

# Welcome, Commander!

Elite: Dangerous Virtual Assistant - EVA - is your in-flight trade computer. Keep track of where you've been, find out where you want to go, and work out the best single trades, or circular trade routes, all from your iPhone or iPad.

EVA links to Elite: Dangerous to get your CMDR information and follows your progress across the galaxy, letting you know what's happening and ready for you when you need information.

Download: <https://itunes.apple.com/us/app/eva/id1098763533?mt=8>

## Main Features

- Sync flight log and notes with EDSM
- Sync market data with EDDN
- Get realtime market updates from EDDN
- Use EDProxy for much faster information updates from Elite: Dangerous
- Speech synthesis of significant events, including your own notes on systems and trade route hints
- List current ranks, allegiances and credits
- See Galnet articles as they arrive
- See full ship loadout and cargo for all ships\*
- Take notes on systems (and sync with EDSM)
- Request cross-reference distances and send to EDSM
- Bookmark systems, stations within systems or commodities within a station
- Bookmark entire trade routes
- View system visit history (and sync with EDSM)
- Commodity search by station, or within a radius of any station
- Trade search for finding the best n-stop trade routes
- Trade search for finding the best single-hop trade from any given station
- Commodity search for buying or selling a particular commodity

Unfortunately this is NOT fully compatible with Xbox accounts, because of the way that they are handled by Frontier. Their own "Companion App" has the same limitation. As an Xbox account holder, you will be able to log in to EVA but no personal details will be available. You can still use the Trade module to work out and remember trade routes though!

## Login Page

The login page is very basic, there's very little you can do here except log in! EVA uses the same communication methods as the "official" Frontier Companion App, so you need to log into Frontier's servers with your Elite:Dangerous account details.

The first time you log in with EVA you will also need to provide an "authentication code", which will be emailed to you directly from Frontier, usually within a few seconds. Each authentication code must match the login that triggered it. If you try to log in again without entering the correct authentication code, a new code will be sent and any older ones will no longer be accepted.

Once you're done, click "Login" (or "Authenticate"). Once you have logged in once, you can tell EVA to log in automatically in the Settings page.

If your Elite:Dangerous account is for the Xbox, you will see a warning saying that personal information will not be accessible.

There is also a version number at the top left of the screen. If you need to report an issue, please make sure that you include the version number.

Support Forum: <https://forums.frontier.co.uk/showthread.php?t=245900>

## Database

The first time you run EVA, you will be given the opportunity to install a 'seed database' containing a full, recent copy of the EDDN database. This provides you with the locations of all known star systems and stations, as well as prices for all commodities at any station with a market.

This information is vital for the trade planner, if you want to be able to do useful trade searches immediately. However, you can choose to start with an empty database if you want to build up your own trade routes from scratch. If you do this, then only data for systems and stations you have visited will be stored.

## CMDR Page

This shows all of the basic details - your rank, allegiance and other status. There is also a GalNet display, showing the galaxy's latest news items.

This will not show useful information for XBox accounts.

On the iPad, all of these are on the same screen; the iPhone has them separated out into sub-pages.

The information here is fetched from Frontier's servers after you log in, so it will normally appear immediately. If it doesn't, please check the "Status Messages" page which is the last of the sub-pages (iPhone) or visible at the bottom of the screen (iPad). There should be a message in there relating to Frontier's servers which may explain the problem.

The "Worth" value is the total value of your credits, minus any debts, plus the combined value of all your ships, upgrades and cargo. As with the Ships page, EVA needs to have seen all your ships being piloted to have full ship data.

On the tab bar at the bottom of the screen are two extra buttons, which are also there on all the other pages. The "gears" icon on the left takes you to a Settings page, and the "refresh" icon on the right re-fetches the latest data from Frontier.

## Requery

A little bit of background information is needed here. All of your CMDR data is fetched directly from Frontier's servers - that is, your name, credit, ships, cargo, and details of the current station's market prices. When you go to a different system, or dock in a different station, this needs to get refreshed.

There are two ways of doing this. Firstly, you can simply remember to tap the "refresh" button after you change systems, or dock. Alternatively, you can use the Settings page to tell EVA to refresh automatically, once per minute. However, this places an additional load on Frontier's servers, so please think twice about switching this feature on.

