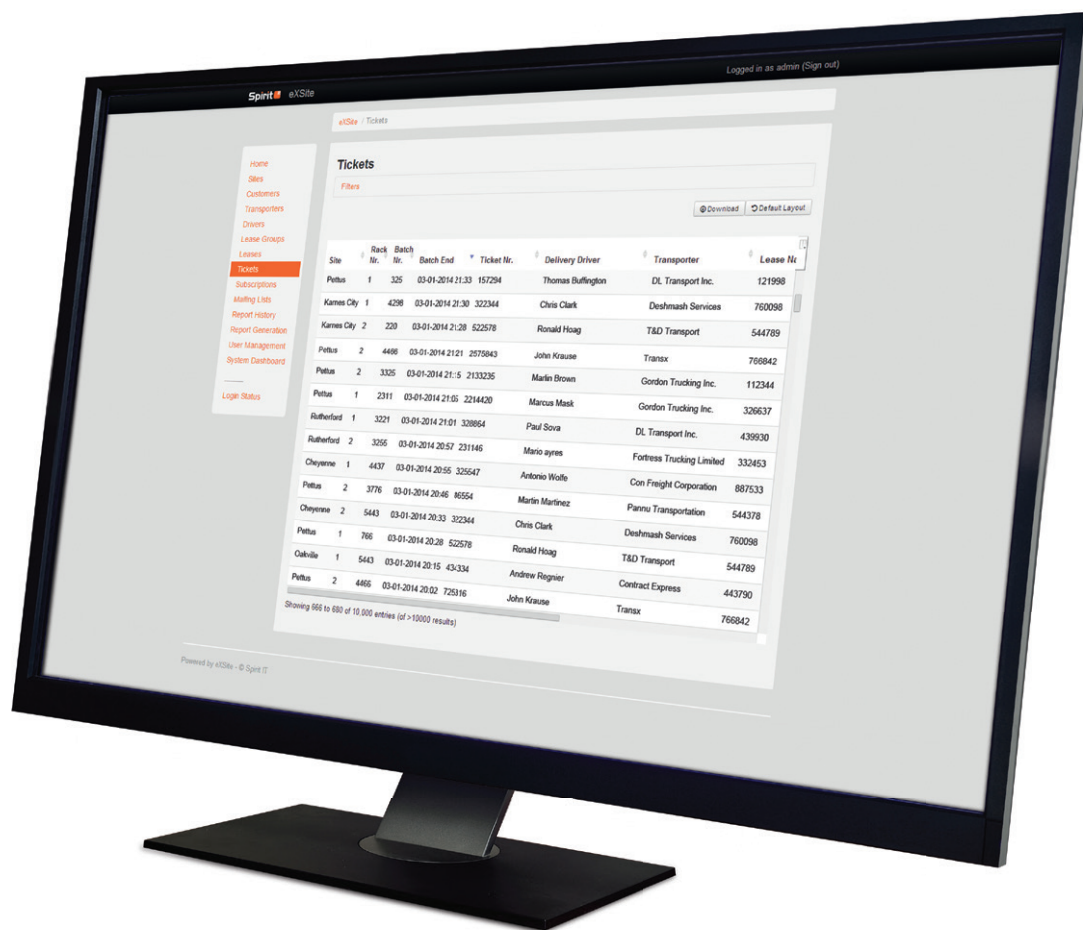


# PRODUCT DESCRIPTION

## eXSite™

### COMPLETE AUTOMATION SOLUTION FOR CRUDE OIL TICKETING





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eXSite is specifically made to automate and regulate the movement of crude oil from the production area to gathering facilities and oil terminals. Field run and LACT tickets are almost instantly available to the back office and automatically emailed to customers.

### **BENEFITS**

- ✓ *Real-time data directly from the drivers to the back office*
- ✓ *True flow computers for accurate and undisputable invoicing data*
- ✓ *Reduced data errors with electronic run tickets*
- ✓ *Automatic data exporting to customers*
- ✓ *Driver management directly by transporter / customer*
- ✓ *Bad driver alerting*

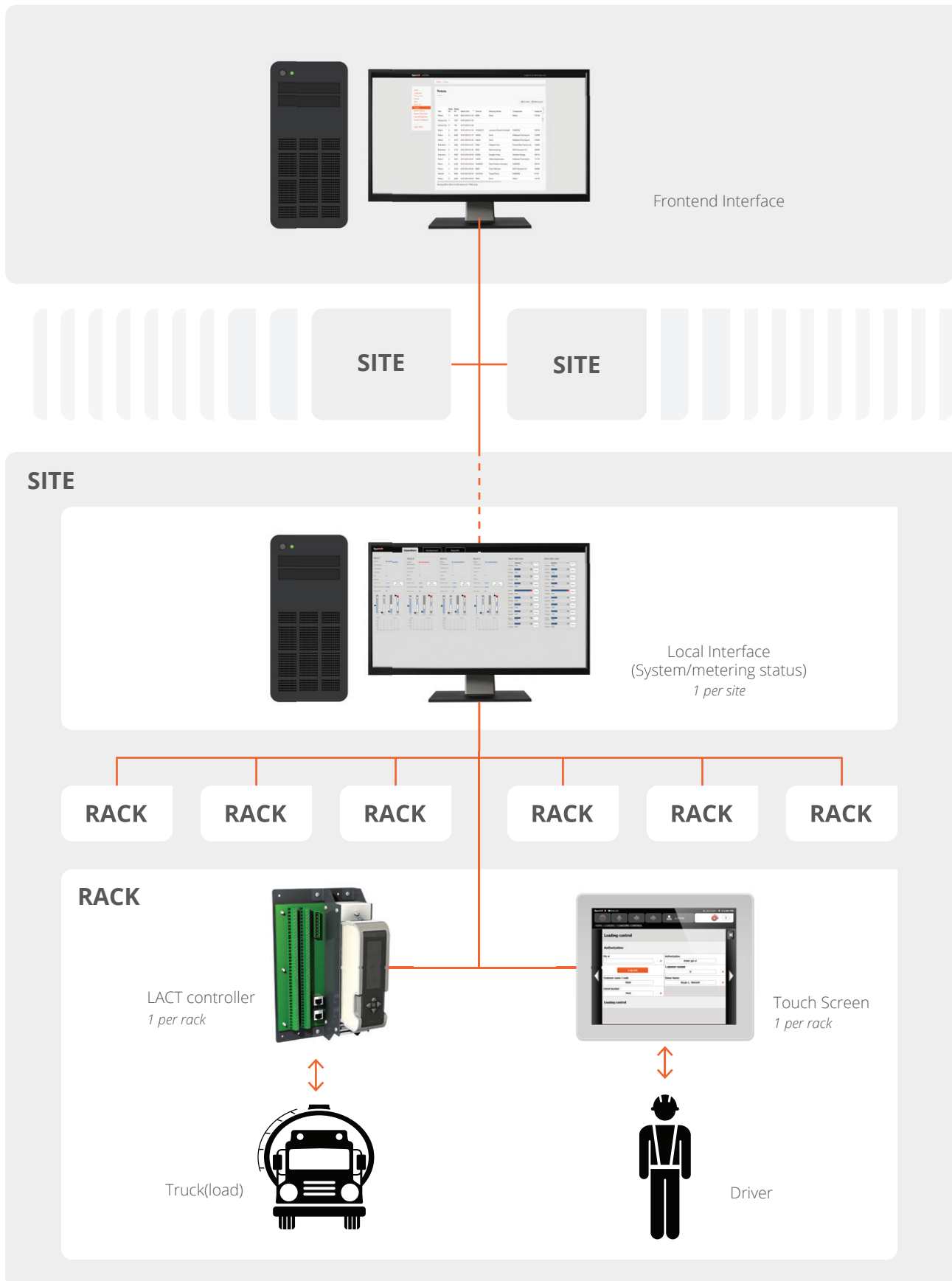
### **APPLICATIONS**

- ✓ *Crude gathering facilities*
- ✓ *Transloader operations*
- ✓ *Pipeline LACT's*

### **FEATURES**

- ✓ *Intuitive touch screen operation*
- ✓ *Automatic driver authorization*
- ✓ *Lockout on high water cut*
- ✓ *10 sample pots per rack*
- ✓ *4 split loads per delivery*
- ✓ *Real-time overview dashboard*
- ✓ *Secure web portal*
- ✓ *Remote access to LACT sites*
- ✓ *Automatic customer reporting*
- ✓ *Data export to accounting systems*
- ✓ *Driver bulk edits*
- ✓ *Customized Trending of measurement data*
- ✓ *Advanced smart meter diagnostics*

# EXSITE COMPONENTS



# 1 LACT CONTROLLER

The LACT Controller is based on our Flow-X product series that provides all benefits of a true flow computer.



## Physical

### Weight

0,8 kg / 1.7 lbs

### Dimensions (w x h x d)

50 x 166 x 115 mm  
2.0 x 6.5 x 4.5 inch

## System

### Processors

32-bit microprocessor with math coprocessor and FPGA.

