

WoW Cardio Raid Manual
 FOR WCR VERSION BETA 24
[HTTP://TIXU.SCRIBE.FREE.FR/](http://tixu.scribe.free.fr/)

Name	Act.	Damages Done	Damages Taken	Mitig.
Hespera	7%	filter ratio: 13.9% (305941 ...)	filter ratio: 0.0% (0 185733)	filter ra
Callisto	7%	filter ratio: 11.9% (276340 ...)	filter ratio: 0.0% (0 358100)	filter ra
Birds	7%	filter ratio: 20.1% (265440 ...)	filter ratio: 0.0% (0 87135)	filter ra
Podarge	7%	filter ratio: 13.9% (260640 ...)	filter ratio: 0.0% (0 100089)	filter ra
Hesperus	5%	filter ratio: 25.1% (257902 ...)	filter ratio: 0.0% (0 81982)	filter ra
Nikothoe	7%	filter ratio: 15.6% (255562 ...)	filter ratio: 0.0% (0 150342)	filter ra
Demphredo	7%	filter ratio: 17.6% (228620 ...)	filter ratio: 0.0% (0 70424)	filter ra
Amalthea	5%	filter ratio: 14.0% (168318 ...)	filter ratio: 0.0% (0 96299)	filter ra
Boar	6%	filter ratio: 15.1% (160606 ...)	filter ratio: 0.0% (0 91082)	filter ra
Graeae	7%	filter ratio: 10.3% (154775 ...)	filter ratio: 0.0% (0 150661)	filter ra
Elpis	7%	filter ratio: 7.6% (125737 1...)	filter ratio: 0.0% (0 183361)	filter ra
Mormo	7%	filter ratio: 17.7% (123785 ...)	filter ratio: 8.4% (78831 94...)	filter ra
Aiolos	7%	filter ratio: 10.5% (105434 ...)	filter ratio: 0.0% (0 207878)	filter ra
Salmeoneus	8%	filter ratio: 6.1% (82769 91...)	filter ratio: 0.0% (0 202615)	filter ra
A...	7%	filter ratio: 16.5% (7725 191...)	filter ratio: 0.0% (0 560030)	filter ra
Ph...	7%	filter ratio: 0.0% (0 99037)	filter ratio: 0.0% (0 99037)	filter ra
Hephaistos	8%	filter ratio: 0.3% (3315 111...)	filter ratio: 0.0% (0 452461)	filter ra
Paion	7%	filter ratio: 3.0% (2740 904...)	filter ratio: 0.0% (0 92256)	filter ra
Boar	8%	filter ratio: 0.0% (0 508124)	filter ratio: 0.0% (0 947234)	filter ra
...	...	filter ratio: 0.0% (0 44056)	filter ratio: 0.0% (0 40298)	filter ra
...	...	filter ratio: 0.0% (0 38734)	filter ratio: 0.0% (0 81988)	filter ra
Cronos	8%	filter ratio: 0.0% (0 33850)	filter ratio: 0.0% (0 162278)	filter ra
Alcyone	8%	filter ratio: 0.0% (0 22800)	filter ratio: 0.0% (0 104485)	filter ra

Time	Event	Source	Dest	Spell
02/25 20:15:53.19	SPELL_AURA_REMOVED	Cyclopes	Elpis	Blood Pact
02/25 20:15:53.19	SPELL_AURA_REFRESH	Nil	Salmeoneus	Hunger For Blood
02/25 20:15:53.19	SPELL_CAST_SUCCESS	Salmeoneus	Nil	Hunger For Blood
02/25 20:15:53.50	SPELL_AURA_REMOVED	Cyclopes	Hephaistos	Blood Pact
02/25 20:15:53.89	SPELL_AURA_APPLIED	Mormo	Mormo	Magma
02/25 20:15:53.89	SPELL_AURA_REMOVED	Cyclopes	Callisto	Blood Pact
02/25 20:15:54.43	SPELL_AURA_REMOVED	Mormo	Mormo	Magma
02/25 20:15:54.71	SPELL_AURA_REMOVED	Echidna	Echidna	Sated
02/25 20:15:54.71	SPELL_AURA_REMOVED	Nikothoe	Nikothoe	Sated

Table of Contents

1	Forward.....	4
1.1	What's New in this Release?.....	4
1.2	About this documentation.....	4
2	Introduction.....	5
2.1	What is WoW Cardio Raid?.....	5
2.2	WoW Cardio Raid vs. WoW Web Stats.....	5
3	Getting Started.....	6
3.1	Recording a Combat Log.....	6
3.2	Opening a file.....	6
3.3	Opening a file (Live Mode).....	6
3.4	Associating .wcr files with WCR.....	6
3.5	The WCR Screen.....	7
4	The Graph Screen.....	9
4.1	The Toolbar.....	9
4.1.1	Basic Toolbar Functions.....	9
4.1.2	Filter Toolbar Functions.....	10
4.1.3	Raid display functions.....	11
4.2	Using the Graph.....	11
4.2.1	General Features.....	11
4.2.2	Context Menu.....	14
4.2.3	NPC Options Window.....	15
4.3	Unit Detail Screen.....	16
5	The Stats Screen.....	17
5.1	Overview.....	17
5.2	Toolbar.....	17
5.3	Stats with Filters.....	18
6	The Events List Screen.....	19
6.1	Overview.....	19
6.2	Toolbar.....	19
7	Filters, The Most Fundamental Context Tool.....	20
7.1	Overview.....	20
7.2	Using Filters.....	20
7.3	Units.....	21
7.4	Tags.....	22
7.5	Spells.....	23
7.6	Events.....	23
7.7	Using Predefined Filters.....	23
8	Other Context Tools: Comparison Lines and Chatlog Import.....	24
8.1	Line Comparison Tool.....	24
8.1.1	Basic Usage.....	24
8.1.2	Individual Players.....	25
8.2	Chatlog Import Tool.....	25
8.2.1	Saving a chatlog.....	25
8.2.2	Load a Chat Loggerhead.....	25
8.2.3	Filtering the Chat Log.....	26

9 Change Log.....27

9.1 Beta 24 – 10 Aug 09.....27

9.2 Beta 23 – 5 Aug 09.....27

9.3 Beta 22 – 29 July 09.....27

9.4 Beta 21 – 10 Jun 09.....28

9.5 Beta 20 – 4 Jun 09.....28

9.6 Beta 19 – 17 May 09.....28

9.7 Beta 18 – 15 Apr 09.....29

9.8 Beta 17 – 7 Mar 09.....29

9.9 Beta 16 – 6 Feb 09.....29

9.10 Beta 15 – 23 Jan 09.....30

9.11 Beta 14 – 19 Oct 08.....30

9.12 Beta 13 – 16 Oct 08.....30

9.13 Beta 12 – 6 Sep 08.....31

9.14 Beta 11 – 5 Aug 08.....31

9.15 Beta 10 – 3 Aug 08.....31

9.16 Beta 9 – 2 Aug 08.....32

9.17 Beta 8 – 1 Aug 08.....32

9.18 Beta 7 – 27 July 08.....32

9.19 Beta 6 – 26 July 08.....32

9.20 Beta 5 – 22 July 08.....32

9.21 Beta 4 – 11 July 08.....32

9.22 Beta 3 – 5 July 08.....33

9.23 Beta 2 – 2 July 08.....33

9.24 Initial Release – 29 Jun 08.....33

1 Forward

1.1 What's New in this Release?

The manual has been significantly updated to reflect feature and GUI changes in the most current version of WoW Cardio Raid, release beta 24. Significant changes include:

- Update to select screenshots
- Clearer documentation of the Graph toolbar
- More split up graph features sections (next iteration will hopefully continue this by splitting up the log bullited list in section 4.2.1)
- Change to the organization of the Filters screen and added some clerification
- Documentation of Live Update, Line Comparison, and Chat log features added
- Change log updated

1.2 About this documentation

This documentation is a continued work in progress. I appreciate all comments, criticisms, and corrections you may have to offer and ask that you please contact me via private message on the WCR official forums, located at: <http://wowcarto.virtuaboard.com/wowcardioraid-f8> ; my username is “genericlifeform.” I will try to respond to your message within 2-3 days.

If you have a bug to report or comments about the program itself, please contact “Tixu” or create a new forum post.

2 Introduction

2.1 What is WoW Cardio Raid?

WoW Cardio Raid (WCR) is a tool for the analysis of raids in World of Warcraft. The addon can load a combat log saved from the game and display information about a fight, such as units' health, damage per second (DPS), healing per second (HPS), debuffs, casts, and targets, all in a timeline style.

WCR also have a stats feature similar to in-game meters like Recount and online tools like WoW Web Stats to track people's aggregate DPS, incoming damage, and the like. Paired with one of these tools, both a macroscopic (via Recount) and microscopic (via WCR) analysis can be done, allowing one to fully see and evaluate a raid.

WCR really shines in the area of understanding mysterious deaths, tracking the effects of buffs on raid members, and general problems where you or your raid leader has wanted to say, "Ok, pause for a moment. Rewind 5 seconds. Ok now, what happened here?"

