

THE ACSIS TRACEABILITY SOLUTION



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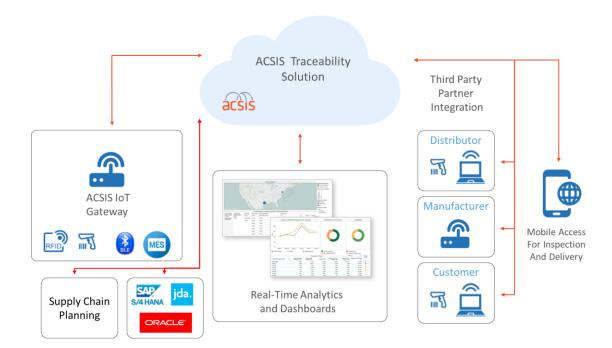
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ACSIS SOLUTION SUITE

ACSIS TRACEABILITY SOLUTION

The ACSIS Traceability Solution provides a data and process integration layer between shop floor equipment, mobile devices, and enterprise systems. It is an open system that allows for device and application independence, a workflow execution engine for process automation and event management, and a framework for building mobile transactions.



Features of the Solution include:

- Real-time integration with ERP, planning and serial number management systems.
- Ability to integrate product movement data as well other product attributes into your ERP solutions without manual intervention.
- A connector framework for seamless integration of automated data collection through barcode scanning, RFID, vision systems, low energy Bluetooth beacons and other IoT technologies.
- Serialization support in the base design.
- Access to real-time and historical posting reports, reconciliation and status reports.



ASSET TRACEABILITY SOLUTION OVERVIEW

FEATURES

Built on the ACSIS Cloud Platform, the ACSIS Traceability Solution tracks and manages serialized items such as containers and other Returnable Transport Items (RTIs) throughout their lifecycle. Standard features include:

- Creation of serialized assets and assigned status (available, returned, inspected, etc.).
- Asset location and asset groups assigned to a delivery (customer).
- Receipt of a shipment at a company owned or customer facility.
- Ability to run as a standalone system or be fully integrated with ERP systems.
- Supports integration of automated data collection equipment throughout the supply chain such as barcode scanners, RFID readers, handheld mobile devices, vision equipment, and GPS systems.

SOLUTION BENEFITS

- Tracks the location and status of the assets across the entire supply chain eliminating lost assets and controls required to only have the exact numbers of assets in circulation.
- Provides greater visibility, control, and management of assets globally from a centralized, cloud-based solution.
- Ensures accurate master data and tracking information, allowing for reduced errors, clearer traceability, and increased asset recovery rates.
- Controls maintenance and inspection activities so that assets can be proactively inspected and required maintenance planned.
- Enables collaboration with third parties.
- Reduces rush shipments and associated cost of shipping.
- Delivers transactional integration with ERP systems.
- Allows for efficient order processing, leading to improved performance, increased service levels, and competitive positioning resulting in increased revenues.
- Integration and collaboration with affiliates, outsourced services providers and customers.
- Lowers capital costs by reducing the number of assets required.

TECHNOLOGY INDEPENDENT

The ACSIS Traceability Solution automates asset management by interfacing with datacapturing technology, such as hand-held barcode scanners, wireless barcode data collection terminals or RFID reading devices. The solution can automate bulk movement of product by aggregating individual units to a shipment and supports packing of units into transport containers for shipping and receiving.



SUMMARY OF TRANSACTIONS

The standard set of transactions delivered with the solution are as follows:

Ship Assets: Allows a user to ship an asset or a group of assets from one location to another. The shipment rules for valid locations for an asset and what users are authorized to ship are handled by configurations in the solution. Status of the asset will appear in the system as "In Transit" until received at the ship-to location.

Receive Assets: Allows a shipment to be received at a location that has been pre-defined in the system. This transaction can also be automated via an inferred receipt for those locations where there is limited participation in the solution.

Check Asset Details: Allows a user to enter or scan an asset identifier and understand the status and the details of the asset.

Fill Asset: Allows an asset to be filled against a production or process order. The order information including product number, batch, and quantity along with other production attributes are updated as needed by the transaction.

Move Assets: Allows a user to move an asset within a defined facility, allowing for a more granular view of assets within the facility e.g. the system can be updated with free text location details such as "Warehouse A" or "Building 2".

