

Oasis montaj 2023.2

Update for NAOC Technical Committee

20 December 2023

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Oasis montaj 2023.2

Available as of Dec 18, 2023

- Oasis montaj
- UX-Analyze Extension
 - DAGCAP Validation
- Geosoft Plugins
- Seequent Connector

Download from: <https://my.seequent.com/products/oasis-montaj/latest>

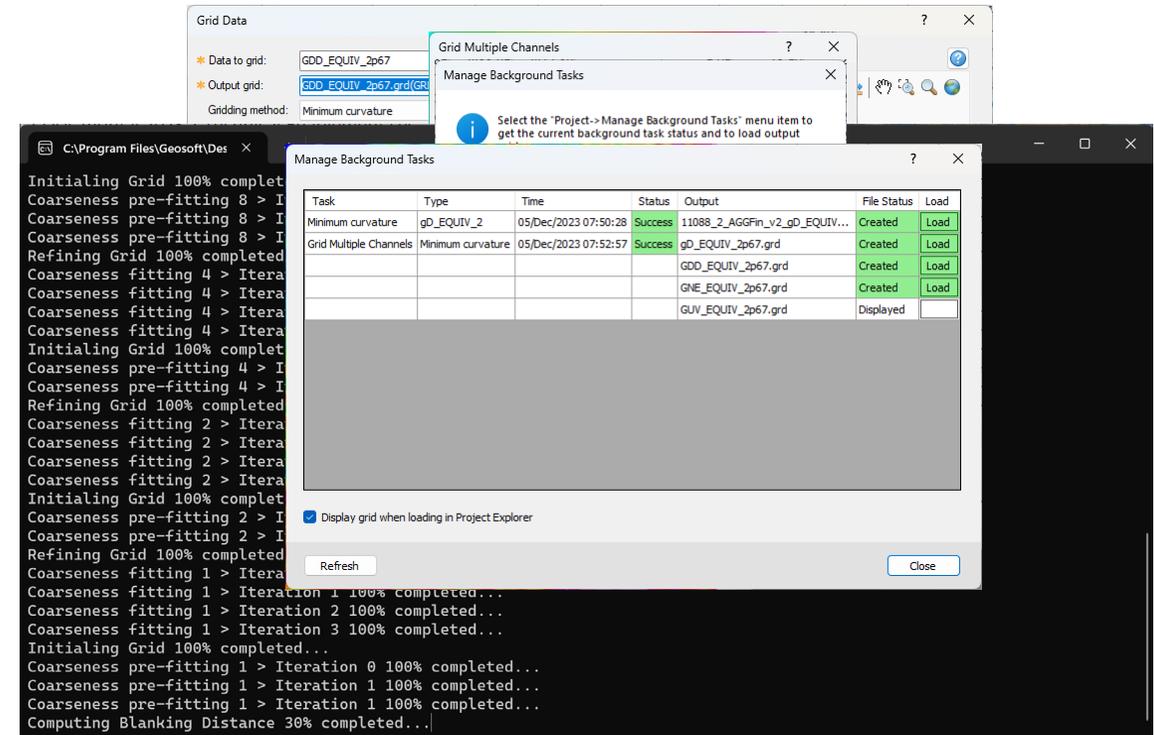
Run Grid Data and Multi-channel Gridding “in the background”

Customer Problems:

1. I can't use Oasis montaj when I'm gridding;
2. I must wait a long time for large grids, or multi-channel gridding

Solution:

- A new checkbox allows you to “Run in background”
- Once the gridding is launched, you may continue to use OM
- A new Manage Background Task dialog
 - Shows an ordered list of the jobs you've launched
 - Shows the status of the job and the output file(s)
 - Allows you to load the grid into the workspace when complete.