A better option is to install [EDProxy](#) by westokyo. This is a small tool that runs on the same PC or Mac as Elite: Dangerous, and sends out notifications when you change to a new system. If you install this, then EVA will refresh your data automatically. However, it doesn't provide notifications when you dock in a new station, so you would still need to tap "refresh" to get the latest market prices.

## Ship Page

This page shows the details, as far as they are known, about all of your ships. At the top you can choose to view any ship, and see exactly where they are currently stored.

This will not show useful information for Xbox accounts.

There are five sub-pages:

- **Overview**  
The basic details of the ship; hold capacity, price, fuel levels.
- **Weapons, Hardpoints, Armour**  
Lists the offensive/defensive equipment installed, grouped by type.
- **Basic Equipment**  
Lists the equipment that all ships need - frame shift drive, life support etc. as well as optional extras like bobbleheads, decals and paintjobs.
- **General Bays**  
Lists the contents of your ship's general bays, for things like cargo bays, scanners or shield generators.
- **Cargo**  
Lists the contents of your cargo bays and refinery, if you have any fitted.

The last tab, "Cargo", shows some additional details about the cargo. The "Value" is the total amount that you paid for the cargo, so can be used as a reminder. The "Mission" field shows whether the cargo is mission-specific. There is no information provided by Frontier on whether cargo is being carried as part of a mission, or is illicit in the current system.



## Nav Page

The Nav page shows details of where you've been, and allows you to search for details of known star systems.

This will not show useful information for Xbox accounts.

There are four sub-pages:

- **Flight Log**

Shows a simple list of systems you have visited, and the date of each visit. The system name has a context menu which allows you to set this system as a source or target in the Trade page, view more details about the system, or set a bookmark.

The "position" column shows whether the system's position in the galaxy is known to EDSM (the Elite: Dangerous Star Map). If the position is uncertain or unknown, you can help to provide the location by going to the system detail page and using the "Update" button.

If a system's position is not known, it is not possible to do many kinds of trade search.

- **System Search**

You can enter any system's name into the search box at the top of the screen to get a list of the known stations in that system, or leave the search box empty to get a list of all systems nearby your current location.

- **Bookmarks**

List all the stored bookmarks. Bookmarks are described later, but in brief you can bookmark a system, a station or a part of a trade route and retrieve the details here.

- **Maintenance**

This sub-page allows you to download the entire EDDB database for star systems, stations or prices. If you chose to install the preloaded database when you first started EVA, then there is no need to do this unless you really must have all the very latest data to hand.

The *approximate* download sizes are shown on the page. After the data has downloaded, there is an additional period where it is stored in the internal database. This can take some time, depending on the model of iPhone or iPad you have.

When you download data, it depends on the previous level having already been downloaded. That is, if you download station data without first downloading system data, then none of the station data will be stored. If you chose to install the pre-packaged database when you first ran EVA, then all the data is already installed.

If you double-tap a system name, or select “Show Detail” from the context menu, you will be shown more details about the star system. You can take notes and, if you have entered an EDSM key (see later) then your notes will be sent to EDSM and will be available to other tools.

You can also choose to update the coordinates of the system from EDSM. If EDSM has no record, or incomplete records, for the system then you can help out by using the Galaxy Map in Elite: Dangerous to calculate distances from four other systems. By entering these distances and sending them to EDSM, you will be helping provide the real location of the system for other people.



## Trade Page

This is the heart of the trading database. You can perform many different kinds of searches, depending on the criteria you search for. EVA tries to find the most appropriate set of results for your search.

### Base System

The base system is where you want to search *from*. This will usually be the system that you're currently in, in which case you can tap the marker buttons to set either the current system, or the current station. You can also type in the name of any system you like, and you will get an autocomplete list when EVA can narrow the list down enough.

Also under the Base System, you can specify a maximum search radius for both systems and stations. The system radius affects how far out certain kinds of searches go, and the stations radius limits searches to only stations that are less than a given distance in light-seconds (Ls) from the system entry point.

Both these limits depend on having the station and system positions, of course, and this data isn't provided by Frontier. It relies entirely on EDDB data, which can only be obtained by downloading it (Nav page, Maintenance tab), or by installing the pre-packaged database. If the position of a system or the distance of a station aren't known, they will be included in search results.

For certain search types, the system radius value is ignored. They are all detailed in the table below.

### Target System

For list-type searches, the target system is the place you want to go to. This is used to list best trades between two systems or stations.

Next, you can choose to search for a particular commodity, or for any commodity. If you choose a specific commodity, you also need to choose whether you want to buy or sell the commodity.

