

in: Blog posts, Site maintenance





# Sunsetting of Maximization Calculators





Cephalon Scientia • 7 December 2022 • User blog:Cephalon Scientia

Happy holidays Warframe community! I want to make an official blog post on the current state of our Maximization calculators on the wiki. For those who are not familiar with this, these calculators are client-side scripts that give readers an interactable understanding of how certain ability modifiers (e.g. Ability Duration) affect ability stats (as well as their augments). These are/were present on many Warframe, Ability, and Warframe Augment Mods articles, but newer content has not been added since Update 25.7 (2019-08-29) ( Gauss was the latest Warframe added).

Because of how the current calculators are implemented and the absence of regular updates by us wiki administrators, this feature has been in a "sunsetted" state for over two years.

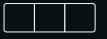


Last updated: Thu, 15 Dec 2022 18:03:45 +0000 (UTC) by User:Cephalon Scientia



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## **Calculator Example**

This is what a maximization calculator looks like for Ash and Ash Prime abilities. As you can see, it is currently outdated, missing Update 31.2 (2022-03-16) buffs for Smoke Shadow.

### Shuriken

500	Base damage
219/s	Bleed DoT
2685	Total damage
25.00	Energy

### Seeking Shuriken

8.00s	Debuff duration
70.00%	Armor reduction

### Strength: 100

ange:	100

Efficiency: 100

Duration: 100

#### **Smoke Screen**

8.00s	Duration
10.00m	Range
35.00	Energy

#### **Smoke Shadow**

N/A

### leport

### Fatal Teleport



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10740	Total damage
60.00m	Range
12.00	Energy per mark
6.00	Energy per mark while invisible

Wikitext/HTML to add the calculator element on articles:

```
{{WFmax|main|ash}}
or

<div style="position: absolute; right: 0px;"
id="maximization_table_main">Input table not loaded. Javascript
not loaded</div>
<div id="maximization_ash"> Result table not loaded. Javascript
not loaded</div>
```

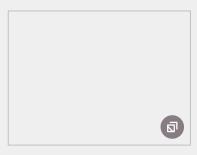
Can also create a calculator for just <u>X</u> <u>Shuriken</u> and its <u>Neeking Shuriken</u> augment, but this won't work properly here because the source code currently only supports one calculator element per page.

Input table not loaded. Javascript Not loaded

#### Shuriken

### Seeking Shuriken

500	Base damage	8.00s	Debuff duration
219/s	Bleed DoT	70.00%	Armor reduction
2685	Total damage		
25.00	Energy		



Screenshot of calculator for posterity



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aximization stuff? Want to see

richin

post for feedback.

• Record your response in this poll, starts at 2022-12-07 15:00 EST and ends at 2022-12-14 15:00 EST (1 week duration):

https://strawpoll.com/polls/w4nWDaaolgA

### Results

Thank you to all that answered! The poll had 2,164 visitors with 500 responses which puts it at a 23.1% response rate.

Do you guys even use the interactive ability/augment Maximization stuff? (2022-12-07 to 2022-12-14)

Answer Options	Votes	Percent
I don't even know what you're talking about	202	40.40%
Kinda, every once in a while I guess	162	32.40%
Yes, very frequently	88	17.60%
No, there are sites that do a better job anyway	48	9.60%
Total Votes	500	100%

While geolocation is not the main concern of this poll, it's generally good to know where visitors come from for a scale of audience and to cross-reference with known data on wiki visitors and WARFRAME players. Although this



Votes over time for those who want to make some interpolations

<mark>ri</mark>ki is in English, it

runs an international audience



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#### Poll Geolocation

Country	Responses	Percent
United States of America	208	41.60%
Germany	41	8.20%
United Kingdom	22	4.40%
Australia	17	3.40%
Canada	17	3.40%
Russia	15	3.00%
Brazil	13	2.60%
Netherlands	12	2.40%
France	11	2.20%
Finland	10	2.00%
Poland	9	1.80%
Sweden	8	1.60%
Hungary	6	1.20%
Portugal	5	1.00%
Romania	5	1.00%
Spain	5	1.00%
New Zealand	5	1.00%
Denmark	4	0.80%
Ukraine	4	0.80%
Vietnam	4	0.80%
Turkey	4	0.80%
ndia	4	0.80%



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range of

Singapore	3	0.60%
Indonesia	3	0.60%
Belgium	3	0.60%
South Africa	3	0.60%
Italy	3	0.60%
Norway	2	0.40%
Hong Kong	2	0.40%
Japan	2	0.40%
Israel	2	0.40%
Austria	2	0.40%
Argentina	2	0.40%
Malaysia	2	0.40%
Slovakia	2	0.40%
Greece	2	0.40%
Bulgaria	2	0.40%
Ireland	2	0.40%
Slovenia	1	0.20%
Macedonia	1	0.20%
South Korea	1	0.20%
Puerto Rico	1	0.20%
Ecuador	1	0.20%
China	1	0.20%
Switzerland	1	0.20%
Bosnia and Herzegovina	1	0.20%
<b>,</b> ,		



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TI POT

Saudi Arabia	1	0.20%
Saudi Arabia	1	0.20%
Lithuania	1	0.20%
Namibia	1	0.20%
Venezuela	1	0.20%
Total	500	100%

## **Analysis**





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Do you guys even use the interactive ability/augment Maximization stuff?