Coordinate Systems & Projections

EPSG

- Updated to the most recent EPSG codes

New projection methods

- Mollweide equal area
- Mollweide pseudo-cylindrical

UTM Zone – New Tool

- Determine the UTM zone(s), based on Geographic Coordinates

Coordinates

WGS84.gdb

✓ L1:0	Longitude x	Latitude y	mag	UTM_Zone		
0.0	-19.15.24.4864	-31.21.35.9711	820.02	27S		
1.0	-19.15.25.6665	-31.21.35.9504	620.82	27S		
2.0	-19.15.26.8466	-31.21.35.9296	478.56	27S		
3.0	-19.15.28.0266	-31.21.35.9088	392.28	27S		
4.0	-19.15.29.2067	-31.21.35.8881	285.95	27S		
5.0	-19.15.30.3868	-31.21.35.8673	115.24	27S		
6.0	-19.15.31.5669	-31.21.35.8465	11.59	27S		
7.0	-19.15.32.7470	-31.21.35.8257	-5.57	27S		
8.0	-19.15.33.9271	-31.21.35.8049	53.38	27S		
9.0	-19.15.35.1071	-31.21.35.7841	211.34	27S		
10.0	-19.15.36.2872	-31.21.35.7633	486.98	27S		
11.0	-19.15.37.4673	-31.21.35.7425	821.20	27S		
12.0	-19.15.38.6474	-31.21.35.7217	1121.14	27S		
13.0	-19.15.39.8275	-31.21.35.7009	1167.68	27S		
14.0	-19.15.41.0075	-31.21.35.6801	808.28	27S		
15.0	-19.15.42.1876	-31.21.35.6593	257.65	27S		
16.0	-19.15.43.3677	-31.21.35.6385	-46.14	27S		
17.0	-19.15.44.5478	-31.21.35.6177	-166.66	27S		
18.0	-19.15.45.7279	-31.21.35.5968	-218.25	27S		
19.0	-19.15.46.9079	-31.21.35.5760	-238.95	27S		
20.0	-19.15.48.0880	-31.21.35.5552	-242.47	27S		

Chan UTM_Zone

| WGS 84 |



IGRF Update

IGRF Channel

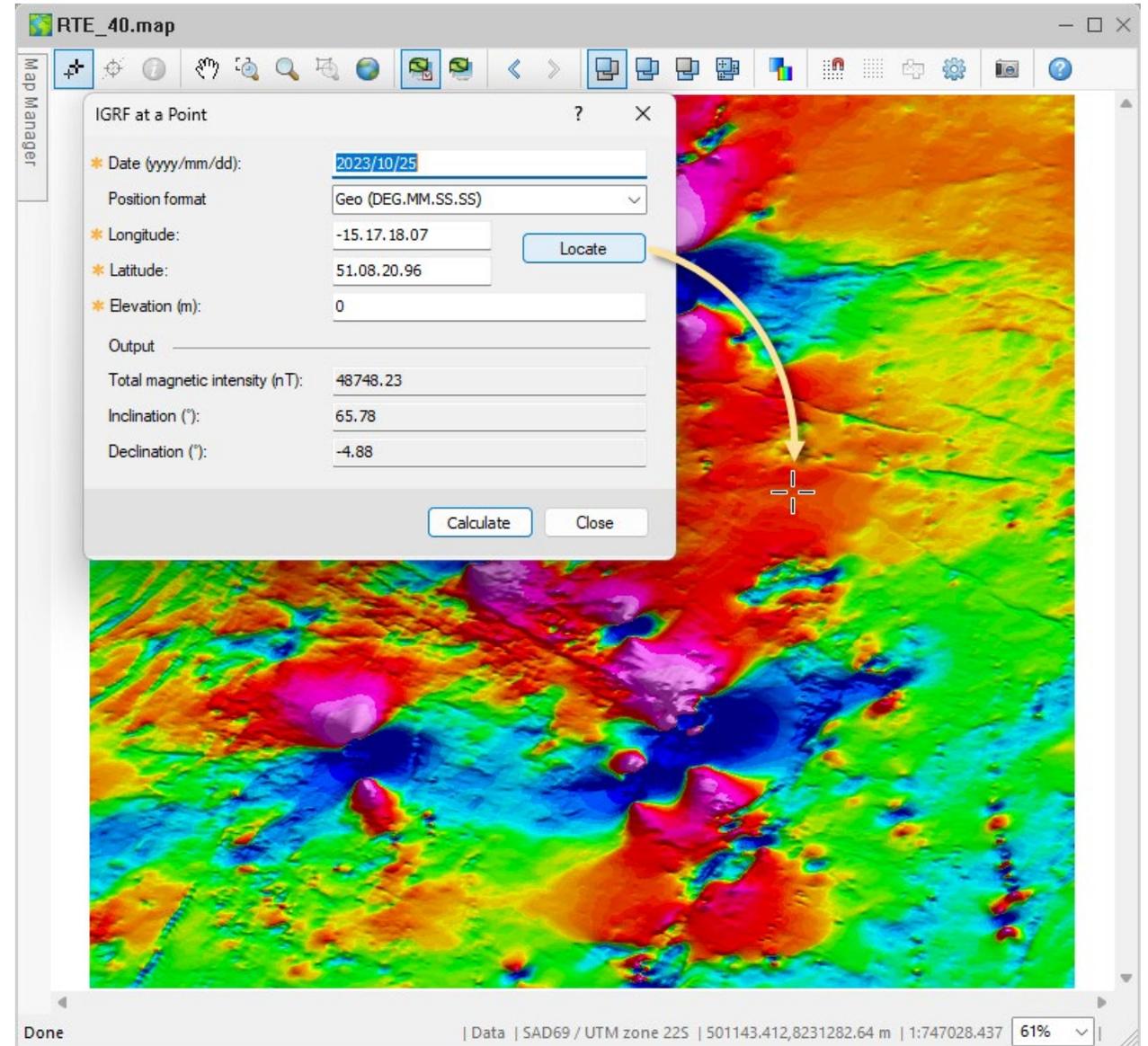
- New interface, parameters reordered in order of contribution
- Automatically sets the secular coefficients to use
- Calculator alignment

