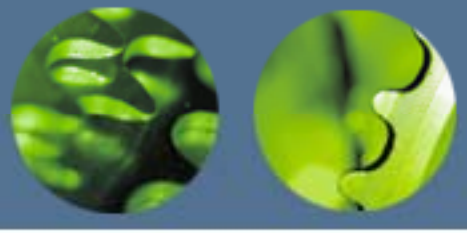
TrakSYS™

Training Course I



Introduction & Overview

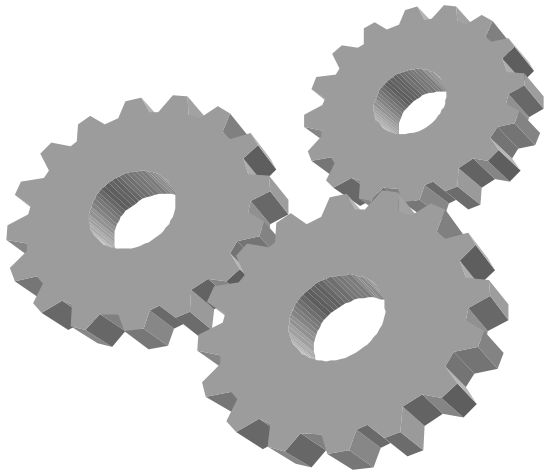
Course Outline

Day One

- Overview
- Licensing
- Tags
- Logic Manager
- Tag Simulator
- Configuration Manager
- Areas
- Systems
- Event Definitions
- webTrak
- Event Reports
- Scheduling
- Capture Schemes

Day Two

- Configuration Manager Applications
- Event Monitor
- OEE
- OEE Calculations
- KPI Reports
- Report Design
- Tag Import



Labs

Lab 01: License Manager
Lab 02: Configuration Manager – OPC Tags
Lab 03: Configuration Manager – Areas, Systems and Event Definitions
Lab 04: webTrak – Event Reports
Lab 05: Tags (Continued), Event Definitions and Event Reports
Lab 06: Configuration Manager – Scheduling and Reports
Lab 07: Configuration Manager – Capture Schemes and Reports
Lab 08: Event Monitor
Lab 09: Configuration Manager – Virtual Tags and more Event Definitions
Lab 10: Configuration Manager – OEE Calculation and OEE Counters
Lab 11: webTrak – KPI Reports
Lab 12: webTrak – Report Design
Lab 13: Tag Import

Prerequisites

- Required computer skills
  - Microsoft Windows XP
  - Microsoft Office (Excel)
  - Internet Explorer Web Browser
- Familiarity with basic OEE and Efficiency concepts
- Familiarity with PLCs and OPC I/O servers

What is TrakSYS ™ ?

- **TrakSYS™ is the leading real-time performance management (RPM) software suite.**
- **Proven to measurably increase manufacturing efficiencies and asset utilization in a short time without disrupting operations.**

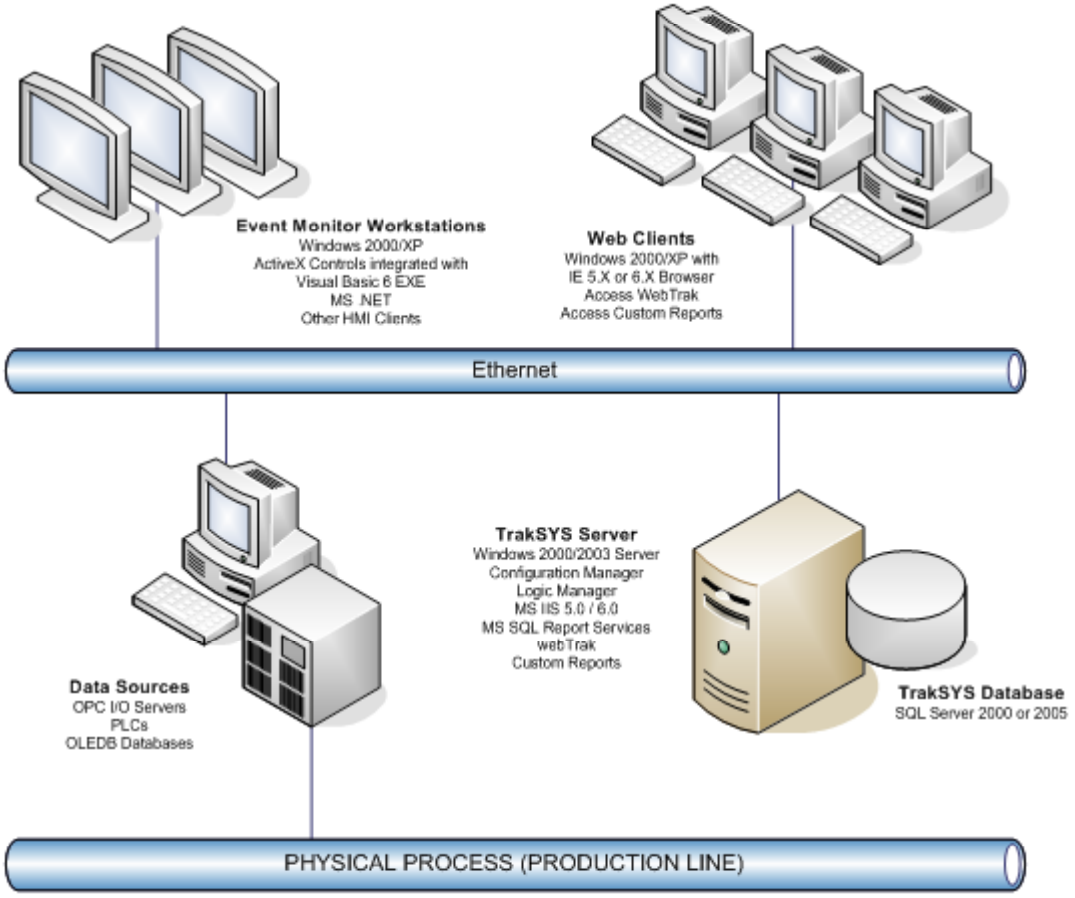
Architecture

TrakSYS™ Components

- EDB Database
- Configuration Manager
- Logic Manager (Service)
- Logic Manager (Client)
- webTrak (Reports)
- Event Monitor

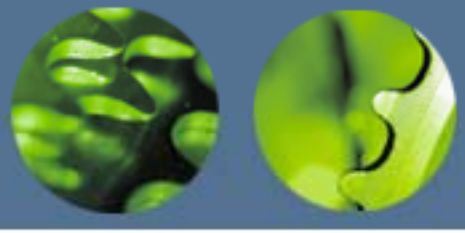
Platform Technologies

- Windows Server 2003
- MS SQL Server 2000/2005
- Internet Information Services
- OLE for Process Control (OPC)
- Microsoft .NET
- Microsoft ActiveX / COM



Orange County Soda

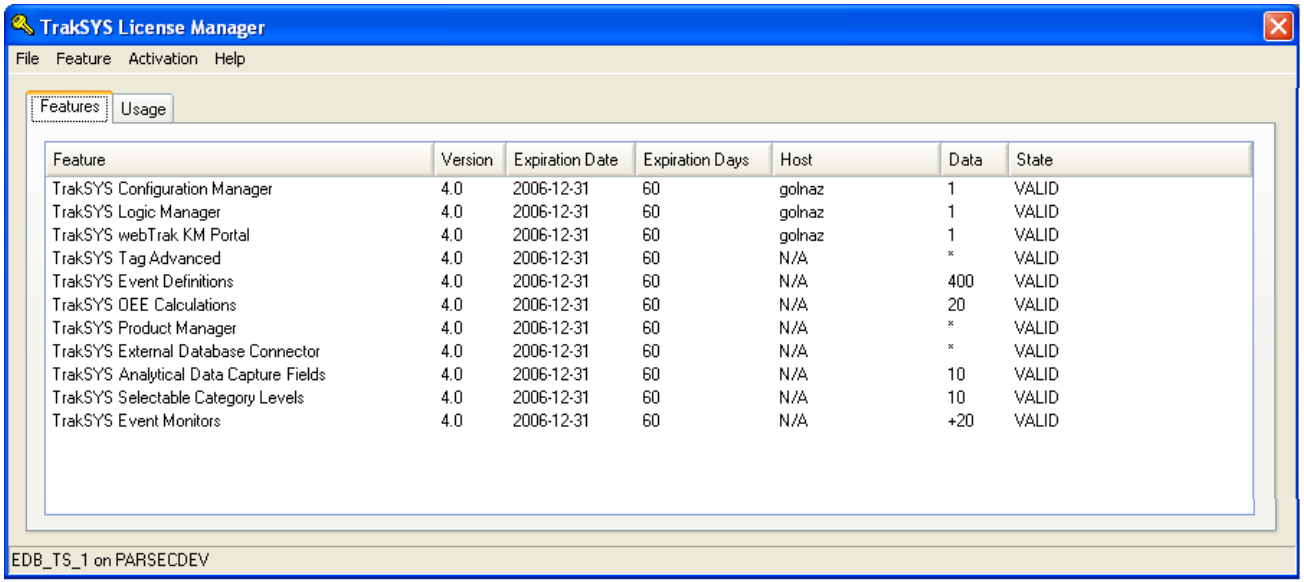
- Sample Soda Line 01 configuration included in the TrakSYS™ installation.
- Used for the Training Course labs.
- Fills Cans and packages into Cases.
- Main Systems (equipment) include:
  - Filler
  - Labeler
  - Casepacker



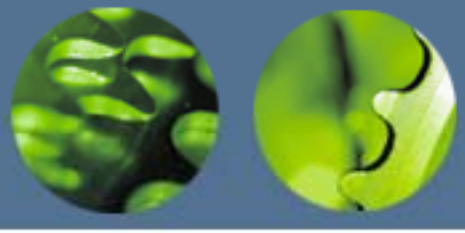
Licensing

TrakSYS™ License Manager

- Allows installation of Feature Lines
- Displays installed Feature Lines
- Allows activation of the Feature Lines that require activation
- Allows deletion of expired or unwanted Feature Lines



Feature	Version	Expiration Date	Expiration Days	Host	Data	State
TrakSYS Configuration Manager	4.0	2006-12-31	60	golnaz	1	VALID
TrakSYS Logic Manager	4.0	2006-12-31	60	golnaz	1	VALID
TrakSYS webTrak KM Portal	4.0	2006-12-31	60	golnaz	1	VALID
TrakSYS Tag Advanced	4.0	2006-12-31	60	N/A	*	VALID
TrakSYS Event Definitions	4.0	2006-12-31	60	N/A	400	VALID
TrakSYS OEE Calculations	4.0	2006-12-31	60	N/A	20	VALID
TrakSYS Product Manager	4.0	2006-12-31	60	N/A	*	VALID
TrakSYS External Database Connector	4.0	2006-12-31	60	N/A	*	VALID
TrakSYS Analytical Data Capture Fields	4.0	2006-12-31	60	N/A	10	VALID
TrakSYS Selectable Category Levels	4.0	2006-12-31	60	N/A	10	VALID
TrakSYS Event Monitors	4.0	2006-12-31	60	N/A	+20	VALID



