Elite Dangerous Cougar Display (EDCD)

EDCD is an Open GL graphical enhancement application designed to render cockpit instrumentation and convey information from Elite Dangerous to two separate consoles. Elite's log files are analysed as game events are generated and used to generate high quality images reacting to events in real time.

These consoles are best used in conjunction with a pair of Thrustmaster MFD Cougar units which provide a panel of buttons to matchup to the action icons rendered by EDCD. By using a pair of 8-inch monitors behind the MFD Cougars, Elite's cockpit becomes extended and a better game experience can be enjoyed.

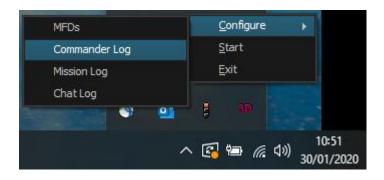


On the left, a Thrustmaster MFD Cougar. On the right, EDCD running on an 8" monitor

EDCD Feature List

Almost zero configuration. A single click of the mouse is all that is needed to map the application to Elite key binds. From installation to running in less than a minute.

Runs minimised in the system tray. Simple click on the icon to bring up the menus to reconfigure settings, position windows, etc.

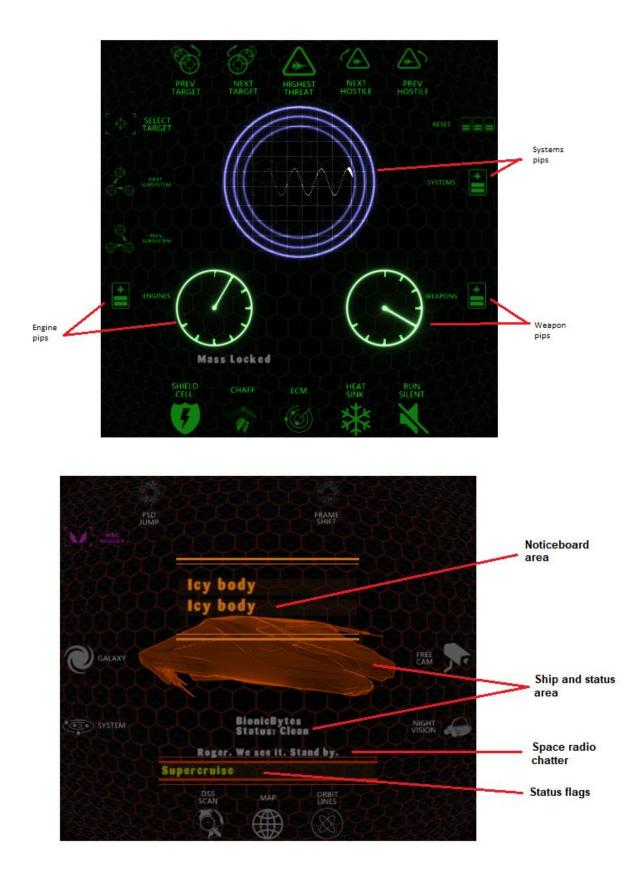


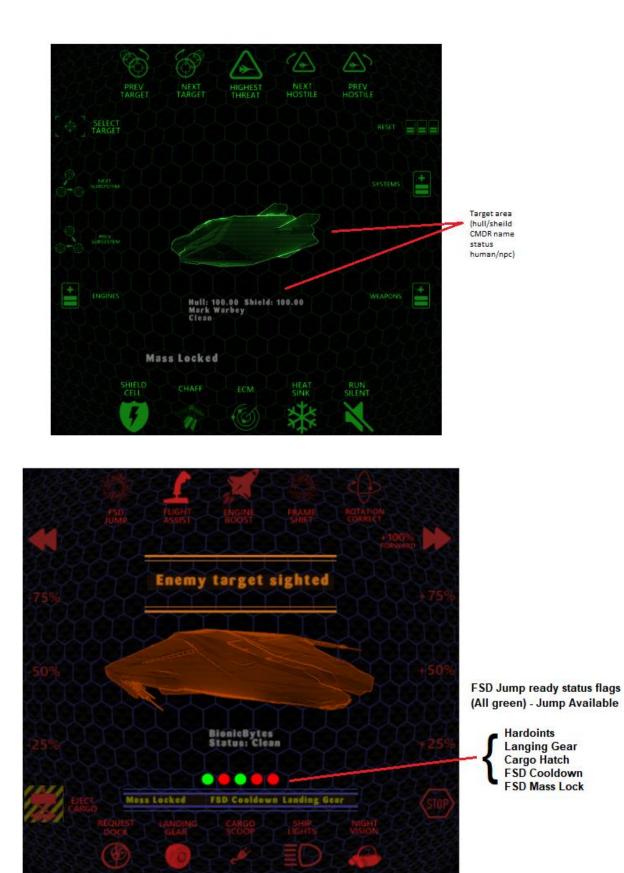
Customisable Cockpit Displays

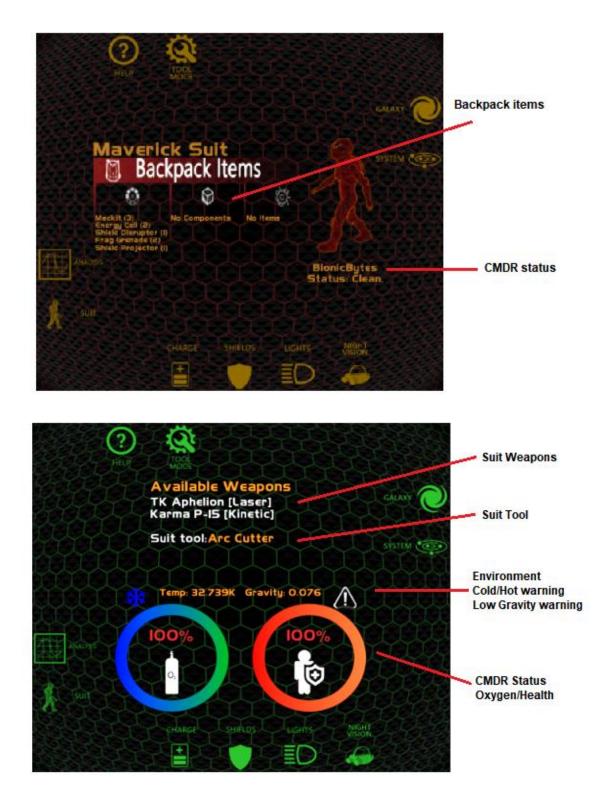
Cougar users can use the rocker switches to change aspects of the display dynamically.



Using the built-in editor, the colour scheme can be changed to suit preferences on each of the different displays (flight, super cruise, planetary landing, weapons, fleet carrier, SLF and SRV). Additionally, the icons can be rearranged and selected from the large set of available options.







Using the built-in editor, the layouts and icons can be customised, down to the colour and sizes of the font.

MFD Layout Editor	,						
Layout Set	<mark>Flight</mark> ame Flight	New Role Flight	/ Layout				Revert Undo changes
Defaults	Enabled						
Background Colou		RGBA colour	Icon Text Gap		0		
Icon Colour On	F01010FF		Icon Size		8		
Icon Colour Off	801010FF		Notice Board C	Colour	FE690AFF	RGBA colour	10 Font Size
Texture Scale	14		Status Text Co	blour	F0F0F0FF	RGBA colour	30 🗧 Font Size
Background Text.	ire hexagons		Target Text Co	olour	808080FF		27 Font Size
Hazard Blend			Screen Clear C	Colour	0000000		
Button Assignment:	MFD Button	Disable buttons (remo X Icon text colour uses		Available	(for assignment)		
	FSD Jump		Clear GBA colour				Select Icon
Colour (off)		Colour (on)					
Hazard Layer Show Label	x		E	Elite Key As	ssignment (Bindin	igs with keyboar	d device)
Status Tracking							
Key press(es) Clear		ation=I,LeftShift,LeftAlt must be bound in Elite		Custom.4.0 Select your).binds Elite Dangerous		Elite Binding File
Quick Key Assig	A quick and ea keys between	sy way to map ED and this app				Close	Save Layouts

Quick key Assign option – Elite has hundreds of possible key bindings. With one click, Elite can be configured to recognise the Cougars and match the layouts specified in the editor. Either the already configured key binds will be used, or one will be set for use.