Pack Assets: Allows a user to aggregate multiple assets into a single asset, container or pallet. Typically, this is used to ship or move multiple assets at one time but can also be used to define a multiple-level asset where the components need to be tracked individually.

Unpack Assets: Allows a user to selectively de-aggregate assets that are packed using the pack transaction.

Update Asset Status: Allows a user to update the asset status based upon pre-defined statuses for the asset class. This can also be used to manage assets across the system.

Manage Maintenance Types: Allows the user to configure the master data for maintenance types. A maintenance type is a set of data elements that defines a particular maintenance schedule.

Manage Asset Types: Allows the user to associate any number of maintenance types with an asset type.

Create Maintenance Record: Allows a user to record the maintenance of an asset including the date, type, technician and an optional notes or attachments.

Manage Asset Types: Allows a user to add, edit or delete asset attributes on any asset type.

Update Asset Attributes: Allows a user to update the attribute values for an asset.

Create Assets: Allows a user to create assets in the system.



Print Asset Labels: Allows a user to create an asset identifier in the system. This can be a linear or a two-dimensional barcode, an RFID tag or both. The solution can support multiple label formats for the identified asset.

Set Current

Location: Allows a user to set the location where they are currently working.

Manage Asset Data: Allows a user to update a defined asset.



Bulk Imports: Allows a user to import files for tracked assets and asset locations.

Production Confirmation: Captures the filling events on the line and sends a production order confirmation to ERP.

Other transactions can be created as part of a project implementation.

MOBILITY

The ACSIS Traceability Solution includes a native iOS and Android app to allow mobile workers to ship, receive and check the status of an asset in the field.



SAFETY AND COMPLIANCE

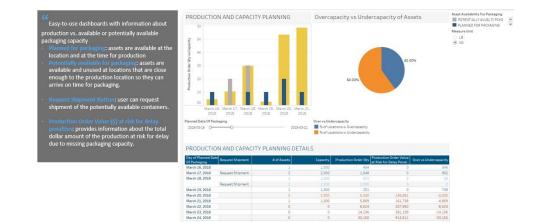
ACSIS partners with the leading companies in the industry to provide certified RFID and Barcode solutions that are able to be installed for use in hazardous areas. This covers both Class 1 Division 1 & 2 as well as ATEX certified solutions.



ACSIS TRACEABILITY SOLUTION ANALYTICS

Analytics and dashboards are provided to track and combine asset data with ERP to allow additional control of assets in the supply chain. The solution is delivered with a series of analytic dashboards that allow visualization of data from both ACSIS, ERP and other systems.