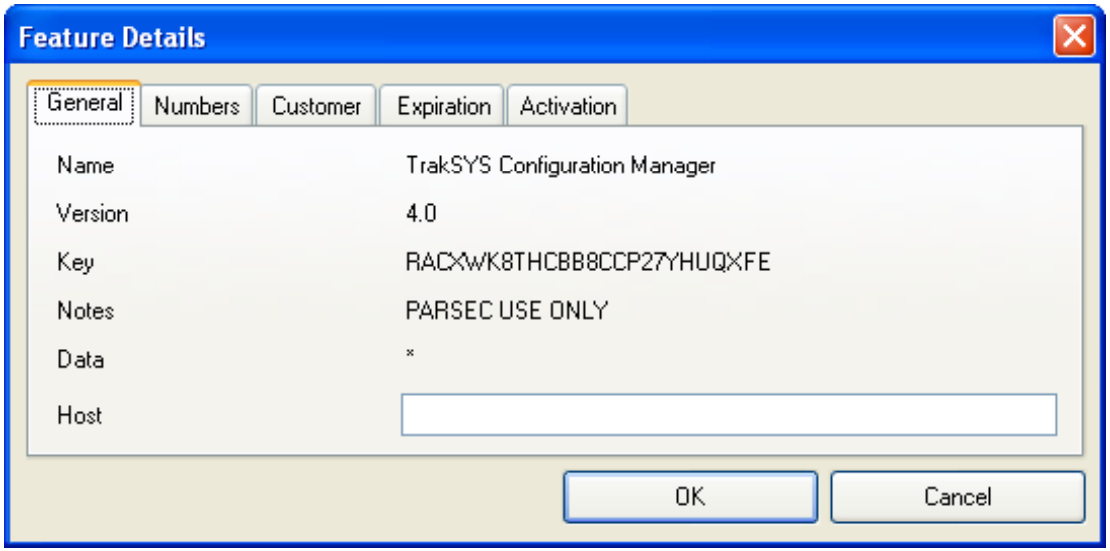
Feature Attributes

- Feature
- Version
- Expiration Date
- Expiration Days
- Host
- Data
- State (VALID/INVALID/NOT ACTIVATED)

Feature Line Details

Additional detailed information for each Feature Line

- General
- Numbers
- Customer
- Expiration
- Activation

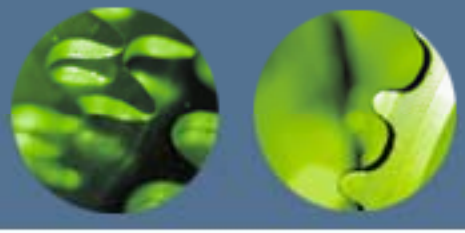


License Activation

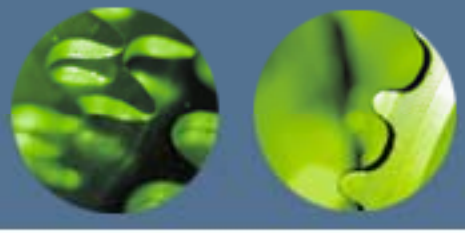
- Validates your license with the software vendor for security reasons.
- Locks the installation to the Database Server.
- Requires Host name for the Logic Manager, Configuration Manager and webTrak Features (Demonstration and CIP Licenses do not require Host name specification).
- Two activation approaches:
  - Automatic Online Activation
  - Manual Offline Activation

Demonstration

- Open License Manager
- Import training class License File
- Show Features List View
- Show Feature Details
- Demonstrate Activation (online and offline)
- Show Usage Tab

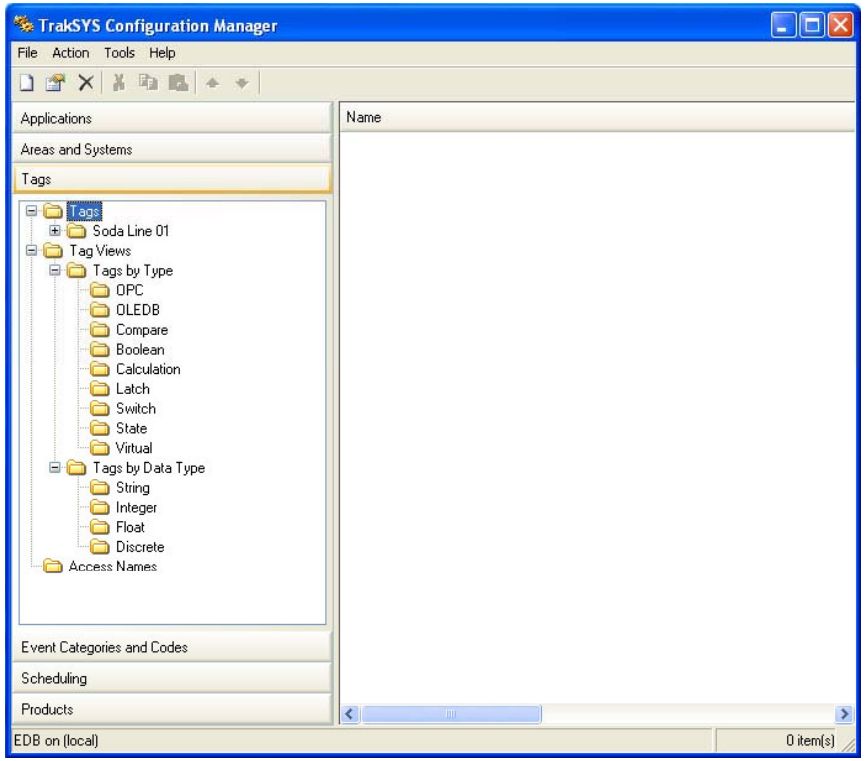


Lab 01: License Manager



Tags

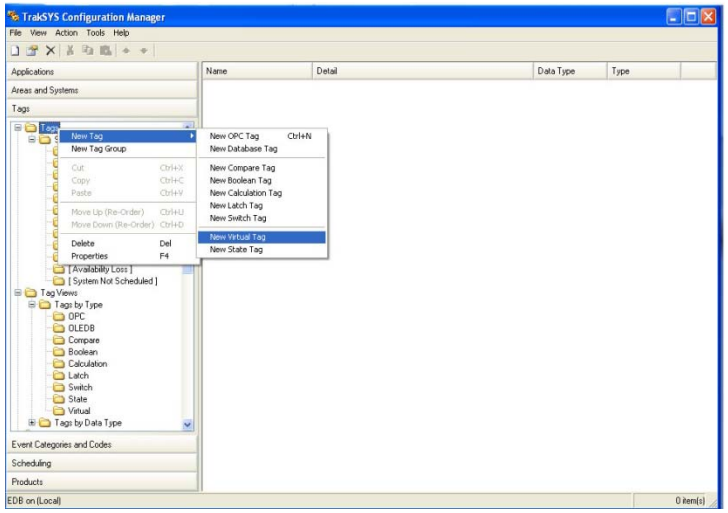
Tags



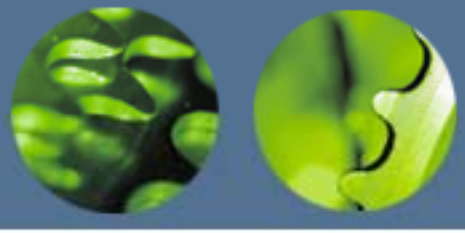
- Provide real-time data from the production line
- Tags can be organized into Tag Groups
- Referred to as I/O Tags, Virtual Tags, Logic Tags, or State Tags
- Tag Names must be unique

Tag Types

- Tags by Data Type
  - String
  - Integer
  - Float
  - Discrete



- Tags by Type
  - OPC Tags
    - Retrieve data from OPC Servers
    - The Item Name is a unique, fully qualified address of an item (Tag) on the OPC Server
    - Access Name
      - Defines an OPC data source
      - Should be created separately before creating the OPC Tags
  - Virtual Tags
    - Used to hold data values (e.g. active Product or Job) that are not available from external sources
    - Values are modified manually via Event Monitor

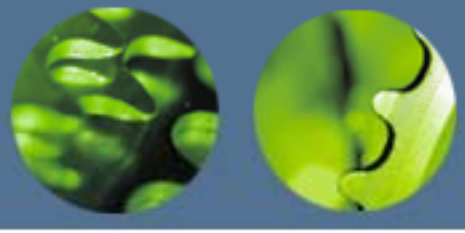


Demonstration

- Open the Configuration Manager
- Discuss the different kinds of Tags (discussed in slides)
- Clarify that OPC Tags are acquiring their values from external sources
- Define what is going to be referred to as Tree View and List View throughout the rest of the course
- Create:
  - Access Name **Soda Line 02 PLC**
  - Tag Group **Soda Line 02**
  - OPC Tag **SL2.FILLER.NO_SODA**
  - Item Name **N7:11/2**

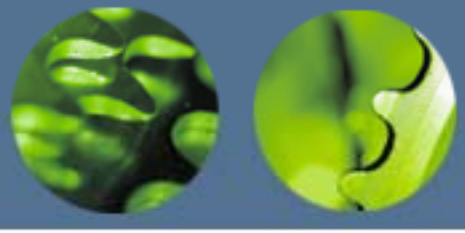
Tag Simulator

- Not a TrakSYS™ component
- For training purposes
- Allows Tag values to be changed for triggering events



Demonstration

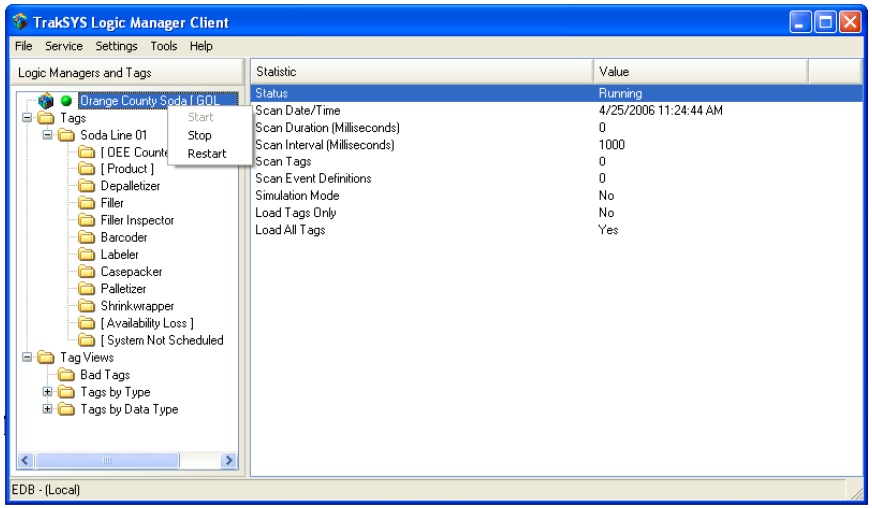
- Run the Tag Simulator
- Demonstrate changing Tag values



Lab 02: Configuration Manager – OPC Tags

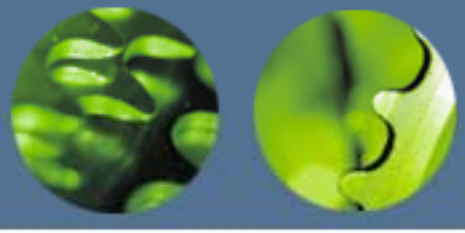
Logic Manager

- Logic Manager Service functionality:
  - Data collection engine of TrakSYS™
  - Communicates with I/O servers to acquire input Tag data
- Starting and stopping the Logic Manager Service using the Logic Manager Client
  - Service must be running for data to be recorded
  - Any changes to the configuration require Logic Manager Service restart or reload to take effect
- View Tag value changes in Logic Manager Client



Demonstration

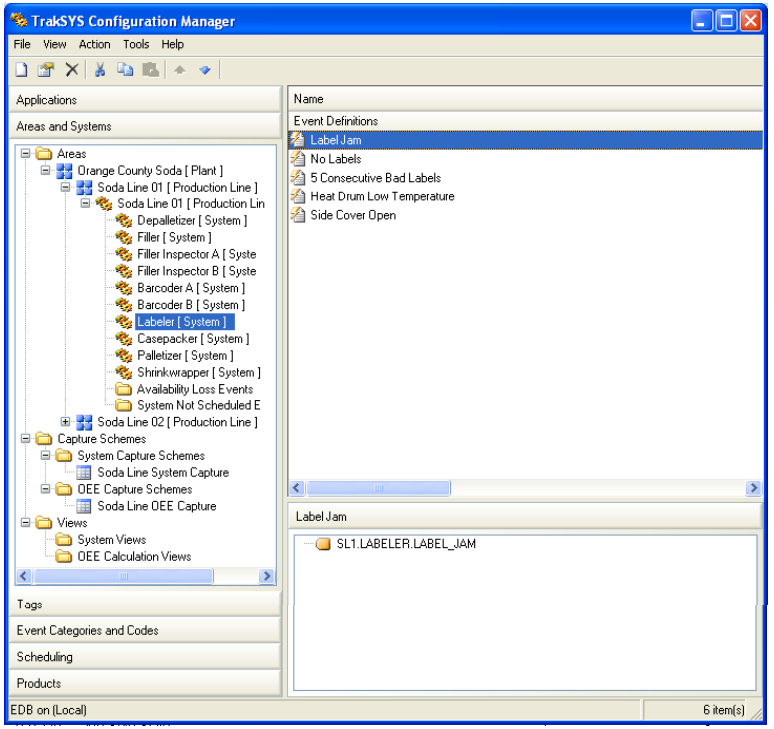
- Open the Logic Manager
- Show how to start, restart, and stop it.
- In the Logic Manager Tree View, under the **Tags** folder, click on the **OEE Counters** Tag Group to show the OPC Tag value changing.