2.2 WoW Cardio Raid vs. WoW Web Stats

While WoW Cardio Raid and WoW Web Stats (<http://wowwebstats.com/>) are combat log parsers used for analyzing raids (or anything combat in game, for that matter), they have distinctly different goals, strengths, weaknesses, and applications.

Here's a quick look at how the two analyze a combat log and represent data for you:

WoW Cardio Raid

- Emphasizes data correlated with when it happened (Time Domain).
- Detailed statistics for a unit are when a spell or debuff occurred, the unit's health over time, the unit's DPS and HPS over time.
- Able to view entire night at once (with limitations) or a specific attempt.
- Allows creation of filters based on spells id, tags, and event API markers.
- Local Parser
- Does have ability to look at aggregate data via Stats window.
- Great for diagnosing strat and execution issues.

WoW Web Stats

- Emphasized aggregate data (Integral Domain).
- Detailed statistics for a unit are its average DPS/HPS, target healed, abilities used and how often.
- Able to view entire night at once or a specific attempt (ie, splits).
- Most common filters are based class/role, abilities, and pivot tables (ie, Who Healed Who?, etc..)
- Web-hosted Parser
- Does have ability to look at time correlated data via Combat Log Viewer.
- Great for diagnosing a player's performance.

The good news: used together, they are an unstoppable team for ironing out almost any raid mechanic, strat development, or rotation theorycrafting problem!

3 Getting Started

3.1 Recording a Combat Log

In order to use WCR, you'll need to create a combat log. A combat log is basically a written transcript of the encounter and includes all abilities used by you and anyone upto a 30 yard radius around you.

Next time you're about to jump into a raid instance, simply type
`/combatlog`

into the chat frame to begin logging. To stop logging, type it again. If you plan to be recording a lot of raids, you might want to make a macro to do this or use an addon like Loggerhead (<http://wow.curse.com/downloads/wow-addons/details/loggerhead.aspx>) to auto start/stop the combat log every time you zone into an instance .

Combat logs are saved to the following path:

`(WoW Directory) /Logs/WoWCombatLog.txt`

and “new” logs are appended onto each other. Thus, it's a good habit to every night after a raid to quickly log off (the combat log cannot be accessed while WoW is running, even if combat logging is disabled) and save your log into the WCR format, upload it to WWS if you wish, and delete it.

3.2 Opening a file

Once you have unzipped WCR into its on directory, double-click on WowCardioRaid.exe. From the home screen, you will see a button “Load Log.” Use it to select the combat log in the logs directory detailed above. After a few seconds of parsing the log, the graph screen will appear.

3.3 Opening a file (Live Mode)

WCR supports the opening of the combat log during an ongoing raid, to monitor its status in semi-real time. To set up this feature, you must first specify the location of your combat log by entering the absolute path in the “Direct path to live wowcombatlog.txt” field located in the “Options” screen. From the options menu you can also select how often WCR updates while in using the auto-update feature (default: 1 min).

3.4 Associating .wcr files with WCR

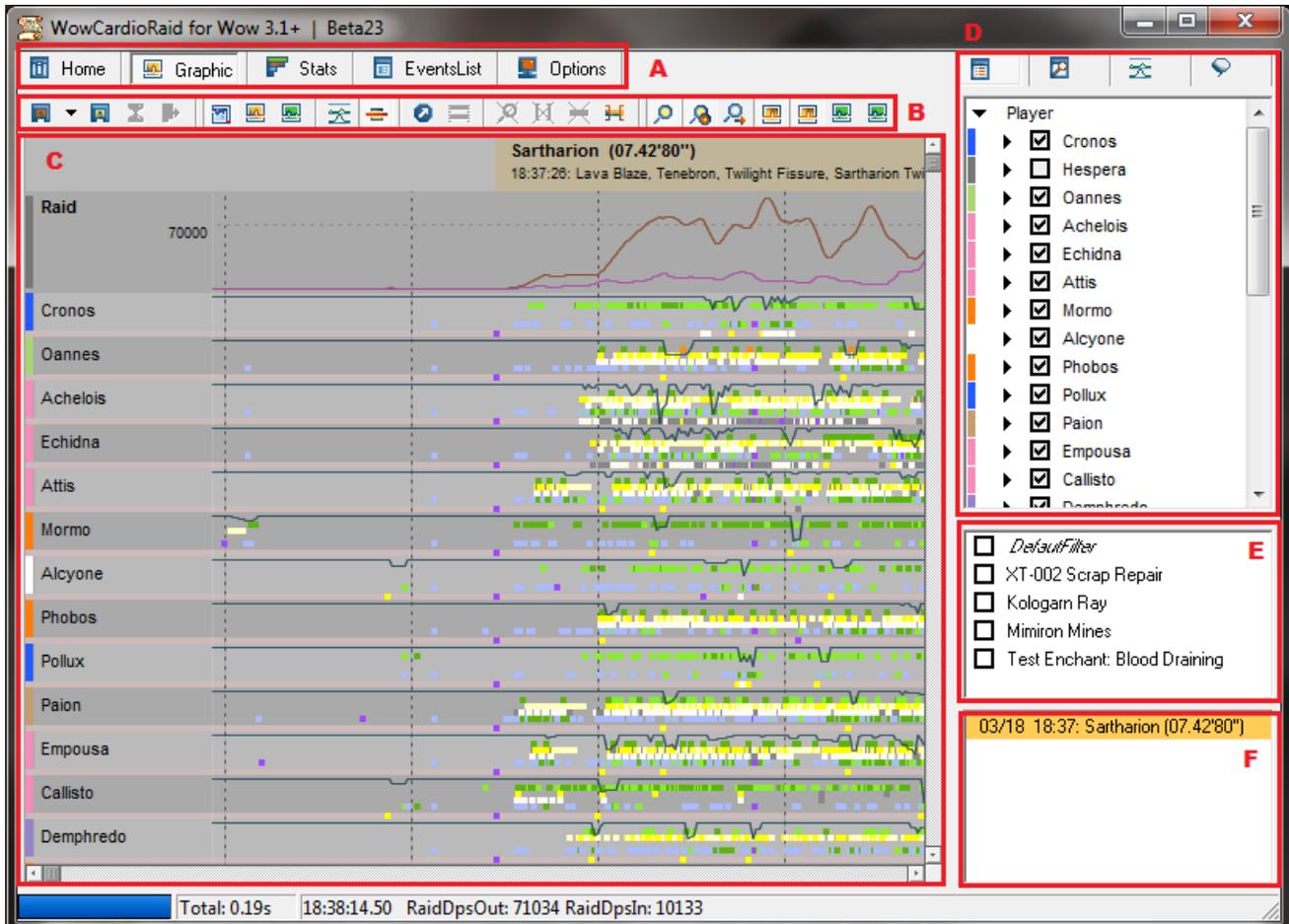
WCR can save files into a proprietary, highly compressed format, a “.wcr file.” To set up Windows to automatically open .wcr files in WCR,

1. Right click on a .wcr file and choose Open.
2. Choose “Select a program from a list of installed programs” from the dialog that appears.
3. Click “Browse...”
4. Browse to and select your WCR executable.
5. Click “Ok.”

Now .wcr files will be opened by WCR when you double click on them.

3.5 The WCR Screen

Here's a quick rundown of the WCR window.



Where...

- **A – Pane Toolbar** Each pane and its associated toolbar will have its own section, but for a quick taste:
 - Graphic – Contains a visual representation of the fight.
 - Stats – Bar graph of aggregate damage done, take, mitigated, and healing statistics.
 - Event List – Pretty much a row for each line in the combat log, with sorting features.
- **B – Toolbar** Different for each view; contains analysis tools.
- **C – Graph** One row for each unit, sorted with players on the top and NPCs at the bottom. Lines represent (depending on situation) health, DPS, or HPS. Colored dots are spells, auras, and other combat log events.
- **D – Context Tools** Includes tools which modify the contextual elements of the graph, such as the viability of units, spells, and in-raid chatter. These tools will be discussed in their own chapter, but for a quick taste:
 - Unit filter – Choose which players, pets, NPCs, and objects are visible on the graph
 - Combat filter – Chose which tags, spells, and events are visible on the graph

- Comparison tool – Allows the import and export of unit and raid DPS lines to compare previous attempts to the current attempt.
- Chat tool – Allows the import of a chat log to monitor raid chatter and boss emotes.
- E – **Saved filters screen** Any filters you save will appear here. Multiple filters are “ORed” together.
- F – **Time Selections (ie, Combat List)** If the log contains multiple bosses, the time of each attempt/kill will be available here. Also, you can enable the display of non-boss NPCs in this screen by right-clicking on a unit in the NPC section of the unit list and selecting “Add/Remove this unit in the combat list.” They will be colored in purple instead of orange in the combat list to differentiate them from bosses.

There is also data along the bottom. The most left bar is the status bar while loading a log. The central message box shows the time (military, time of the system that recorded the log), unit HP if available, unit name, and HP deficit/DPS/HPS.