Text to Speech Synthesis

Brings Elite Dangerous to life by making NPCs 'talk'. Multiple pirates, station controllers and system authority NPCs (up to 5 simultaneously) can be assigned different voices for automatic speech synthesis (assuming your Windows system has suitable voice packs available).

You have the ability to:

- Assign a unique synthetic voice as an assistant to your Elite COVAS voice.
- Assign a set synthetic voices to use used by station authority / Fleet Carriers
- Assign a set synthetic voices to use used by system authorities / police
- Assign a set synthetic voices to use used by malevolent NPCs
- Specify which game events fire a text to speech
- Specify what set phrases are used by the covas assistant
- Fine tune voice filter effects

Voice Selection			×		
Cougar Display Voices Voice Role Assignment		Voice Selection			
Select all voices to use with Cougar Display		Cougar Display Voices Voice Role Assignment			
× Microsoft Hazel Desktop - En, × Microsoft Catherine - English × Microsoft Server Speech Tex × Microsoft Server Speech Tex × Microsoft Server - Speech Tex × Microsoft Server - English (Uni × Microsoft Susan - English (Uni × Microsoft Susan - English (Uni × Microsoft Server Speech Tex × Microsoft Server Speech Tex × Microsoft Server Speech Tex × Microsoft Server Speech Tex × Microsoft Park - English (Unit × Microso	(Australia) to Speech Voice (en-AU, stralia) to Speech Voice (en-CA, nited Kingdom) sh (North America) tied Kingdom) and) to Speech Voice (en-IJS, ed States) to Speech Voice (en-IJS, ed States)	Station / Fleet Carrier Double-click to remove Item T Microsoft Catherine - English (Australia) Microsoft Server Speech Text to Speech Voice (e Microsoft Server Speech Text to Speech Voice (e	est Voice Add		Test Voice N, Heera) JS, Helen)
Microsoft Server Speech Tex		litor			
Volume for Station / Security / Military Volume for NPC (Malevolent / Everyone else)		is the key word will be replaced by the replacement inder" replaced by "Admiral" Replacement	Specify alternate ph Use the key word su	eech events. (seconds) when the event will fire. rases which will be randomly selected ubsitution to perform a global find/replace across all idx way to replace a commo word used in each	
Select Voice for COVAS Assistant				ut having to manually edit each one	
Select Voice Microsoft Hazel Desktop - English Volume	× Enabled Edit Initial Delay	ISSDrop Trading Beacon t Phrase			
	Co	mmander, a trading beacon has been detected mmander, a trading beacon is available in this system mmander, trading beacon located			
	× Enabled	SSSignal Combat Zone t Phrase			
	Ca	ution commander, factions in conflict in this system tention Commander, active conflicts in this system anning commander, factions in open conflict in this syst	tem	Double dick to remove	