Configuration Manager

Configuration Manager

- Configuration Manager:
  - Central configuration tool for TrakSYS™
  - Application for defining the manufacturing environment to be monitored
- User Interface
  - Tree View and List View
- Important Configuration Entities
  - Tags
  - Areas
  - Systems
  - Event Definitions
  - Logic Managers
  - System Capture Schemes
  - Teams, Shifts, and Schedules
  - Event Monitors

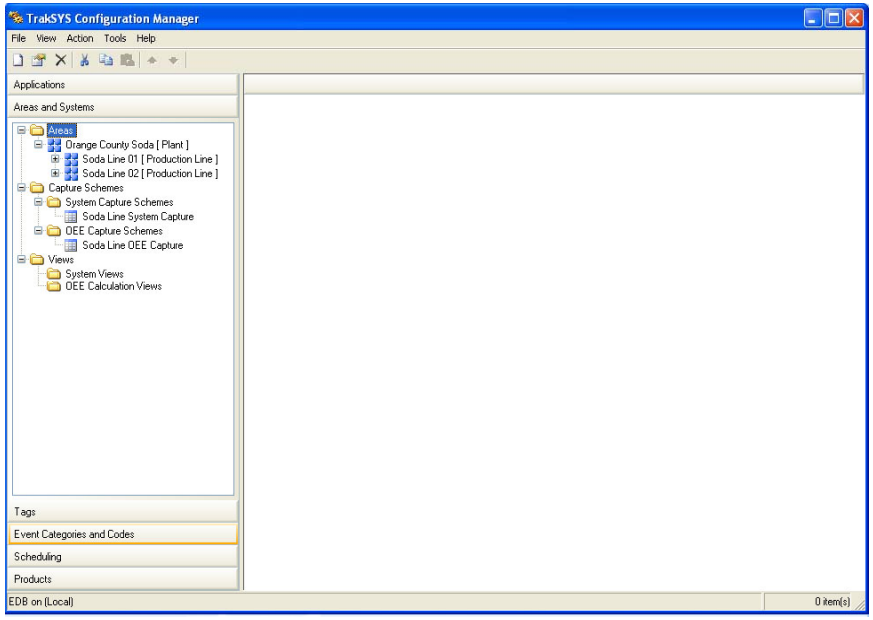


Demonstration

- Switch to the Configuration Manager
- Demonstrate the basic Configuration Entities
  - Tags
  - Areas
  - Systems
  - Event Definitions
  - System Capture Schemes
  - Teams, Shifts, and Schedules

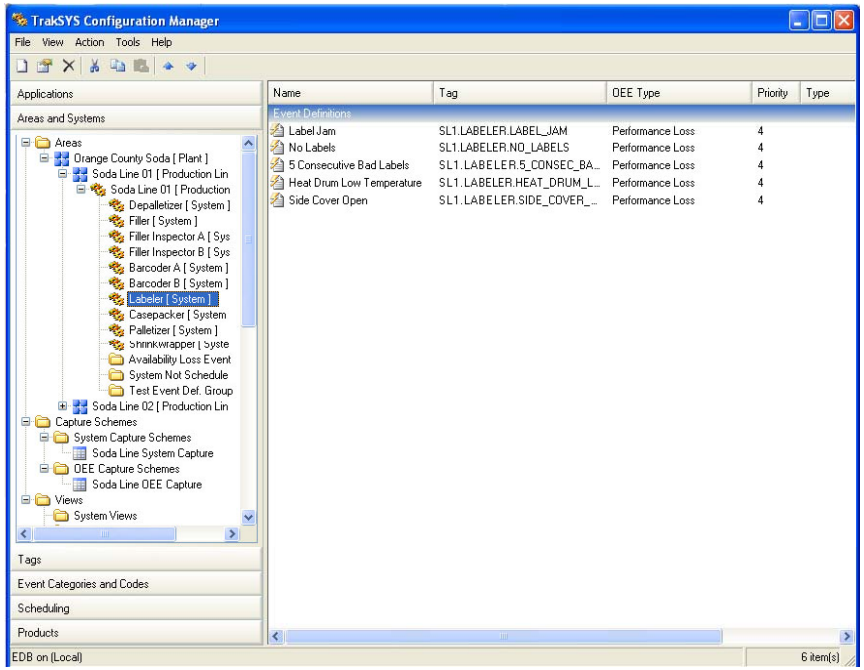
Areas

- Represent a subset of the production environment (e.g. a plant, a manufacturing line, or a piece of equipment)
- May contain other Areas
- Provide a grouping mechanism for Systems



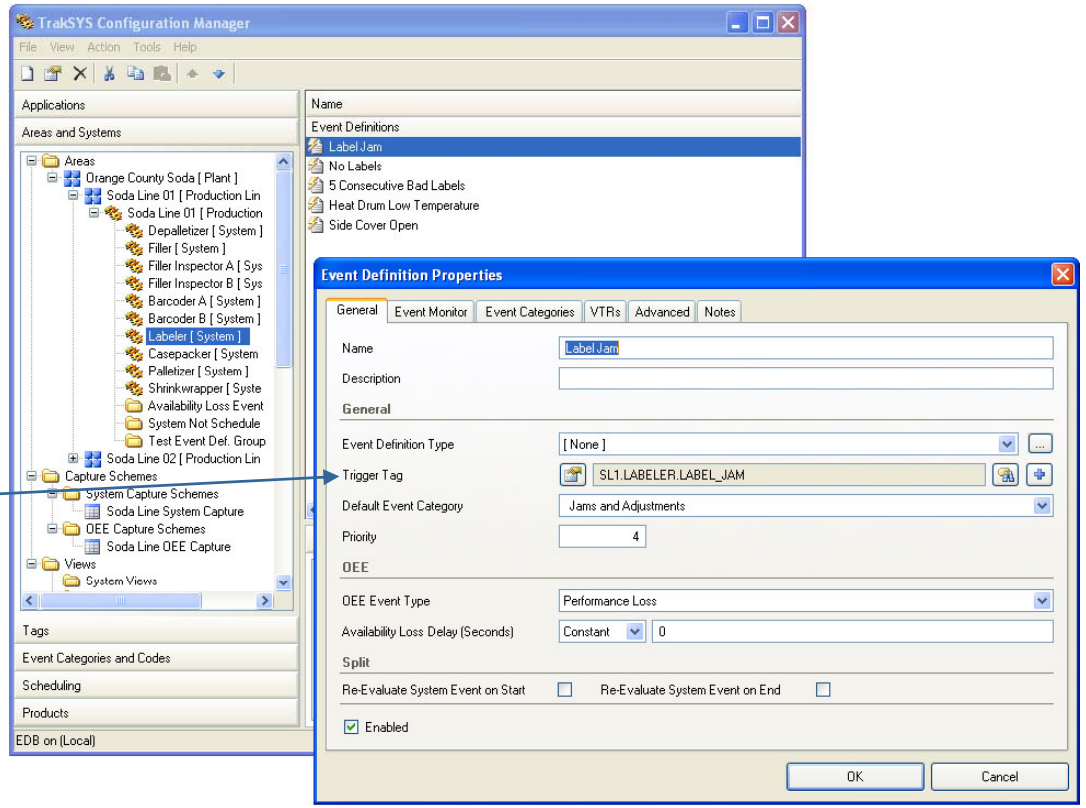
Systems

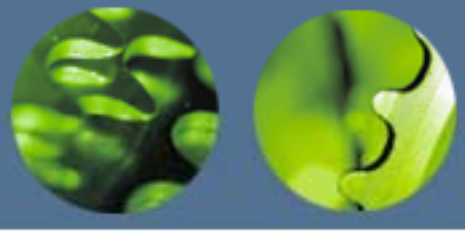
- May represent a production line or part of a production line (e.g. Packaging Line, Labeler, or Filler)
- May include Sub-Systems to organize the Event Definitions into groups based on smaller components within the main System



Event Definitions

- Event Definitions
  - Determine which Events to track for the parent System
  - Belong to Systems, which may contain one or more Event Definitions
  - Translate into the Events Logic Manager records to the database when active
- Trigger Tag
  - Indicates when to start and stop Events according to a Discrete Tag

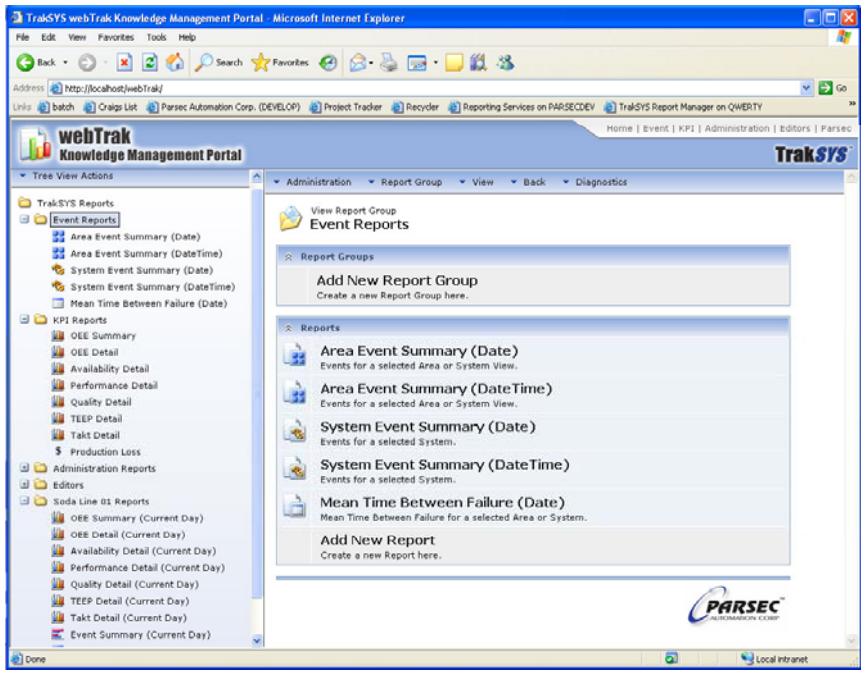




Demonstration

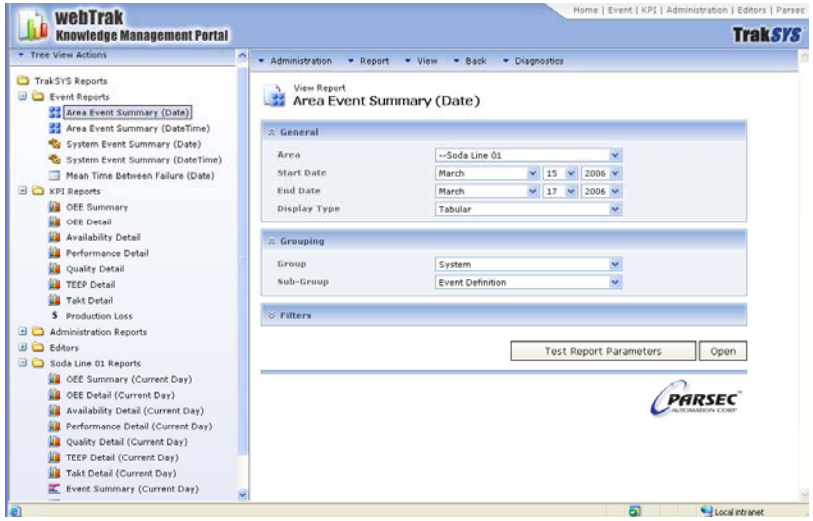
- Create **Soda Line 02** Area
- Create **Soda Line 02** System and **Filler** Sub-System
- Create **No Soda** Event Definition
- Describe that Trigger Tag = 1 means the Event Definition is active and 0 means inactive
- Run the Logic Manager and Tag Simulator to trigger an Event (SL2.FILLER.NO_SODA = 1 and then 0)