4 The Graph Screen

This main graph screen is the most distinguishing feature of WCR as well as the most daunting. There is a high concentration of data in a very small space, but we'll try to go over it piece by piece.

4.1 The Toolbar

The most revolutionary – although admittedly confusing – aspect of WCR are the unit graphs (sometimes, called the EKGs). Let's have a quick look at how to read one.

4.1.1 *Basic Toolbar Functions*



From left to right, each toolbar icon means,

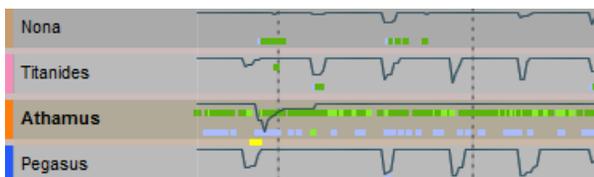
- **Load Log** With a drop down to load from either a WoW Combat Log/WCR propitiatory format log or a live log.
- **Save Log** Save this log, or the currently selected time frame, to a .wcr file.
- **Live Update/Resume** Enable or disable the automatic updating of the graph from a live log file (no use with a static log file; default disabled). To change how often the log is updated (variable between 30 sec to 30 mins), change the “LiveUpdate Timer” in the *Options* pane.
- **Manual Update/Resume** Forces an update of the graph from a live log file (no use with a static log file)
- **HP Lines** When enabled, the lines for all units will be their HP. HP lines are a gray-blue.
- **DPS Lines** When enabled, the lines for all units will be their DPS. DPS lines are red. Use “v” to decrease the interval over which DPS is calculated, “b” to decrease it. Default interval is 5 seconds.
- **HPS Lines** When enabled, the lines for all units will be their HPS. HPS lines are green. Use “v” and “b” to change evaluation interval similar to DPS lines.
- **Relative Ratio** Explained below.
- **Line Foreground/Background** When enabled, HP/DPS/HPS lines are drawn over the buff squares.
- **Return to Graph** When used in the unit detailed view, returns to the graph. When used in the graph, returns to the detailed view showing the last unit inspected.
- **Toggle Cast vs. Received Auras** Usable only in the detailed view, changes whether the detailed aura list shows received auras (default, button not depressed), or auras cast on other targets by this unit (button depressed).

4.1.2 Filter Toolbar Functions



This group of toolbar icons affect how filters affect the display of elements of the EKGs. Starting from the magnifying glass with a cross through it,

- **Reset Filter** Resets the tag/spell/event filters, therefore showing all event squares.
- **Reset Time Selection** Resets the time interval selected, indicated with vertical red/orange lines.
- **Reset Current Focus** Removes focus from all unit(s). Units with focus have a slight highlight, as shown in the screenshot below.



Focus in Inclusive Mode



Focus in Exclusive Mode

- **Toggle Focus Mode** Determines whether focuses are inclusive or exclusive.
 - In **inclusive mode** (default, button not depressed), events must be the source **and** destination of focused units to be shown.
 - In **exclusive mode** (button depressed), events show may be either a source of **or** the destination of the focused unit. Exclusive mode is useful for finding attacks between two specific units, for example a tank and a boss or a healer and his healing target. When in inclusive mode, the filter highlight will be **orange**; in exclusive, **blue**.
- **Apply filter to lines** When this button is depressed (default), DPS and HPS lines use only spells visible per the current filter to show the line. For example, if you wanted to see the DPS from a mage's Living Bomb spell, you could select the spell from the filter list and, when this option is enabled, the DPS line would show only DPS caused by Living Bomb. When the button is not depressed, DPS lines remain the same regardless of the filter used.



Important Note: If, when looking at a file, there appear to be no DPS/HPS lines and/or way too few line, make sure that it isn't because of this feature. Its easy to be looking for some buff, using a filter to find that buff, and then decide to look at some DPS/HPS line and forget that the filter is still engaged.

- **Auto-update lines** When depressed (default), lines update automatically every time the filter is changed, otherwise you'll have to force-update the lines manually.
- **Force-update lines** Force the lines to update to reflect the current filter.

4.1.3 Raid display functions



This group of toolbar icons affect what is visible in the “raid” row located at the top of the graph. The options are,

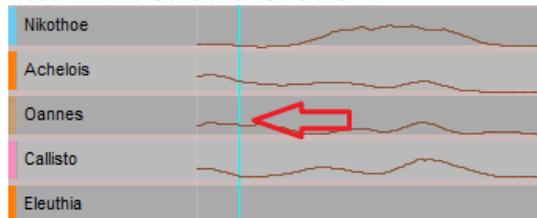
- **Raid DPS Out** Shows the DPS of the raid.
- **Raid DPS In** Shows DPS taken by the raid. Useful in combination with raid effective healing line to see how quickly healer respond to raid-wide damage.
- **Raid HPS Out** Shows how much healing per second is done
- **Effective HPS Out** Shows how much healing per second is done that actually heals the target.

4.2 Using the Graph

4.2.1 General Features

Here are some other important features about the graph (ie, **EKGs** because of their similarity to medical EKGs and “Cardio” in the name “WowCarioRaid”),

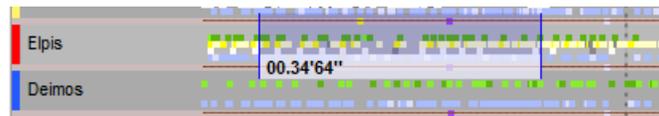
- **Colored Boxes:** Each unit gets a line (in this case, representing its HP) and a series of dots/boxes. The colors of the boxes represent,
 - **Mustard Yellow** – Damage (to or from the unit) / **Light Yellow** – Periodic Damage
 - **Dark Blue** – Buff Cast from unit to a different unit / **Light Blue** – Buff Persists / **Light Grey** – Buff removed.
 - **Purple** – Buff applied onto unit from a different unit / **Light Grey** – Buff removed which originated from a different unit.
 - **Dark Green** – Heal (to or from unit) / **Light Green** – Periodic Heal
 - **White** – White Damage/Spell Cast Success / **Dark Grey** – Miss
 - **Red** – Unit died.
- **Vertical dashed lines represent time.** Depending on zoom level, each dash could be 1 minute or 1 second.
- To aid in figuring out what was happening at a given time, use *Shift-Click* to place a **turquoise, vertical cursor**, as depicted in the screenshot below.



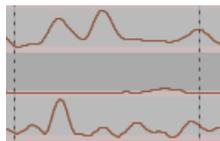
- If an **error has occurred** you will see three exclamation marks in the top left part of the graph screen. To see the error(s) that have occurred, look at the error log in the *options* pane.



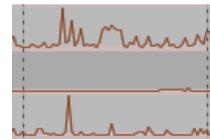
- **To measure a quantity of time**, use *Alt-Click* at the beginning and end of the time frame. *Alt-Click* anywhere again to clear the time measuring tool. (Pressing escape will not clear the time measuring tool)



- **To apply a time filter**, *Ctrl-Click* around the selected time. Red lines with an orange highlight will appear denoting the time selected.
- Hover over the name of a unit to see its **statistics**.
- Use *Ctrl-Alt-A* to **anonymous your report**, giving each unit a random name.
- **To move the EKG**, click-and-drag anywhere on the graph left, right, up, and down. Also, to move up and down, you can use Page Up and Page Down keys. You can also move up and down by hovering over the unit names and using the mouse scroll wheel.
- **To zoom in and out**, use your mouse scroll wheel when over the main part of the graph.
- **To cycle between HP/DPS/HPS lines**, use the toolbar buttons presented above or the “c” key.
- **To toggle the HP/DPS/HPS lines on/off**, use the “h” key.
- **To toggle the event dots on/off**, use the “a” key. This is a very useful shortcut.
- **To remove**, in successive order, Event/Spell Filters → Unit Focus → Time Selection → Turquoise Cursor, use the “ESC” key.
- Use “v” and “b” **to change the calculation interval** – up and down respectively – for HPS and DPS lines. Five seconds is the default.

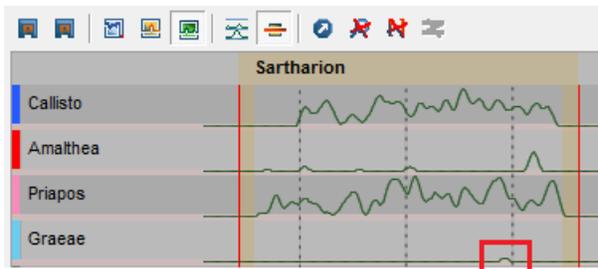


Calculation interval at 5 s

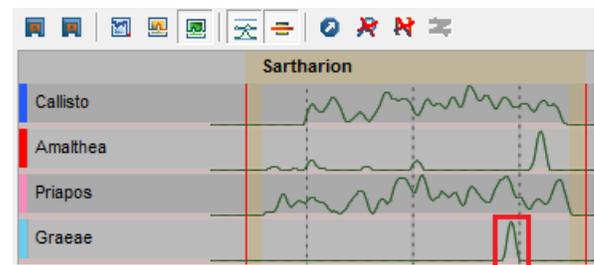


Calculation interval at 1 s

- When using the **relative ratios** option from the toolbar, DPS and HPS lines will be for that unit will be relative to that unit's maximum. When not enabled, the line will be relative to the raid's maximum DPS/HPS.