Simulated Air Traffic Control

A fully customisable script can be set to play in the background during supercruise and system space. Using a set of audio filters, synthesised voices are rendered along with ambient noises. Morse code beeps can be heard panning from speaker to speaker, and a full blown Apollo 11 Moon landing conversation is acted out to break up the silence of super cruise voyages.

An additional script is used in system space to provide ambient background radio chatter as ships come and go in the local system. The amount of chatter is customisable as is the conversations taking place. This script file can be edited into another language if desired.

The scripts can be edited and actors assigned to each line, along with randomising the voices (from the pool of voices assigned to roles) and lines spoken.

POI / Navigation Heading Assistant

The commander's log features a navigation tab where longitude and latitude values can be set for a specific point of interest. The system will automatically calculate a heading when approaching the target body (planet).

Elite Overlay Window

Additionally, the heading text can be displayed as an overlay on top of Elite via an invisible window that you can place in your desired location.

Visual and Audio Information Announcements (Speech Event Editor):

- Performs cargo limpet checks when undocking:
 - Prospector and cargo limpet controller
 - Recon and repair limpets
 - o Hatch breaker limpets
- Crew member check for ships with SLF fighter hangar
- Conflict Zone warning
- Anarchy system warning
- High security system warning
- Compromised nav beacon announcement
- Hazardous Resource Extraction Site announcement
- High value targets announced see piracy
- Hot Target announcements see mercenary
- Low fuel level warnings
- Docking rejection warnings, including the reason for refusal
- Notoriety level warnings
- Criminal activity warnings
- Capital ship presence

Visual Aids

- Heading assistant
- Landing pad docking assistant (Orbis, Ocellus, Coriolis, MegaShip, FleetCarrier, Asteroid Base)

- Docking assistant information on available services
- Mining assistant information on prospected asteroids
- Target ship assistant shield/hull health, legal status, Cmdr name, human player indicator
- Notification of impending (NPC) interdiction
- Notification of remaining jumps to final destination
- Notice board with the 10 most recent announcements

Fleet Carrier Support

- Audio and visual warning of impending decommission
- Tracking of carrier finances
- Tracking of carrier crew/roles

Piracy / Mercenary Game play additions

- Ships equipped with cargo manifest scanners visual and audio indication of ships with high value cargo (**Note:** this feature is currently waiting for Frontier to address a missing event in the Journal logs)
- Targets with a bounty are highlighted and announced
- Entry into High security systems is announced
- Missing limpets announcement for ships with hatch breaker controllers

Bounty Hunting Game play additions

- Record and search for systems with <u>known</u> Compromised Navigation Beacons (CNB) and Hazardous Resource Extraction Sites (HAZ Res)
- Missing SLF pilot check and announcement

Mining Game play addition

Ships equipped for mining:

- Limpet check reminder upon undocking
- Tracks minerals refined (per session)
- Tracks current limpet count (per session)
- Display of the cargo total, remaining limpets and materials refined
- Prospector information display
- Records locations of Ringed systems with hotspots
- Search the database for specific combinations of BGS state

Exploration Enhancement

- Graphical effect for planetary landings
- Automatic switching to suitable consoles when in Analysis mode
- Automatic screenshot to PNG converter, including renaming the files
- **Commander's Log** a complete application in itself (see next section). Captures a log of strange and interesting systems encountered on your journey.
- Bookmark star systems
- Search and record POI signal sources
- Heading assistant user defined longitude and latitude navigation

Automatic console switching

Automatic switching of console roles in response to the game play occurring at the time. Launch a fighter and the SLF and weapons consoles become active; switch to the SRV and the buggy console becomes active. Automatic and seamless switch over to super cruise and exploration consoles.

Simplified Configuration

One – click automatic key binding and synchronisation between Elite and EDCD application. With once click, all the key bindings required by this application are brought over to Elite by replacing unused bindings, or as a fall-back, secondary keyboard bindings.

Customisable COVAS Assistant Voices

Select your preferred Windows TTS voice to accompany COVAS. Select other voices for system authority vessels and select/deselect voices for use by NPCs. Built-in utility included for voice selection and testing. Methods available for the possible expansion of available voices for all users of Windows 10! See the separate guide on this topic.