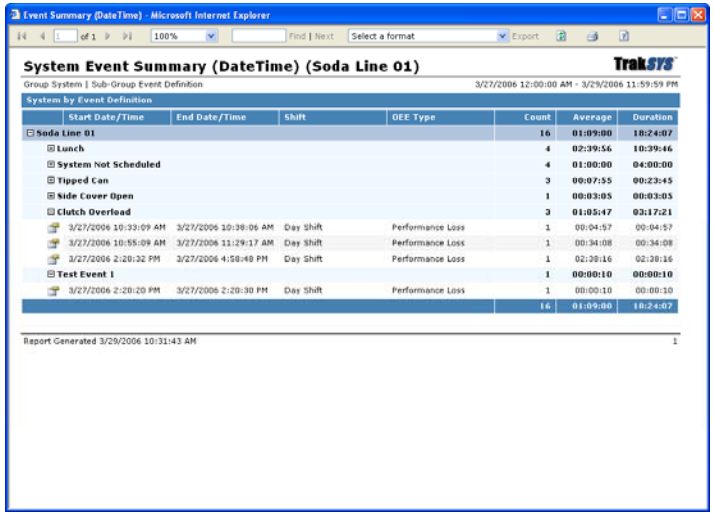
webTrak



- Reporting portal for analysis of TrakSYS™ data
- Standard and pre-designed reports vs. customized reports for specific user needs
- Portal to view production events, calculated OEE, and other KPIs, as well as application error logs

Event Reports

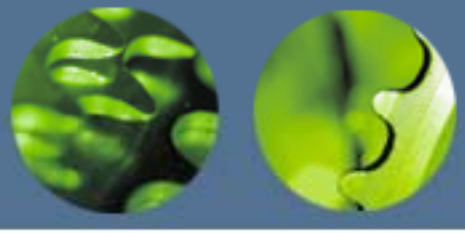




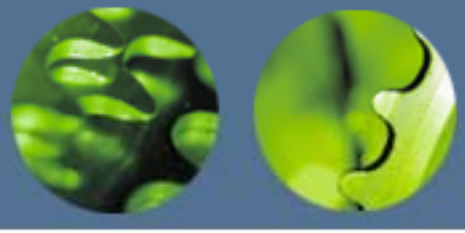
- Display Event data recorded by Logic Manager
- Help identify problematic or malfunctioning equipment

Demonstration

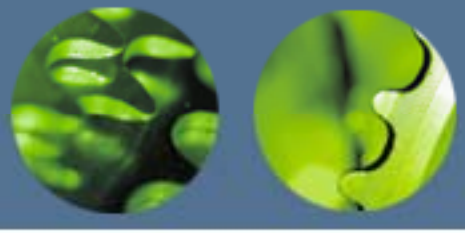
- Open the webTrak Knowledge Management Portal
- Discuss pop-up reports and the need for disabling pop-up blockers
- Show the **No Soda** event that occurred in Soda Line 02
- Open the webTrak Sample Data web and open a System Event Summary Report for May 15, 2006 to May 19, 2006



Break (15 Minutes)



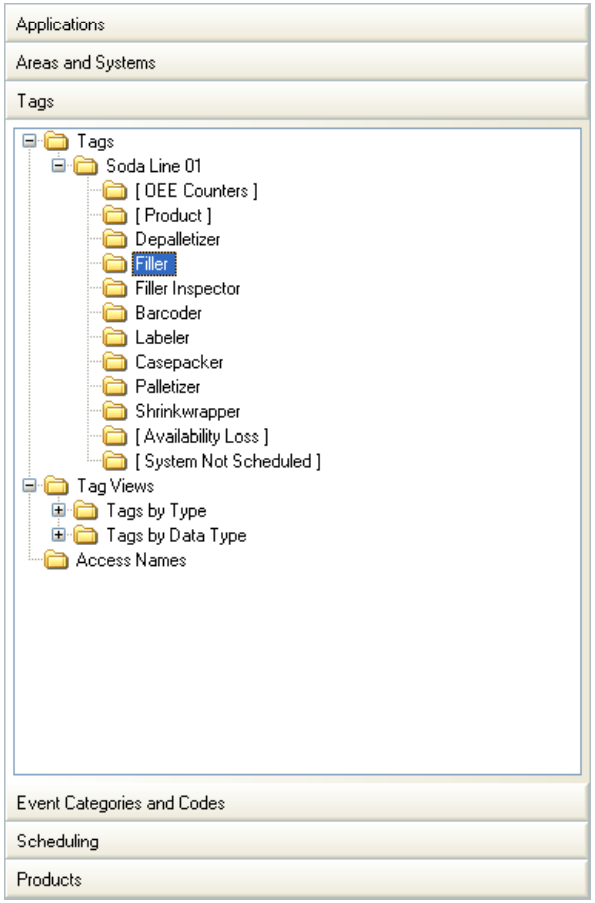
Lab 03: Configuration Manager – Areas, Systems, and Event Definitions

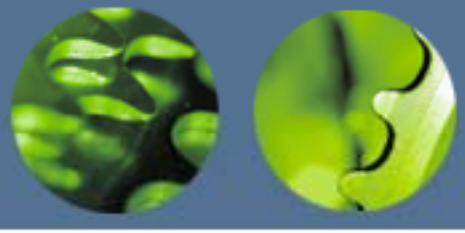


Tags (Continued)

Tag Groups

- Organize Tags (e.g. based on Systems)
- Can be multi-level (hierarchical)
- Available in any Tag Properties page when editing a Tag





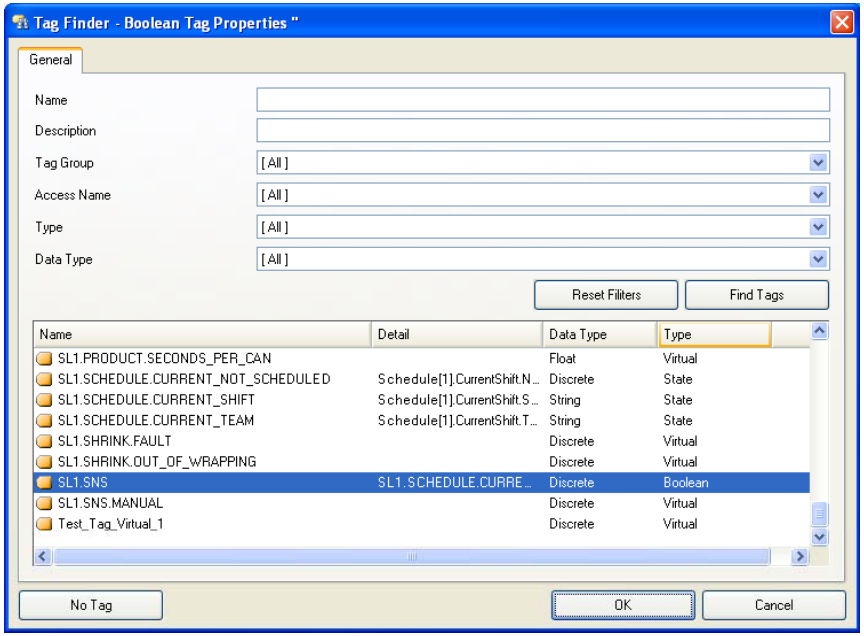
Tag Types

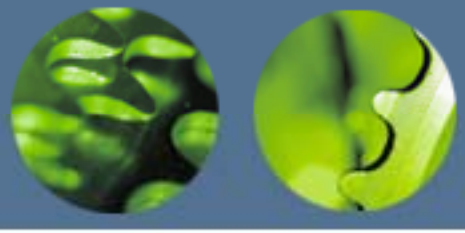
Logic Tags

- Boolean Tags
  - Allow the combination of two or more Discrete Tags using Boolean logic operators (AND, OR, XOR, etc…)
- Compare Tags
  - Compare two values (Tags or constants) using comparison operators (=, <>, >, >=, <, <=)

Tag Finder

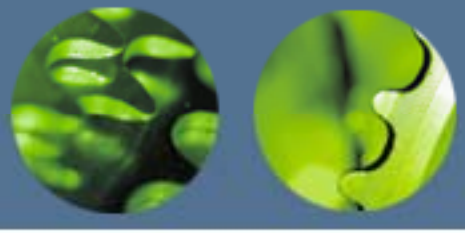
- Searches for and selects Tags for any entity property that requires a Tag
- Can filter by Tag Name, Type, Data Type, Access Name, and etc…
- Retains the last search results for successive Tag selection





Demonstration

- Explain/Demonstrate some common Tag Group uses
- Create sample Boolean and Compare Tags (they do not need to be saved)
- Show examples of filtering using the Tag Finder

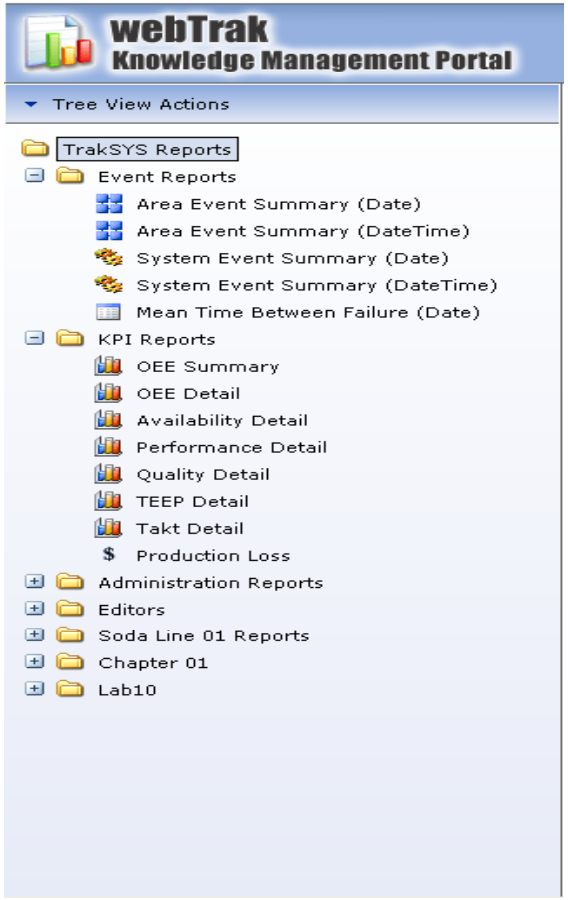


Lunch (1 Hour)