Relative Ratio Disabled



Relative Ratio Enabled

Ex: The mage does very little healing in a fight: the only time is with a health pot, indicated against as a tinny little bump when Relative Ratio is disabled because a health pot vs. the healing from healers is small. However, when Relative Ratio is enabled, which plots vs. the maximum healing done by the particular unit instead of all units, his healing stands out. Also note how the shaman and paladin, both healers, have their EKG's relatively unchanged between the two modes.

- Using the **use current filter for lines** option, one can easily discriminate certain types of healing and damage from the total. For example, to see if a melee DPS was pulling his weight, you might want to use a filter that displays all damage but “white damage.” To do this, click the “eventsAutoAttack” tag filter twice (the first click selects damage only from that tag, the second changes the filter to be damage from every tag but that one). If a melee's DPS line all but disappears, you know they've only been auto-attacking the boss. This feature is heavily used in conjunction with filters, which are discussed in their own chapter.
- At the top of the EKG is the **“Raid”** row. This row can be set up to display raid-wide DPS and HPS of various varieties using the toolbar described above. The raid row can also display lines imported from previous attempts for comparison purposes.
- If you have a/some **unit(s) focused, the raid row will display** the DPS/HPS line (depending on the raid's DPS/HPS selectors (located on the right side of the toolbar) and **not** the unit's DPS/HPS selector) for the focus in the raid row and, as a lighter color, the line for the whole raid.

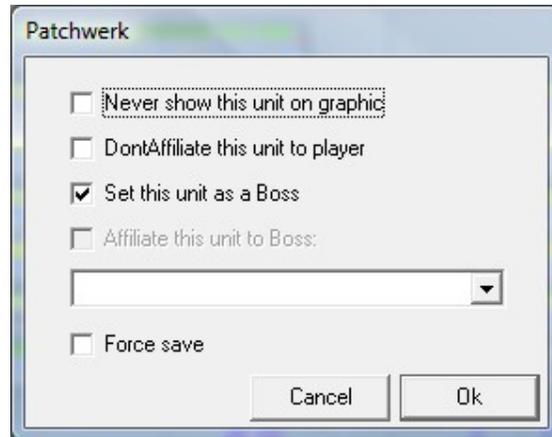
4.2.2 Context Menu

You can also Right-Click anywhere on the EKG to bring up the following context menu:

- **Details for: <Unit>** – Brings up the detail screen, covered in the next section. Equivalent to the  toolbar button.
- **Toggle focus on:: <Unit>** – Places the focus on unit. When a unit has focus, all event dots are removed from the whole graph except for those which are originated by or cast onto the unit. Units with focus have a slight highlight.
- **ShowOnlySpell: <Spell>** – If you right-click on an event dot, this option is available. This applies a filter which shows only this spell on the graphs.
- **ShowOnlyEvent: <Event>** – Same as with spell, but will only show events in this category.
- **Reset** – Resets the unit focus, time selection, filter, or time cursor.
- **ViewEventInList** – If you right click on an event dot, this option lets you jump to this event in the event view list.
- **Remove: <Unit>** – Removes the unit from the graph.
- **Options for: <Unit>** – See options screen, covered in the next section. Only available for NPCs.
- **Check <Spell> on Web** – If used on an event dot, opens up the spell in a WoW online database. The default option is wowhead, but any database can be used. To change the database used, change the “Spell base Web Link” field in the options screen. Use %s in the URL where the spell ID should be inserted.
- **EditSpellParams: <Spell>** – Allows association with of a spell with a class. Not used often.
- **Load Log** – Equivalent to the Load Log toolbar button. – Equivalent to the Load Log toolbar button.

4.2.3 NPC Options Window

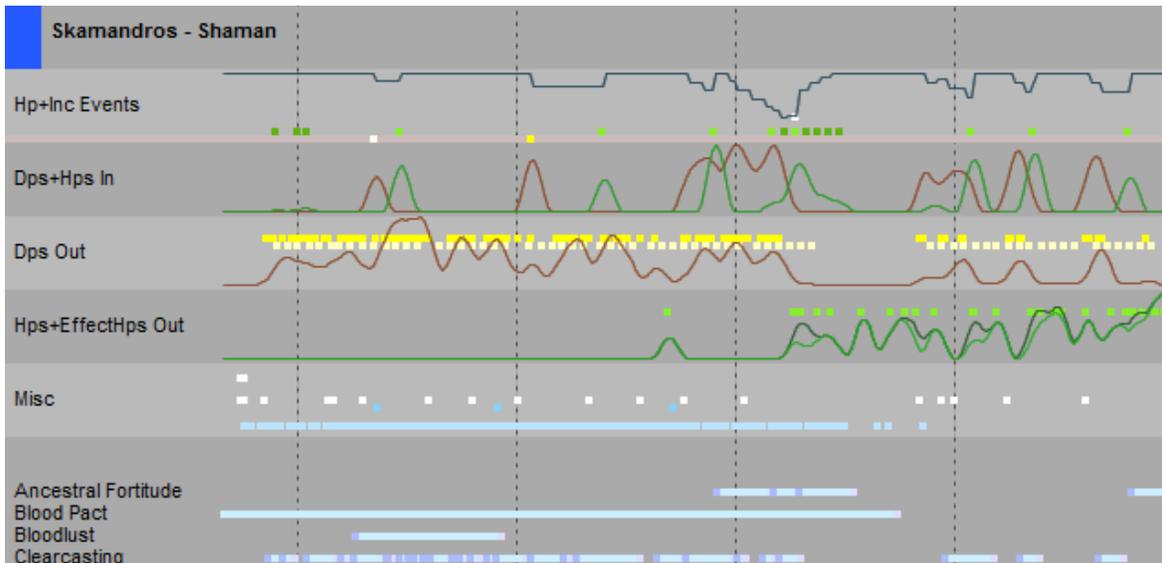
When right clicking on an NPC and choosing the Options menu will bring up the following window:



- **Never show this unit on graphic** – When checked, this unit (and units of the same name) will not be shown on the graph. To show a unit on the graph again, choose Units > NPC > the unit from the right filters and selections pane, Right Click > Edit Params for <Unit>.
- **DontAffiliate this unit to player** – Sometimes boss-summoned NPCs come in affiliated with a player (Globbulus clouds for example) which are not actually player units. Check this to make these units independent.
- **Set this unit as Boss** – This unit is a boss and will be used to determine time selections.
- **Affiliate this unit to Boss** – Used to affiliate boss adds (such as Sartharion's drakes). (First select a boss from the drop-down box, then the check-box will automatically get checked.)
- **Force Save** – WCR saves NPC options and HP pool together, but there are times when you want to only save the HP pool but not other options (such as on drakes for the third phase of Malygos). This options allows you to save the HP independent of the other options.

4.3 Unit Detail Screen

From the main graph, Right-Click on a unit and select “Details for: <Unit>” to bring up the detail screen,



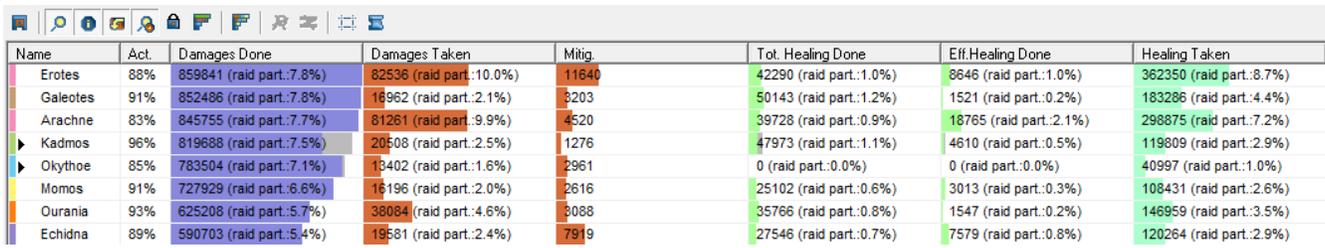
This screen shows a Health graph concurrent with a DPS and HPS in graph, a DPS out graph, and an HPS and Effective HPS out graph. Following these detailed graphs, is each buff divided out on its own row. You can change whether the divided out buff section shows buffs on the unit or cast by the unit by using the  toolbar button, described in an earlier section.

The DPS and HPS in graph is great for looking at how effectively your healers are responding to your tanks' taking damage (how far behind the DPS-in line does the HPS-in line lag?). The individual buff rows are good for seeing how well a player is keeping up abilities like water shield, as well as how often clear casting/hot streak/etc... buffs proc and how they affect DPS.

5 The Stats Screen

5.1 Overview

The Stats Screen is pretty similar to cumulative graphs you might find in WWS, Recount, and other combat log tools. Viewing of aggregate data is available for Damage Done, Damage Taken, Damage Mitigated, Total Healing Done, Effective Healing Done, and Healing Taken.



