player's [Mastery Rank](#). A player gains 200 Mastery points per Affinity level on a previously unranked Warframe, Archwing or Companion, and 100 Mastery points per level on a previously unranked weapon. Once a player has acquired sufficient Mastery points, they can take the test to increase their Mastery Rank.

The amount of Affinity a weapon or frame has earned during a mission can be seen in the post-mission report, just to the left of the reward info box, where it is referred to as XP (experience).

Using the [Affinity Booster](#), purchasable for  40, double Affinity gain for 3 days, 7 days with the 

80 booster, or 30 days with the  200 booster.  [Smeeta Kavat's Charm](#) also has a chance to provide double Affinity gain for a duration.

Some [Prime Access](#) packages also have special 90-day Affinity boosters.

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	MK1-BRATON RANK 7	 5,436	BONUS 6,795		VIPER RANK 25	 5,794	BONUS 7,243
	MK1-BO RANK 13	 10,619	BONUS 13,274		QEOVICRER RANK 26	 22,194	BONUS 27,743

Acquisition

Warframe Affinity

Warframes and weapons gain Affinity for several types of actions, detailed below. Unless specified otherwise, all Affinity gained uses the split according to **the general rule**: 25%



[Archgun Deployer](#), 25% each for three, 37.5% each for two, or the full 75% if only one is equipped).^[1]

Deployable gear, such as [Archwings](#) and [Necramechs](#), only gain affinity when deployed.

- **Kill with Warframe abilities:** All Affinity goes to the Warframe.
- **Kill with weapons:** Half Affinity goes to the Warframe and half to the killing weapon.
- **Shared Affinity from allied Tenno kills:** When within 50 meters of an ally (200 meters while using a [Fosfor](#), 250 meters in [Landscape](#) missions) when they kill an enemy, you gain the same total Affinity, distributed according to *the general rule* specified above. This doesn't reduce the Affinity gained by the killing player, and doesn't reduce the Affinity gained by other nearby allies.
 - **No weapons equipped:** All Affinity goes to the Warframe.
 - This applies when the only equipped weapons are overridden by ability-created ones (E.g. Using [Exalted Blade](#) while only having a [melee](#) weapon equipped).
- **Parazon Mercy kills:** Half Affinity goes to the Warframe and other half goes to last equipped weapon.
- **Kills with Railjack turrets:** All Affinity goes to the [Plexus](#).
- **Crewship Kills via Railjack Artillery:**
 - **While In A Warframe:** Gets shared according to *the general rule* above, and is also duplicated in a 50/50 split to your Companion and its weapon, or 100% to a living Companion without a weapon
 - **While In Operator Mode:** Half Affinity goes to the Operator and half to their Amp.
- **For Archwing missions,** the shared affinity range is increased to 200 meters (800 with a [Fosfor](#)).
- **While in Railjack,** the shared affinity range is infinite, and the above rules still apply to affinity gain.

Operator Affinity

Operators gain their own Affinity, similar to a Warframe. They only receive affinity when deployed.

- **Kills with Operator abilities:** All Affinity goes to the Operator's equipped Amp when possible.^[2]



- **Shared Affinity from allied Tenno kills:** When within 50 meters of an ally (200 meters while using a [Fosfor](#), 250 meters in [Landscape](#) missions) when they kill an enemy, you gain the same total Affinity. The Affinity is distributed by 25% for the Operator, 37.5% for the Amp, and 37.5% for their unused melee slot.
 - Because only Operator Amps can gain Affinity, the 25% gained for the Operator and the 37.5% for their unused melee slot is lost resulting in only 37.5% of shared Affinity being earned for the Amp.
- **No Amp equipped:** Affinity is lost.
 - Only Operator Amps gain Affinity and not the Operator themselves.

Companion Affinity

Companions gain their own Affinity, similar to Tenno.

- **Tenno kills:** 100% of Affinity gained by Tenno kills by any means (weapons or abilities) and with any deployables (Necramech, Operator mode, etc) also goes to the companion.
 - Affinity is split between the Companion and its weapon 50/50%.
 - 100% Affinity to the Companion in the absence of a weapon.
- **Companion kills:** Total Affinity upon kills is equal to that gained by Tenno. The owner of the Companion gains no Affinity.
 - **Kills with its weapon (mechanical pets only):** Affinity is split between the Companion and its weapon 50/50%.
 - **Kills (living pet without a weapon):** All Affinity goes to the Companion.
 - **Kills with an ability:** All Affinity goes to the Companion.
- **Companion uses an ability:** Amount varies by ability.^[*investigation needed*] 100% goes to the Companion.
- **Allied Tenno, but not the Companion's owner, kills an enemy:** Affinity gained by the Companion does not detract from that gained by its owner.
 - Affinity is split between the Companion and its weapon 50/50%.
 - 100% Affinity to the Companion in the absence of a weapon.