### Route Filter

Route-type searches try to find the best round-trip trade routes that match your criteria. The first control sets the number of hops in the route, so for example a 2-hop route would go from system A to system B and then back again; a 3-hop route would go from A to B to C then back to A.

The "In-system Transit" switch lets you choose whether you are willing to fly between stations in a system to get the best trades. With this switch set to "off", the next trade in a route will

always start from the same station even if a better deal is available elsewhere in the system. However, switching this on will take longer to calculate all possible routes.

Finally you can set a limit for the minimum profit you are willing to work for. This is the profit for the entire route, not an individual hop.

## Search Type - List

Base System	Base Station	System Radius	Target System	Target Station	Commodity (optional)	Results
✓		Ignored			✓	List commodities in this system.
✓	✓				✓	List commodities in this station.
✓	✓	✓			✓	List commodities nearby this station.
✓		✓			✓	Find a specific commodity within a certain distance of this system.
✓		Ignored	✓		✓	List all possible trades between the source and target systems
✓	✓	Ignored	✓		✓	List all possible trades between the source station and the target system
✓	✓	Ignored	✓	✓	✓	List all possible trades between the source station and the target station

## Search Type - Route

Base System	System Radius	In-Sys Transit	Min Profit (optional)	Surface (optional)	Large Pad (optional)	Results
✓	✓		✓	✓	✓	Find best trade routes within a radius of the base system, always leaving from the same station.

✓	✓	✓	✓	✓	✓	Find best trade routes within a radius of the base system, leaving from any station in the system.
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If you set the “Surface” option OFF, then no surface ports will be included in the trade route.

If you set the “Large Pad” option ON, then no outposts will be included in the trade route.

For both of these options, if no data is available for a port then it will always be included. This data can only be obtained by downloading the “Stations” database from EDDN, or using the included seed database which already has the latest station data.

While EVA is running, unless you have told it not to, it is listening for notifications from EDDN as other people send in price updates. You can see these notifications arrive in the system log on the CMDR page.

## Bookmarks

EVA can remember locations for you. From both the Nav and Trade pages, you can show a menu on system or station names, or commodities in a station, and either create or add to a bookmark. To show the menu, hold your finger on any data item that has a small triangle shown next to it. Any system, station or commodity will have a menu available.

A bookmark can have your own notes added to it, as a reminder of why you bookmarked it in the first place. If you go to the bookmarks sub-page in the Nav page, you can edit your notes and rename the bookmark as well as deleting it.

## Trade Routes

Because a bookmark can hold more than one location, it is possible to create bookmarks for entire trade routes. The bookmark contains the location and the commodity, but not the prices, so you can see over time if a bookmarked route is becoming less profitable.

To bookmark an entire trade route at once, run a Route search on the Trade tab and then use the context menu in the System column.

When you bookmark a trade route, it is set as the “active route”. You can also set a route as the active route from the bookmarks sub-page on the Nav page. If you have selected an active route, you can add new locations to it from the context menu.

When you set a trade route as active, EVA will monitor your progress as you move between systems and stations and will give you spoken instructions on what you need to do next if you are in a system that is part of the route.

## Other Services

### EDDN

<https://eddb.io>

The Elite:Dangerous Data Network is a community-run project which gathers current price and availability information and makes those available to other tools such as EVA. It relies on having people upload the prices that they receive from the Frontier servers when they dock at stations. EVA makes heavy use of that data, and so is set up to upload prices automatically.

You can choose not to do this in the Settings page.

### EDSM

<http://www.edsm.net>

The Elite:Dangerous Star Map is another community-run project which aims to gather information about starsystem locations. Frontier's servers don't provide location information, but the exact locations are needed to work out distances between systems and from there, trade networks.

EVA uses the location information provided by EDSM as part of its trade database. As with EDDN, you can choose not to send location data in the Settings page.

When you arrive in a system, EVA will contact EDSM to get location information if it's not already been downloaded. If the system's location is either unknown or unclear, you will be asked to do some basic lookups in Galaxy Map in Elite:Dangerous which will help to isolate the system's exact location. By doing this, you help others in the future by improving the quality of the database.

If you create a free account with EDSM, you can also exchange information about your travel history and take notes. When you create an account, you will be given an API key. This is paired with your account, and lets EVA exchange information without needing full account details. Copy the API key from the EDSM site, and paste it into EVA's Settings page.