Name	Act.	Damages Done	Damages Taken	Mitig.	Tot. Healing Done	Eff. Healing Done	Healing Taken
Erotos	88%	859841 (raid part.:7.8%)	82536 (raid part.:10.0%)	11640	42290 (raid part.:1.0%)	8646 (raid part.:1.0%)	362350 (raid part.:8.7%)
Galeotes	91%	852486 (raid part.:7.8%)	18962 (raid part.:2.1%)	3203	50143 (raid part.:1.2%)	1521 (raid part.:0.2%)	183286 (raid part.:4.4%)
Arachne	83%	845755 (raid part.:7.7%)	81261 (raid part.:9.9%)	4520	39728 (raid part.:0.9%)	18765 (raid part.:2.1%)	298875 (raid part.:7.2%)
Kadmos	96%	819688 (raid part.:7.5%)	20508 (raid part.:2.5%)	1276	47973 (raid part.:1.1%)	4610 (raid part.:0.5%)	119809 (raid part.:2.9%)
Okythoe	85%	783504 (raid part.:7.1%)	13402 (raid part.:1.6%)	2961	0 (raid part.:0.0%)	0 (raid part.:0.0%)	40997 (raid part.:1.0%)
Momos	91%	727929 (raid part.:6.6%)	16196 (raid part.:2.0%)	2616	25102 (raid part.:0.6%)	3013 (raid part.:0.3%)	108431 (raid part.:2.6%)
Ourania	93%	625208 (raid part.:5.7%)	38084 (raid part.:4.6%)	3088	35766 (raid part.:0.8%)	1547 (raid part.:0.2%)	146959 (raid part.:3.5%)
Echidna	89%	590703 (raid part.:5.4%)	19581 (raid part.:2.4%)	7919	27546 (raid part.:0.7%)	7579 (raid part.:0.8%)	120264 (raid part.:2.9%)

The Stats Screen, sorted for damage done.

5.2 Toolbar



The toolbar options are, from left to right,

- **Load Log**
- **Use Current Filter** – If enabled, uses the spell and event filter, shown with spit bars.
- **Use Focused Unit** – All bars will be split with Damage/Healing/Etc against the focused unit. So, for example, if you have Tenebron in a 3-drakes run focused, the DPS bars will show a split with the colored part showing how much damage from each player was done to him.
- **Merge Affiliated Units** – Merges pets, totems, etc... with their owner. Merged data will appear gray on the bar to which it is added.
- **Autoupdate Stats** – Updates the chart when the filter changes automatically.
- **Secure Stats** – Prevents stats from being updated. Increases computer performance.
- **Refresh/Updates Stats** – Causes a recalculation of stats.
- **Toggle Player/NPC stats** – Choose whether to display charts for players of NPCs.
- **Reset Filter** – Resets the spell/event filter.
- **Reset Focus** – Removes focus from current unit.
- **Toggle Focus** – Determines whether focuses are inclusive or exclusive. In exclusive mode (default, button not depressed), events show may be either a source **or** the destination of the focused unit. In inclusive mode (button depressed), events must be the source **and** destination of focused units to be shown. Inclusive mode is useful for finding attacks between two specific units, for example a tank and a boss or a healer and his healing target.
- **Adjust Column Size** – Resets the column widths.
- **Export Stats** – Exports stats in a text form for use on forum that uses phpBB formatting.

5.3 Stats with Filters

Besides giving a quick view of a fight, the best feature of the Stats screen is to show total stats compared to a filter.

Name	Act.	Damages Done	Damages Taken	Mitig.
Nix	93%	filter ratio: 88.4% (11589...)	filter ratio: 59.6% (327623 549795)	filter ratio: 78.5% (204...
Daphnaie	97%	filter ratio: 65.5% (71514...)	filter ratio: 13.4% (60602 451281)	filter ratio: 41.0% (108...
Zephyros	99%	filter ratio: 69.0% (62466 ...)	filter ratio: 55.8% (51484 92256)	filter ratio: 51.1% (104...
Amphitrite	99%	filter ratio: 22.1% (5035 ...)	filter ratio: 33.4% (32015 95767)	filter ratio: 31.7% (482...
Caeneus	100%	filter ratio: 2.3% (786 33...	filter ratio: 19.0% (30904 162278)	filter ratio: 29.9% (652...
Cytherea	88%	filter ratio: 14.7% (32192...)	filter ratio: 14.8% (27522 185733)	filter ratio: 17.8% (482...
Oreads	92%	filter ratio: 14.4% (33448...)	filter ratio: 6.6% (23491 358026)	filter ratio: 24.6% (103...

For example, this is a screenshot of a stats report showing what damage was done to and taken by Lava Blazes in a Sartharion 3-drakes kill. This filter was obtained by toggling the focus on to each Lava Blaze.

When you click on a heading, everything is sorted with respect to that heading. If a filter or selection is applied, as is the case here, the sort will be with respect to the filter. The colored section of the graph indicates the filter while the grayed out is the remaining total.

Nix, the assigned Lava Blaze tank, has about 60% of his damage taken from Lava Blazes. (Nix also had to tank a drake because a tank died, hence why this percent is so low) From this filter, we can see that Nix is doing a fair job of keeping Blazes off of healers, accounting for about 60% of Blaze damage taken. However, Daphnaie was the drake tank and would pick up Blazes in his free time, so its ok Daphnaie was next in line to take damage from Blazes. Zephyros, a shaman healer, should be looked at closer next time though; maybe Nix should have a taunt macro for him or make sure to keep close to him in future runs.

6 The Events List Screen

6.1 Overview

The Events List screen provides a near replica of the combat log exported by WoW.



Important Note: You may have to hit the  button when you first load this screen in order to populate the list.

Time	Event	Source	Dest	Spell	Amount
+00.02'38"	SWING_DAMAGE	Noth the Plaguebri...	Oannes	!NoSpellAction	2234
+00.02'38"	SPELL_CAST_SUCCESS	Podarge	Noth the Plaguebri...	Vampiric Embrace	
+00.02'47"	SPELL_AURA_REMOVED	Aegina	Kronus	Blood Pact	
+00.02'47"	SPELL_AURA_REFRESH	Nil	Noth the Plaguebri...	Deep Wounds	
+00.02'47"	SPELL_AURA_APPLIED	Empousa	Cronos	Rampage	
+00.02'47"	SPELL_AURA_APPLIED	Pollux	Pollux	Clearcasting	
+00.02'47"	SPELL_AURA_APPLIED	Cronos	Oannes	Renew	
+00.02'47"	SPELL_AURA_APPLIED	Attropus	Oannes	Lifeblood	
+00.02'47"	SPELL_AURA_REMOVED	Cronos	Oannes	Power Word: Shield	
+00.02'47"	SPELL_AURA_APPLIED	Podarge	Noth the Plaguebri...	Vampiric Embrace	
+00.02'56"	SPELL_AURA_REMOVED	Echidna	Echidna	Blink	
+00.02'56"	SPELL_AURA_APPLIED	Priapos	Priapos	Avenging Wrath	
+00.02'56"	SPELL_CAST_SUCCESS	Priapos	Nil	Avenging Wrath	
+00.02'56"	SPELL_MISSED	Aer	Noth the Plaguebri...	Instant Poison IX	
+00.02'56"	SWING_DAMAGE	Aer	Noth the Plaguebri...	!NoSpellAction	252
+00.02'75"	SPELL_CAST_SUCCESS	Priapos	Noth the Plaguebri...	Judgement of Wisdom	
+00.02'75"	SPELL_PERIODIC_ENERGIZE	Empousa	Empousa	Bloodrage	1
+00.02'75"	SPELL_MISSED	Priapos	Noth the Plaguebri...	Seal of Blood	
+00.02'75"	SWING_DAMAGE	Priapos	Noth the Plaguebri...	!NoSpellAction	1211
+00.02'80"	SPELL_CAST_SUCCESS	Oannes	Noth the Plaguebri...	Devastate	
+00.02'80"	SPELL_AURA_REMOVED	Aegina	Kronus	Blood Pact	

Each row is a line from the log, colored by the event type just like dots in the EKGs.

6.2 Toolbar



From left to right,

- **Load Log**
- **Use Time Selection** – Shows only those events from the time period selected in the graph/combat list.
- **Use Current Filter** – Shows only events that match the filters on the right side of the screen.
- **Auto Update List** – Automatically updates the contents of the event list when a filter is changed.
- **Secure list** – Prevents overflow.
- **Refresh/Update List** – Manually populates the list. You may need to hit this button when first entering the EventsList screen.
- **Reset Filter**
- **Export Events** – Exports selected events in the following format:
 TimeStamp|Target → Source|SpellName|Amount

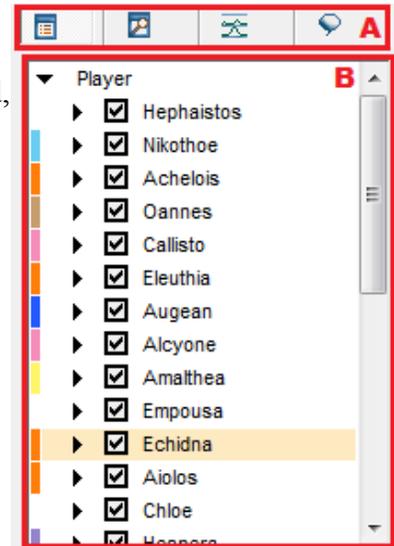
7 Filters, The Most Fundamental Context Tool

Filters are an integral part of WCR and have already been used to a small degree in this manual up to now. Filters help sift through the corpus amount of data provided in WCR and reduce it to the most informative information. Now let's take an intensive look at what sorts of things you can filter and how they work.