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ksset Name	Location Name	Location	Days	Maintenance	Neintenance Daratine Dava	Meintenence Duratian	maintenence	critical path*	✓ ok overbue
				Location (Doys)	DETRODUCTORYS	Lorgeon			(3) OVENDOR
Drugar Vapor 2000	57908725 - AZ DELTA	19127530-0ENERALA	0.00	43,30	15.00	58.30	199.79	141.46	
Drieger Valoer 2000	67908725 - A2 06LTA	19127630-GENERALA.	0.00	43.30	15.00	68.30	199.74	541.46	
Drager Vecer 2000	SBOLES72-Rhon KL Herz-und Gef#3k		0.00	27.40	15.00	42.40	183.83	141.43	
Drager Vapor 2000	\$800.6172-Frankl, Herp-und Gef#34		0.00	27,40	15.00	42.40	183.83	141.43	
Dreper Vecer 2000	58016172-RHon XL Herz-und Gef#3k		0.00	27.40	15.00	42.40	183.83	141.43	
Dyagar Yapor 2000	\$0016172-RHor KL Herboard Gefells		0.00	27.40	15.00	-42.4D	183.83	141.43	
Druger Vapor 2000	500L0713-KHS St. Jovef Kath, KHS-8		0.00	27.40	15.00	42.40	183.83	141.43	
Dyagar Vapor 2000	SD015290-Jppth.d Diak KHS Prede		0.00	27.40	15.00	42.40	287.63	141.43	
Drager taper 2000	68016171-Kraisonia gShoH Bach.		0.00	27.40	15.00	42.40	183.83	141.43	
Dyinger Vecor 2000	50016171-Kreiskinnik glimbH Bad N.	19127630-98hERALA	0.00	27,40	15.00	42.40	283.83	545.43	
Drager Vapor 2000	SSSC6270-Nielo-Stersen-FL Marian.		0.00	27.40	15.00	42,40	183.83	242.43	
Wager Vapor 2000	6001,6271-Kreissolvis gGrioH Bec N.	19127630-01NERALA.	0.00	27.40	15.00	42.40	183.83	141.43	
Drager Vapor 2000	60016171-Kreiskitelk gGmbH Bad N.		0.00	27.40	15.00	42.40	100.03	141.40	
Drager Vecor 2000	GB016272-Kreiskinen gSmbH Rad N.	19127630 - GENERALA	0.00	27.40	15.00	42.40	189.93	141.43	
0005 Yeaper Veger	\$8016171-Frenklink göriott Bad N	19127630-0ENERAL A.	0.00	27,40	25.00	42.40	183.83	141.43	
Imager Vacor 2000	5801.6017-Jpoth Winnium Stuttger		0.00	27.40	15.00	42.40	163.83	141.45	
Irager Vapor 2000	0028082207 Dr. 3 Kisket s/sPres. Dr.		0.00	27.40	15.00	42.40	183.82	141.42	
Traper Vapor 2000	\$501.0017-Aport- Manhum Stumper	15137530-05NERALA	0.00	27.40	15.00	42.40	183.82	141.42	
Trager Vapor 2000	EDOLGO17-Aparty: Hissinger Shattpar.	10127630-02h02ALA	0.00	27.40	15.00	42.40	163.82	141.42	
Dragar Tapor 2000	\$9006017-Apoth Minikum Stuttgar	19127630-08NBRAL &	0.00	27.40	15.00	42.40	183.82	141.42	
Prager Vapor 2000	55018017-Apoth Riskham Stuttger	19127630 - 01/1874LA	0.00	27.40	15.00	47.40	183.82	141.42	
Drager Vapor 2000	SDCLCCLT-Apoch, Killshum Stumper.	19127630 - GENERAL A	0.00	27.40	15.00	42.40	192.92	242.42	
Drager Vacor 2000	50016017-apoth Klinikum Stattgar		0.00	27.40	15.00	42.40	283.62	343.42	
Demoner Vietner 2000	GB01 G01 7-Epoth #Holisum Stuttage		0.00	27.60	15.00	42.60	182.82	545.42	

- "Best Case Scenario for Maintenance Compliance: The chart shows all Assets per asset type and their status according to maintenance compliance The compliance is calculated taking into account:
 1. How many days remain until next due maintenance
 2. The expected maintenance duration (base do nistorical data for maintenance at the "best maintenance location" for the asset type)
 3. Expected transport duration to "best maintenance cation" for the asset type based on historical or estimated movement data. The estimated movement data is configured by the client based on experience
 4. (in case that the asset has been shipped and is in transit) The time until the asset arrives



REPORTS

There are many standard reports delivered with the base system.

All reports can be exported to a number of different formats including MS Excel, CSV, PDF, XML or MS Word formats.

The following reports are standard and delivered with the base solution:

- Asset History view information associated with an asset.
- Asset Location Status Details view the location of an asset.
- Asset Parent Location Details view the parent location for a selected asset.
- Asset Status Details view the status of an asset.
- Asset Travel History view the movement history of the asset.
- Container Contents view the contents of a designated container.
- Asset in Transit Report view assets that have been shipped and not received at the designated location.
- *Maintenance Compliance Report* view assets that are out of compliance or will be in the future.
- Asset Details Report view detailed information associated with an asset.
- *Territory Asset Status Details* view details of all assets in a selected territory.
- Global Asset History view all events associated with an asset.
- Territory Asset Location Status Details view details of an asset in a specific territory.
- Global Asset Travel History view the global movement of an asset.
- *Territory Asset Travel History* view the details of movement of an asset based on the selected date range.
- Global Asset Status Details Report view option details for one or more status types.
- *Territory Asset History Report* view all events associated with an asset.
- Global Asset Location Status Details Report view the history of locations for an asset.
- *Global Asset in Transit Report* view global assets that have been shipped and not received at the designated location.
- *Territorial Asset in Transit Report* view territorial assets that have been shipped and not received at the designated location.

Other reports can be created as part of a project implementation.