IGRF at a point

- New interface
- Point selected on a grid | map

Historical data

- Both non-definitive and definitive constituent models can be still used.



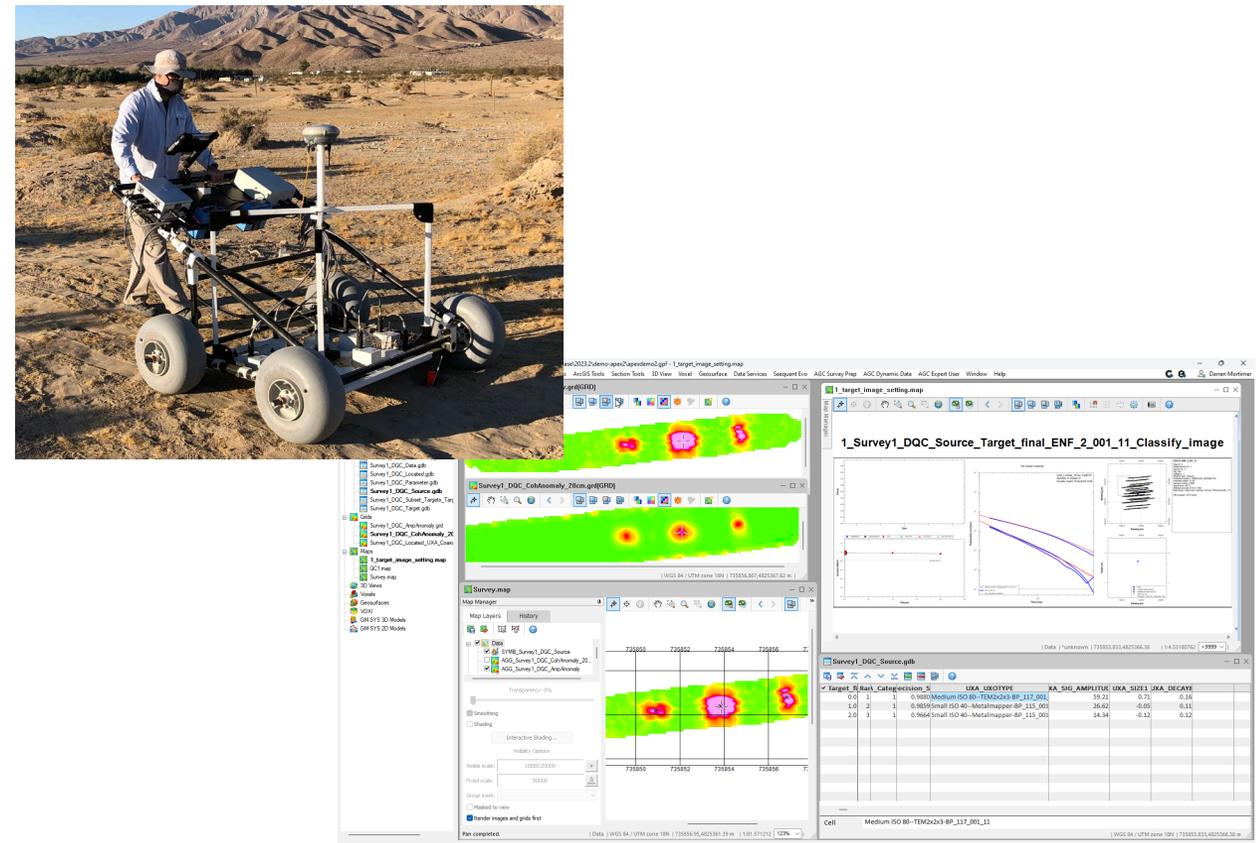
UX-Analyze – Improved Sensor Support

Customer Problems:

- Need to support HDF v1 for all DAGCAP approved sensors

Solution

- Support APEX
- Support MPV (AcornSI) data in HDF v1



UX-Analyze – Improved Inversion Algorithm

Customer Problems:

- Need to support HDF v1 – read all parameters from the data
- Not all sensor have monostatic coil combinations

Solution

- Updated inversion code
- Selection of coils for signal amplitude

Invert for Sources (Dynamic)

* Database prefix: v11Survey1_DAM

* Source group: Target

* Target database group: Targets

* Id channel: UXA_TARGET_ID

* Mask channel: UXA_MASK

Sensor channel suffix - leveled: NORM_LEV

Gates: Low: 5 High: 18
Time of gate (ms): 0.134 2.428

* Pitch channel: UXA_PITCH_FILTER

* Roll channel: UXA_ROLL_FILTER

* Heading channel: UXA_YAW_True_FILTER

Signal amplitude: Monostatic Z Coaxial Z

* Data chip cross-line dimension

* Data chip along-line dimension

Number of dipoles:

Invert identified anomalies

Invert identified anomalies

Reposition data chip to i

* Amplitude:

* Threshold:

Model coherence:

Threshold:



UX-Analyze – Improved Inversion Algorithm

Other changes:

- New example libraries

TOI	UXA Library Id	JXA Fit BCz	UXA Class	CommonN	XA MarkMo	XA Conditi	TEMORIENT	A Dimensic	UXA Fins	UXA Fuse	UXA Name	QualifierPed	A_RotatingB	SerialNum	SpottingCh	IT
1.0	100-lb GP Bomb-AN-M30A1-Mk	1.00	Bomb	100-lb GP Bon	AN-M30A1	Unfired/Pristi	VU	205,970	True	False	100-lb Bomb	A	False	46207-101767	False	
2.0	100-lb GP Bomb-AN-M30A1-Mk	1.19	Bomb	100-lb GP Bon	AN-M30A1	Unfired/Pristi	HPT1	205,970	True	False	100-lb Bomb	A	False	46207-101767	False	