Answer Options	Votes	Percent	User Group Notes
I don't even know what you're talking about	202	40.40%	<ul> <li>Readers who are not aware of this feature and thus don't use it</li> <li>Poor feature visibility/marketing</li> <li>Wildcard in determining feature viability in its function; they don't use it because they don't know it so we don't know if any of these people benefit from this</li> <li>Probably least affected if feature removed unless there are readers in this group that would benefit from feature but don't know it yet</li> </ul>
Kinda, every once in a while I guess	162	32.40%	<ul> <li>Readers that know about feature, but intermittently use this feature</li> <li>Weak advocates</li> <li>They see value in feature and are (somewhat) satisfied with current implementation but may want improvement</li> <li>Somewhat affected if feature removed</li> </ul>
Yes, very frequently	88	17.60%	<ul> <li>Readers that actively use this feature</li> <li>Strong advocates</li> <li>They see value in feature and are         (somewhat) satisfied with current         implementation but may want         improvement</li> <li>Most affected if feature removed</li> </ul>
lo, there are	48	9.60%	• X Readers that know about the feature,  busly decide not to use it or don't



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			<ul> <li>Probably avoid using it because of bad interface, outdated values, etc.</li> <li>May believe information presented in calculator is already on articles in static format (information redundancy)</li> </ul>
			Not affected at all if feature removed
Total Votes	500	100%	

Do you guys even use the interactive ability/augment Maximization stuff? (As binary choice)

Answer Options	Votes	Percent
<ul><li>Yes</li><li>Yes, very frequently</li><li>Kinda, every once in a while I guess</li></ul>	250	50%
<ul> <li>I don't even know what you're talking about</li> <li>No, there are sites that do a better job anyway</li> </ul>	250	50%
Total	500	100%

Bar visualization of usage frequency amongst respondees who know about feature

▼ 0 respondees, 0% 298 respondees, 100% ▼

Never (48,	Comptimes (142 E4.749/)	Frequently (88, 29.53%)
16.11%)	Sometimes (162, 54.36%)	

### **Conclusions**

There is likely more people who would value a "maximization calculator" feature on the viki if more people knew about it. Despite being behind almost 2 years of updates, ople still see value in this feature. I don't think a full removal is necessary if we (as



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based on is still on articles (e.g. what stats scale off Ability Strength and the formulas that it uses if not standard percent increases/decreases).

## Why Sunsetting?

### Low Reader Usage/Engagement

<u>User:FINNER</u> made a quick poll on the topic in the wiki's Discussions back in July 2021 with these results (sample size 111):<sup>[1]</sup>

Do you guys even use the interactive ability/augment Maximization stuff? (2021-07-29)

Answer Options	Votes	Percent
I don't even know what you're talking about	67	60%
Kinda, every once in a while I guess	25	23%
Yes, very frequently	11	10%
No, there are sites that do a better job anyway	8	7%
Total	111	100%

• Note that Fandom's poll doesn't give raw numbers, only vote percentage, so actual vote count per option is derived.

It seems like most people don't often use or don't even know about this calculator feature on the wiki. This might be because of multiple reasons:

- Mobile readers (which make up almost 50% of the wiki's traffic) will probably not see these calculators since the mobile view of Fandom wikis does not allow loading of custom client-side scripts in the MediaWiki namespace.
  - Calculator scripts on desktop view on mobile will load, but won't be optimized for mobile experience (small viewport and touch screen).



These calculators were hidden behind collapsible elements on individual Warframe



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n/max features that arguably

date with the game than the

Personally, I've seen almost no comments mentioning the absence of the maximization calculator on newer content. Occasionally, like once every few weeks, someone comments that a calculator has inaccurate calculations on one of the ability augment articles.

Feel free to take the <u>#User Poll</u> and post your experiences down in the comments so us wiki admins and editors have a better gauge on what the community wants regarding the future of this feature.

