



Cat® Asset Intelligence



Cat Asset Intelligence SE is the shore-based central module of the Asset Intelligence technology platform that enables automated analytics to be used by shore-based managers and experts to help make better operations and maintenance decisions resulting in decreased fuel and maintenance costs. SE enables shore-based managers and experts to have visibility into the health and performance of vessels and onboard equipment, which is helpful in assisting the onboard crew with maintenance and performance issues as well as prioritizing resources across the fleet. The SE module receives data from one or more vessels via a vessel data management system (such as Asset Intelligence Vessel Edition) on a configurable time basis and provides asset owners, managers and experts a consolidated view of the health and performance of all assets within their enterprise.

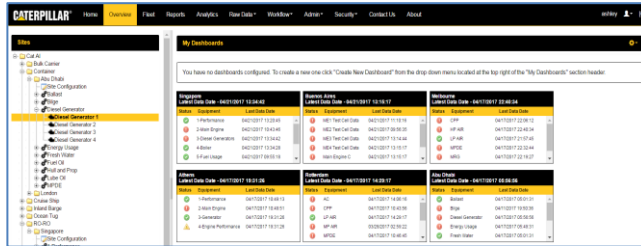
Cat Asset Intelligence SE consists of the following components:

- Overview: Provides a high level summary of the health of systems across all vessels being monitored
- Vessel dashboard: Diagnostic summary rollup for equipment associated with the Vessel or Site
- Performance: a logical rollup of diagnostic data such that end user gets a “quick” look at active and non-active faults. Very similar to dashboard but is equipment specific only.
- Fleet Analytics: Provides a cross-enterprise view of a particular equipment type or model across the enterprise, enabling central experts and managers to identify fleet level issues that should be addressed at the enterprise level as well as where to prioritize resources
- Analytics: Provides access to the Asset Intelligence Business Intelligence module embedded within Asset Intelligence
- Workflow: Provides a managed and audited workflow process for reviewing data and analytic output, and translating that data into actionable maintenance recommendations which can then be entered into a third party Computerized Maintenance Management System (CMMS).
- Reports: Archive of any reports generated on equipment status
- Administration: Enables management of data processing, system configuration, file management, maintenance recommendation library, and output processing
- Security: Enables management of user roles, groups and rights, as well as audit functions

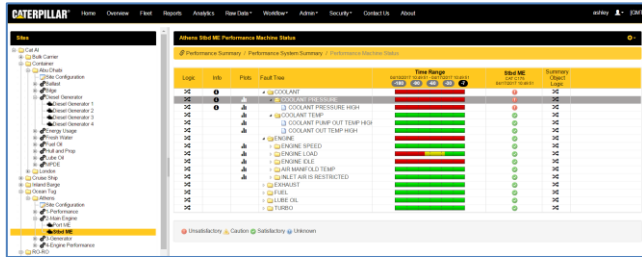
Cat Asset Intelligence SE performs the following functions:

- Data integration: Brings together data from multiple vessels or assets to be analyzed together
- Data processing: SE processes data from multiple vessels or assets as it is received and updates all of the unit and fleet analytics
- Multi-level data analysis: Enables analysis at the individual equipment level, similar equipment across the enterprise, comparison of vessels or assets across the enterprise and access to configurable reports and analysis within the Business Intelligence module
- Web-access: enables multiple users to access data and analytics from any computer connected to the internet with proper login credentials

Sample views of Asset Intelligence Shore Edition



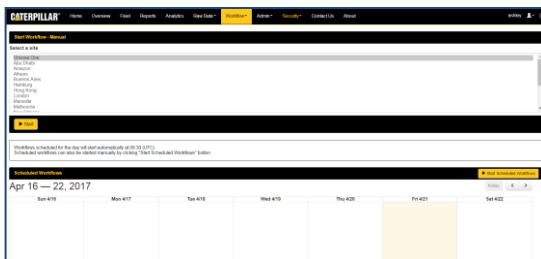
Overview screen enables enterprise level visibility into the health and performance of different vessels or assets and their major systems.



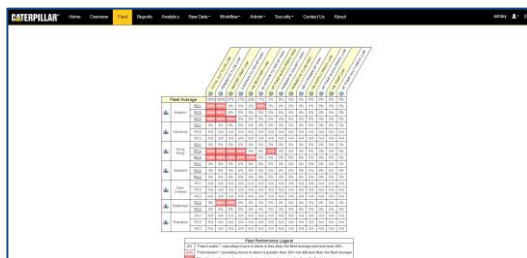
Performance Analysis enables drill down into individual equipment health and performance, with simple graphical (red/yellow/green) depiction of equipment, sub-system and failure mode/fault level over different time horizons.



Drill down capability to get to actual data for advanced troubleshooting and trend analysis. Click-and-zoom charts enable easy analysis of data and trending. Range is selectable by the user. Users can toggle between different equipment while keeping same charts displayed.



Enterprise workflow management enables review of data and analytics by subject matter experts in a timely manner. Provides standard maintenance and operations recommendations based on the fault or failure mode present. User can also add additional comments and recommendations. Can be integrated with 3rd party CMMS. Review activity and reports are maintained and auditable.



Fleet Analytics view enables cross-enterprise comparison of similar assets and equipment models by failure mode and fault. Fleet wide issues can be easily identified and addressed at the enterprise level or with the OEM instead of attempting to solve at the individual vessel or asset level.