Flexible Screen Layouts

Position the output windows on any monitor, re-size the windows and even create margins so that the rendered output matches the dimensions of the secondary monitors. Switch roles between the consoles.

Adjustable

Plenty of tweakable settings to adjust colours and layout positioning and element sizing. Add / remove icons, rebind keys, show or hide labels.

Commander's Log

A complete application built-in.

The commander's Log is a comprehensive set of hooks and rules designed to capture the names and bodies in the Elite universe where strange and interesting stellar peculiarities exist.

Stellar features of interest include:

- Systems containing 5 or more of the materials needed for FSD jumps (jumponium)
- Landable planets with rings
- Landable planets with a terraform state
- Landable planets with an atmosphere (Odyssey)
- Landable high gravity planets
- Landable large planets
- Planets with wide rings
- Planets in close orbit
- Planets with moons in the rings
- Moons with moons (nested)
- Really small bodies
- Bodies with fast rotation
- Bodies with fast orbits
- Bodies with high eccentricity
- Stars close binary pairs
- Stars colliding
- Stars with rings
- Systems where a codex discovery was made
- Ringed bodies with hotspots / geological POIs

Commander's Lo	Dg
Show	Research your discoveries
Show	X Convert/rename screenshots
The Convert/m	

The **Convert/rename screenshots** option activates the feature to convert bitmap images to png images in the folder Elite uses to capture images. Additionally, the file is renamed to something more useful which includes the date/time, system and body name.

The Commander's Log has four tabs across the top to perform the following functions:

- Live view of the journal logs
- Live view of signal sources
- Explore the database of previous events
- Download EDDB database updates, import journal logs
- Configure which events are written to the database

Live View

Live view is linked to the current system in Elite and shows any notes you have recorded for this system. You can bookmark this system for your easy reference at a later date.

D Commander's Explorer Log			×
Live View Explore Database Database Tasks Settings			
[Bunda] Notes			
	Bookmark	Your notes	s as you explore this sytem [CTRL + Enter for new line]
2020-01-26 16:11: []: { "timestamp":"2020-01-26T16:11:30Z", "event":"FSSSignalDiscovered			Signal Sources
2020-01-26 16:11: [] { 'timestamp':'2020-01-26716:11:3027, 'event': FSSSignalDiscovered 2020-01-26 16:11: [] { 'timestamp':'2020-01-26716:18:1927, 'event': FSSSignalDiscovered 2020-01-26 16:11: [] { 'timestamp':'2020-01-26716:18:1927, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:1927, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:1927, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:1427, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:1427, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:1427, 'event': FSSSignalDiscovered 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:227, 'event': Music', 'MusiCradd' 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:227, 'event': Music', 'Timor', 'MisiCradd' 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:227, 'event': Music', 'MusiCradd' 2020-01-26 16:18: [] { 'timestamp':'2020-01-26716:18:227, 'event': Music', 'Timor', 'Timo	d", "SystemAddress":6131300733658, d", "SystemAddress":6131300733658, d", "SystemAddress":6131300733658, d", "SystemAddress":6131300733658, d", "SystemAddress":6131300733658, "Progress":1.000000, "BodyCount":7 ed":1.649537, "Total":32.000000, "BodyCount":7 ed":1.649537, "Total":32.000000, "BodyCount":7 in": Faraday Ring", "Message": "\$STAT ", "Faraday Ring", "Message": "\$DTata": ", ", ", ", ", ", ", ", ", ", ", ", ", "	"SignalName": "\$Warzor "SignalName": "\$Warzor "SignalName": "\$Warzor "SignalName": "Swarzor "SignalName": "Solemn ("SignalName": Valz Do "SignalName": Valz Do to 100, "Solence", "Nator "SignalName": Valz Do to 101, NoFireZone_entere me": Taraday Ring", "Sta ION_NoFireZone_entere	16:11:30 Conflict Zone [Low Intensity] 16:11:30 Kay Beacon 16:11:30 Faraday Ring 16:11:30 Conflict Zone [Low Intensity] 16:11:30 Conflict Zone [Low Intensity] 16:11:30 Conflict Zone [Medium Intensity] 16:11:30 Conflict Zone [In] Intensity] 16:11:30 Conflict Zone [Low Intensity] 16:11:30 Conflict Zone [Low Intensity] 16:11:30 Conflict Zone [Low Intensity] 16:11:30 Empryean Interchange Hub 16:11:30 Walz Dock

When a commander jumps to a new system, the Commander's log module will analyse the results of a DSS scan and report back any features of interest which are categorised and stored in a local database for later analysis.

Additional Features

Configure a UI to enable/disable settings/persist settings. Display of the signal sources in the system.

Exploring the Commander's Database

The database contains a rich set of information which can be searched.