### Memory

1 GB on-board memory for time-stamped data, report archive and audit trail

### Clock

RTC 2 PPM, with internal lithium cell, Accuracy better than 1 s/day

### Watchdog

Watchdog timer for general protection of the flow computer correct operation

## Display & buttons

### Display type

Graphical 196 x 64 pixel  
LCD, White LED,  
100 step dimmable

### Buttons

4 navigation buttons

## I/O per Flow-X/M

Analog inputs	6*	Analog transmitter input, high accuracy. Input types are 4-20mA, 0-20mA, 0-5V, 1-5V. Accuracy 0.002% FS at 21°C, 0.008% at full ambient range of 0-60°C, resolution 24 bits. Inputs are fully floating (optically isolated).
4-wire PRT inputs	2	Resolution 0.02 °C for 100 ohms input. Error depending on range: 0 - 50 °C: Error <0.05 °C or better. -220 - +220 °C: Error <0.5 °C or better.
HART	4*	Independent HART loop inputs, on top of 4-20 mA signals. Support includes multi-drop for each transmitter loop, as well as support for redundant FC operation.
Analog outputs	4	Analog output for flow control, pressure control 4-20mA, outputs floating. Resolution 14 bits, 0.075% FS.
Pulse Inputs	1	Single or dual pulse input. Adjustable trigger level at various voltages. Frequency range up to 1MHz. Compliant with ISO6551, IP252, and API 5.5. True Level A and level B implementation.
Density/viscosity	4**	Periodic time input, 100µs - 5000µs. Resolution < 1ns.
Digital inputs	16**	Digital status inputs. Resolution 100ns (10MHz)
Digital outputs	16**	Digital output, open collector (0.5A DC). Rating 100mA @24V.
Pulse outputs	4**	Open collector, max. 10Hz
Sphere detector inputs	4**	Supports 1, 2 and 4 detector configurations mode. Resolution 100ns (10MHz)
Prover bus outputs	2**	Pulse outputs for remote proving flow computers. Resolution 100ns (1MHz).
Frequency outputs	4**	Frequency outputs for emulation of flow meter signals. Maximum frequency 10KHz, accuracy 0.1%.
Serial	2	RS485/RS232 serial input for ultrasonic meter, printer or generic, 115kb
Ethernet	2	RJ45 Ethernet interface, TCP/IP

\* Analog input = 6 (of which 4 support HART)

\*\* Total number of digital inputs + digital outputs + pulse outputs + density inputs + sphere detector inputs + Prover bus outputs + Frequency outputs = 16

The next-generation Flow-X hardware platform delivers top-of-the-range quality in a highly compact design.



The Flow-X is the most accurate flow computer on the market.



The Flow-X supports personalized user access to allow secure user access control.



Log files keep track of all user activities. This gives Flow-X a unique level of traceability and auditability.

The Flow-X offers a good Modbus I/O expansion, so you are not only limited to the I/O of the Flow-X, but you can expand to the amount of I/O that is needed for your installation.

# 1 LACT CONTROLLER

## FLOW-X ENCLOSURES

The Flow-X/M can be installed in any of the following enclosures:



### Flow-X/S

- ✓ *Single stream*
- ✓ *2x 39 terminals for IO*



### Flow-X/P

- ✓ *Panel mounted flow computer for up to four streams with a color touch screen*
- ✓ *2x 37-pin DSub connectors for IO per module*



### Flow-X/R

- ✓ *Rack model for up to 8 streams*
- ✓ *2x 37-pin DSub connectors for IO per moduler*



### Flow-X/K

- ✓ *Single stream*
- ✓ *2x 39-pin DSub connectors for IO*

Optionally, Flow-X/B breakout boards can be installed allowing for easy integration.

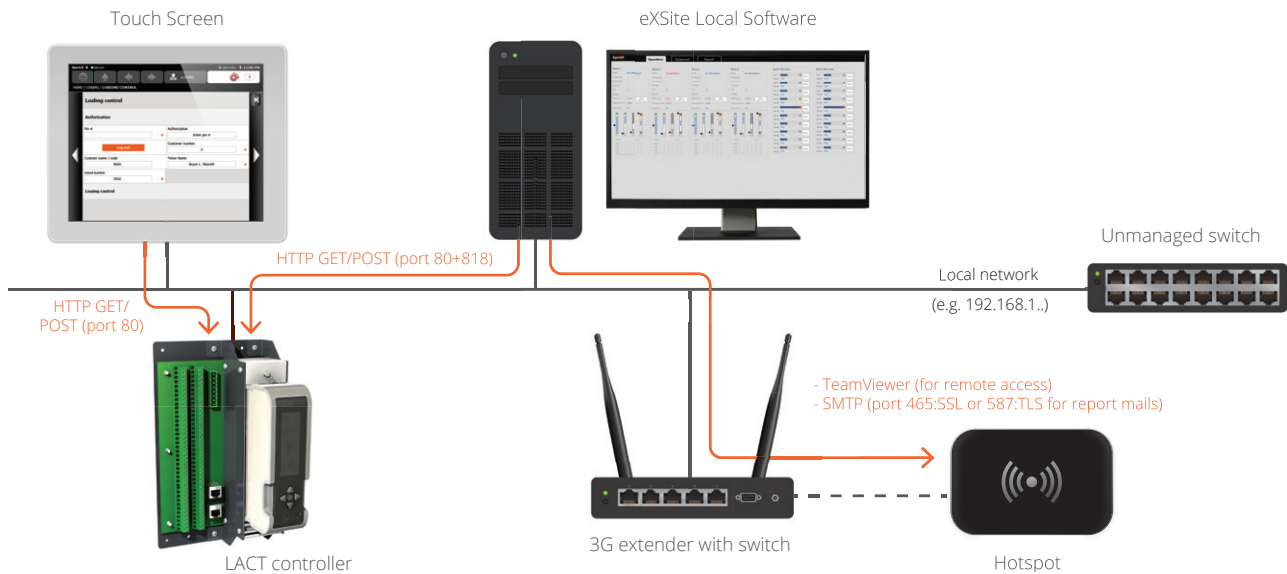


# 1 LACT CONTROLLER

## FEATURES

- ✓ **True flow computer**  
API MPMS Chapter 11 volume conversions.  
API MPMS Chapter 12 meter tickets and proving reports.  
API MPMS Chapter 21 flow computations  
Highest accuracy, best security and traceability.
- ✓ **Electronic run tickets**  
Run ticket data can be entered on the local touch screen.
- ✓ **Driver authorization**  
Only authorized drivers are allowed to offload.
- ✓ **Water cut lock**  
Provided that the rack is equipped with a water cut meter, the Flow-X LACT controller continuously monitors the measured water cut. When the water cut gets above the limit for a certain amount of time, the offload is stopped automatically. The driver can restart the offload, but if the water cut is again above the limit then the offload is aborted and the driver is locked out for offloading to any rack at the facility,
- ✓ **Up to 16 sample pots**  
Up to 16 sampling pots are supported per rack with separate flow weighted averages and totalizers.
- ✓ **Automatic pot selection**  
Pot selection is based on the transporting company.
- ✓ **Aggregate batch data**  
Up to 4 sets of aggregate batch data are available. Batch data may be reset every day, month or on scheduled dates.
- ✓ **Split loads**  
Each delivery may consist of up to 4 split loads, with each split load having its own run ticket data.
- ✓ **Loading permissives**  
Loading permissive may be based on:
  - truck ground detection signal
  - 2 additional hardwired signals
  - driver verification
  - meter active state
  - 3 custom permissive conditions
  - BS&W lock
  - driver run ticket data valid
- ✓ **Booster pump control**  
Based on 5 analog output set-points with 4 switch points. Switching is based on either flow rate or gravity.
- ✓ **Lease number verification**  
The lease number by the driver is verified against a master list.
- ✓ **24 additional driver entries**  
User definable fields for driver entry, in addition to the standard driver entries.
- ✓ **Pump stop on no or suspicious flow**  
Configurable output signals for high water cut and meter failure alarms.
- ✓ **Alarm output signals**  
Configurable output signals for high water cut and meter failure alarm.
- ✓ **Transloader function**  
Enables data points for buyer, seller, transloader and railcar number on displays and reports.
- ✓ **Shakeout based recalculations**  
Tickets can be corrected for gravity and water cut values resulting from shakeouts.
- ✓ **Driver entry validation**  
Data entered by the driver are validated against configurable limits.
- ✓ **Divert valve control**  
Automatically diverts product into a slop tank on high water cut. There is also the possibility to divert product of separate gravity ranges into different tanks.
- ✓ **Production tank level**  
Monitor and report production tank levels. Start and stop gathering LACT based on tank levels.
- ✓ **BOL and ticket printing**  
Supports network printing to thermal and laser ticket printers.
- ✓ **Standard modbus comms**  
Easily customized Modbus communications for interface with a local control system or a SCADA system.