Other Affinity Sources

- **Use a Warframe/Archwing ability:** Affinity equal to the base energy cost, in most cases.
- **Hack a terminal:** 50 Affinity.



- **Collect an Affinity Orb:** 100 Affinity.
- **Scanning with the [Codex Scanner](#):**
 - **Scanning objects:** 10 Affinity.
 - **Scanning enemies:** Affinity equal to 1/3 of gain upon killing the enemy (rounded down).
 - **Stealth scan:** Affinity equal to gain upon killing the enemy.

Stealth Kill Affinity Bonus

Killing unaware enemies will trigger a Stealth Kill Affinity Bonus, which increases the amount of affinity that a player gains from killing said enemy. A notification appears in a player's HUD to the left of the shield counter upon performing a stealth kill, which will display the bonus affinity value for that kill, as well as the time remaining for the combo. The default bonus affinity value is 100%, which can be increased by performing a subsequent stealth kill within 30 seconds of the previous one, which will add another 100% to the bonus value, e.g. killing a second enemy stealthily will grant a 200% affinity multiplier, the third granting 300%, and so forth until it caps out at 500%, whereupon any successive stealth kills will provide said bonus as long as they are made within the time limit. Stealth kill affinity bonuses can be initiated using any attack as long as the enemy is unaware of the player's presence, though melee weapons grant twice the amount of stealth kill affinity compared to ranged weapons or abilities.

The stealth kill affinity bonus resets if a kill is made on an alert enemy, or upon being attacked by an alert enemy. Only enemy units will trigger these affinity bonuses. Environmental objects like Corpus Turrets, Security Cameras, Sensor Bars, and Storage Containers will not reset the multiplier nor do they count as a stealth kill. Certain units like Sensor Regulators are also considered objects, and thus will not initiate stealth affinity bonuses.

Oddly enough, certain Warframe powers (like Paralysis) and Melee Combos that initiate stagger may initiate stealth kill affinity bonuses upon performing a Counterattack Finisher, even if the enemy was previously aware of the player.

Killing an enemy that spawned within 5 seconds will not count towards the stealth affinity multiplier.

Bonus Affinity

If a player completes a [mission](#) successfully they gain bonus Affinity based on the



mission report and is an additional **125%** of the base Affinity earned for each item.

Due to bonus Affinity, leveling an item up to a certain level in a single mission, and completing the mission, will result in that item becoming max rank:

- Getting an item to Rank 20 will result in that item becoming Rank 30.
- For Rank 40 weapons that require 5 [Forma](#) such as [Kuva Weapons](#), [Tenet Weapons](#), or the [Paracesis](#), getting to Rank 26 and two-thirds will result in a Rank 40 weapon.

Affinity Range

When playing with other players, Affinity will be shared among the squad if they are within a **50-meter** radius. This can be increased with [Fosfors](#) to **200m** or [Vazarin's Mending Unity](#) (+**25m** at max rank). Some Warframe [Abilities](#) and [Warframe Augment Mods](#) also have their ranges tied to this particular range.

Citrine	Ember	Harrow	Jade	Revenant	Styanax	Trinity	Helminth
2 50 Preserving Shell Citrine guards herself and nearby allies with a crystalline shell that gradually decays. Kills and assists increase the defensive power of the shell. Introduced in Update 32.3 (2023-02-15)							
						Strength: 10 / 20 / 30 / 40 % initial damage reduction +3% damage reduction per kill +1% damage reduction per assist	
						Duration: 18 / 20 / 22 / 25 s	
						Range: N/A	
						Misc: 50 m Affinity Range 8 m Stagger radius 2 m Knockback distance 1 s initial decay delay 10 / 20 / 25 / 25 % minimum damage reduction -1%/s decay rate at 25%-75% -3%/s decay rate at 75%-90% 2 s kill/assist decay delay 90% max damage reduction	

The range limit is increased to **200m** in [Archwing](#) missions and **250m** in [Landscapes](#) ([Plains of Eidolon](#), [Orb Vallis](#), and [Cambion Drift](#)). The range limit is ignored entirely in [Empyrean](#) missions due to their sheer scale.