7.1 Overview

On the right side of the WCR window is the context tool area.

- **A** – Lets you change what context tool you are working with and, therefore, changes the contents of panel B
- **B** – For each context tool,
 - **Units** – Units are sub divided into Player, Pet, NPC, and Object categories.
 - **Filters** – Three filter types are available: Tags, Spells, and Events. Multiple options are “ANDed” together. These three filter types are the focus of the bulk of this chapter's discussion.
 - **Line Comparison** – Allows the addition of raid lines from previous attempts. This feature is discussed in the next chapter.
 - **Chat Log** – Allows the addition of a chat log. This feature is discussed in the next chapter.



7.2 Using Filters

For every Filter, clicking on the check box will do the following, in order:

- **Before the First Click:** Assume this is what your filter list looks like. We will be experimenting with the *Blood Pact* spell. Note that *Blood Corruption* is already disabled.

<input checked="" type="checkbox"/>	Blizzard	
<input checked="" type="checkbox"/>	Blood Boil	
<input type="checkbox"/>	Blood Corruption	
<input checked="" type="checkbox"/>	Blood Fury	
<input checked="" type="checkbox"/>	Blood of the Old God	
<input checked="" type="checkbox"/>	Blood Pact	
<input checked="" type="checkbox"/>	Blood Plague	
- **First Click:** Checks only that tag/spell/event and removes all others, allowing you to see only that one.

<input type="checkbox"/>	Blizzard	
<input type="checkbox"/>	Blood Boil	
<input type="checkbox"/>	Blood Corruption	
<input type="checkbox"/>	Blood Fury	
<input type="checkbox"/>	Blood of the Old God	
<input checked="" type="checkbox"/>	Blood Pact	
<input type="checkbox"/>	Blood Plague	

- **Second Click:** Checks all other tags/spells/events except that one (and any other disabled filters), removing it from the graph. Notice how, because *Blood Corruption* was disabled before we started it is still disabled now.



- **Third Click:** Restores the filter to how it was before clicking where both that tag/spell/event and all others that are enabled.



These successive clicks will be shown graphically as the check marks next to each item and disappear and reappear appropriately.



Important Note: The tags filter items do not give this visual indication but do have identical responses as the other filters.

7.3 Units

The units are sub divided into Player, Pet, NPC, and Object categories. Clicking on the arrow next a unit will show all the instances of that unit.

NPC units' names are colored to show,

- Black – Standard Unit
- **Bold Orange** – Unit is a boss
- Orange – Unit is associated with a boss
- Grey – Unit is invisible (will not show up on graph)

If you right-click somewhere in the B pane, you will get a context menu with the following options:

- **Uncheck All Players** – Removes all PCs from the graph.
- **Reset Player Stats** – Places PCs present at the time frame back on the graph.
- **Don't Dynamically add NPC** – If checked, NPCs (such as adds, trash, and non-affiliated NPCs) will not be added to the graph. To add these NPCs, you'll have to check their boxes manually.
- **Don't dynamically add Pet** – If checked, player's pets will not appear on the graph unless their individual box is checked.
- **Don't dynamically add Affiliated NPC** – If checked, affiliated NPCs (such as mini-bosses in an encounter and sometime adds) will not appear on the graph unless their individual box is checked.
- **Always add Boss NPC** – If checked, the Boss NPC for a time frame is added regardless of

rules stated above.

- **Show inactive raid players** – If checked, players who have no activity during the time frame will appear on the graph.
- **Hide external player** – Hide external player removes any player characters that may have been superciliously added to your combat log, but weren't in your raid. For example, a player doing a daily while you wait outside the instance would show up on the EKG but is not a player you care about.
- **Edit Params for: <Unit>** (NPC only) – Brings up the parameter box discussed in The Graph Screen section.
- **Add/Remove this unit from the combat list** (NPC only) – Adds this NPC to the time selection combat list. Non-boss NPCs appear in purple; bosses (automatically added) appear in orange.
- **Registered Units** (Only while no log is loaded) – Brings up a window containing a list of every NPC in WCR's database and allows for quick viewing and editing of NPCs.

7.4 Tags

Under Filter > Tags is a long list of tags associated with the API Combat Log Event parameters (to sort on the event types themselves, use Filter > Event). More information about the API Combat Log parameters is available at http://www.wowwiki.com/API_COMBAT_LOG_EVENT. The options here are numerous and mostly self explanatory, however let's highlight a few:

- **eventIsFriendlyVsFriendly** – Used to show heals and buffs. Great filter to use if you're looking at a tank's EKG and all the incoming/outgoing damage is clogging up your analysis of “Were healers doing their job?”
- **eventIsFriendlyVsOther** – Used to show damage and debuffs.
- **eventIsHeal** and **eventIsOverHeal** – Show heals; look for overheals.
- **eventIsDamage** – Used to show only damage events. “Was your tank not DPSing during Twilight Torment to avoid taking unnecessary damage?”
- **eventIsOverDamage** – Used to quickly find killing blows.
- **eventIsSchool:<School>** – “How effective is your resist set?” When used with the stats tool, “Is it worth using a frost resist set when 40% of your incoming damage is frost?”
- **eventIsEnergize** – Show mana/rage/energy/runic power restoration. These do not show up on the graph but will show up on a details view of a unit.
- **eventIsInterrupt** – “Where your rogues really interrupting Kelthuzad's casts every cooldown?” “How often do interrupts overlap; is more coordination required?”
- **eventIsDead** – Quickly find when people died by showing only red dots on the EKG.

7.5 Spells

Under Filter > Spells is a long list of every spell, buff, debuff, and ability used by PCs and NPCs in the log. There is a search box near the top to help you find the spell for which you are looking. Here are some quick examples of how spell filters can be useful.

- How many people and which people stood in void zones and took other avoidable damage?
- Turn on DPS lines and filter for bloodlust (also, consider using relative ratio). What people are using bloodlust effectively and which are not?
- Is earth shield up on the tank at all times?
- How often did casters get Spell Disruption on Heigen?



Helpful Hint: If you select a character while in the *Stats* pane, the spell list will be automatically reloaded to show only those spells to/from that unit, which can also be useful for sorting through the list. To further reduce the options, select the damage done, healing, damage taken bar to show only that kind of spells for that unit.

Right clicking on a spell will bring up a context menu with the following options,

- **Reset SpellDefaultSelection** – Enables all spells but leaves tag and event filters unchanged.
- **Reset FullDefaultFilter** – Enables all spells, tags, and events.
- **EditSpellParams: <Spell>** – Allows association with of a spell with a class. Not used often.
- **ShowOnlySpellWithParam** – Shows only spells with a class association. Use to find common class abilities like Fireball, Chain Heal, Renew, etc...
- **<Spell> WCRIId: <ID> WowID <ID> count: <#>** – Opens the spell in whatever web database service you have set up (default: wowhead).

7.6 Events

Under Filter > Events is a list of every event category used by the WoW Combat Log API. Events are triggered when a spell is cast or interrupted, or when damage is dealt or taken. These are mostly self explanatory and will not be discussed.

7.7 Using Predefined Filters

Located directly below the context tool pane is the following filter list:

This contains a list of predefined filters. Some predefined filters come with the program and reflect common filters used in WoW. You can also **add your own filters** by *right-clicking* in the pane and selecting “Save Filter.” This will save your current filter selection with a name you provide. You can also **rename and delete filters** by selecting a filter, *right-clicking*, and choosing the appropriate option from the contextual menu.