🖨 Commander's Log	_ 🗆 🗙							
Live View Explore Database Database Tasks Settings Navigation								
Search Multi-Star systems with no celestial bodies								
Query Type [LHS 2936] Events Ourrent All systems Search 1 Min number of stars								
Filter								
Ent_Tussods_03_K_Name Fast orbit FSD Boost Synthesis materials Landable with Atmosphere Landable with Extrem Gravity Filter RingClass Filter R								
Landable with Fingh Gravity 50 Landable with Fingh Gravity 50 Nested Moon (0 or -1 for bit fields) 50 Search Radius (ly) 50 from current 50 Search EDSM								
EventDate Event Interesting System SystemAddress Body Item Detail								
▶ 19/02/2017 12:04:47 Scan 🗹 Murungh 0 Murungh C 7 Non-locked body with Icy body, Ro	otational period: 30 hours							
17/03/2017 09:22:28 Scan 🗸 Mithou Wa 0 Mithou Wa 7 a Volcanism Icy body, ma	ajor water geysers volcanism							
17/03/2017 09:22:45 Scan 🗹 Mithou Wa 0 Mithou Wa 7 c Volcanism Icy body, mir	nor carbon dioxide geysers \							
10/06/2017 09:42:44 Scan 🗹 Synuefe X 0 Synuefe XR-H d11-102 4 Non-locked body with Sudarsky da	ss III gas giant, Rotational p							
10/06/2017 09:44:45 Scan 🗹 Synuefe X 0 Synuefe XR-H d11-102 4 a Volcanism Rocky body,	minor metallic magma volcar							
23/07/2017 13:06:26 Scan 🗹 Col 359 Se 0 Col 359 Sector KB-T c5-6 A 1 Non-locked body with Sudarsky da	ss I gas giant, Rotational pe							
23/07/2017 13:19:57 Scan 🗹 Col 359 Se 0 Col 359 Sector RR-N b10-2 1 Non-locked body with Rocky ice bo	dy, Rotational period: 46 ho							
Records: 3186								

The Commander can:

- Look for any of the "items of interest" features (nested moons, colliding binaries, etc)
- Look for codex entries
- Search in the scan events for Stars, planets and rings of interest (radius, atmosphere composition, etc)
- Search for a multi-star system with zero bodies which is something I know from the forums that some Commanders would like to find
- Search for rings with hotspots / geological POIs
- Search for Pristine Metallic Ringed systems nearby

Mining Assistant - Searching for Pristine Metallic Ringed systems nearby

Using EDSM, searches for specific reserve levels of planetary rings can be located in systems surrounding the current position. When laser mining Painite, this feature allows the commander to quickly locate pristine metallic ringed systems.

Commander's Log					
Live View Explore Database Databa	se Tasks Settings N	avigation			
Search EDSM - Pristine Rings					
Pristine					
X Filter RingClass Metallic					
Search Radius (ly)	103 from LHS 2936				
Search EDSM					
System	Body	Class	Ring	Туре	Distance
LFT 65	4	Class III gas giant	4 A Ring	Metallic	32.39 ly
LHS 2661	6	Class IV gas giant	6 A Ring	Metallic	51.02 ly

Database tasks

Clear Database

Database tasks tab allows the commander to clear out the portion of the database relating to journal scan events. This is useful so that a re-read/refresh of the journal logs can be performed. This is a safe operation and bookmarks, system notes are not affected.

3D Commander's Explorer Log	9		_ 🗆 🗙
Live View Explore Database D	atabase Tasks	Settings	
Clear Database Delete all stellar entries fro Note: This action is revers Delete			
Import Elite Dangerous Jou Scan all Elite Dangerous lo		rt events (typically scan and codex events)	
Import Not in progress	Journal Live Dont miss Import be	Beta	

Import Elite Dangerous Journal Logs

This option populates a local database with all the codex and scan events found in the journal logs. There is a wealth of information contained in these logs and some of it is very useful to collect – ie for mission route optimisation.

Commander Log Settings

The Commander can also tweak the settings of the module so that he can define what an "interesting" item means.

3D Commander's Explorer Log			x
Live View Explore Database Database Tasks S	ettings		
Scan Settings			
X Landable with Terraform X Landable with Atmosphere Landable with High Gravity Landable Large Planet Wide Rings Close Orbit (Parent) Shepard Moon	X Close Binaries Colliding Binaries Nested Moon Tiny Object Fast Rotation Fast Orbit High Eccentricity	× Ringed Star × All FSD Boost Materials × All FSD Materials in System	
Thresholds (scan events)		Misc	
High Gravity 5.0	Large Planet Radius 18000000	Show Journal Entries (in Live view)	
Extreem Gravity 15.0	Wide Rings (body radius) 5	× Run query on Start FSD jump	
Proximity (Binaries) 0.4	Close Orbit (parent radius) 3	X Switch to live view on FSS scan	
Tiny Radius 300000	Eccentricity 0.90		
Fast Rotation 17280	Close to Ring (radius) 10		
Fast Orbit 28800			

Miscellaneous Options



Capture the journal entries as they are written by Elite.

Optionally runs a database query to show a summary of the new system you are about to jump to and switch to the **Explore Database** whilst the jump is in progress.

Another option switches to and activates the Live view tab so that signal sources can be seen, as well as the results of the scan analysis looking for "interesting" items.