Level Requirements

To reach a given level from unranked, a Warframe or Sentinel needs $1000 \times level^2$ Affinity in total. A weapon needs half that amount.

To reach the same level from the previous level, a Warframe or Sentinel needs $1000 \times (2 \times level - 1)$ Affinity. Again, a weapon needs half that amount.



Pie chart illustrating the proportion of each level of the total affinity required to rank any item from unranked to 30.

Cumulative Affinity Requirements From Rank 0

Level	Warframe/ Sentinel	Weapon	Level	Warframe/ Sentinel	Weapon
1	1,000	500	21	441,000	220,500
2	4,000	2,000	22	484,000	242,000
3	9,000	4,500	23	529,000	264,500
4	16,000	8,000	24	576,000	288,000
5	25,000	12,500	25	625,000	312,500
6	36,000	18,000	26	676,000	338,000
7	49,000	24,500	27	729,000	364,500
8	64,000	32,000	28	784,000	392,000
9	81,000	40,500	29	841,000	420,500



11	121,000	60,500	31*	961,000	480,500
12	144,000	72,000	32*	1,024,000	512,000
13	169,000	84,500	33*	1,089,000	544,500
14	196,000	98,000	34*	1,156,000	578,000
15	225,000	112,500	35*	1,225,000	612,500
16	256,000	128,000	36*	1,296,000	648,000
17	289,000	144,500	37*	1,369,000	684,500
18	324,000	162,000	38*	1,444,000	722,000
19	361,000	180,500	39*	1,521,000	760,500
20	400,000	200,000	40*	1,600,000	800,000

*Only for [Paracesis](#), [Kuva Weapons](#), [Tenet Weapons](#), and [Necramechs](#). Note that this chart does not accurately reflect on **total** cumulative Affinity needed to rank up to 40 as you have to [Forma](#) the weapons five times in order to increase the max rank to 40.

The cumulative Affinity to rank for the Paracesis and Kuva Lich weapons including Forma cycles is as follows:

Total Cumulative Affinity Requirements From Rank 0

Level	Weapon
31	930,500
32	962,000
33	1,506,500
34	1,540,000
35	2,152,500
36	2,188,000
37	2,872,500
38	2,910,000
39	3,670,500



Enemy Affinity Scaling

Main article: [Enemy Level Scaling](#)

When you kill an enemy, the Affinity gained is shown on screen underlined in blue. The formula enemy affinity scales at is as follows:

$$\text{Affinity Multiplier} = 1 + 0.1425 \times \text{Current Level}^{0.5}$$

Note that the base affinity multiplied by the Affinity Multiplier value is also **rounded down** to a whole number, e.g. 62.7 affinity will be rounded down to 62.

Current affinity scaling.

Because the square root is taken of the enemy's current level, the actual benefit of facing high-level enemies is minimal. For example, killing a level 100 [Napalm](#) would give 1213 Affinity, less than twice the Affinity you would get from a level 3 Napalm (623). Therefore, "farming" Affinity is easier when killing many low-mid level enemies instead of taking on high level enemies.

For further reading on this subject, consider the [Affinity](#) and [Affinity Density](#) chapters of the Enemy Level Scaling article.

Notes

- Fully ranked equipment still accumulates Affinity even though the mission end



- The Affinity count in the profile page for specific equipment does not increase upon polarization, only when the amount of cumulative Affinity earned prior to the polarization is exceeded.^[3]
- Until they were polarized 5 times they do not gain affinity when they are at their temporary max level (eg. 1 Forma level 32, 2 Forma level 34). This is only noticeable in the profile page.
- Enemies in the Simulacrum when killed do not reward Affinity.
- Mastery Rank Tests will **not** reward Affinity upon completion.

Farming Tips

- Do not bring max ranked weapons alongside the ones you intend to level up if are in a team as they will continue to leech Affinity.
- Mass crowd control abilities (e.g. [Equinox's](#) [Mend & Maim](#), [Mirage's](#) [Sleight of Hand](#), [Saryn's](#) [Spores](#), or [Volt's](#) [Discharge](#)) generate a lot of affinity for teammates.

Locations

These are based on opinions and may not be 100% true. These should be viewed as advice for farming Affinity until better facts are proven.