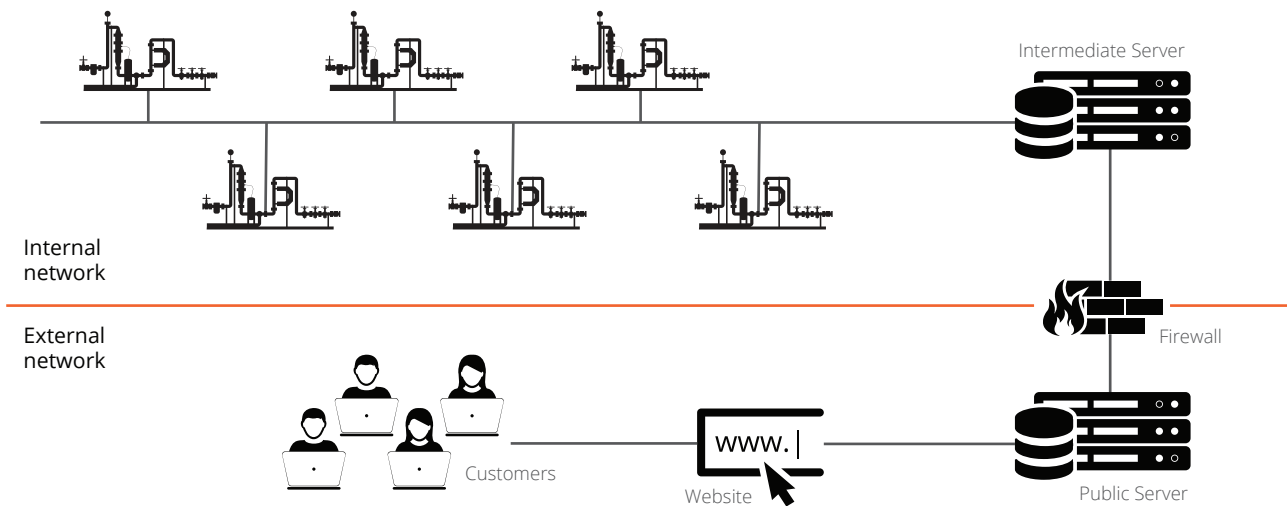
# LOCAL CONTROL SYSTEM



Each facility has its own local control system composed of an eXSite PC as well as a Flow-X LACT controller and HMI touch screen at each loading rack. The touch screen is the interface for the truck drivers, while local personal at the facility can manage and operate the system from the 'eXSite' PC.

Remote connectivity is typically provided by a satellite link (not included).

# CORPORATE MANAGEMENT SYSTEM



At the corporate level eXSite consists of two servers. The Intermediate Server resides within the internal network and communicates with eXSite local computers at the different facilities. The Public Server provides external access for customers and transporting companies such that they can review their particular ticket and report data and/or update drivers. The Intermediate and Public Servers synchronize their data with each other.

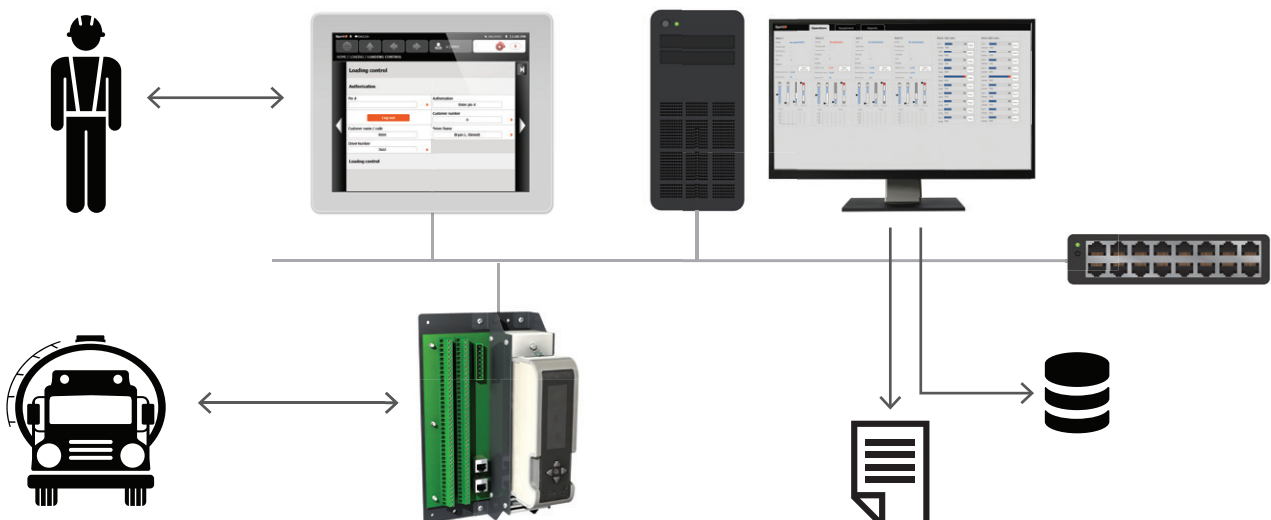
*Note: When external systems are not allowed to dial-in to the local facilities, the system can be set up such that the local sites call in to the Intermediate Server to set up a connection instead of the other way round.*



# OFFLOAD PROCEDURE

eXSite supports the following standard offload procedure:

1. The truck driver logs on to the loading rack through the touch screen at the loading rack.
2. eXSite checks if the driver credentials exist in the driver database, which resides on the local eXSite PC. If not, then the log-on is rejected. Additionally, lease ID verification can be present.
3. Once the driver is logged on, eXSite checks if the driver is allowed to offload to this rack. If not, then the driver is instructed to go to the appropriate rack at the facility, if any.
4. The driver enters the run ticket data. Entered values are validated against low and high limits.
5. When the truck contains oil from multiple wells, then separate data can be entered for each split load. eXSite supports up to 4 split loads per delivery.
6. Once all ticket data is entered and validated, the driver may start the offload provided that all permissives are set. The LACT controller starts the booster pump, flushes the sampler and opens the valve to the appropriate sampling pot.
7. During the offload the water cut is monitored. If the water cut is too high then the pump is stopped automatically. The driver can restart the loading, but when the water cut gets too high again the offloading is aborted and the driver is locked out from further offloading. The lockout holds for all the loading racks at the facility. The lockout can be reset by the facility manager or the back-office or automatically after a configurable amount of time.
8. At the end of the offload the driver stops the loading, which in effect stops the booster pump. At any time during the offload the driver may stop and restart the pump.
9. If applicable, the driver enters shakeout data (API gravity and water cut) for recalculation of the net standard volume.
10. The driver gives the command to print the LACT ticket. Both the run ticket information and the LACT ticket are stored to the local eXSite database.
11. In case of the optional eXSite Corporate system the run and LACT ticket information is also automatically transferred to the central database.
12. The driver logs off or is automatically logged off after a configurable timeout period.



# RUN TICKET DATA

eXSite maintains the following electronic run ticket data for each delivery.

## Truck information

- ✓ Load number
- ✓ Number of tickets
- ✓ Truck driver number
- ✓ Truck driver name
- ✓ Trucking company
- ✓ Truck number
- ✓ Trailer number

## Run ticket data <sup>(1)</sup>

- ✓ Lease operator name
- ✓ Lease name
- ✓ Lease number <sup>(2)</sup>
- ✓ Truck ticket number
- ✓ For the account of
- ✓ Driver observed volume
- ✓ Driver standard volume
- ✓ Driver net volume
- ✓ Driver BS&W
- ✓ Driver observed gravity
- ✓ Driver atmospheric pressure
- ✓ Driver observed temperature
- ✓ Range check <sup>(3)</sup>

## Customer information

- ✓ Customer number
- ✓ Customer name
- ✓ Confirmation number

## Destination information

- ✓ Destination ID
- ✓ Tank / Railcar ID
- ✓ Tank / Railcar Size
- ✓ Split load (yes/no)

## Transloader information

- ✓ Transloader ID
- ✓ Transloader operator
- ✓ Ticket operator

## Sampling information

- ✓ Sample can number

## User-definable fields <sup>(4)</sup>

- ✓ 24 entry and 24 calculation data points

## Notes

1. eXSite supports up to 4 split loads per delivery with each split load having its own ticket data
2. The lease number entered by the driver is verified against a master list. The driver gets a warning when the lease number is not in the master list. The warning may be overruled by the driver.
3. A range check is applied on the data entered by the driver. The driver gets a warning when a value is out of range. When the driver overrules the warning, then the out-of-range value is accepted and the 'Range check' field is set to 1.
4. The system supports 24 additional data points for the truck driver to enter and also 24 additional calculated data points in addition.

# LACT TICKET DATA

eXSite generates the following LACT related data for each delivery.