### EDProxy

[EDProxy](#)

One of the problems with Frontier's "Companion App" API, the method used by EVA and many other tools for getting information about your status in Elite:Dangerous, is that it can lag behind events by some time. Also, information is only provided on demand, so to find out when you have changed to a different system it is necessary to continually fetch data from Frontier's servers. This creates additional, unnecessary load on their servers.

EDProxy helps to fix this problem by running alongside Elite: Dangerous and monitoring the log files in realtime. When you go to a new system, it sends a notification out over the network to any tools that are listening for it. EVA can use these notifications to respond much more quickly to system changes.

Since EVA will usually send system visit logs to EDSM, it is a big help to have these notifications sent out otherwise it is easy to miss sending some visit records.

EDProxy doesn't send information about docking, so it's still necessary to hit the "refresh" button when you dock, if you want to make sure that the latest price information is sent to EDDN.

Normally, EDProxy should be found automatically with no additional setup. However, if it isn't then you can manually enter the IP address of your PC or Mac in the Settings page. EVA will try to contact EDProxy at this address if it can't be found automatically.

## FAQ

### **The authentication code wasn't accepted.**

The first time you log in from new software, you must authenticate your account with Frontier. Each authentication code matches one login, and one only. If you try to log in again before you enter the authentication code, a new one is sent. If you then enter the first one, it won't be accepted.

### **My CMDR data is sometimes out of date, even if I requery it.**

The latest information received from Frontier is always displayed, but sometimes the information received is a little out of date, particularly for your current position. It will catch up once Frontier's servers do.

### **The dates on the GalNet articles are wrong.**

The newsfeed sent out by Frontier has the date of the most recent article repeated for all the other articles. If Frontier fix the newsfeed, the dates will be displayed correctly by EVA.

### **Some of my ships have no data displayed.**

The data received from Frontier contains the full details of your current ship, but only the name and location of any other ships you own. EVA remembers the full details of any other ships you have piloted while EVA has been running and displays these.

### **I want to sort one of the grid-type displays a different way.**

Most of the grids can be sorted simply by tapping on one of the column headers. Tap the same column a second time to sort in the other direction.

### **What does the little triangle mean, in the grid display?**

This shows that there is a context-menu available. Hold your finger anywhere on the item, it doesn't have to be on or near the triangle, and you will get additional options displayed.

### **How do I add notes for a system?**

In any of the Nav page displays, either double-tap a starsystem name, or use the context menus and select the "Show Detail" option. You can then type in notes, which will also be sent to EDSM if you have an account there. These notes can also be read aloud when you enter that system in the future.

### **A trade-route search is taking a while to finish. Why?**

Simply put, there are a huge number of options and it can take a while to sort through these on older iPads/iPhones. Try reducing the search radius, maybe to 20 instead of 30, and the searches should finish much more quickly. As a guide, a 30Ly-radius, 5-hop trade search including both planets and outposts returns in under two seconds on an iPad Air 2.

### **I did a 5-hop trade route search, and got 8 steps in the results. What gives?**

The number of hops is assumed to mean inter-system hops. If you've got the "in-system transit" option switched on, you may also get trade route steps telling you to buy and sell within the same system. This can happen if the best trade from the current system is from a different station; instead of transferring empty to the station to buy from, EVA will try and find any profitable trade and will list that.

### **Sometimes EVA doesn't transmit shipyard data to EDDN.**

Sometimes Frontier doesn't transmit shipyard data to EVA! There are other similar issues - outfitting data is sent out for stations with no outfitting available. Other than being irritating, you can ignore these errors - EDDN will filter them out. If you wish, you can re-send the station's price data by manually re-querying using the Refresh button. If the prices have changed, or the shipyard has suddenly reappeared, they will be sent to EDDN again.

### **Can you show rank progress?**

Sadly not. There is no information available on how far you have progressed towards the next rank or combat/trading/exploration level, just on the current level.

### **Can I switch between two different commander accounts?**

Yes! Enter a different Frontier account name when you log in. Passwords, EDSM settings, colours, flight log and speech settings are remembered individually for each commander.

## And Finally:

Many thanks to the group of CMDRs who helped with testing during the pre-release phase, making the release much smoother than it otherwise would have been. If you were in the beta group and would like your name changed or removed, please just let me know!

CMDR Cooltimmetje, Will, Rob, Helen and Lance.