Event Reports

webTrak

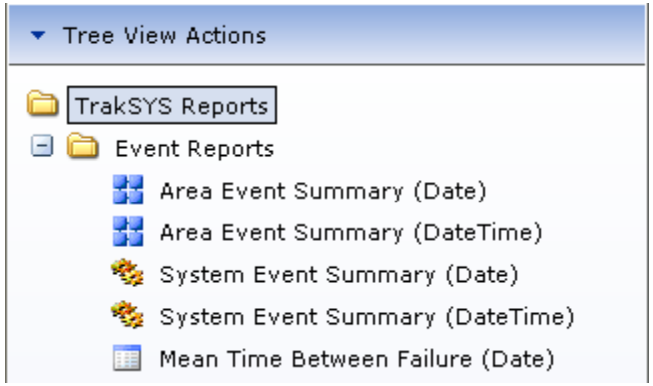
- Reports
  - Contain data for a specified Area, System, or OEE Calculation
- Report Groups
  - Organize Reports into logical groups
- webTrak Tree View
  - Displays a hierarchical view of Report Groups and Reports



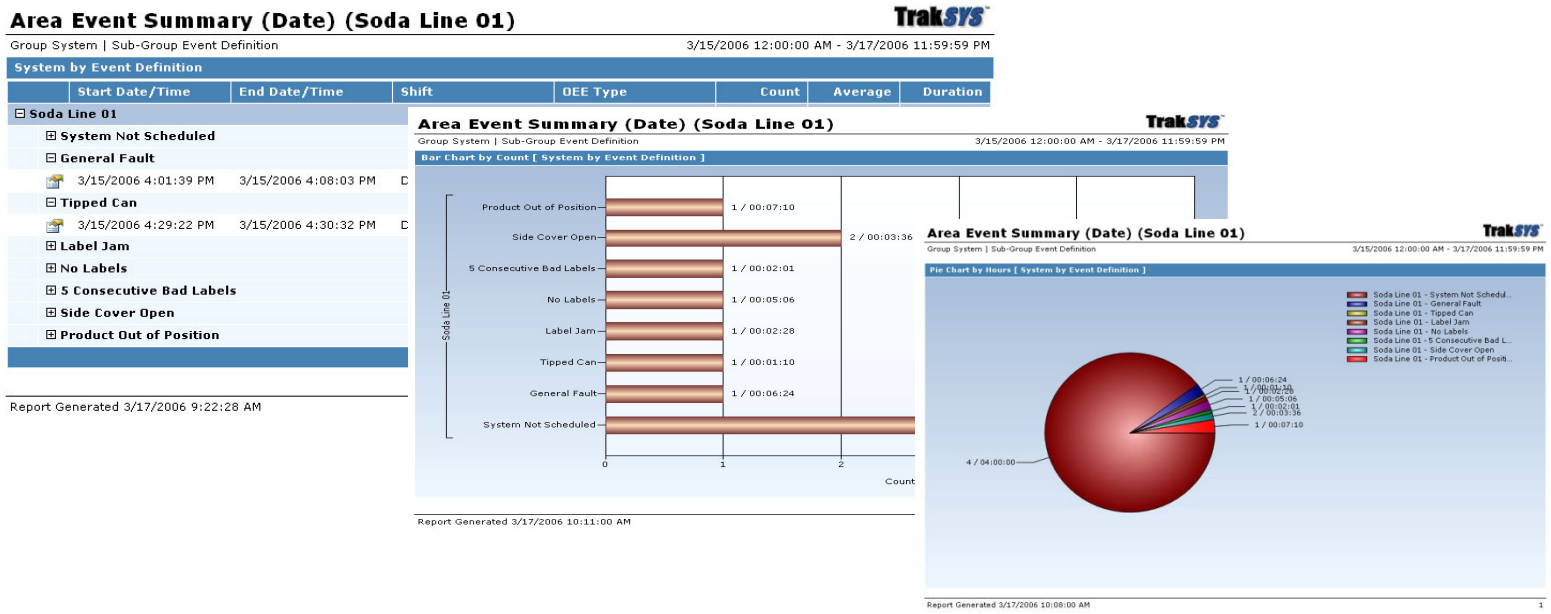
Event Reports

Standard Event Reports

- Area Reports
  - Area Event Summary (Date)
  - Area Event Summary (DateTime)
- System Reports
  - System Event Summary (Date)
  - System Event Summary (DateTime)
- Mean Time Between Failure



Event Report Display Types



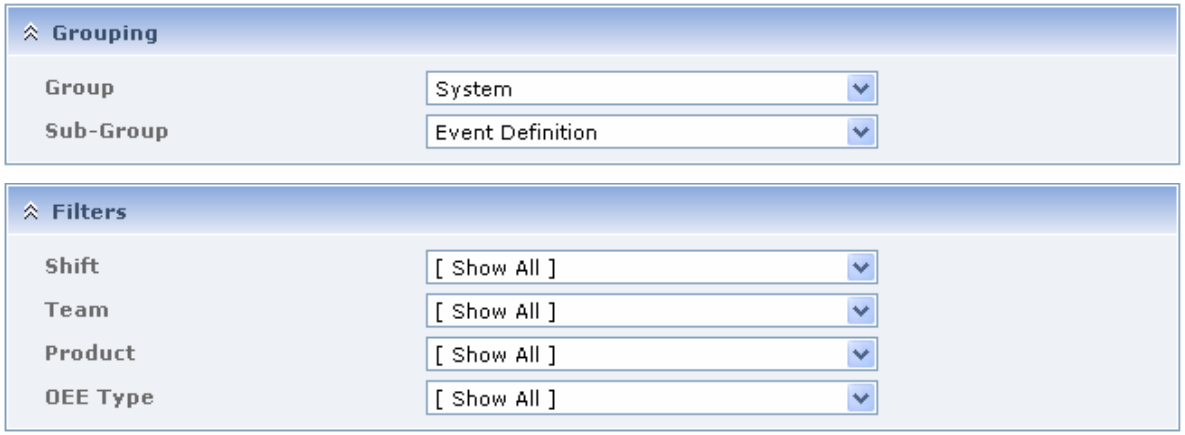
Various display formats are available for Event Reports (e.g. Tabular, Bar Chart, Pareto Chart, and etc…)

Demonstration

- Explain/Demonstrate the difference between “Date” and “DateTime” Report Types
- Demonstrate different Event Report display types

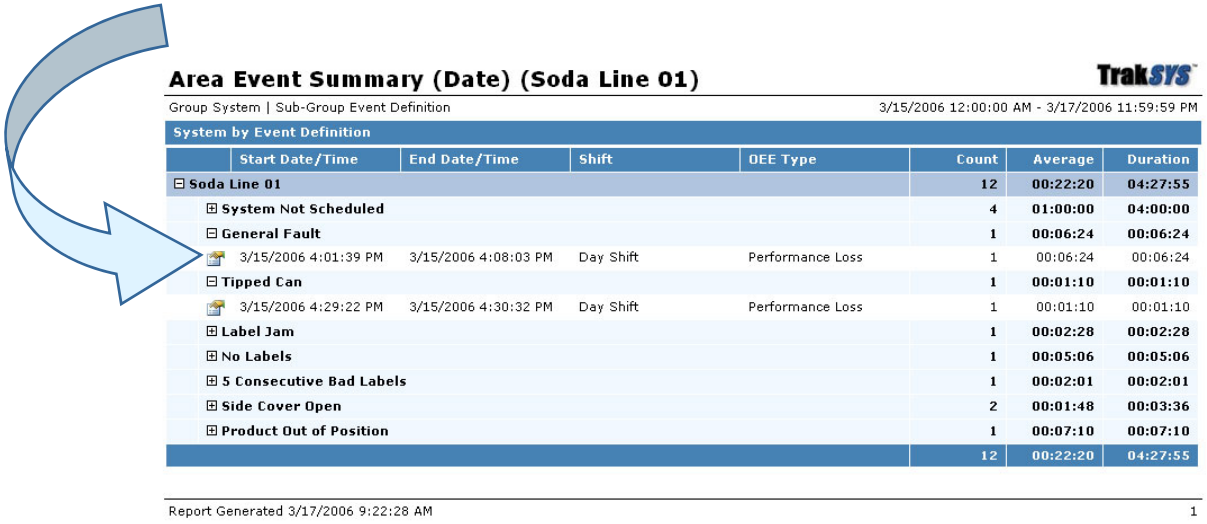
Event Report Grouping and Filtering

- Grouping
  - Specify up to two levels of data grouping from nearly any available Event data field
- Filtering
  - Limit the Report results to specific criteria (e.g. Shift, Team, Product, and etc…)



Event Report Table Columns

- Sub-groupings can be expanded to expose more detail for a single Event
- Event details in the table include Event Start Date/Time, End Date/Time, Shift, OEE Type, Count, Average, and Duration
- A detail view for each Event is available by clicking on detail icon in Tabular format



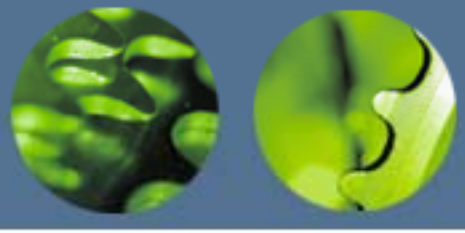
Area Event Summary (Date) (Soda Line 01) TrakSYS

Group System | Sub-Group Event Definition — 3/15/2006 12:00:00 AM - 3/17/2006 11:59:59 PM

System by Event Definition

	Start Date/Time	End Date/Time	Shift	OEE Type	Count	Average	Duration
⊟ Soda Line 01					12	00:22:20	04:27:55
⊞ System Not Scheduled					4	01:00:00	04:00:00
⊟ General Fault					1	00:06:24	00:06:24
	3/15/2006 4:01:39 PM	3/15/2006 4:08:03 PM	Day Shift	Performance Loss	1	00:06:24	00:06:24
⊟ Tipped Can					1	00:01:10	00:01:10
	3/15/2006 4:29:22 PM	3/15/2006 4:30:32 PM	Day Shift	Performance Loss	1	00:01:10	00:01:10
⊞ Label Jam					1	00:02:28	00:02:28
⊞ No Labels					1	00:05:06	00:05:06
⊞ 5 Consecutive Bad Labels					1	00:02:01	00:02:01
⊞ Side Cover Open					2	00:01:48	00:03:36
⊞ Product Out of Position					1	00:07:10	00:07:10
					12	00:22:20	04:27:55

Report Generated 3/17/2006 9:22:28 AM — 1

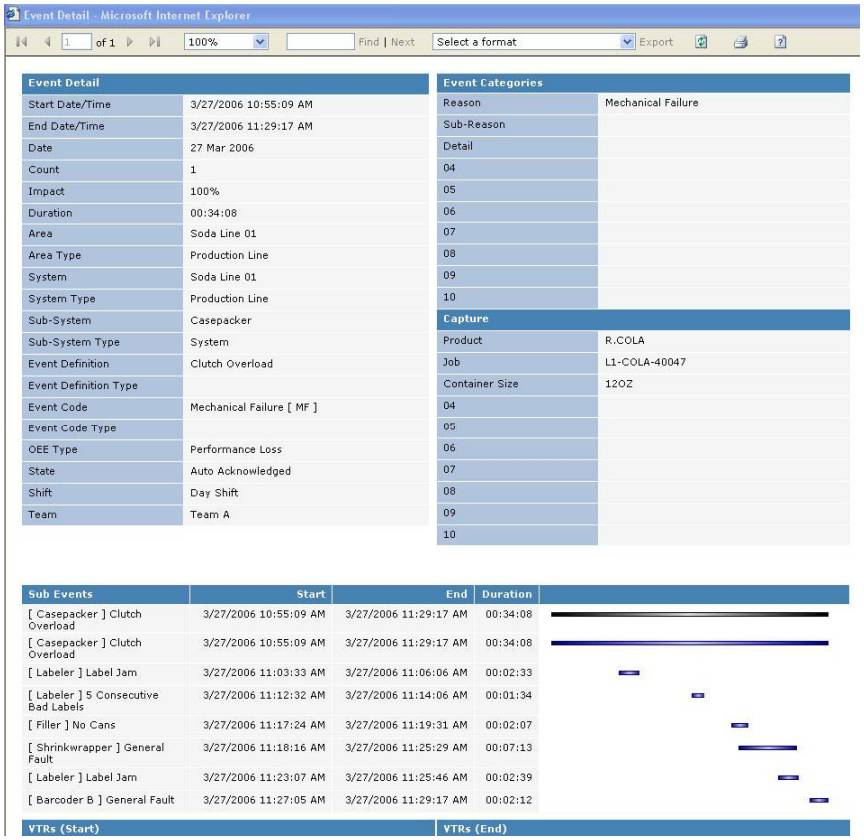


Demonstration

- Report Grouping
- Report Filters

Event Detail Reports

- Display all recorded data related to a single Event
- Display operator assigned Event Categories
- Display Capture Tag values
- Diagram the Sub Events in a Gantt View