✓	<b>Start</b>	<i>Date and time at the begin of loading</i>
✓	<b>Stop</b>	<i>Date and time at the end of loading</i>
✓	<b>Rack Number</b>	<i>Number of the rack</i>
✓	<b>Batch Number</b>	<i>Number of the batch</i>
✓	<b>Site</b>	<i>Name of the facility</i>
✓	<b>IV Begin</b>	<i>Indicated volume at the begin of loading</i>
✓	<b>IV End</b>	<i>Indicated volume at the end of loading</i>
✓	<b>IV Batch</b>	<i>Indicated volume of the loading</i>
✓	<b>GSV Begin</b>	<i>Gross Standard volume at the begin of loading</i>
✓	<b>GSV End</b>	<i>Gross Standard volume at the end of loading</i>
✓	<b>GSV Batch</b>	<i>Gross Standard volume of the loading</i>
✓	<b>NSV Begin</b>	<i>Net Standard volume at the begin of loading</i>
✓	<b>NSV End</b>	<i>Net Standard volume at the end of loading</i>
✓	<b>NSV Batch</b>	<i>Net Standard volume of the loading</i>
✓	<b>Temperature</b>	<i>Flow weighted average temperature during the loading</i>
✓	<b>Pressure</b>	<i>Flow weighted average pressure during the loading</i>
✓	<b>Meter Factor</b>	<i>Flow weighted average meter factor during the loading</i>
✓	<b>CTL</b>	<i>Flow weighted average Ctl during the loading</i>
✓	<b>CPL</b>	<i>Flow weighted average Cpl during the loading</i>
✓	<b>CTPL</b>	<i>Flow weighted average Ctpl during the loading</i>
✓	<b>BS&amp;W</b>	<i>Flow weighted average water cut during the loading</i>
✓	<b>Density 60F</b>	<i>Flow weighted average density at 60°F and 0 psig during the loading</i>
✓	<b>API 60F</b>	<i>Flow weighted average API gravity at 60°F and 0 psig during the loading</i>
✓	<b>Totalizer Before</b>	<i>Mass totalizer as read from the Coriolis flow meter at the begin of loading</i>
✓	<b>Totalizer After</b>	<i>Mass totalizer as read from the Coriolis flow meter at the end of loading</i>

# TRANSACTION RECORD

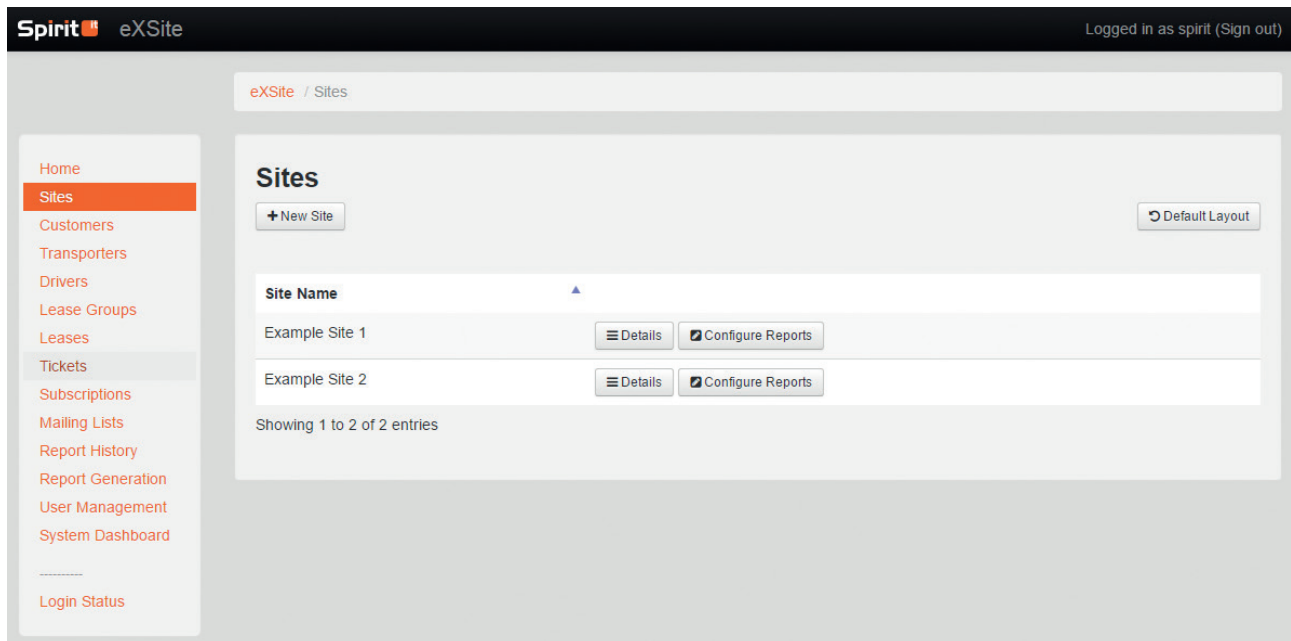
The data from run and LACT tickets are combined to create a single transaction record.

Optionally, custom data analysis and exception reporting for data that are outside user/customer defined limits can be provided.

## 3 EXSITE CORPORATE

### SITES

Within eXSite a **Site** represents a confined area, like an oil gathering facility, where a number of LACT racks are located.



Each site has a unique IP subnet for all the related LACT controllers.

### RACKS

Within eXSite a Rack represents a loading rack, which is also referred to as a LACT (Lease Automatic Custody Transfer).

The screenshot shows the 'Site details' page for 'Example Site 1'. The page includes an 'Edit' button and a 'Delete' button. Below this is a 'Racks' section with an 'Add Rack' button and a 'Default Layout' button. A table lists two racks with columns for 'Rack Number', 'Flow-X IP address', and 'Customer'. Each rack entry has a 'Details' button. The table indicates 'Showing 1 to 2 of 2 entries'. Below the racks is an 'Events' section with a table that has columns for 'Category', 'Message', 'Location', and 'Timestamp'. The message column shows 'No events'. Four red arrows point from text annotations to specific elements on the page: one to the 'Site details' title, one to the 'Flow-X IP address' column, one to the 'Customer' column, and one to the 'Events' section.

*Racks can be configured on the 'Site details' display.*

*The LACT controller of each loading rack has a unique IP address that needs to be on the IP subnet of the corresponding Site.*

*Each Rack is assigned to one Customer.*

*The 'Site details' display also shows significant events related to the rack.*



## SAMPLE POTS

Each rack can have up to 10 sample pots and each pot can be assigned to one or more Transporters.

The screenshot shows the 'Rack' page in the eXSite application. The left sidebar contains a navigation menu with 'Sites' highlighted. The main content area has a breadcrumb 'eXSite / Sites' and a 'Back to Site' button. The 'Rack' section displays details for Rack Number 1, Customer A, and Flow-X IP address 10.0.20.100, with 'Edit' and 'Delete' buttons. Below this is the 'Pot Assignments' section with an 'Add Assignment' button and a 'Default Layout' button. A table lists three pot assignments:

Pot	Transporter Name	Lease Group Name	
1	Transporter 1	Americas, Asia	<a href="#">Details</a>
2	Transporter 1	Americas	<a href="#">Details</a>
3	Transporter 2	Europe	<a href="#">Details</a>

Showing 1 to 3 of 3 entries

## CUSTOMERS

Within eXSite a Customer represents an oil company that buys the crude oil delivered to one or more LACT racks.

The screenshot shows the 'Customers' page in the eXSite application. The left sidebar has 'Customers' highlighted. The main content area has a breadcrumb 'eXSite / Customers' and a 'New Customer' button. The 'Customers' section displays a list of two customers:

Customer Name	
Customer A	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Configure Reports</a> <a href="#">Delete</a>
Customer B	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Configure Reports</a> <a href="#">Delete</a>

Showing 1 to 2 of 2 entries

## 3 EXSITE CORPORATE

### TRANSPORTERS

A **Transporter** represents a transporting company that hauls crude for one or more Customers. Each Transporter has its own list of drivers.

The screenshot shows the eXSite web application interface for managing transporters. The top navigation bar includes the Spirit logo, eXSite text, and a user login status 'Logged in as spirit (Sign out)'. A breadcrumb trail shows 'eXSite / Transporters'. A left sidebar contains a menu with options: Home, Sites, Customers, Transporters (highlighted), Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Transporters' and features a '+ New Transporter' button and a 'Default Layout' button. Below these is a table with two columns: 'Transporter Name' and 'Customers'. The table contains two entries: 'Transporter 1' associated with 'Customer A', and 'Transporter 2' associated with 'Customer A, Customer B'. Each entry has four action buttons: 'Edit', 'Delete', 'Edit Drivers', and 'Configure Reports'. At the bottom of the table, it says 'Showing 1 to 2 of 2 entries'.

Transporter Name	Customers	Edit	Delete	Edit Drivers	Configure Reports
Transporter 1	Customer A	[Edit]	[Delete]	[Edit Drivers]	[Configure Reports]
Transporter 2	Customer A, Customer B	[Edit]	[Delete]	[Edit Drivers]	[Configure Reports]

### DRIVER BULK EDITS

Bulk edits on Transporter level are accommodated via the import & export feature on the Transporters display.

The screenshot shows the 'Import/export drivers' section of the eXSite web application. The top navigation bar and sidebar are identical to the previous screenshot. The main content area is titled 'Import/export drivers' and includes instructions: 'Edit the list of drivers below, one driver per line, each line as: <pin code><TAB><driver name>, then click "Import".' and a tip: 'Tip: you can copy & paste the list to e.g. Excel.' Below the instructions, there is a section for 'Transporter 1' with a text area containing a list of drivers: '6548 Ernest Hemingway', '1234 George Orwell', '8793 James Joyce', and '6351 William Shakespeare'. An 'Import' button is located at the bottom left of the text area.

Transporter 1

6548	Ernest Hemingway
1234	George Orwell
8793	James Joyce
6351	William Shakespeare

With eXSite Customers and Transporters can maintain the driver database themselves without involvement of the Company.

