Location: Abu Dhabi

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| Step | Operator | AI Commentry | Platform Actions |
| *Theme: General* | | | |
| 1 | Hello, Tactica | How would you like to begin today? | *Showing the world with “Welcome back Ali” msg* |
| 2 | Zoom into the UAE. | Sure, Zooming into The United Arab Emirates. The UAE is a country located in the Arabian Peninsula. It is a federal, elective monarchy composed of seven emirates, with Abu Dhabi as its capital. | *Screen zooming to UAE (Optical Imagery covering entire UAE) and Key Statistics are shown on the right (traffic, population, environmental data etc..)*  *(UAE Showing important locations and cities)* |
| 3 | What are the commercial ports in the UAE? | The UAE has **12 commercial ports**, along with several smaller ports and specialized facilities. Of these, **7 ports** are considered major due to their strategic importance and high capacity for handling cargo, containers, and passengers. These are Jabel Ali Port, Zayed port, Khalifa Port, Rashid port, Khor Fakkan Port, Fujairah port and Mina Saqr. | *Screen bringing all ports in UAE; Each port is color-coded based on congestion levels, with detailed analytics for each port:* ***Current vessel traffic and different Ships IDs.***  (AIS information to be on)  *(UAE showing all 12 ports in UAE as well as the AIS traffic)* |
| *Theme: Maritime Security* | | | |
| 4 | Zoom into Khalifa Port Economic Zone | Sure, here is the latest imagery of Khalifa port and its Economic Zone. There are also thermal and SAR imagery available. Would you like to see some of them? | *The platform zooms in on the Khalifa Port, transitioning from the broad UAE view to a detailed port view. The operator can now see: vessel movements (imagery and AIS).*  *(Showing Image* |
| 5 | For the ships currently here, What is their vessel movement for the last 24 hours? | Here is summary of the vessel movement over the last 24 hours. Within the area, there are total 52 ships in the area. 4 ships with AIS deactivated, and 33 are currently docked | *The platform displays Vessel movements over the last 24 hours, using a time-lapse feature with SAR imagery and AIS data, showing vessel routes, docking times, and potential delays. Also, afterwards it shows weather forecasts, and current vessel schedules* |
| *Theme: Port Activities, and Hybrid Analytics* | | | |
| 6 | Zoom into the port itself | Zooming into Khalifa Port, **Khalifa Port** is a state-of-the-art deepwater port and one of the region’s largest logistics hubs. It handles containerized, bulk, and general cargo, connecting global markets with advanced automation and infrastructure. | *Platform showing analysis of Khalifa port, typical traffic and containers* |
| 7 | Enhance the optical imagery and detect all ships | Imagery enhanced. There are currently 33 ships docked at the port. | *Displays enhanced satellite imagery with a before-and-after comparison. highlighting ship locations, IDs, and movement patterns.* |
| 8 | What assets are in the port? | Key assets detected in the port, include 36 STS cranes, and 98 other types of cranes including yard . The port currently holds approximately 63,000 containers. | Highlights monitored assets with color codes for maintenance status.  *Platform displays container statistics on the screen, highlighting the areas where containers are located.* |
| 9 | How many staff and visitors are within the port area? | Here is a density heat map. There are 741 people in the port area. Of these, 318 are employees, and 423 are visitors. | *The platform zoomed into the area and shows stats* |
| 10 | What is the water depth in the port area? | The water depth varies from 10 to 19 meters across the port. There is a 3-meter increase in depth near the eastern entrance due to recent dredging. | Platform displays a depth contour map around the port. |
| 11 | Provide a 3D visualization of the port's underwater topography | Certainly. Here is the 3D visualization of the underwater topography. Areas with recent changes are highlighted in blue. | Changes the view to a 3D map showing the bathymetry of the port area. |
| *Theme: Alerts and Full Analytics; Alert to be called:*  Alert; One ship has been inactive on AIS for 30 minutes around Fujairah port. A multispectral satellite is scheduled to pass over its location in one minute. Would you like to request a Satellite image collection? | | | |