Star Chart Missions

Target ▾	Planet ▾	Name ▾	Type ▾	Level ▾	Tile Set ▾
	Sedna	Hydron	Defense	30 - 40	Grineer Galleon
	Saturn	Helene	Defense	21 - 26	Grineer Galleon
	Pluto	Oceanum	Spy	32 - 36	Corpus Ship
	Sedna	Adaro	Exterminate	32 - 36	Grineer Asteroid
	Uranus	Brutus	Ascension	45 - 50	Stalker's Lair



Target ↕	Planet ↕	Name ↕	Type ↕	Level ↕	Tile Set ↕
	Veil Proxima	R-9 Cloud	Skirmish	80 - 90	Free Space

- Hydron is a common spot for general Affinity farming, with Helene being a more accessible alternative, albeit netting less Affinity overall due to the lower level of enemies.
- Oceanum can be stealthily speed ran by more advanced players, hacking all three data vaults without being detected to farm for Affinity for a particular weapon.
- Adaro can award an extreme amount of affinity when utilizing Stealth Kill Affinity Bonus from stealth Warframes ([Ash's](#) [Smoke Screen](#), [Ivara's](#) [Prowl](#), [Loki's](#) [Invisibility](#), or [Octavia's](#) [Metronome](#)), Warframes that can force enemies to sleep ([Baruuk's](#) [Lull](#), [Equinox's](#) or [Helminth](#) subsumed [Rest & Rage](#), or Ivara's [Quiver](#)), or silenced weapons ([Banshee's](#) or [Helminth](#) subsumed [Silence](#) and a weapon modded with [Hush](#), [Suppress](#), or [Silent Battery](#) if not innately silenced).
- R-9 Cloud is the highest leveled [Empyrean](#) mission. It also allows bringing [Archwings](#), [Archguns](#), [Archmelee](#), and [Necramechs](#).

Archwing Missions

Target ↕	Planet ↕	Name ↕	Type ↕	Level ↕	Tile Set ↕
	Neptune	Salacia	Mobile Defense	27 - 32	Corpus Ship (Archwing)

- Salacia is arguably the best location for leveling up [Archwings](#), [Archguns](#), and [Archmelees](#) outside of [Empyrean](#) missions.

Other Locations

- [Dark Sector](#) missions are scattered throughout the Star Chart. These provide bonus Affinity gain to specific weapon classes.

This section is [transcluded](#) from [Dark Sector § Locations](#). To change it, please [edit the transcluded page](#).



There are a total of 26 **Dark Sector** Missions.

Planet ↕	Mission Name ↕	Type ↕	Credit Reward ↕	Additional Credit Reward ↕	Level ↕	Resource Drop Chance Bonus ↕
Earth	Coba	Defense	1,500	12,000	6 - 16	15%
Earth	Tikal	Excavation	1,500	12,000	6 - 16	15%
Venus	Malva	Survival	1,700	10,000	8 - 18	10%
Venus	Romula	Defense	1,700	10,000	8 - 18	10%
Mars	Wahiba	Survival	1,900	14,000	10 - 20	20%
Mars	Kadesh	Defense	1,900	14,000	10 - 20	20%
Ceres	Gabii	Survival	2,400	20,000	15 - 25	35%
Phobos	Memphis	Defection	2,400	16,000	15 - 25	25%
Phobos	Zeugma	Survival	2,400	16,000	15 - 25	25%
Ceres	Seimeni	Defense	2,400	20,000	15 - 25	35%
Jupiter	Cameraia	Survival	2,900	14,000	20 - 30	20%
Jupiter	Sinai	Defense	2,900	14,000	20 - 30	20%
Europa	Cholistan	Excavation	3,200	16,000	23 - 33	25%
Europa	Larzac	Defense	3,200	16,000	23 - 33	25%



Planet ↕	Mission Name ↕	Type ↕	Credit Reward ↕	Additional Credit Reward ↕	Level ↕	Resource Drop Chance Bonus ↕
Uranus	Assur	Survival	3,400	16,000	25 - 35	25%
Saturn	Piscinas	Survival	3,500	14,000	26 - 36	20%
Saturn	Caracol	Defection	3,500	14,000	26 - 36	20%
Uranus	Ur	Disruption	3,900	16,000	30 - 35	25%
Neptune	Yursa	Defection	3,900	18,000	30 - 40	30%
Neptune	Kelashin	Survival	3,900	18,000	30 - 40	30%
Eris	Zabala	Survival	4,400	18,000	35 - 45	30%
Sedna	Sangeru	Defense	4,400	16,000	35 - 45	25%
Pluto	Hieracon	Excavation	4,400	20,000	35 - 45	35%
Eris	Akkad	Defense	4,400	18,000	35 - 45	30%
Pluto	Sechura	Defense	4,400	20,000	35 - 45	35%
Sedna	Amarna	Survival	4,400	16,000	35 - 45	25%