### **Anti-Open Data Implementation**

Currently, the ability stat formula data is stored within the actual script itself, locking out contributions from non-admin editors. This is not ideal compared to how we store structured data around the wiki (see <a href="Template:ModuleNav">Template:ModuleNav</a> and <a href="WARFRAME">WARFRAME</a>
<a href="Wiki:Updating Databases">Wiki:Updating Databases</a> for a list). The wiki should practice and be a model for <a href="Open data">Open data</a> principles as an open repository of knowledge of all things Warframe:

- 1. Data should be viewable and accessible regardless of user type
- 2. Data should be editable and modified by any one regardless of user type (with some exceptions; few databases are protected against anonymous edits)
- 3. Data should be sharable under an free license for whatever use cases

Because only wiki admins can edit site-wide JavaScript pages on the wiki, any updates to the calculator source code and data has to go through them. This is generally good for enforcing some sort of data integrity, but the nature of Warframe updates as a <u>live-service game</u> demands regular maintenance. We have a few volunteer wiki admins that are familiar with JavaScript, but not all of them are currently active on the wiki or the game. For a game as large as Warframe, it is often difficult for a few individuals to keep up with all the changes, so it's best to open editing to the greater community and provide ample documentation to do so for long-term support of the feature (if we ever continue with the calculator project).

#### **Not Scalable**

The current implementation of the calculator logic, presentation, and the way how data stored is not scalable on multiple fronts:



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pdate source code in response



- As per #Anti-Open Data Implementation, wiki editors cannot readily update formulas or stat strings
- No support for message localization (source code is not internationalized)
- Only one calculator element per page (cannot create multiple calculators, each with their own separate number input)

## **Project History**

This project was spearheaded by our (now inactive) moderator <u>User:TunaInABottle</u> who had been developing this calculator for quite a while and it was officially used on articles in March 2019 as per <u>User blog:TunaInABottle/Interactive Ability Maximization</u>. It is implemented purely in vanilla JavaScript and resides in the MediaWiki namespace as <u>MediaWiki:Maximization.js</u> (source code) and <u>MediaWiki:Maximization.css</u> (styling) which means that only wiki administrators and bureaucrats are able to edit these scripts. A helper template <u>Template:WFmax</u> is used to add the required HTML elements for the calculator on articles.

There was an attempt to move ability calculation data into a Lua module

Module: Maximization/data so that wiki editors have access to it, but this project died out as there is no straightforward way in the current MediaWiki environment for the JS script to execute a Lua script and parse the Lua tables as JSON.

We recently Luafied <u>Template:AbilityU10.3</u> (ability horizontal infobox) to <u>Module:Ability/infobox</u> to take advantage of ability structured data stored on the wiki (<u>Module:Ability/data</u>). This also resulted in the removal of the "<u>Maximization</u>" tab from the infobox (not for technical reasons, but because this feature has already been left in the dust by maintainers). Maximization tab will still be present in ability infoboxes, but won't work for newer Warframes. Many augment mods will still have the calculator however.

## **Going Forward**

I'm hesitant to give any hard deadlines for the full removal of this feature because I elieve there is some possibility to reimplement the calculator in a more wiki editorandly way (i.e. decoupling data from business logic) so wiki admins do not have to



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As of now, reader should expect very infrequent updates to the current source code because of how complicated some Warframe ability interactions are. Some calculators may be outdated with missing stats or inaccurate stat calculations. Because of this, editors are free to remove these "Maximization" sections from articles until further notice. However, if you are willing to make some edit suggestions like with <a href="https://warframe.fandom.com/wiki/Message\_Wall:Cephalon\_Scientia?">https://warframe.fandom.com/wiki/Message\_Wall:Cephalon\_Scientia?</a> threadId=4400000000003653979, I am more than happy to persist those to the source code, just don't expect major bug fixes or feature updates from the admin team.

For alternative solutions, I suggest to use <a href="https://overframe.gg">https://overframe.gg</a> for maximization theorycrafting because they seem to be more responsive to recent Warframe updates as well as having a more practical user interface inline with the in-game modding experience. There might be other player-made resources that I'm not aware of so please feel free to comment them down below!

### **Armor Calculator**

The wiki has an even niche calculator that is only present on the <u>Armor</u> article. This is worth mentioning because it also shares the same fate as ability maximization calculators.

## References

 User:FINNER (2021, July 29). Do you guys even use the interactive ability/augment Maximization stuff?. Fandom. Accessed 2022-09-29. Archived (https://web.archive.org/web/20221205225217/https://warframe.fandom.com/ f/p/4400000000003490648) from the original on 2022-12-05.



### See Also

- WARFRAME Wiki:Maximization Calculator, design document for the feature
- User blog:TunalnABottle/Interactive Ability Maximization (March 2019), original 2019 blog post on the release of the feature
- User blog:TunaInABottle/Ability Strength and Maximization: which is the proper value? (June 2018), User:TunaInABottle also created a spreadsheet for ability



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 Module:Maximization/data, attempt to decouple ability calculation data from calculator business logic

### **Categories**

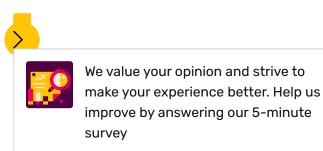


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