| 12 | Yes, get the image | Acknowledged. Communicating with the Satellite; Data is being requested | *Platform goes toward the area with AOI:*  *shows a satellite, and a request is being made.*  *Displays a satellite icon over the designated area, with a progress bar indicating the data request.* |
| 13 | What is the latest known information about this ship? | The ship is a chemical tanker known as MT Stolt Sakura. This ship is a Chemical Oil Products tanker. It has a length of 122m and beam of 22m.  The ships recent available imagery are SAR imagery detected 78 mins ago as shown.  As of 37 mins ago, Thermal and AIS data confirm its location at the specified location at a speed of 11.4 knots and with a heading bearing 17 degrees.  The Area to be searched is displayed. | *Part #1: Platform zoomed out first showing both imagery from far.*  *(3D imagery of the ship on the side)*  *Part #2:*  *Zooming into SAR imagery*  *Part #3:*  *Zooming out from SAR and into Thermal Imagery*  *Part #4:*  *Zoom out to the same part #1 and add the circles.*  *Shows on the side that Satellite imagery is being processed.* |
| 14 | What is the trajectory of this ship? | The ship overall trajectory over is shown here.  The ships route is originating from **Mombasa Harbour** heading to **Umm Qasr Port.**  ***(Pause for 1 second)***  Notification received. The new imagery is ready to be visualized | *Zoom out little bit. Platform showing arrows and direction from Mombasa direction (history) and future to Umm Qasr Port (Future).*  *Shows on the side that Satellite imagery is being processed.*  *Notification received that the image is ready.* |
| 15 | Open and analyse the new image Detect and identify the ships new location and any other suspected activity of the ship | Based on the new image, I have identified the location of the MT Stolt Sakura.  It is observed that the MT Stolt Sakura is engaging in an offshore-trans-shipment with a general cargo ship. The second ship has been identified as the MV Arklow Meadow general cargo ship.  A 3D reconstructed model of the two vessels is presented. | *Imagery is Zoomed out to cover all.*  *Imagery getting the capture in the transshipment location.*  *Platform is showing details of both ships and 3D aspects of it.* |
| 16 | Generate a report on these two ships and send it to Khalid | A report is currently being generated. The report will be sent to **Khalid** both in PDF format and through his access in the Platform.  Would you like to increase coverage for this area and detected ships? | *Platform is showing that it is generating a report anc completed. Platform showing notification of the report sent.*  *Displays a progress indicator for report generation and a notification confirming the report was sent.* |
| 17 | Yes. Also open the report. | Monitoring coverage has been increased. Here is the generated report, which includes snapshots of both ships’ routes, historical activities, trade information, and projected movements. | ***Platform:*** *Opens the PDF report, providing a detailed summary of the ships and their activities.* |
| 18 | Close the report. | The report is closed and disseminated. Is there anything else you would like me to assist with? | Platform goes back to the port area before the report page. |
| *Theme: Urban Planning* | | | |
| 19 | Yes, Let’s look at the urban areas of Abu Dhabi, Zoom into Khalifa City and do land cover classification. | Certainly. Zooming into Khalifa City. Here is a land coverage classification of it showing buildings, roads, solar panel and agricultural lands. | **Platform:** Legend + statistics of each. |
| 20 | What are the newly constructed buildings in Khalifa City in 2024? | Comparing August 2024 to August 2023,  the newly constructed buildings are highlighted in green. | Layout of the buildings in green.  Platform Highlights changes in buildings on the map, showing before-and-after images. Statistics |
| 21 | How many vehicles are in the imagery in this area? | Based on this image, there are approximately 10801 vehicles detected in the area. | Displays the detected satellite imagery with cars detected. |
| 22 | Identify all palm trees in the region and surrounding main roads. | Sure, there are detected 6,173 palm trees in the area as highlighted. Good percentage of the palm trees are concentrate on the surrounding main roads. | Size distribution |