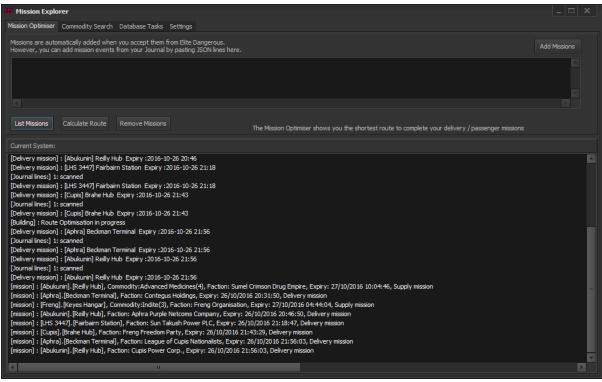
Mission Explorer

The Mission Explorer module consists of:

- Mission Optimiser
- Commodity Search
- Route Plotting / Neutron star route plotting

Mission Optimiser

This module can help a Commander plan his routes from station to station. On each new mission accepted, the system builds a list of known missions and calculates the most efficient route between star systems. The computed route is based only on the systems in the missions and performs distance/jump calculations based on a look up to a cached copy of EDDB's database. As part of the supply/demand missions, the system will add stations you must visit to buy goods (using the commodity search module functionality). Note, however, it doesn't take into account available cargo space at any one time – so this is something you'll need to manage for yourself!



There is an advanced user feature available so that Commanders can cut/paste an entry from the journal file and have the mission optimiser add that as an available mission.

Route Plotting

Various routes from different sources can be plotted in the Galaxy Map and a visual representation of the route shown.

Routes can be generated via Elite missions (cargo/passenger), manually created by adding waypoints, or automatically added to waypoints via plotting a route in Elite Dangerous.

Mission Optimiser Route Plotting

Mission routes can be plotted on an in-built galaxy map. This tool allows the commander to visualise the mission route and see the results of the mission optimiser. Using the left, right and middle mouse buttons, the galaxy map can be rotated, strafed and zoomed. The keys WSAD also perform the same function.

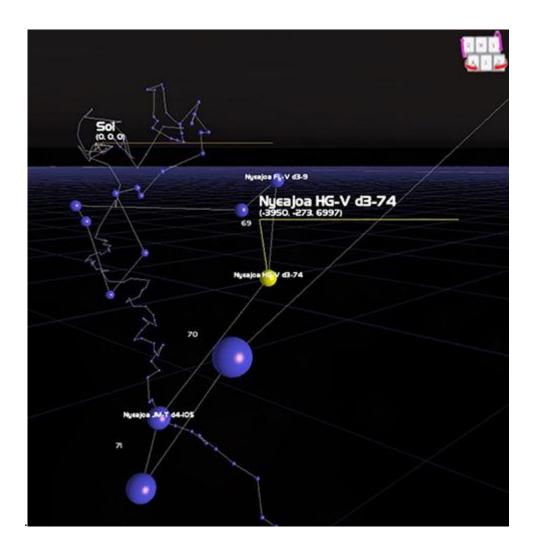
The nodes on the plotted route can be selected (left mouse button) and the camera will focus and zoom in on the selection. In a future release (scheduled for Q3 2020), zooming in a little further will then display the system orrery.

Route plotting is useful for long missions and can identify loops and inefficient waypoints.

Neutron search

The **Neutron search** option allows the route to be altered to include the use of neutron star (boosts). This option is especially useful for planning long range journeys where the number of jumps can be significantly reduced.

The system already knows about the current jump range of the active ship and takes this into account when performing the route. Different results could be obtained by having an empty cargo hold/less fuel when initiating the plot.



Clicking on the star systems listed in the route output copies the system name to the clipboard for easy use within Elite.

	Neutron Route
	Teason Node
	Route Planner / Neutron Route
c Inc	[Neutron] Requesting route: Jump range:27
on: l	[Neutron] : Waiting for results
sive	[Neutron] Calculating route:
cpiry	[1. Maia] : Remaining (257.80), Jumps: (0)
8:47	[2. Irandan] : Remaining (0.00), Jumps: (11)
iry:	[3. Azaleach] : Remaining (0.00), Jumps: (4)
tion	[4. Wulgaedia] : Remaining (0.00), Jumps: (6)
	[5. Wat Yu] : Remaining (0.00), Jumps: (5)
	[6. Chi Orionis] : Remaining (0.00), Jumps: (3)
- 1	[7. Ackwada] : Remaining (0.00), Jumps: (4)
- 1	[8. Ienpalang] : Remaining (0.00), Jumps: (5)
- 1	[9. Sothis] : Remaining (0.00), Jumps: (27)
9) (C	[10. Robigo] : Remaining (0.00), Jumps: (3)
	[11. Maia] : Remaining (0.00), Jumps: (12)
- 1	[12. Wat Yu] : Remaining (0.00), Jumps: (18)
- 1	[13. Vak] : Remaining (0.00), Jumps: (5)
	[Summary] Total jumps: 103 Distance: 2330.30
►	

WayPoints / Manual Route Plotting

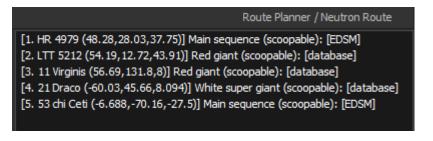
In addition to the mission route plotting, manual waypoints can be plotted on the galaxy map.