- [Eximus](#) enemies give a large amount of Affinity and are abundant in [Sortie](#) Eximus Strongholds.
- [Sanctuary Onslaught](#) and Elite Sanctuary Onslaught are the best locations for Affinity farming, spawning a high volume of enemies in a short amount of time. Note that the elite version restricts access to only max ranked Warframes or a [Mastery Rank](#) 30 player whose Warframe has been [polarized](#) once.



- Gear is restricted in Sanctuary Onslaught, preventing the use of [Archgun Deployers](#).
- Endless [Void Fissure](#) missions provide Affinity gain bonuses for the duration of the mission after opening a certain number of [Void Relics](#), up to a maximum of 2x Affinity gain at 16 relics opened.
- Soloing [The Circuit](#) is a particularly good way to farm for Affinity. A Level 0 Warframe, for example, is capable of reaching Level 27 after completing a few stages, particularly so if the stage is an Endless mission.

References

1. "Proportionate Shared Xp" Developer Workshop post (<https://forums.warframe.com/topic/147071-proportionate-shared-xp/>)
2. "Killing enemies with Operator abilities (Void Blast, Void Dash) will now grant the kill Affinity to the equipped Amp when possible." - [Plains of Eidolon Remaster: Update 24.6.0 patch notes](#) ([https://forums.warframe.com/topic/1079621-plains-of-eidolon-remaster-update-2460/#:~:text=Killing%20enemies%20with%20Operator%20abilities%20\(Void%20Blast%2C%20Void%20Dash\)%20will%20now%20grant%20the%20kill%20Affinity%20to%20the%20equipped%20Amp%20when%20possible.](https://forums.warframe.com/topic/1079621-plains-of-eidolon-remaster-update-2460/#:~:text=Killing%20enemies%20with%20Operator%20abilities%20(Void%20Blast%2C%20Void%20Dash)%20will%20now%20grant%20the%20kill%20Affinity%20to%20the%20equipped%20Amp%20when%20possible.))
3. [Profile Affinity Resets with Forma](#) (<https://forums.warframe.com/topic/968495-profile-affinity-resets-with-forma/>)

See Also

- [Mastery Rank](#)

Patch History

[Update 34.0](#) (2023-10-18)

Removal of Flawed Mods from Vor's Prize

Adjusting for Increased Mod Drain As Flawed Mods are being removed, we want to ensure that new players can still create their early builds and equip Mods onto their equipment. Since normal Mods have a higher drain than their Flawed variants, we're approaching this problem in two ways:

Firstly, we've added 90k Bonus Affinity to the completion of the Vor's Prize Quest,



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	PvP	Duel • Conclave (Lunaro) • Frame Fighter
	Other	Gravity • Threat Level
	Modding and Arcanes	Arcane Enhancements • Archon Shard • Fusion • Mods (Flawed, Riven) • Polarization • Transmutation • Valence Fusion
Equipment	Warframe	Attributes (Armor, Energy, Health, Shield, Sprint Speed) • Abilities (Augment, Casting Speed, Helminth



		System , Passives , Duration , Efficiency , Range , Strength)
	Weapons	Accuracy • Alternate Fire • Ammo • Area of Effect • Attack Speed • Bounce • Critical Hit • Damage Falloff • Exalted Weapon • Fire Rate • Hitscan • Holster • Incarnon • Melee • Multishot • Noise • Projectile • Projectile Speed • Punch Through • Recoil • Reload • Ricochet • Trigger Type • Zoom
	Operator	Amp • Focus (Madurai , Vazarin , Naramon , Unairu , Zenurik) • Lens
	Drifter and Duviri	Decrees • Drifter Combat • Drifter Intrinsic s • Kaithe
	Other	Archwing • Companion • K-Drive • Necramech • Parazon • Railjack
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	Audio	Mandachord • Music • Shawzin • Somachord • Sound
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