| 23 | Run red weevil analysis on the palm trees. | Here is a breakdown of palm tree health. Approximately 13% are heavily infected with red weevils. The legend on the bottom right indicates the health status of the trees. | Pie chart |
| 24 | What is the current traffic density around the region? | The latest traffic density appears normal. The co lour indicates speed, where orange represents high speeds, while blue shows lower speeds. The thickness of the line reflects the number of cars passing through. | Presents a traffic density map with speed and volume visualizations, accompanied by a breakdown of speed distribution in a side chart. |
| *Theme: Airports* | | | |
| 25 | Zoom into Zayed airport? | Certainly. Zooming into Zayed International airport. Zayed International Airport serves as a gateway for international passengers and cargo and a major global hub for Etihad Airways. There is also Thermal and SAR imagery available. Would you like to see some of them? | Platform showing statistics on Zayed Airport  Displays a detailed map of Zayed Airport, including its runways, terminals, and key statistics on flights and cargo movements. |
| 26 | Identify all airplanes and what is their operational activity. | As of this image, there are 50 identified airplanes with breakdown of type and confidence score reported. There are 8 airplanes connected to the terminal, 37 parked on and 5 in motion in the taxiway with 1 next to the runway. |  |
| 27 | Identify all A380 airplanes in the airport. | I have detected 4 Airbus A380 airplanes; 1 connected to the terminal and 3 parked on the yard. | Highlights the location of the identified Airbus A380 on the map. |
| 28 | Zoom into the one connected to the terminal. | Zooming into the Airbus A380 airplane that is connected to the terminal. | Provides a close-up view of the Airbus A380, showing its location on the tarmac with surrounding infrastructure. |
| 29 | Run model logic analysis on the airplane. | Here is a model logic analysis. The dimensions detected are:  Length: 69.7 m  Wingspan: 80.1 m  TG Height: 22.9 m  Number of Engines: 4  Based on the detected dimensions, the confidence level is 97%. | Provides a close-up view of the Airbus A380, showing its location on the tarmac with surrounding infrastructure. |
| 30 | Generate a 3D of the Airbus A380 | Here is a 3D generated representation of the A380 airplane. |  |
| 31 | Do you have high frequency imagery over the airport? | Yes, there are four optical satellite images taken within the last hour. These are focused on Runway 13R/31L, also known as the western runway, highlighted here in yellow. | Zoom out and Shows an overview of the runway with timestamps for the captured images and an aircraft summary. |
| 32 | What are the changes in the western runway over the last 1 hour | Based on the four images,  we notice the arrival and parking of one airplane  And we notice the departure of another plane after disconnecting from the terminal | Platform shows about the number of airplanes in the western runway. |
| 33 | Put and explain the thermal imagery. | *The Thermal imagery reveals warmer areas like runways, taxiways, and aprons due to heat retention, while cooler zones indicate shaded or vegetated regions. Bright spots near terminals likely represent airplanes or active infrastructure, and the surrounding areas, such as Khalifa City, show mixed heat signatures from residential and industrial zones.* | **Platform:** Displays the thermal imagery of the airport with a heat map overlay.  As the view zooms out, it transitions to show the broader region, including nearby Khalifa City, with thermal patterns and potential points of interest marked. |
| 34 | Standby | Thanks. I am at standby and will continue to share notifications and alerts. | *Platform goes to the world mode* |

System Questions

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|  | Operator | AI | Platform |
| *Theme: System Information* | | | |
| 35 | What kind of data can the system support? | The system supports the following data:  Satellite Imagery including Multispectral, Hyperspectral, SAR, and Thermal, It also support and integrate aerial, drones, ground cameras, IoT sensors, AIS, ADSB and OSINT into a unified analytical framework. | Platfrom goes to the world mode. It opens a box of icons showing the different data |
| 36 | Open the notification tab | Here are the most recent imagery and data updated into the system. | No change in the image (or if easier you can go to the world mode),  Just open the notification. |

Drone To be added