## DRIVERS

eXSite keeps a list of truck **drivers** that is defined either at corporate level through the Public Server or, in case the optional eXSite Corporate is not available, locally at each facility with the local eXSite PC.

The screenshot shows the eXSite web interface. At the top, there's a header with the 'Spirit eXSite' logo and a user status 'Logged in as spirit (Sign out)'. Below the header, a breadcrumb trail reads 'eXSite / Transporters'. The left sidebar contains a list of navigation links: Home, Sites, Customers, Transporters (highlighted), Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Import/export drivers'. It contains instructions: 'Edit the list of drivers below, one driver per line, each line as: <pin code><TAB><driver name>, then click "Import".' and a tip: 'Tip: you can copy & paste the list to e.g. Excel.' Below this, there's a section for 'Transporter 1' which contains a table with four rows of driver data. At the bottom of the main content area is an 'Import' button.

Transporter 1	
6548	Ernest Hemingway
1234	George Orwell
8793	James Joyce
6351	William Shakespeare

A driver has a name, an optional number, a PIN code for logging on the LACT controller and is assigned to a **Transporter**. eXSite uses the following relationships to control which driver has access to which loading rack.

- ✓ A driver is assigned to a single transporting company.
- ✓ Each loading rack has one or more sampling pots.
- ✓ Each sampling pot is assigned to one or more transporting companies.
- ✓ Optionally, each sampling pot is assigned to one or more lease groups.

When a driver logs on to a loading rack, eXSite first checks if the driver is known by the system. Optionally, the system can be configured to require a lease ID to be entered as well. Then the system checks if the loading rack has a sampling pot assigned to the transporting company and, if applicable, whether the lease group of which the lease is part is part of the assignment as well. If this is the case, then the driver can start the offload.

## 3 EXSITE CORPORATE

### LEASE GROUPS

A **Lease Group** represents a set of leases, typically used to identify a set served by a single driver. Each lease group holds a list of leases.

The screenshot shows the eXSite web application interface for managing Lease Groups. The top navigation bar includes the Spirit logo, eXSite text, and a login status indicator 'Logged in as spirit (Sign out)'. The breadcrumb trail is 'eXSite / Lease Groups'. A left sidebar contains a menu with items: Home, Sites, Customers, Transporters, Drivers, Lease Groups (highlighted), Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Lease groups' and features a '+ New Lease Group' button and a 'Default Layout' button. Below this is a table with the following data:

Lease Group Name		
Americas	<a href="#">Edit</a>	<a href="#">Delete</a> <a href="#">Edit Leases</a>
Asia	<a href="#">Edit</a>	<a href="#">Delete</a> <a href="#">Edit Leases</a>
Europe	<a href="#">Edit</a>	<a href="#">Delete</a> <a href="#">Edit Leases</a>

Showing 1 to 3 of 3 entries

### LEASES

eXSite keeps a list of **leases** that is defined either at corporate level through the Public Server or, in case the optional eXSite Corporate is not available, locally at each facility with the local eXSite PC.

The screenshot shows the eXSite web application interface for managing Leases. The top navigation bar includes the Spirit logo, eXSite text, and a login status indicator 'Logged in as spirit (Sign out)'. The breadcrumb trail is 'eXSite / Leases'. A left sidebar contains a menu with items: Home, Sites, Customers, Transporters, Drivers, Lease Groups, Leases (highlighted), Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Leases' and features search filters for 'Lease Name' and 'Lease ID Code', a 'Filter' button, a '+ New Lease' button, and a 'Default Layout' button. Below this is a table with the following data:

Lease Name	Lease Number	Lease ID Code	Lease Group	
USA		1	Americas	<a href="#">Edit</a> <a href="#">Delete</a>
Netherlands		31	Europe	<a href="#">Edit</a> <a href="#">Delete</a>
Germany		49	Europe	<a href="#">Edit</a> <a href="#">Delete</a>
Mexico		52	Americas	<a href="#">Edit</a> <a href="#">Delete</a>
Argentina		54	Americas	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 5 of 5 entries

A lease has a name, an optional number, a Lease ID code for identification on the LACT controller and is assigned to a **Lease Group**.



## LEASE BULK EDITS

Bulk edits on Lease Group level are accommodated via the import & export feature on the Lease Groups display.

Spirit eXSite Logged in as spirit (Sign out)

eXSite / Lease Groups

### Import/export leases

Edit the list of leases below, one lease per line, each line as: <Lease ID number (lin) code><TAB><lease name>, then click "Import".

Tip: you can copy & paste the list to e.g. Excel.

**Lease Group**  
Americas

Lease ID number (lin)	code	lease name
54	Argentina	
55	Brasil	
52	Mexico	
1	USA	

Import

With eXSite Customers and Transporters can maintain the lease database themselves without involvement of the Company.

## SUBSCRIPTIONS

Subscriptions of users to reports are defined as by assigning one or more reports to a mailing list.

Spirit eXSite Logged in as spirit (Sign out)

eXSite / Subscriptions

### Email Subscriptions

+ New Subscription Default Layout

Name	File Formats	Email List	Report Instances	
Daily Tickets All	csv	Spirit IT	Daily Tickets, Daily Summary	Details Delete
Totals Summary	csv	Spirit IT	Monthly Summary, Daily Summary	Details Delete

Showing 1 to 2 of 2 entries

# 3 EXSITE CORPORATE

## MAILING LISTS

eXSite provides flexible mailing lists definitions with lists and sub lists.

Spirit eXSite

Logged in as spirit (Sign out)

eXSite / Mailing Lists

Home

Sites

Customers

Transporters

Drivers

Lease Groups

Leases

Tickets

Subscriptions

**Mailing Lists**

Report History

Report Generation

User Management

System Dashboard

-----

Login Status

Mail Lists

+ Add Mail List

Default Layout

Name	Sub List	User Group		
Transporter 1	All Transporters	Transporter Transporter 1	Details	Delete
Transporter 2	All Transporters	Transporter Transporter 2	Details	Delete
Customer A	All Customers	Customer Customer A	Details	Delete
Customer B	All Customers	Customer Customer B	Details	Delete
All Transporters	Spirit IT		Details	Delete

Showing 1 to 5 of 5 entries

## SITE REPORTS

A separate report can be configured for each site.

The screenshot shows the Spirit eXSite web application interface. At the top, the header includes the Spirit logo and 'eXSite' text, with a user login status 'Logged in as spirit (Sign out)'. A breadcrumb trail shows 'eXSite / Sites'. On the left is a navigation menu with links: Home, Sites (highlighted), Customers, Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and a Login Status link. The main content area is titled 'Configure Site Filter Report for Example Site 1'. It contains three dropdown menus: 'Periods' with options 'Daily', 'Month', and 'Daily Cumulative'; 'Transporters' with options 'Transporter 1' and 'Transporter 2'; and 'Email List' with the option 'Spirit IT'. A 'Save' button is located at the bottom of the configuration area.

eXSite supports the following reports for Sites:

- ✓ **Daily** *Contains ticket data of all loadings finished during a day for the respective site and for the selected transporters. Generated once a day.*
- ✓ **Monthly** *Contains ticket data aggregated for the previous month for the respective site and for the selected transporters. Generated once every month at the first day of the month.*
- ✓ **Daily cumulative** *Contains ticket data of all loadings of the current month for the respective site and for the selected transporters. Generated once a day.*  
*Note: At the first day of the new month the 'Cumulative daily' report contains data of all loadings of the previous month .*

The reports are stored as a CSV (Comma Separated Value) files and automatically sent to the selected email list.

# 3 EXSITE CORPORATE

## CUSTOMER REPORTS

Customers can select one of the available reports that will be automatically emailed to a particular email list. The reports only contain data of the specific customer.

The screenshot shows the eXSite Corporate web application. At the top, there's a header with the Spirit logo and 'eXSite' text, and a user status 'Logged in as spirit (Sign out)'. Below the header, a breadcrumb trail reads 'eXSite / Customers'. On the left, a sidebar menu lists various options: Home, Sites, Customers (highlighted), Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Configure Customer Report for Customer A'. It contains a 'Periods' dropdown menu with options 'Daily', 'Month', and 'Daily Cumulative'. Below this is an 'Email List' dropdown menu with 'Customer A' selected. A 'Save' button is at the bottom of the form.

eXSite provides the following reports for Customers:

- ✓ **Daily** *Contains ticket data of all loadings of the day for the respective customer. Generated once a day. A separate report is generated for each site.*
- ✓ **Month** *Contains ticket data aggregated for the previous month for the respective customer. Generated once every month at the first day of the month. A separate report is generated for each site.*
- ✓ **Daily cumulative** *Contains ticket data of all loadings of the current month for the respective customer. Generated once a day. A separate report is generated for each site.  
Note: At the first day of the new month the 'Cumulative daily' report contains data of all loadings of the previous month.*

The reports are stored as a CSV (Comma Separated Value) files and automatically sent to the selected email list.



## TRANSPORTER REPORTS

A Transporter can configure reports containing ticket data for crude that is hauled by drivers of the particular transporting company. Reports will be emailed automatically to the assigned mailing lists.