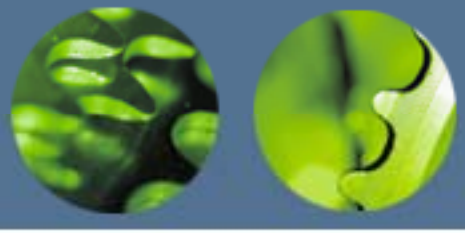
Event Report
Sub-Events

- Include secondary events not directly responsible for the System stoppage
- Note that Event reports do not double count time for overlapping Sub-Events

Sub Events	Start	End	Duration	
[Depalletizer] General Fault	3/15/2006 4:01:39 PM	3/15/2006 4:08:03 PM	00:06:24	
[Depalletizer] General Fault	3/15/2006 4:01:39 PM	3/15/2006 4:06:18 PM	00:04:39	
[Filler] Tipped Can	3/15/2006 4:04:15 PM	3/15/2006 4:04:33 PM	00:00:18	
[Labeler] Label Jam	3/15/2006 4:05:10 PM	3/15/2006 4:08:03 PM	00:02:53	

Demonstration

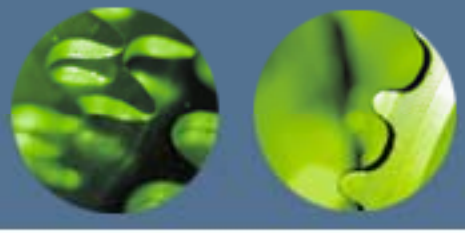
- Open an Event Detail Report and discuss the different attributes that are recorded
- Describe the difference between the Events (black) and Sub-Events (blue) in the Sub-Event section



Lab 04: webTrak – Event Reports

Lab 05: Tags (Continued), Event Definitions and Event Reports

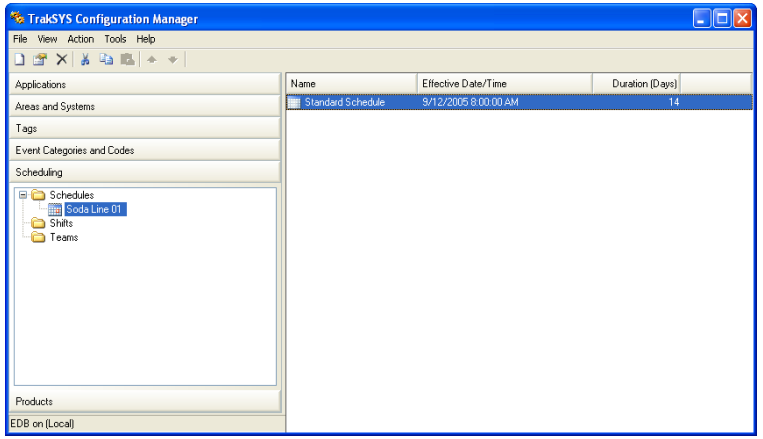
Break (10 Minutes)

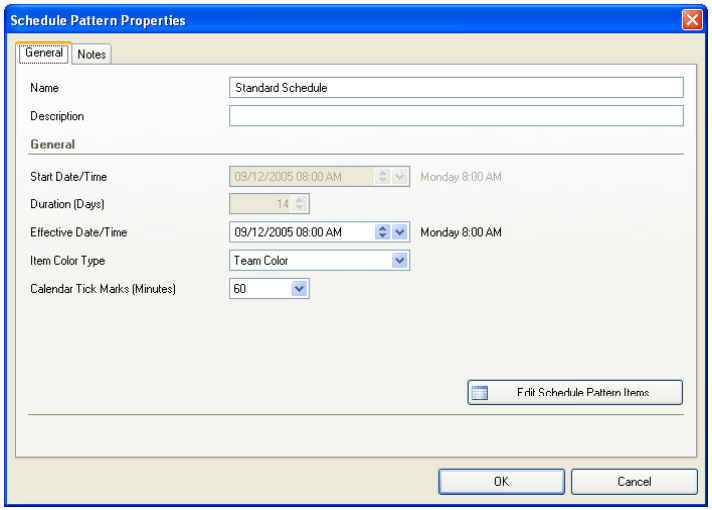


Scheduling

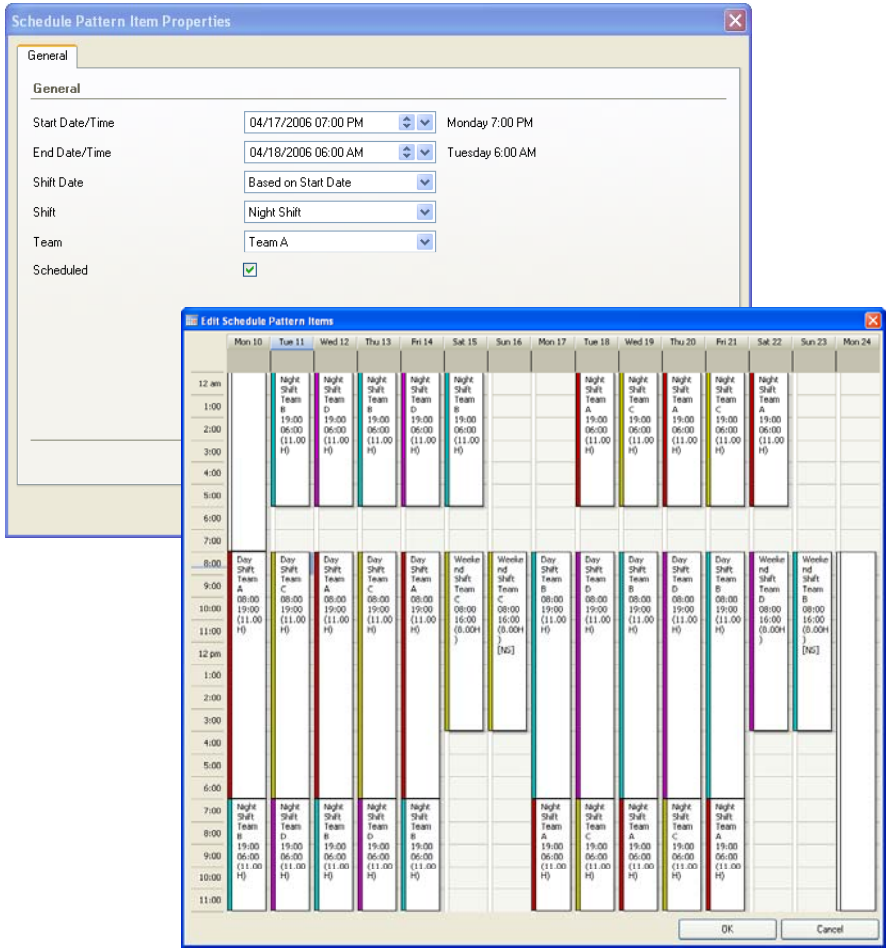
Scheduling

- Teams
  - Represent groups of operators
- Shifts
  - Name work time periods for operators / Teams
- Schedules
  - Instruct Logic Manager which Shifts and Teams are active for which Systems
- Schedule Patterns
  - Represent repeating sequences of Shifts and Teams (Schedule Pattern Items)
  - Belong to a parent Schedule, which may contain multiple Patterns
  - Include a Start Date/Time and duration
  - Allow only one to be active at a time





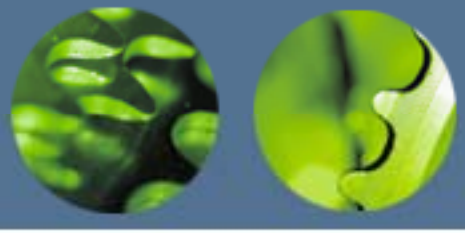
Schedule Patterns



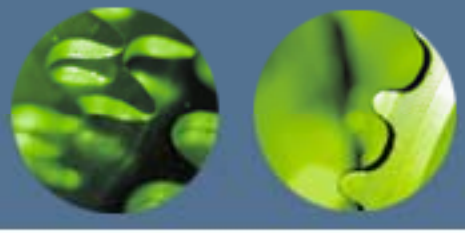
- Schedule Patterns
  - Represent a timetable specifying rotating Shifts and Teams
- Logic Manager uses the Schedule Pattern with the most recent Effective Date/Time

Demonstration

- Open Configuration Manager
- Show Team and Shift Colors
- Discuss Schedule Properties
- Demonstrate Schedule and Schedule Patterns
- Discuss the Schedule Pattern Properties
- Show Schedule Pattern Items
- Activate an event in Line 01 and show the shift gets captured in the reports



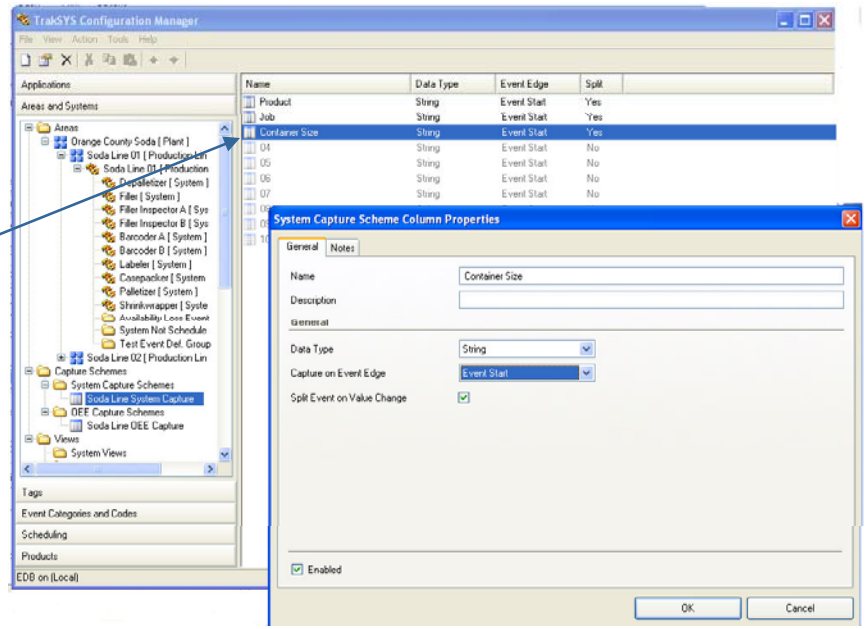
Lab 06: Configuration Manager – Scheduling and Reports