Use the **Add Waypoint** button to add system names to use during the route. Click the **Waypoint Route** button to plot the route plot and optionally check the **Neutron Search** option to plot the route using neutron star FSD boosts.

System names that can't be located (in your explorer database or via EDSM) will be removed from the plotted galaxy map.

Elite Galaxymap Route

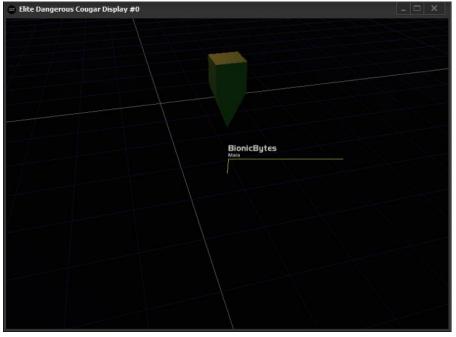
When a route is plotted in-game, the star systems are added to the waypoints list. Clicking the **Plot Galaxymap** button plots the route onto the galaxymap MFD and also gives a route summary in the Route Planner Display.



This display gives an indication of the main sequence star, if it's 'scoopable' and if the star system is already known – ie making it easy to spot an undiscovered system in the route.

Galaxy Map / Orrery

The galaxy map shows the route plotted by the Mission Explorer module – either mission routes, manual waypoints or the in-game route. If neither of these have been populated, then the galaxy map centres around your CMDR's last known star position and is indicated by a large (green) pin drop icon.



The display can be rotated, translated (left/right) and zoomed (forward/backward) by the use of left, right and middle mouse buttons.

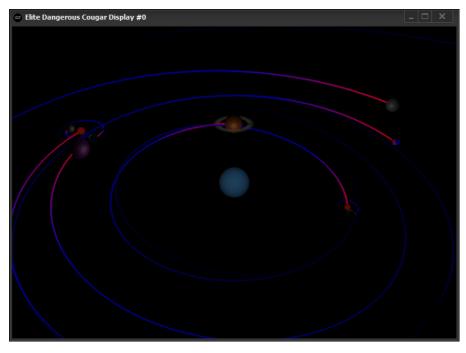
Additionally, the **WSAD** keys are assigned to the forward, reverse and rotate (left/right) functions.

Galaxy map Built-in Orrery

When a node has been selected in the galaxy map, a zooming in (W key or middle mouse wheel) towards the node will automatically switch to the orrery when the camera is very close up.

When in the orrery, moving the camera far away from the central star will switch back to the galaxy map.

This feature is particularly useful when plotting journeys as it allows for a quick inspection of the systems along a route without having to travel or open the system map in-game for each star system.



There are no UI controls or menus in this mode for the Orrery.

Commodity Search

The Commodity Search tab contains live in-game information for the current system, your ship and it's FSD jump range.

This module allows a commander to

- Search for specific in-game commodities and locate a station with a certain quantity
 Can also search within a distance from a specified system, or the current system.
- Results are ranked for the most efficient use of time (considers number of jumps, distance of station from star, quantity of commodity, requires permits, landing pad size)

Current Shystem: Bunda Current Ship: Federal Corvette, Pad Size: L, Cargo Capacity:8, FSD Search (Stations and Systeme) Common Search Filters Common Search Filters Search Type Search near me System Name Outrent Ship: Federal Corvette, Pad Size Pad Size Custom search (string) Filter Search near me Station Options Clear all Station Options Clear all Station Options Custom search (string) Contains Search value (string) Station Options Clear all Station Options Clear all Station Options Clear all Station Options Commodity Custom search (numeric) Search value (string) Station Options Clear all Station Options	Mission Explorer	
Search Type System System Specify Combined Filter Search Search near me Custom search (string) Search value (string) Search value (string) Station Options Clear all Custom search (numeric) Equals O or -1 for bit fields Station Options Clear all Station Distance Commodity Paladium Outring Search value (numeric) Backmarket Y Yes/No Station Distance Commodity Custom search (numeric) Equals (0 or -1 for bit fields Y Yes/No Station Distance Min Quantity Doding × Y Yes/No Y Yes/No Station Distance Min Quantity Planetary × Yes/No Station Shappard Yes/No Station Distance No Rank SystemDistance Supply SystemName StationName Rank SystemDistance Supply SystemName StationName distance 1.00 24.68 40 LHS 2335 Haberlandt Hangar 15.00 Cortolis Starpor L Image: Station Zie		Current Ship: Federal Corvette, Pad Size: L, Cargo Capacity:8, FSD
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2.00 49.89 1653 Nungar Weitz Vision 6.00 Coriolis Starpor L	2.00 26.48 15 Codorain Corm 2.00 48.58 770 Slatus Tysor	
2.00 25.28 11 Karnarki Pangborn City 59.00 Coriolis Starpor L Image: Coriolis Starpor L	2.00 25.28 11 Karnarki Pangt 2.00 48.58 1560 Slatus Duke	

There are options for additional criteria to reduce the number of stations returned in a given search such as permit requirements, planetary bases, distance from station and star system distance from current or specified location.