The screenshot shows the eXSite web application interface. At the top, there is a header with the Spirit logo and 'eXSite' text, and a user status 'Logged in as spirit (Sign out)'. Below the header, a breadcrumb trail reads 'eXSite / Transporters'. On the left, a sidebar contains a list of navigation links: Home, Sites, Customers, Transporters (highlighted), Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard, and Login Status. The main content area is titled 'Configure Transporter Report for Transporter 1'. It features a 'Periods' dropdown menu with options 'Daily', 'Month', and 'Daily Cumulative'. Below this is an 'Email List' dropdown menu with the option 'Transporter 1'. A 'Save' button is located at the bottom of the configuration area.

eXSite provides the following reports for Transporters:

- ✓ **Daily** *Contains ticket data of all loadings of the day for the respective transporter. Generated once a day. One report with data of all the sites is generated.*
- ✓ **Month** *Contains ticket data aggregated for the previous month for the respective transporter. Generated once every month at the first day of the month. One report with data of all the sites is generated.*
- ✓ **Daily cumulative** *Contains ticket data of all loadings of the current month for the respective transporter. Generated once a day. One report with data of all the sites is generated. Note: At the first day of the new month the 'Cumulative daily' report contains data of all loadings of the previous month.*

The reports are stored as a CSV (Comma Separated Value) files and automatically sent to the selected email list.

## 3 EXSITE CORPORATE

### CUSTOMER REPORTS

eXSite provides the following predefined custom reports, which are for internal use within the Company only. Custom reports are not available for Customers and Transporters.

- ✓ **Daily tickets**      *Contains ticket data of all loadings of the day for all LACT's. Generated once a day.*
- ✓ **Monthly tickets**      *Contains ticket data of all loadings of the month for all LACT's. Generated once a day.*
- ✓ **Daily summary**      *Contains ticket data of all loadings of the day aggregated by LACT. Generated once a day.*
- ✓ **Monthly summary**      *Contains ticket data of all loadings of the previous month aggregated by LACT. Generated once a month at the first day of the month.*
- ✓ **Customer daily**      *Contains ticket data of all loadings of the day aggregated by customer. Generated once a day.*
- ✓ **Customer monthly**      *Contains ticket data of all loadings of the previous month aggregated by customer. Generated once a month at the first day of the month.*
- ✓ **Customer cumulative**      *Contains ticket data of all loadings of the day aggregated by customer. Generated once a day. Note: At the first day of the new month the report contains data of all loadings of the previous month .*
- ✓ **Transporter daily**      *Contains ticket data of all loadings of the day aggregated by transporter. Generated once a day.*
- ✓ **Transporter monthly**      *Contains ticket data of all loadings of the previous month aggregated by transporter. Generated once a month at the first day of the month.*
- ✓ **Transporter cumulative**      *Contains ticket data of all loadings of the day aggregated by transporter. Generated once a day. Note: At the first day of the new month the report contains data of all loadings of the previous month.*

Custom reports are stored as a CSV (Comma Separated Value) files and automatically sent to the selected email list.

*Note: additional custom reports can be configured by an administrator through the backend of the eXSite web server.*

## MANUAL REPORTS

Reports can also be generated manually. Automatic reports can be regenerated, which is useful when a report doesn't contain all the data, e.g. because of a communication failure at the time the report was generated.

Furthermore a report for any period time can be generated and emailed to a configured mailing list or specific email addresses. This report contains ticket data for all the loadings within the time period and for the selected customers, transporters and sites.

Manual reporting is defined in a stepwise manner.

### Step 1: Select the Report type

Spirit eXSite Logged in as spirit (Sign out)

eXSite / Report Generation

### Generate report: Choose period (step 1 of 5)

Report Type

- Daily
- Custom Time Range
- Daily**
- Month
- Daily Cumulative

06/15/2016

Next

For a 'Custom Time Range' the begin and date and time need to be defined.

Spirit eXSite Logged in as spirit (Sign out)

eXSite / Report Generation

### Generate report: Choose period (step 1 of 5)

Report Type

Custom Time Range

Report Period:

Choose the date range of the report

2016/04/07 00:00 - 2016/06/15 00:00

FROM TO

2016/06/15 ( 2016/06/15 (

Apply Cancel

Jun 2016 Jun 2016

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

29 30 31 1 2 3 4 29 30 31 1 2 3 4

5 6 7 8 9 10 11 5 6 7 8 9 10 11

12 13 14 15 16 17 18 12 13 14 15 16 17 18

19 20 21 22 23 24 25 19 20 21 22 23 24 25

26 27 28 29 30 1 2 26 27 28 29 30 1 2

3 4 5 6 7 8 9 3 4 5 6 7 8 9

0 : 00 0 : 00

# 3 EXSITE CORPORATE

## MANUAL REPORTS

For one of the standard reports ('Daily', 'Month', 'Daily Cumulative') the date on which the automatic report should have been generated, needs to be defined.

The screenshot shows the 'Generate report: Choose period (step 1 of 5)' interface. On the left is a sidebar menu with options: Home, Sites, Customers, Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation (highlighted), User Management, System Dashboard, and Login Status. The main content area has a header 'eXSite / Report Generation' and a title 'Generate report: Choose period (step 1 of 5)'. Below the title, there is a 'Report Type' dropdown menu set to 'Daily Cumulative'. Under 'Report Date:', there is a text input field with '06/15/2016' and a calendar icon. A calendar pop-up is visible, showing June 2016 with the 15th selected. At the bottom of the main area is a 'Next' button.

### Step 2: select the reports

Step 2 is to select the actual reports that need to be generated.

The screenshot shows the 'Generate report: Pick the reports (step 2 of 5)' interface. The sidebar menu is the same as in the previous screenshot. The main content area has a header 'eXSite / Report Generation' and a title 'Generate report: Pick the reports (step 2 of 5)'. Below the title, it says 'Pick the specific reports that you want to regenerate:'. There is a list box containing the following items: Customer (with sub-item Customer A), Transporter (with sub-items Transporter 1 and Transporter 2), Site Filter (with sub-item Example Site 1), and Custom Reports (with sub-items Daily Tickets and Daily Summary). At the bottom of the main area are 'Back' and 'Next' buttons.

The available filter options depend on the selection in the step 1. For the three standard report types, 'Daily', 'Month' and 'Daily Cumulative', the selection list only shows customers, transporters, sites and custom reports for which a report of the particular type is configured in the system. For the Custom Time Range any customer, transporter, site and custom report can be selected.



## MANUAL REPORTS

### Step 3: Set the mailing options

The screenshot shows the 'eXSite' web application interface. At the top, the header includes the 'Spirit eXSite' logo and a user status 'Logged in as spirit (Sign out)'. A breadcrumb trail shows 'eXSite / Report Generation'. On the left is a sidebar menu with links: Home, Sites, Customers, Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation (highlighted), User Management, System Dashboard, and a separator followed by Login Status. The main content area is titled 'Generate report: Set mailing options (step 3 of 5)'. It contains three checkboxes: 'Re-generate the reports Override any reports that were already created' (checked), 'Send reports to subscribers' (unchecked), and 'Send reports to addresses entered below' (checked). Below these is a text input field for email addresses, with the placeholder 'One email address per line' and the example 'john.doe@example.com'. Further down are two sections: 'Override email subject:' with a text input field containing '[Custom Subject]', and 'Override email message:' with a larger text input field containing '[Custom Message]'. At the bottom are 'Back' and 'Next' buttons.

#### Re-generate reports

Defines whether or not the report needs to be regenerated if it already exists in the report history.

#### Send reports to subscribers

Defines if the report needs to be sent to its subscribers. Only applies for the automatic reports.

#### Send reports to addresses entered below

Defines to which (additional) mail addresses the report has to be sent.

#### Override email subject

Provides the option to overrule the automatic email subject.

#### Override email message

Provides the option to overrule the automatic email message.

# 3 EXSITE CORPORATE

## MANUAL REPORTS

### Step 4: Confirmation

Spirit eXSite

Logged in as spirit (Sign out)

eXSite / Report Generation

Home

Sites

Customers

Transporters

Drivers

Lease Groups

Leases

Tickets

Subscriptions

Mailing Lists

Report History

Report Generation

User Management

System Dashboard

-----

Login Status

Generate report: Confirm generation options (step 4 of 5)

Please confirm the following configuration for generating reports

Report Start	06/14/2016 - 07:00
Report End	06/15/2016 - 07:00
Regenerate reports	Yes
Reports to be generated	<ul style="list-style-type: none"><li>Customer<ul style="list-style-type: none"><li>Customer A</li></ul></li><li>Transporter<ul style="list-style-type: none"><li>Transporter 1</li></ul></li></ul>
Send reports to subscribers	No
Send reports to following additional addresses	
Subject	Original Subject
Message	Original Message

Back

Generate

### Step 5: Generation

Spirit eXSite

Logged in as spirit (Sign out)

eXSite / Report Generation

Home

Sites

Customers

Transporters

Drivers

Lease Groups

Leases

Tickets

Subscriptions

Mailing Lists

Report History

Report Generation

User Management

System Dashboard

-----

Login Status

Generate report: Results (step 5 of 5)

Success

Successfully generated 1 reports for Customer A tickets - Daily tickets for Customer A

Success

Successfully generated 1 reports for Transporter 1 tickets - Daily tickets for Transporter 1

☒ Restart with previous data

☐ Restart from scratch

## USER MANAGEMENT

A user with administrative rights can add Customer and Transporter users to the system.