Capture Schemes

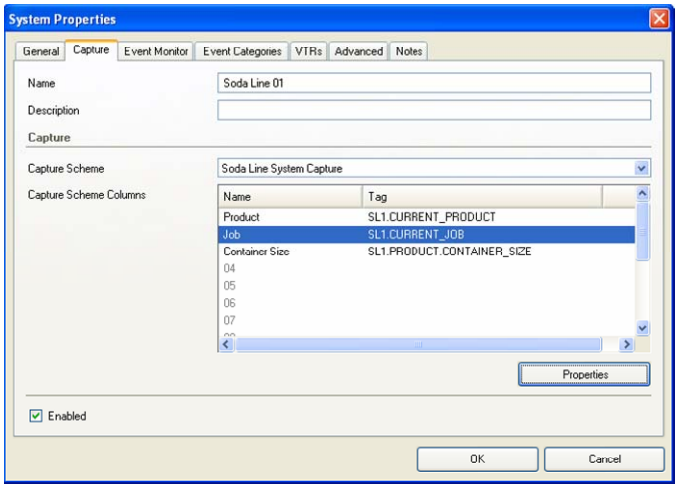
Capture Schemes

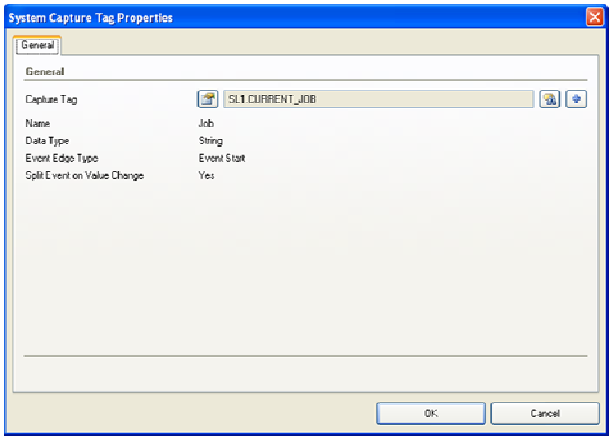
- System Capture Schemes
  - Define a set of Capture Scheme Columns
- System Capture Scheme Columns
  - Define the names and Data Types of values Logic Manager will capture when System Events occur
  - Can capture values on Event Start or End
  - Examples include Job, Container Size, Batch, Lot Number



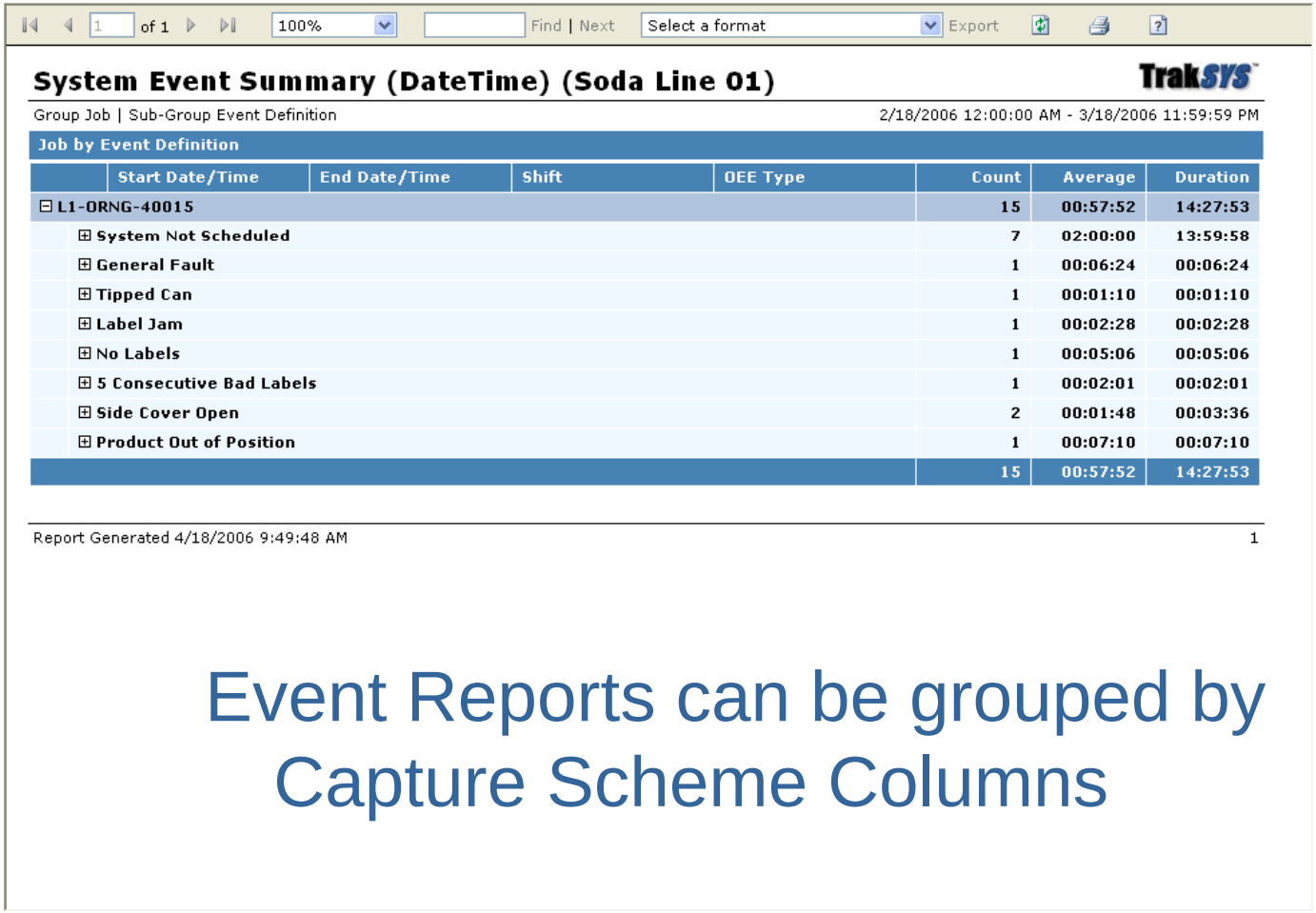
System Capture Tags

- Logic Manager records the values of specific Tags assigned to System Capture Scheme columns
- Different Systems can capture different Tags for the same System Capture Scheme





Event Reports and Capture Scheme Columns



1 of 1 | 100% | Find | Next | Select a format | Export

System Event Summary (DateTime) (Soda Line 01)

TrakSYS

Group Job | Sub-Group Event Definition — 2/18/2006 12:00:00 AM - 3/18/2006 11:59:59 PM

Job by Event Definition

	Start Date/Time	End Date/Time	Shift	OEE Type	Count	Average	Duration
⊟ L1-ORNG-40015					15	00:57:52	14:27:53
⊞ System Not Scheduled					7	02:00:00	13:59:58
⊞ General Fault					1	00:06:24	00:06:24
⊞ Tipped Can					1	00:01:10	00:01:10
⊞ Label Jam					1	00:02:28	00:02:28
⊞ No Labels					1	00:05:06	00:05:06
⊞ 5 Consecutive Bad Labels					1	00:02:01	00:02:01
⊞ Side Cover Open					2	00:01:48	00:03:36
⊞ Product Out of Position					1	00:07:10	00:07:10
					15	00:57:52	14:27:53

Report Generated 4/18/2006 9:49:48 AM — 1

Event Reports can be grouped by Capture Scheme Columns

System Capture Tag Values in Event Reports

Event Detail	
Start Date/Time	4/5/2006 3:19:45 AM
End Date/Time	4/5/2006 3:22:24 AM
Date	04 Apr 2006
Count	1
Impact	100%
Duration	00:02:39
Area	Soda Line 01
Area Type	Production Line
System	Soda Line 01
System Type	Production Line
Sub-System	Labeler
Sub-System Type	System
Event Definition	Label Jam
Event Definition Type	
Event Code	Jams and Adjustments [JA]
Event Code Type	
OEE Type	Performance Loss
State	Sent
Shift	Night Shift
Team	Team C

Event Categories	
Reason	Jams and Adjustments
Sub-Reason	
Detail	
04	
05	
06	
07	
08	
09	
10	
Capture	
Product	D.COLA
Job	L1-DCLA-40033
Container Size	12OZ
04	
05	
06	
07	
08	
09	
10	

Sub Events	Start	End	Duration	
[Labeler] Label Jam	4/5/2006 3:19:45 AM	4/5/2006 3:22:24 AM	00:02:39	
[Labeler] Label Jam	4/5/2006 3:19:45 AM	4/5/2006 3:22:24 AM	00:02:39	

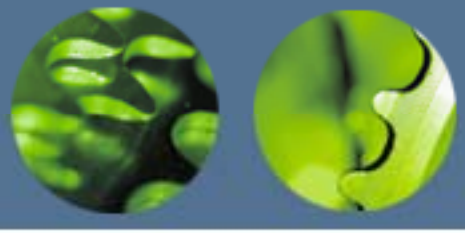
VTRs (Start)	
Tag Name	Tag Value

VTRs (End)	
Tag Name	Tag Value

Capture Tag values are displayed in the Event Detail Report

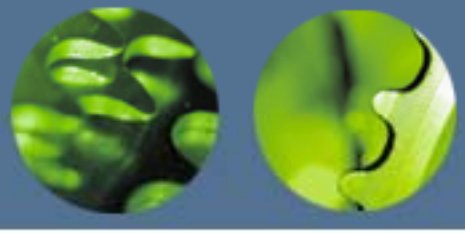
Demonstration

- Show the pre-designed Capture Scheme
- Open System Properties and demonstrate assigning System Capture Tags
- Demonstrate Event Reports grouped by different Capture Scheme Columns



Lab 07: Configuration Manager – Capture Schemes and Reports

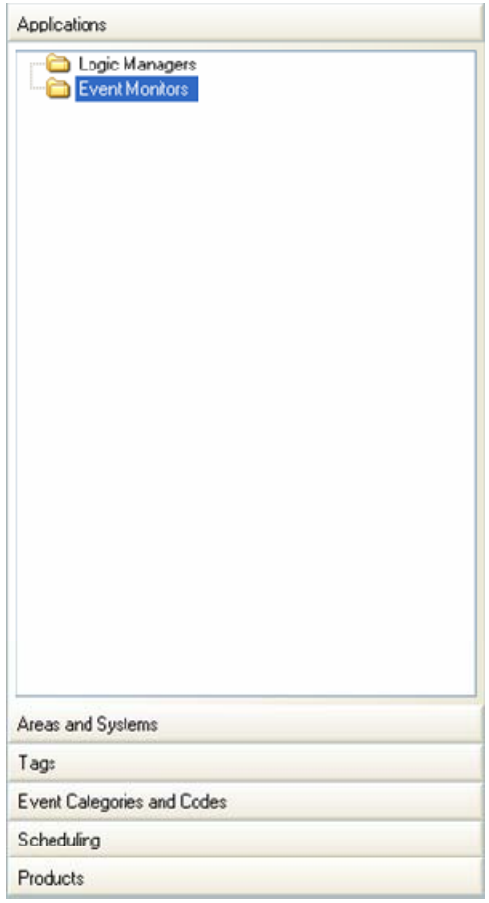
End of Day 1



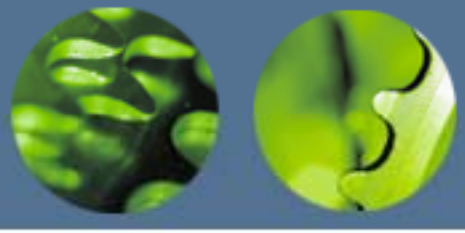
Configuration Manager

(Applications Section)

Configuration Manager - Applications

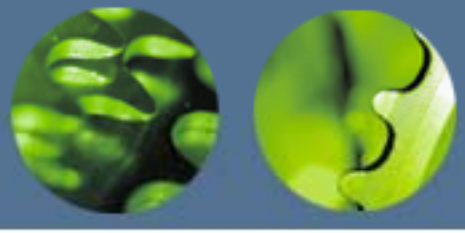


- Logic Manager
  - Monitors changing Tag values
  - Records configured events
  - Records configured KPIs (OEE)
  - Manages messaging to Event Monitors
- Event Monitor
  - Provides an interface to alert operators of recent and ongoing Events
  - Represents an instance of the Event Monitor on different clients (computers / IP addresses)