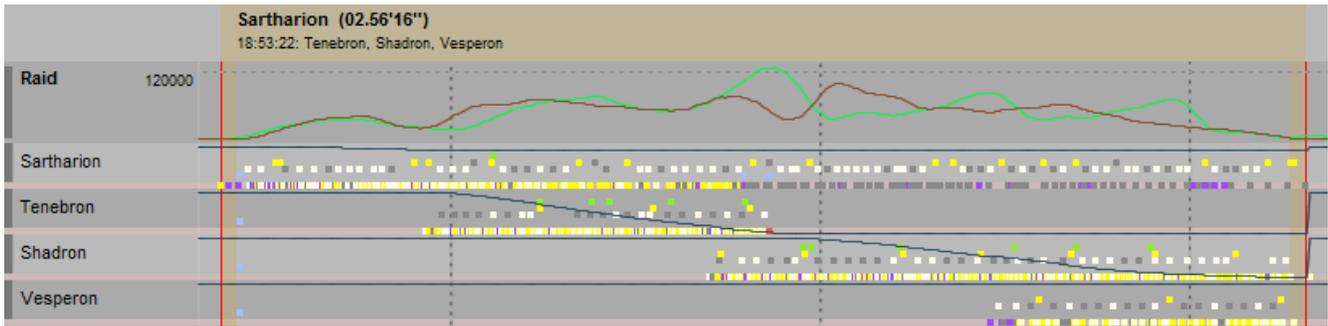


8 Other Context Tools: Comparison Lines and Chatlog Import

8.1 Line Comparison Tool

8.1.1 Basic Usage

The line comparison tool allows you to compare previous attempts with the attempt you're currently looking at and see and changes that stand out. To do this, you save the raid-wide DPS or HPS line(s) you'd like to compare. For example,



Green = Perfect Kill; Brown = Failed Attempt

The green raid line is a perfect 3 drakes kill and the brown line is a failed 3 drakes attempt. Interrupting this graph, one may conclude that DPS may have been a factor that lead to this unsuccessful attempt. While the DPS substantially increases when Tenebron drops in the failed attempt, there is not nearly high enough DPS, compared to the perfect kill, when Shadron drops 45 seconds later. A raid leader in this circumstance might want to emphasize the need for higher DPS on Shadron, even if it means a small sacrifice in DPS when Tenebron drops.

To import a basis line,

1. Select a time frame for the basis of the comparison. (Please note: A time frame must be selected, even if the log contains only one boss) Clear any focuses you may have.
2. In the *Graphic* pane, the “Raid display features” section of the toolbar (see earlier chapter) allows one to choose four raid lines: DPS In, DPS Out, HPS, and EHPS. Select which line(s) you'd like to uses as your basis.
3. In the context tools section on the right side of the screen, select the  icon to bring up the line comparison tool.
4. *Right-click* in the large, white box and select “AddRaidLine.”
5. A dialog is brought up from which asks you to enter the name of the raid line. You can also click on the color strip to the left of the box to choose a custom color.
6. The line is now available for use as a basis. You can save this/these line(s) by right clicking and choosing save.

With a basis line, you can conduct a comparison by

1. Select a time frame for the comparison. (Please note: A time frame must be selected, even if the log contains only one boss)
2. If necessary, load the basis line by *right-clicking* in the large box and selecting “Load.”
3. Check the line(s) you'd like to use in your comparison.
4. In the *Graphic* pane, the “Raid display features” section of the toolbar (see earlier chapter) allows one to choose four raid lines: DPS In, DPS Out, HPS, and EHPS. Select which line(s) you'd like to use as your comparator.

8.1.2 Individual Players

It is possible to save a basis line for an individual unit or group of units by doing the following:

1. Set as your focus the unit or units you wish to save a basis for.
2. Verify you are in inclusive mode by ensuring the focus highlights are orange.
3. Using the raid's HPS/DPS selectors (located on the right side of the toolbar) **not** the unit's selector, choose which line you'd like to save.
4. Save the line as though you were doing a raid basis.

For use in a comparison, make sure you have the same unit(s) set as the focus.

8.2 Chatlog Import Tool

8.2.1 Saving a chatlog

To save a chatlog, you follow a procedure similar to saving a combatlog. While World of Warcraft is running, and at the same time you are logging a raid, enter

```
/chatlog
```

into the chat prompt.

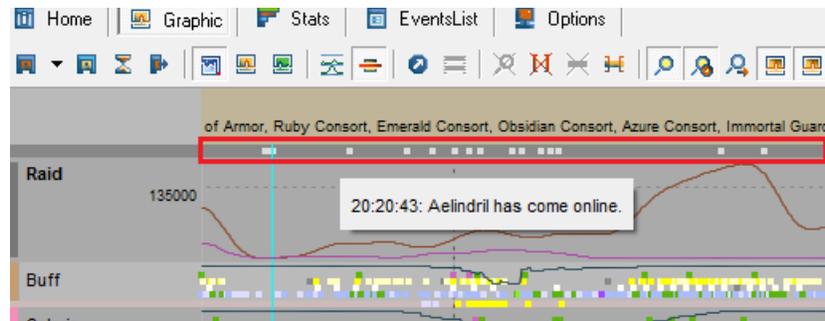
Chat logs are saved to

```
(WoW folder)/logs/WoWchatlog.txt
```

8.2.2 Load a Chat Loggerhead

To load a chat log,

1. Open up the chat log context tool.
2. Click on the “Load ChatLog (beta)” button and navigate to the chat log.
3. The log is now loaded in the right side of the screen as well as a series of dots on the graph above the “raid” frame, as shown below. Hover over a dot to see that chat log event.



Chat log entries that occur outside of the currently visible graph area appear in grey text; the currently visible entries are in black text.

You can also navigate directly to the point in the graph where a chat event occurred by finding it in the chat log frame and double-clicking on it. This will navigate you to that time in combat and place the torques time cursor at the appropriate time, as show in the screen shot above.

8.2.3 Filtering the Chat Log

The chat log saves a large number of superfluous events – such as the logging on/off of people, loot distribution, and addon channel “text” – that you probably do not want to view. To remove these items:

1. Find an event in the chat log list that is similar to the kind you wish to filter.
2. Select it, *right-click* and choose “send to BlackList.”
3. Edit the text in the pop-up dialog box to include the part of text that matches all the items you wish to filter (for example, “[6. Channel]” to filter all chat from that channel or “has gone offline.” to remove all offline status messages).
4. To apply your black-list filter, *right-click* anywhere in the chat log list and select “ApplyBlackList”

9 Change Log

9.1 Beta 24 – 10 Aug 09

- Few internal and UI Improvements
- Some bosses are now recognized through their generic name (for example: 'Iron council' instead of 'Stealbreaker')
- Added access to the registered Unit List, with ability to manually add new npc/boss, use this very carefully or this will break combat block detection (access to this list is gained through the unittree context menu, **before** loading any log)

9.2 Beta 23 – 5 Aug 09

- Fixed a bug in the save module of the compare tool
- Added an access to the 'compare line' properties (comments and color).
- Fix a possible out-of-range error with the stattree column check
- Added a graphical aura emphasis when a buff or debuff is selected in detailed view.
- When the live combatlog is renamed by the program, the autoupdate-events are also disabled.

9.3 Beta 22 – 29 July 09

- Slight improvements in real-time parsing
- Small UI improvements
- WCR now remembers the last log folder
- Fixed the wow 3.2 log changes (need testing anyway for UNIT_DISSIPATES event)
- Its now possible to specify your favorite web site for checking spell info. (default is Wowhead). Just use %s for the spellId string in the link
- Its now possible to specify the default live log in options, and to access it directly through the load button or menu.
- Added some save options, when necessary. Also added a way to rename the live wowcombatlog.txt through the save process (wow.exe must be closed for this functionality)
- Small Fix with UTF-8; some logs were not parsed correctly when split with external tools
- While parsing, the estimated time left is shown in the status bar. Also corrected a small visual issue with the progress-bar
- Since some SPELL_AURA events have been fixed in wow3.1, the aura visualization have been revamped. Aura of the same type are now separated between their casters. Anyway it's possible to specify in spell Options to use a single aura line only when necessary. Please note that REFRESH_AURA events are credited only for the original Aura caster. It's probably a Blizzard bug.
- Stack number for relevant Auras are now indicated on the aura-lines directly (with a proper zoom level only to keep viewing clear).
- Added a button to switch from buff gained and buff cast in detailed view.
- Added the name of the caster and the aura Uptime in front of aura lines in detailed view

- The left column (with unit name or aura name) is now resizable.
- Added a new compare system (alpha). It's possible to save a specific raid Dps/hps line, (filtered or not), and to load it over the current combatgraph, and to compare performance. This comparison tool works through different logs.

9.4 Beta 21 – 10 Jun 09

- WowCardioraid can now open, read and parse the wowcombatlog.txt file even if the game is not closed.
- Experimental support for RealTime Update (event only, no support for realtime chatlog atm). Events are parsed automatically when the wowcombatlog.txt is updated by the game. Update frequency can be adjusted in the options (from 30s to 30 mn). A manual update is also available.
- Due to background update possibilities, parsing error feedback has been changed. Errors are now logged in the options panel. A single '!!!' mark is added in the viewport (top-left) when error(s) have been recorded.
- Added Inclusive/Exclusive modes for focused Unit: Inclusive mode means that events must match sourceUnit *or* destUnit, while exclusive mode means that events must match sourceUnit *and* destUnit to be filtered. Unit focused are highlighted in Orange in inclusive mode, and Blue in ExclusiveMode.
- Few optimizations in parsing functions.

9.5 Beta 20 – 4 Jun 09

- Beta support for chat log: Load a regular event log, then load the chatlog for the same session. You can now check boss'emotes or other raid warning. Additionally, if chat-events have been loaded, they can be saved in wcr file directly. You can also set a blacklist to keep the chatlog more reliable.
- Viewport context menu: Added an fonction to set focus for all units of the same type in the current combat frame. Additionnaly, focused unit are now highlighted in the unit tree too.
- Scroll bars have been added to the viewport.
- Raid header size is now correctly saved.
- Fix for some combat block problems.
- Few small fixes and optimizations.