3.0	20-lb Fragmentation Bomb-AN	0.60	Bomb	20-lb Fragmer	AN-M42	Weathered	HPT1	90,500	True	False	20-lb Bomb	A	False	46207-0257	False	
4.0	20-lb Fragmentation Bomb-AN	0.68	Bomb	20-lb Fragmer	AN-M42	Weathered	VU	90,500	True	False	20-lb Bomb	A	False	46207-0257	False	
5.0	20-lb Fragmentation Bomb-AN	0.72	Bomb	20-lb Fragmer	AN-M42	Weathered	VD	90,500	True	False	20-lb Bomb	A	False	46207-0257	False	
6.0	250-lb GP Bomb-AN-M57-Meta	1.03	Bomb	250-lb GP Bon	AN-M57	Weathered	VNU	270,1170	True	False	250-lb Bomb	A	False	Boneyard	False	
7.0	250-lb GP Bomb-AN-M57-Meta	1.06	Bomb	250-lb GP Bon	AN-M57	Weathered	VND	270,1170	True	False	250-lb Bomb	A	False	Boneyard	False	
8.0	250-lb GP Bomb-Mk81-MetaIm	0.77	Bomb	250-lb GP Bon	Mk81	Weathered	VU	225,1110	False	False	250-lb Bomb	A	False	62640-06674	False	
9.0	250-lb GP Bomb-Mk81-MetaIm	1.39	Bomb	250-lb GP Bon	Mk81	Weathered	HPT1	225,1110	False	False	250-lb Bomb	A	False	62640-06674	False	
10.0	5-lb Practice Bomb-Mk106-Met	0.50	Bomb	5-lb Practice B	Mk106	Rusty/Weathe	HPT1	100,459	True	False	5-lb Bomb	A	False	62640-00510	False	
11.0	5-lb Practice Bomb-Mk106-Met	0.61	Bomb	5-lb Practice B	Mk106	Rusty/Weathe	VD	100,459	True	False	5-lb Bomb	A	False	62640-00510	False	
12.0	5-lb Practice Bomb-Mk106-Met	0.64	Bomb	5-lb Practice B	Mk106	Rusty/Weathe	VU	100,459	True	False	5-lb Bomb	A	False	62640-00510	False	
13.0	BDU-33 Practice Bomb-Mk76-TI	0.26	Bomb	BDU-33 Practi	Mk76	Fired/Bent	V-D	102,635	True	False	25-lb Bomb	B	False	NRL PB-1	False	
14.0	BDU-33 Practice Bomb-Mk76-TI	0.39	Bomb	BDU-33 Practi	Mk76	Fired/Bent	V-D	102,635	True	False	25-lb Bomb	B	False	NRL PB-1	False	
15.0	BDU-33 Practice Bomb-Mk76-TI	0.40	Bomb	BDU-33 Practi	Mk76	Fired/Bent	V-U	102,635	True	False	25-lb Bomb	B	False	NRL PB-1	False	