The screenshot shows the 'User Accounts' section of the Spirit eXSite application. The top navigation bar includes the Spirit logo, 'eXSite', and a user status 'Logged in as spirit (Sign out)'. Below this is a breadcrumb 'eXSite / User Management'. A left sidebar contains a menu with items like Home, Sites, Customers, Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management (highlighted), System Dashboard, and Login Status. The main content area is titled 'User Accounts' and features two buttons: 'New Transporter User' and 'New Customer User', along with a 'Default Layout' button. A table lists three users: 'admin' (Site Administrator), 'CustomerA.Marc' (Ticket Analyst, Customer Customer A), and 'Transporter1.John' (Driver Maintainer, Transporter Transporter 1). Each user entry has 'Edit' and 'Delete' buttons. Below the table, it says 'Showing 1 to 3 of 3 entries'.

User Name	Email	User Groups	
admin		Site Administrator	<a href="#">Edit</a> <a href="#">Delete</a>
CustomerA.Marc	marc@customera.com	Ticket Analyst, Customer Customer A	<a href="#">Edit</a> <a href="#">Delete</a>
Transporter1.John	john@transporter1.com	Driver Maintainer, Transporter Transporter 1	<a href="#">Edit</a> <a href="#">Delete</a>

*Note: Other type of users, that may require more or different rights, can be configured through the backend.*

## SYSTEM DASHBOARD

The system dashboard shows all the status of the overall system and of each individual site.

The screenshot shows the 'System Dashboard' section of the Spirit eXSite application. The top navigation bar is identical to the previous screenshot. The breadcrumb is 'eXSite / System Dashboard'. The left sidebar is also identical, with 'System Dashboard' highlighted. The main content area is titled 'Dashboard' and features a green status box: 'No alarms active (11:44:17)'. Below this are two sections: 'System Health' and 'Sites Health'. 'System Health' shows a table with 'Name' (None) and 'Status' (OK). 'Sites Health' shows a table with 'Name', 'Status', and 'Action' columns, listing 'Example Site 1' and 'Example Site 2', both with 'OK' status and a 'Details' button.

Name	Status
None	OK

Name	Status	Action
Example Site 1	OK	<a href="#">Details</a>
Example Site 2	OK	<a href="#">Details</a>

The System Health shows the status and any alarms of the eXlent Corporate system. The Sites Health section shows the status and alarms for each sites.

# 3 EXSITE CORPORATE

## SITE DASHBOARD

The Site Dashboard, which can be accessed from the System Dashboard through the corresponding 'Details' button, shows the active alarms of the site together with a number of live values that are refreshed every 5 minutes (default value).

The screenshot shows the Spirit eXSite interface. The top navigation bar includes the Spirit logo, the text 'eXSite', and a user status indicator 'Logged in as spirit (Sign out)'. Below this is a breadcrumb trail 'eXSite / System Dashboard'. A left-hand sidebar contains a list of navigation items: Home, Sites, Customers, Transporters, Drivers, Lease Groups, Leases, Tickets, Subscriptions, Mailing Lists, Report History, Report Generation, User Management, System Dashboard (highlighted in orange), and Login Status. The main content area is titled 'Site State: Example Site 1' and includes a 'Back to Health Overview' button. It displays two sections: 'Active Alarms' and 'Live Values'. The 'Active Alarms' section contains a table with one row showing 'None' for Name and a green 'OK' button for Description. The 'Live Values' section contains a table with three columns: Name, Value, and Description.

**Site State: Example Site 1**

**Active Alarms:**

Name	Description	Location	Active Since
None	OK		

**Live Values:**

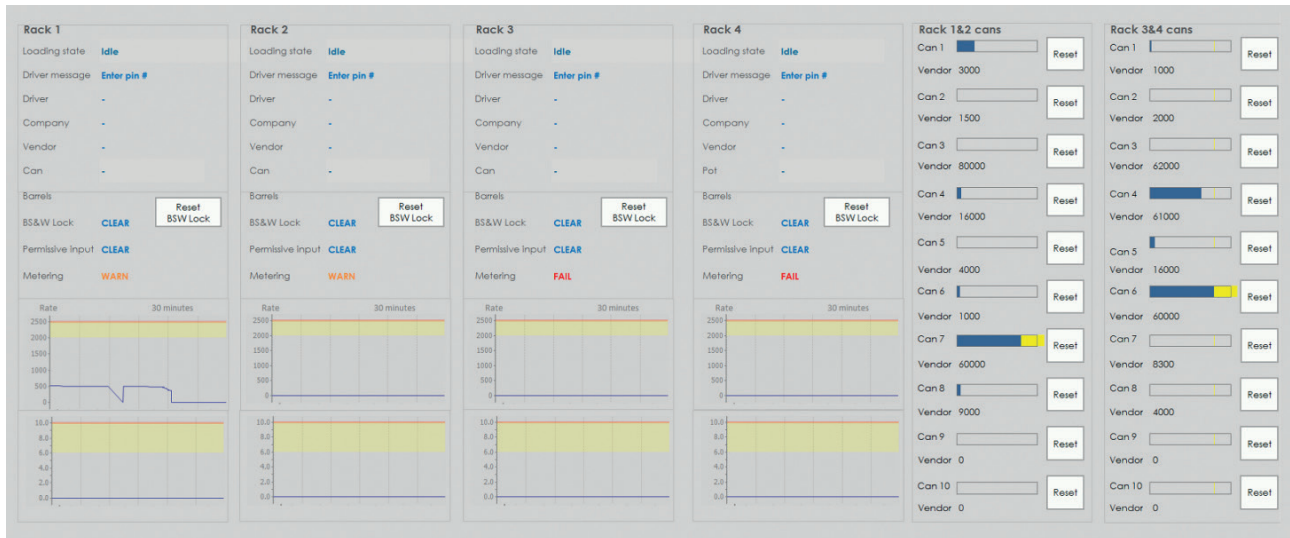
Name	Value	Description
------	-------	-------------

*Note: The actual alarms and live values may differ per system and are configured in the backend.*

# 4 EXSITE LOCAL DISPLAYS

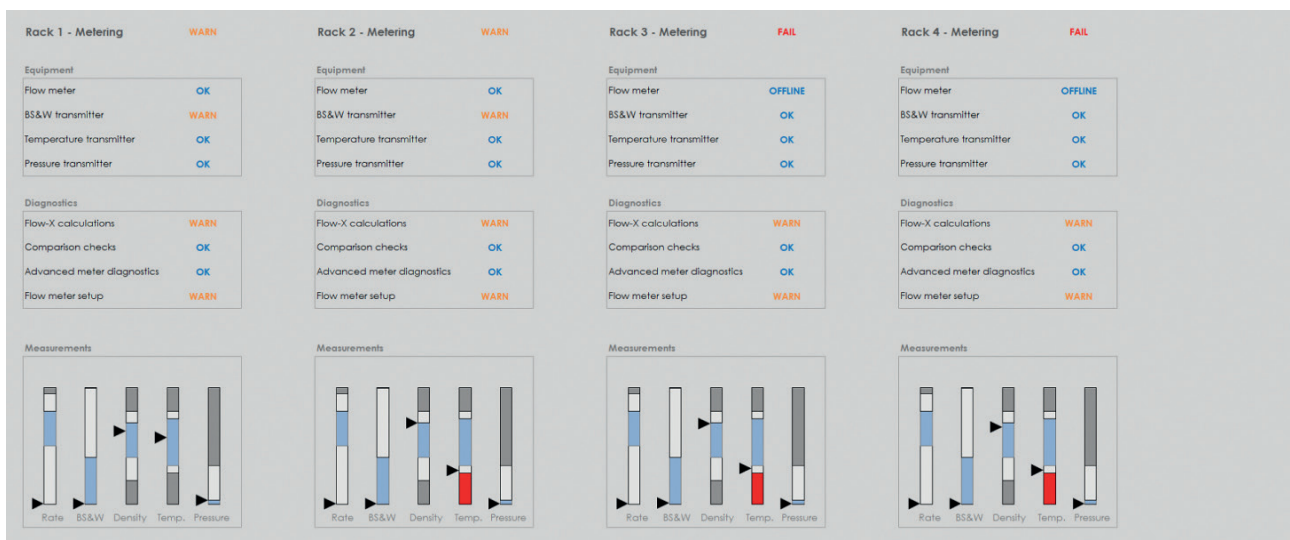
eXSite Local provides additional displays to quickly assess current operations and the metering equipment.

## OPERATIONS OVERVIEW DISPLAY



Note: the example applies for up to 4 racks. For sites with more than 4 racks the display will be different.