Commanders can explore the database looking for stations offering a particular set of facilities (rearm, refuel, etc) as well as the controlling faction state.

The station/system search function allows Commanders to locate systems in a specific combination of state (eg Boom + Public Holiday + Expansion + Civil Liberty)

Alerts

The **Mission Explorer** Commodity Search (INARA) tab allows the CMDR to set up notification alerts when you are navigating the galaxy - so that you are informed when you are near to something you are interested in.

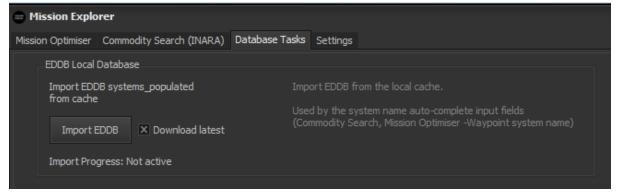
There are two types of alerts:

- Commodity Alerts
- Service Alerts

Commodity Alerts are for searching for trading commodities (eg gold) and Service alerts are for services such as "Material trader" or "Fleet carrier outfitting". In either case, the alert system allows you to define the radius of the search and display the results in the main flight console, or a custom panel.

INARA Import

The system allows for automatic INARA commodity import and backup of database files.



Backup schedules and import frequencies for commodities can be individually set.

Mission Explo	orer			
Mission Optimiser	Commodity Search (INARA)	Database Tasks	Settings	
Scheduler Se	ttings			
Automa	atic database backup			X Automatic INARA Import (Commodities)
15 🌩 B	iackup schedule (days)			7 🗘 Schedule (days)

Chat Viewer

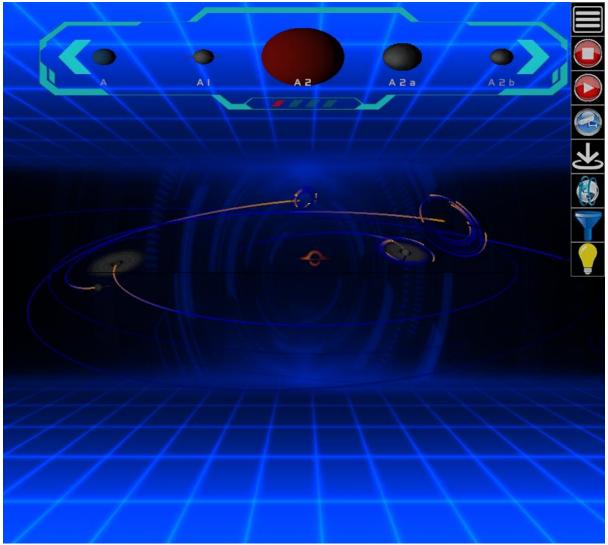
A window with views to separate and display NPC chat, player chat, wings and squadron messages. Simplifies the display of messages be resizing the space for viewing them to make them more readable.

3D Chat Log			_ 🗆 🗙
Live Chat			
Options			
X NPC Chat X Player Chat	× Wing Chat	× Squadron Chat	
16:09: npc []: Entered Channel: Shinrarta Dezhra			
16:11: npc []: Entered Channel: Bunda			
16:18: npc [Faraday Ring]: No fire zone entered. 16:18: npc [Faraday Ring]: It's great to see you again			
16:18: npc [Faraday Ring]: Docking request granted.			
16:25: npc [Faraday Ring]: Docking request cancelled.			
16:26: npc [Faraday Ring]: It's great to see you again			
16:26: npc [Faraday Ring]: Docking request granted.			
16:26: npc [Faraday Ring]: Docking request cancelled.			
			D

Orrery

Accessing the Elite system map (or orrery view) will bring up the Orrery view. The system planets displayed on the Orrery are obtained from EDSM (or the Commader's journal files / database in the event of no EDSM data).

The Orrery contains a user interface which can help locate and identify any planet class, sun or body. There are filters to colourise the planets so that multiple planets can be quickly located based on their composition, volcanism or atmosphere type.



The colours used in the Orrery can be customised by the Layout Editor utility built-into Cougar Display; there are several styles of background to choose from.

A combination of mouse and keyboard can be used to pan, zoom, rotate or select bodies for a closer look. View the system from any angle you like – examine the shapes of the orbits.

When no user input has been received (for a configurable period of time), the Orrery enters "demo mode" where it selects random views of the system.

Odyssey Support

Elite Dangerous: Cougar Display supports Odyssey additions:

- Additional Elite ranks
- Commander's log updated to include detection of landable planets with atmospheres
- Suits and upgrades
- Suit modules and upgrades
- Suit weapon modules and upgrades

To display Suit information, setup and use a custom panel and select one of the suit information panel options to display information about the current suit and equipped modules.