9.6 Beta 19 – 17 May 09

- Dps/hps lines calculation has been switched to linear mode by default, since it's the most accurate mode. Smooth (and slower) calculation is available through options (if you want to compare dps performance between different raid session, be sure to use the same mode)
- Added raid overview dps/hps lines. The raid output header can be resized by moving its bottom line in the gfx view.
- Added support for focus/filter in dps/hps lines (raid or players), and proper functions like auto/manual update

- Added option to exclude self damages for damage done output (lines and stats)
- Added option to cap Overkill damage, to prevent huge spike in dps lines (Mimiron can blast for 5millions ;))
- All filtered events now appear in gfx view regardless their importance in zoom level.
- Proper handle of SPELL_CAST_START and SPELL_CAST_FAILED events, also added an option to disabled SPELL_CAST_FAILED events completely.
- SPELL_CAST_START and SPELL_CAST_SUCCESS are now only drawn in detailed view except if the caster is a raid opponent.
- Fixed few smalls bugs
- Small changes in the wcr format. Older version of wowcardioraid will not be able to open the new format (but older wcr files can still be opened).

9.7 Beta 18 – 15 Apr 09

- Quick fix for WoW 3.1

9.8 Beta 17 – 7 Mar 09

- Add a combat-block headers. Use Space/backspace keys to cycle through recognized combat-blocks
- Added multiple and saved filters. The default filter is the current dynamic filter, it can be saved in fixed filter. Multiple filters logical is 'OR'. You can activate/deactivate filters with their check box. For structural reason, enchants and environments spells can't be saved anyway.
- Preferences and options are now saved through sessions.
- The activity calculation has been adjusted. Activity column has also been added in the stat view.
- Added a mitigation column in the statview. This can be use to evaluate the amount of resist/absorb/block.
- All npc of the same type can now be temporary added directly in the 'boss combatlist'
- Added an log anonymiser. Press Ctrl-Alt-A to change all players/pets names.

9.9 Beta 16 – 6 Feb 09

- -It's now possible to save the log in a proprietary packed format (*.wcr) for faster futures usages or web upload if needed. If a time-period is selected, only the period is saved, otherwise it's the whole log.
- Wcr now support the 'open with' (or command line) windows system possibility. You just need set *.wcr file to wowcardio in windows 'open with' menu.
- It's now possible to scroll down NPC list in main view, and Aura list in detailed view with pgup-pgDown key and/or mouse wheel (the cursor must be over the name column in this case)
- Added a time-Measuring tool (alt - Left Click)
- Added a DamageOverkill filter, to quickly see killing blows
- 'Enchant' and 'Environmental effects' are now shown in the spell-list
- Added a (very) rudimentary stat-export in the stats view.
- Hpline calculation for NPC has been improved. It's also possible to say to WowCardio to save

the estimated Hp pool for a specific mob in NPC unit options (boss are saved by default)

- Dps/hps lines now have relative ratio for same type of NPC.
- Pressing Esc while parsing stop the parsing.
- A few Memory optimization and internals improvements.

9.10 Beta 15 – 23 Jan 09

- Removed wow2.0 compatibility for optimization. WCR now only work for wow3.0+ logs
- Added a tracker for some affiliation (DoomGuard, army of dead)
- Added a color code in the spell list to quickly view the common usage of spells (Yellow = damage, Green = Healing, and Purple for Buff/debuff)
- Up to date spells list and boss list are also included

9.11 Beta 14 – 19 Oct 08

- Added a button to toggle the stat view between Players and NPC
- Unit who are not related to the raid should not be shown in the graphic view and stats view anymore
- Affiliated Unit (pet, totem etc...) are now placed as child node in the stats view for better feedback
- Stats filter have been improved
- Its possible to temporary add some random npc tracking in the combat list (without notifying them as Boss). To do this, open NPC section the unitTree, open the wanted NPC node, then focus a specific instance of this NPC and choose 'add/remove this unit in combat list'. Grayed NPC are not raid related, so no combat will be found.
- Few optimizations
- Bug Fix with aura in Detailed view

9.12 Beta 13 – 16 Oct 08

- Full support of wow 3.0 log and wotlk beta. (you can still load old 2.4.3 log format)
- A lot of wotlk boss have been added to the combattracker.
- Activity and dps for all units have been added to stats tooltip
- Lot of internal fix and optimisations
- It's now possible to set focus on more than one unit.
- Full support of Filters in Eventlist
- Full support of filters in stats calculations
- The spellist is dynamically (re)filled while choosing a unit in the stats panel for quick access
- New interface design, and more flexibles possibilities
- Quick example of stats filter:
 - Say, for example, that you want to see how your healers are using HoT on your tank.
 - Load a log if its not already done, then, go to the stats panel (the third icon at top left, labelled 'Stats').

- Select the tank stats line, then bring the popup menu and select 'set focus'. The name of the tank is now highlighted in orange color.
- Now the stat reflect only what happens on your Tank.
- Now click on the filter tab (at top right, next to the unit tab), and in the tags list, check 'eventIsPeriodic' now you can see only all periodic effect on the tank
- If now you want to see the specific effects of, for example, Renew, bring the spell filter panel just near the tag panel, then, 3 choices here:
 - Search the renew spell in the list
 - Type the first letters of renew, this will filter the list and bring Renew in evidence
 - Or better, in the stats panel (at left), click on the healing column of a priest, this will bring all healing spell used by this priest in the selected period of time.
 - Then check the Renew spell, and the stats will be automatically generated with the full filter.

9.13 Beta 12 – 6 Sep 08

- Log duration increased to 100 days (keep cool with your memory ;)
- Detection of Pom, LB, ES has been optimised (note: this doesn't work well in current Wotlk build)
- Filtered spells are also shown they are interrupted or dispelled.
- Eventfilters can be used in EventList (but one at a time; full filter will come in the future)
- Bug fix for events with extraspell
- Log error now have better feedback.
- Bug fix for some parsing possible error (unit name with " or , on their name)
- Better support for Wotlk.
- Support of overDamage (beta wotlk 8905)
- Fix for auras (beta wotlk 8885)

9.14 Beta 11 – 5 Aug 08

- Tracking for PoM, Earth Shield and Lifebloom available. You can see the real sources for all these spells.
- You can also choose if you want to get stats with spell affiliation, or not.
- A lot of Performances tweaks have been done.

9.15 Beta 10 – 3 Aug 08

- Bug fix: stats ratio in tooltip should show the correct amount
- New filter: Overheal
- Bug fix: tooltip should now appear correctly
- WowCardioraid can now parse Wotlk(8714) combatlogs correctly (with the new overheal data).

9.16 Beta 9 – 2 Aug 08

- Overheal detection has been added.
- Bug fix for hpdeficit feedback
- In the detailed view, a new effective hps line est now associated to the total hps output
- New tooltip: when hovering a unit name on the time line viewport you can now get a quick stat breakdown for this unit. This stats are including pet or totem affiliation.

9.17 Beta 8 – 1 Aug 08

- Better rendering for hps/dps lines
- Healing events now show their correct CRIT tag
- Aura list in detailed view is now sorted
- The highlight of auras in detailed view is now persistent
- New filters added: mitigation detail, damage school, et spell school
- 'insta'-value for all lines are now shown in status bar (dps, hps, hp deficit)
- In eventlist (text format), the selection of a unit via context menu does not reset the list position.

9.18 Beta 7 – 27 July 08

- Fix for some stacking buffs (like mongoose)
- Fix for non-listed buff-debuff outside the time selection zone

9.19 Beta 6 – 26 July 08

- New detailed view for unit. You can watch dps in/out, hp, and timelined buff & debuffs. (via context menu)
- Minor changes in the interface.

9.20 Beta 5 – 22 July 08

- New events from wow 2.4.3
- Shaman Elemental are correctly associated to their owner
- New Boss have been added to the fight detection list

9.21 Beta 4 – 11 July 08

- Many internal optimizations
- New filterTab: each option is inclusive.
- Few bugs have been killed
- New list: Fight vs boss , with direct access. Stats are also generated dynamically for each boss.

- New option for unit: you can set a unit as a boss, or as a boss-child (for example Thaladred is affiliated to KaelThas)

9.22 Beta 3 – 5 July 08

- Many internal optimizations
- Classes colors added in the viewport and tree.
- New behavior for PlayerUnit: A grayed checkbox indicate that the unit will be added dynamically, while a non grayed Checkbox forces the state (depending if the box is checked or not).
- New contextmenu to check Uncheck all players
- New options added to set how npc/pet should appear in viewport
- Correction in the dynamic module.
- The tooltips may now display correctly the damages absorbed, blocked etc.
- Pets / totem are now counted in stat for their owner.
- The stats are now accessible directly in the 'stats' panel, without the need to generate them before.

9.23 Beta 2 – 2 July 08

- Various optimization
- Adding stats for the time period selected. The totems or pets are not being understood.
- Manual sorting possible for 'Player Units' via the 'unit'-tree.

9.24 Initial Release – 29 Jun 08

- First public release