Known Issue

- Performance is slower than previous versions
 - Running from a script using OMS (Command Line) is better than from the GUI

UX-Analyze – Improved Classification Workflow

Customer Problems:

- Problem with updates, many copy of scripts and expressions
- Files are everywhere
- “Optional parameters” are hard to use

Solution

- Refactor removing scripts and several expressions
- Improve UI
 - Easy to use settings for all optional parameters
 - Ranking options, use ‘mask’ channels instead of ‘comment codes’

Note: No changes to the “logic”

The screenshot shows the 'Set Classification Thresholds and Prioritize' dialog box. It is divided into several sections:

- Source Database:**
 - Name: v11Survey1_SAM_Source.gdb
 - Group: Targets
 - ID channel: UXA_TARGET_ID
 - Mask channel: UXA_MASK
 - Gates: Low: 14, High: 98, Decay: 71
 - Time of gates (ms): 0.104, 8.116, 2.034
- Library Database:**
 - Name: SiteLib 6ms 99gate.gdb
 - Group - TOI: TOI
 - Group - non TOI (Clutter):
- Classification Thresholds:**
 - Minimum signal amplitude (mV): 2
 - Maximum signal amplitude (mV): 20
 - Minimum fit coherence: 0.8
 - Maximum inverted depth BGS (m): 2
 - Maximum distance - array position & inverted location (m): 0.4
 - Maximum distance - array position & flag location (m): 0.75
 - Maximum distance - flag location & inverted location (m): 0.6
- Decision Statistics:**
 - Dig - no Dig threshold: 0.825
 - High confidence match to known non TOI threshold: 0.925
 - Minimum source distance for multiple TOI at a flag (m): 0.2
- Classification options:**
 - Classify sources with noisy polarizabilities as Cannot Analyze (Cat 0)
 - Maximum primary polarizability noise threshold: 3
 - Minimum primary polarizability noise threshold: 1
 - Maximum combined polarizability noise threshold: 10
 - Classify sources using only the primary polarizability match
 - Library match (100) metric threshold: 0.925
 - Use custom classification expressions
 - Expression file - TOI:
 - Expression file - Distance:
- Ranking options:**
 - Rank using manual TOI selection
 - TOI selection mask channel:
 - Rank training data at the top of the list
 - Training data selection mask channel:



UX-Analyze – Improved Sensor Support

Supported sensors for v2023.2 (Dec. 2023)

Sensor	Manufacturer	CSV	HDF v0	HDF v1
Metal Mapper	Geometrics	Supported	n/a	n/a
TEM 2x2	NRL	Supported	n/a	n/a
MPV	G&G Geosciences	Supported	n/a	n/a
Metal Mapper 2x2	Geometrics	n/a	Supported	Pending
TEMSense	TEMSense	n/a	n/a	Supported
MPV	AcornSI	Supported	n/a	Supported
APEX	White River Technologies	n/a	n/a	Supported
UltraTEM	Black Tusk Geophysics	n/a	n/a	<i>Coming for 2024</i>