## METERING OVERVIEW DISPLAY

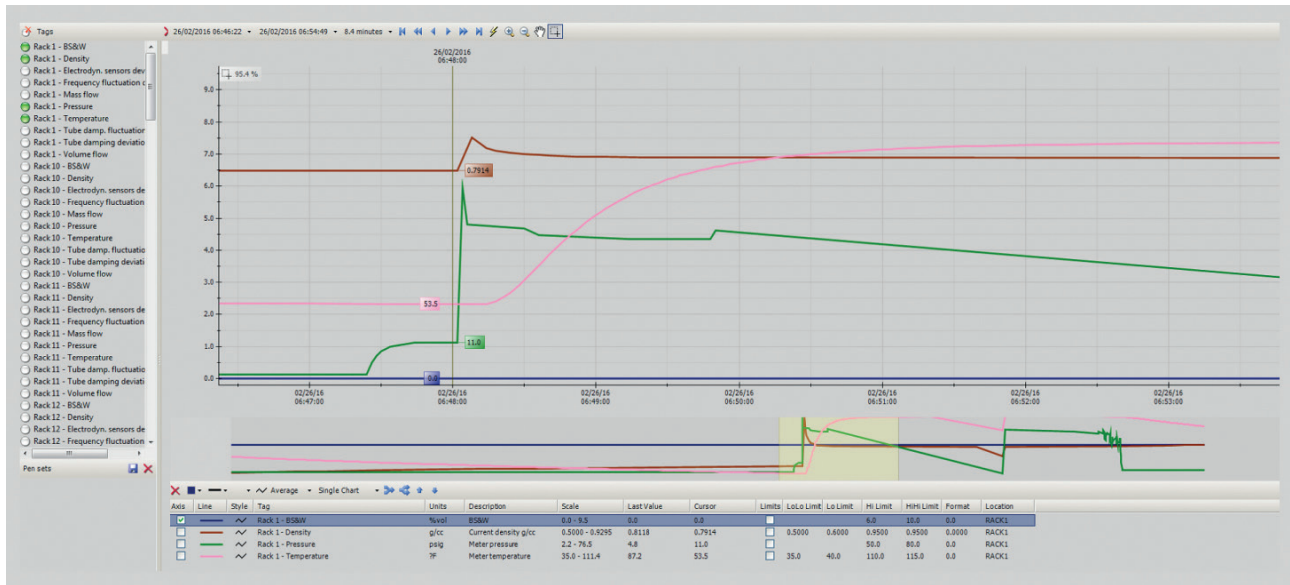


Note: the example applies for up to 4 racks. For sites with more than 4 racks the display will be different.

# 4 EXSITE LOCAL DISPLAYS

Trending and audit trail displays are available to check the LACT systems back in time.

## TRENDING DISPLAY



## AUDIT TRAIL DISPLAY

Current Alarms										Historical Alarms, Configuration Changes and Events									
Active	Location	Description	Type	LastValue	Limit	Units	Time	Time	Time	Date/Time	Description	Location	Location	Location	Location	Location	Location	Location	Location
02/26/16 07:02:27	TAHK01	TAHK01: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 06:46:12	RACK1 - Driver PIN changed to 8321	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:27	TAHK08	CURRENT MASS	High Alarm	7479.59	7000	lbm	02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 05:50:56	RACK1 - Driver PIN changed to 0	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:27	TAHK10	CURRENT MASS	High Alarm	15170.49	7000	lbm	02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 07:02:27	02/26/16 05:29:41	RACK1 - Driver PIN changed to 8331	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK02	TAHK02: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 04:08:10	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK03	TAHK03: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 03:43:04	RACK4 - Driver PIN changed to 8305	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK04	TAHK04: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 03:25:17	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK05	TAHK05: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 02:56:41	RACK3 - Driver PIN changed to 60110	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK06	TAHK06: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 02:44:55	RACK1 - Driver PIN changed to 0	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK09	CURRENT LEVEL	Low Alarm	0	0	ft.	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 02:17:30	RACK2 - Driver PIN changed to 0	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK09	CURRENT LEVEL	Low Alarm	0	0	ft.	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 02:17:30	RACK2 - Driver PIN changed to 8307	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK10	TAHK10: BAD TEMPERATURE	Status Alarm	1	1		02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 02:15:02	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK01	CURRENT MASS	Low Alarm	2925	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 01:46:24	RACK2 - Driver PIN changed to 8446	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK01	CURRENT VOLUME	Low Alarm	46	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 01:45:42	RACK3 - Driver PIN changed to 8480	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK01	CURRENT AVAILABLE ROOM	Low Alarm	334	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 00:36:32	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK02	CURRENT MASS	Low Alarm	2153	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 00:01:48	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK02	CURRENT VOLUME	Low Alarm	45	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 00:00:30	RACK2 - Driver PIN changed to 0	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK02	CURRENT AVAILABLE ROOM	Low Alarm	352	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:37:19	RACK3 - Driver PIN changed to 60056	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK02	CURRENT MASS	Low Alarm	2776	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:31:27	RACK2 - Driver PIN changed to 8307	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK03	CURRENT VOLUME	Low Alarm	42	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:29:26	RACK4 - Driver PIN changed to 8446	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK03	CURRENT AVAILABLE ROOM	Low Alarm	338	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:17:26	RACK1 - Driver PIN changed to 8480	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK04	CURRENT MASS	Low Alarm	3316	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:16:32	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK04	CURRENT VOLUME	Low Alarm	137	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 23:02:27	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK04	CURRENT AVAILABLE ROOM	Low Alarm	326	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 22:49:27	RACK4 - Driver PIN changed to 8431	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK05	CURRENT MASS	Low Alarm	1265	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 22:33:07	RACK3 - Driver PIN changed to 60110	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK05	CURRENT VOLUME	Low Alarm	28	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:39:58	RACK1 - Driver PIN changed to 0	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK06	CURRENT MASS	Low Alarm	372	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:38:30	RACK2 - Driver PIN changed to 0	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK06	CURRENT AVAILABLE ROOM	Low Alarm	2325	1000	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:17:33	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK06	CURRENT VOLUME	Low Alarm	52	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:07:04	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK06	CURRENT AVAILABLE ROOM	Low Alarm	348	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:07:54	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK07	CURRENT AVAILABLE ROOM	High Alarm	36472	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 21:05:12	RACK4 - Driver PIN changed to 0	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK08	CURRENT AVAILABLE ROOM	High Alarm	33244	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:57:56	RACK2 - Driver PIN changed to 67005	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK09	CURRENT MASS	Low Alarm	0	0	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:46:41	RACK3 - Driver PIN changed to 8480	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK09	CURRENT MASS	Low Alarm	0	0	lbm	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:37:49	RACK1 - Driver PIN changed to 3051	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK09	CURRENT VOLUME	Low Alarm	0	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:36:09	RACK1 - Driver PIN changed to 3213	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1	Rack 1
02/26/16 07:02:13	TAHK09	CURRENT VOLUME	Low Alarm	0	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:34:40	RACK4 - Driver PIN changed to 8381	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK09	CURRENT VOLUME	Low Alarm	0	1000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 20:24:46	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK09	CURRENT AVAILABLE ROOM	High Alarm	50000	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 19:54:13	RACK3 - Driver PIN changed to 60056	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK10	CURRENT AVAILABLE ROOM	High Alarm	34045	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 19:26:20	RACK3 - Driver PIN changed to 0	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3	Rack 3
02/26/16 07:02:13	TAHK10	CURRENT AVAILABLE ROOM	High Alarm	44504	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 19:05:16	RACK2 - Driver PIN changed to 0	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2
02/26/16 07:02:13	TAHK10	CURRENT AVAILABLE ROOM	High Alarm	44504	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 18:54:15	RACK4 - Driver PIN changed to 65098	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4	Rack 4
02/26/16 07:02:13	TAHK10	CURRENT AVAILABLE ROOM	High Alarm	44504	20000	bbi	02/26/16 07:02:13	02/26/16 07:02:13	02/26/16 07:02:13	02/25/16 18:32:10	RACK2 - Driver PIN changed to 8446	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2	Rack 2



# TECHNOLOGY

eXSite is based on the following technology:



The Flow-X flow computer is equipped with a special LACT application and is used as the controller at each loading rack.



The eXLerate software runs at the eXSite local PC and manages the driver authorization. It communicates with the Flow-X on one end and the local and corporate TYPO3 software on the other end.



TYPO3 is open source Content Management System software and runs on the local, intermediate, and corporate servers.



Microsoft Windows is used the operating system on the eXSite Local and Corporate computers. Microsoft Office is used by eXLerate and runs on the eXSite local computers.



Apache is used as the web server and runs on the local, intermediate, and corporate servers.



MySQL is used as the database and runs on the local, intermediate, and corporate servers.



PHP is used as the scripting language and runs on the local, intermediate, and corporate servers.

# ABOUT SPIRIT IT

We make flow measuring systems **better, smarter and more accurate.**



## A MEMBER OF THE ABB GROUP



Power and productivity  
for a better world™

Since November 2014, Spirit IT has become a member of the ABB Group. The acquisition adds a new line of high-performance custody transfer solutions to ABB's measurement business unit.

ABB is a leader in power and automation technologies that improve performance while lowering environmental impact. With thousands of experts around the world and high-performance innovations, ABB's team is dedicated to making measurement easy for its customers.

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