DAGCAP Validation

- Latest Version
 - v 2022.1
- Pending
 - v 2022.2
 - v 2023.1
 - v 2023.2

For up-to-date information see:

<https://www.seequent.com/help-support/standards-certifications/validated-ux-analyze-versions/>



Geosoft Plugins retirement

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2023.1 was the last release these plugins were available in the Geosoft installer

- Target for ArcMap plugin
- Plugin for ArcGIS
- Plugin for MapInfo

Past releases: <https://my.seequent.com/products/oasis-montaj>

The image shows three overlapping screenshots of retirement notices for Geosoft plugins. The top-most screenshot is for 'Target for ArcMap 2022.2', released on December 13, 2022. It includes the Geosoft logo and a description: 'View drillhole data as a layer within Esri ArcMap.' Below the description are links for 'Release Details' and 'Past Releases', and a blue 'Download' button at the bottom. The middle screenshot is for 'Geosoft Plug-in for ArcGIS', also released on December 13, 2022. It includes the Geosoft logo and a description: 'Plug-in to view and use Geosoft grids, shaded grids, and map files in ArcMap.' Below the description are links for 'Release Details' and 'Past Releases', and a blue 'Download' button at the bottom. The bottom-most screenshot is for 'Geosoft Plug-in for MapInfo', released on December 13, 2022. It includes the Geosoft logo and a description: 'Plug-in to view and use Geosoft grids, shaded grids, and map files in MapInfo.' Below the description are links for 'Release Details' and 'Past Releases', and a blue 'Download' button at the bottom.

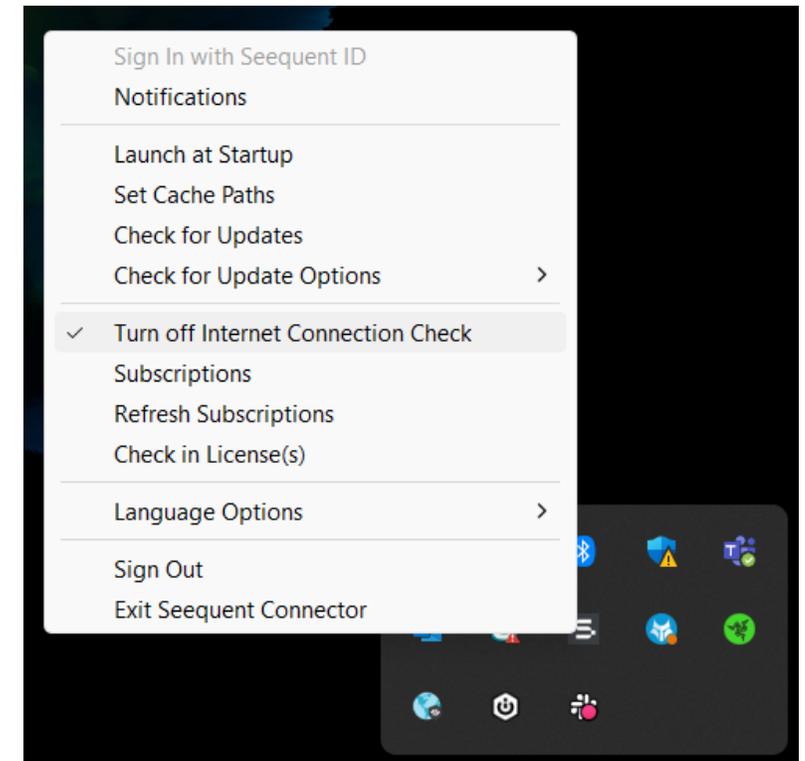


Seequent Connector Update

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Improved Offline Capabilities

- **Extended Offline Usage:** Operate entirely offline for up to 90 days without interruption.
- **Consistent Offline Mode:** Optionally disable the automatic license check-in. Once set to offline mode, the SQ Connector avoids license checks, even if an internet connection is detected.



When upgrading to the latest Oasis montaj version, 2023.2, please note that the Seequent Connector will automatically update for offline mode functionality. For Leapfrog users, it's essential to run one of these versions: 2021.1.5, 2021.2.7, 2022.1.2, 2023.1.2, or 2023.2.1. If you're not on these versions, an upgrade is required to ensure Leapfrog continues working seamlessly.



Questions?

Contact us for any questions.

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