Demonstration

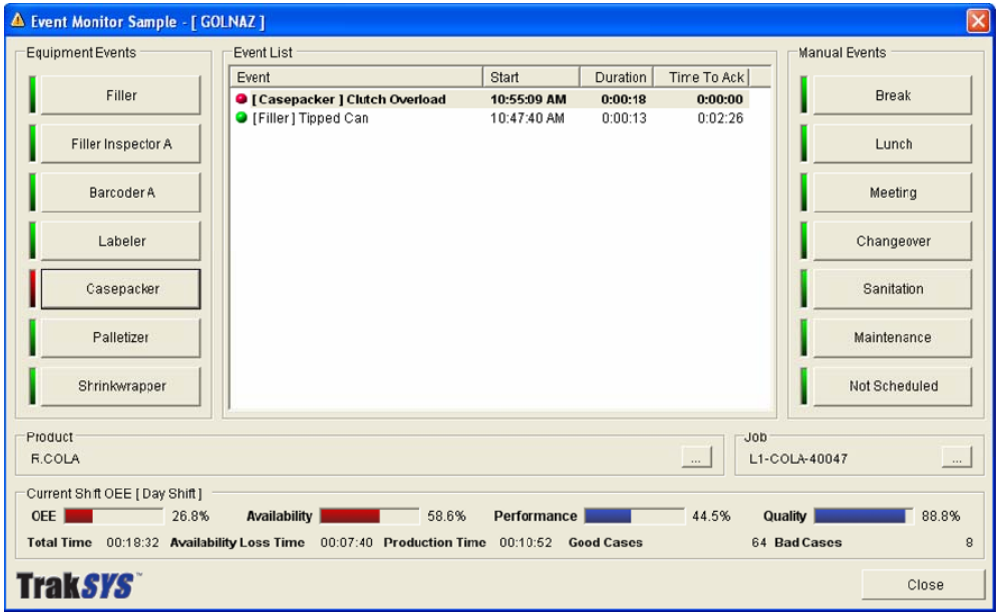
- Create a new Logic Manager
- Create a new Event Monitor

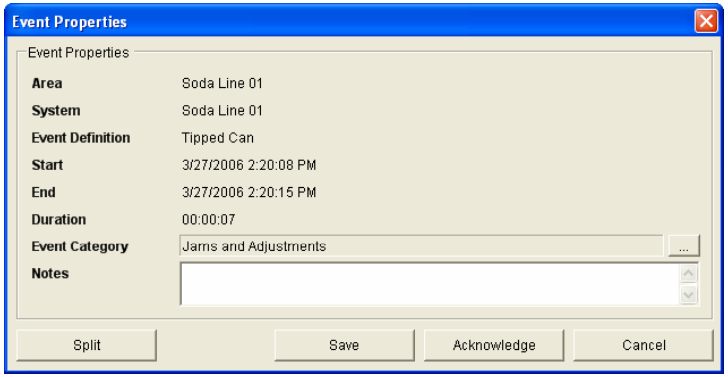


Event Monitor

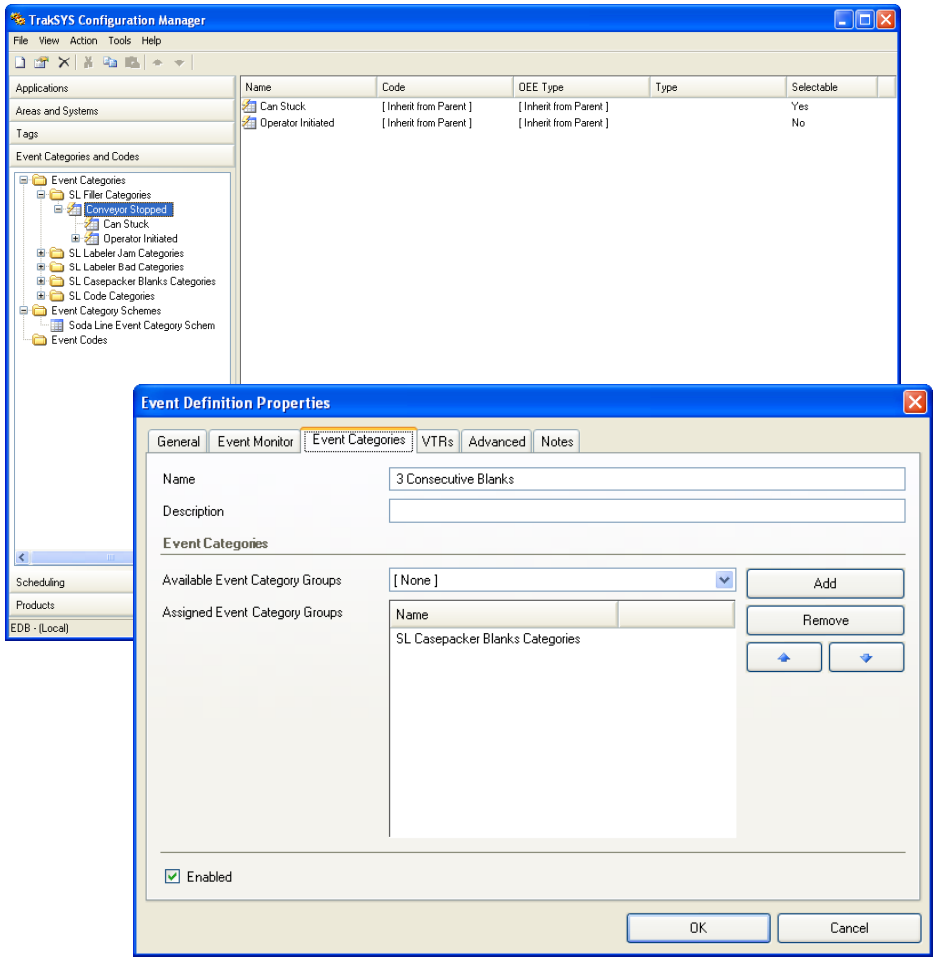
Event Monitor

- Displays equipment Events
- Allows activation of manual Events
- Event List
- Event Properties
  - Categorize
  - Annotate
  - Acknowledge





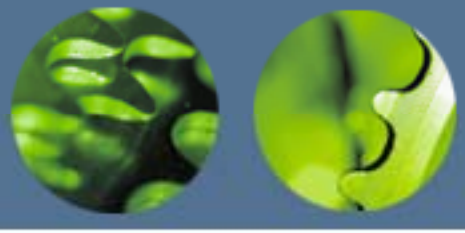
Event Categories



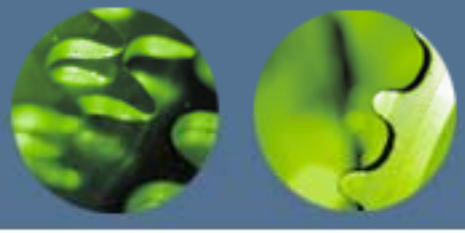
- Selected by operators to categorize Events in Event Monitor
- Assigned to Systems or Event Definitions by Event Category Group

Demonstration

- Show Event Categories and Event Category Groups
- Assign an Event Category to System
- Open the Event Monitor
- Explain Equipment Events vs. Manual Events
- Activate an Event
- Open Event Properties
- Demonstrate Event Categorization and Acknowledgement



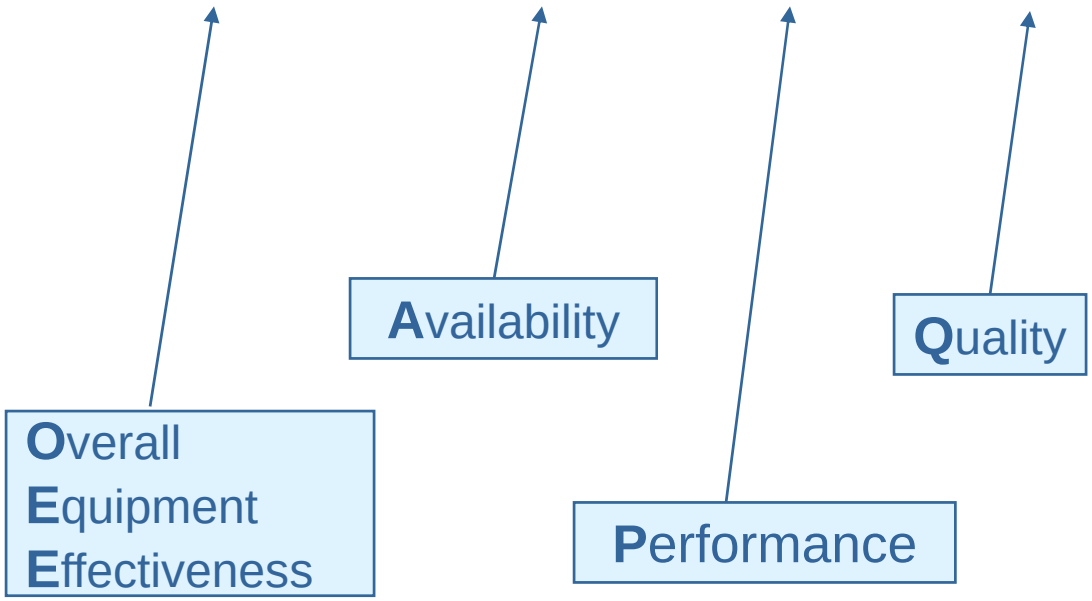
Lab 08: Event Monitor

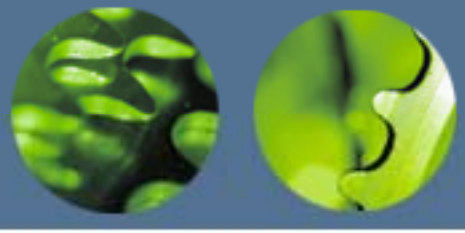


OEE Measurement

OEE Defined

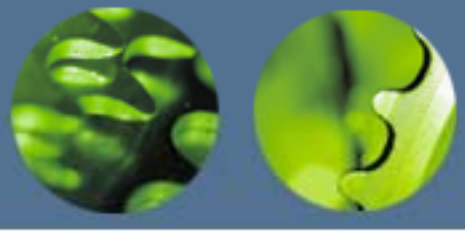
- OEE → Overall Equipment Effectiveness
- OEE% = A% * P% * Q%





Calculating OEE

- System Not Scheduled (SNS)
- Availability Loss (AL)
- Production Time = Total Time – SNS – AL
- Net Operation Time = Total Time – SNS
- Total Units = Good Units + Bad Units
- Theoretical Rate



Demonstration

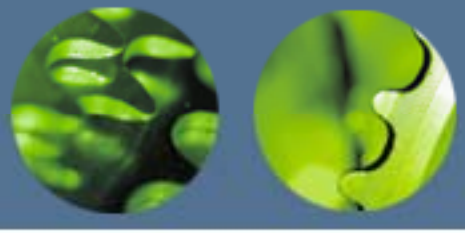
- Discuss SNS and AL in more detail with examples
- Discuss using the Schedule for automatically determining System Not Scheduled time

Calculating OEE

$$\text{Availability} = \frac{\text{Production Time}}{\text{Net Op. Time}}$$

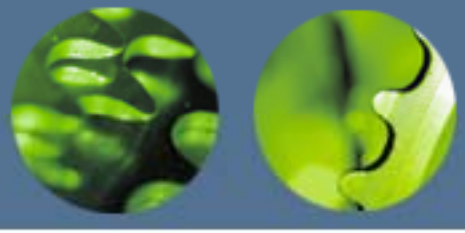
$$\text{Performance} = \frac{\text{Total Units}}{\text{Th. Rate} * \text{Prod. Time}}$$

$$\text{Quality} = \frac{\text{Good Units}}{\text{Total Units}}$$



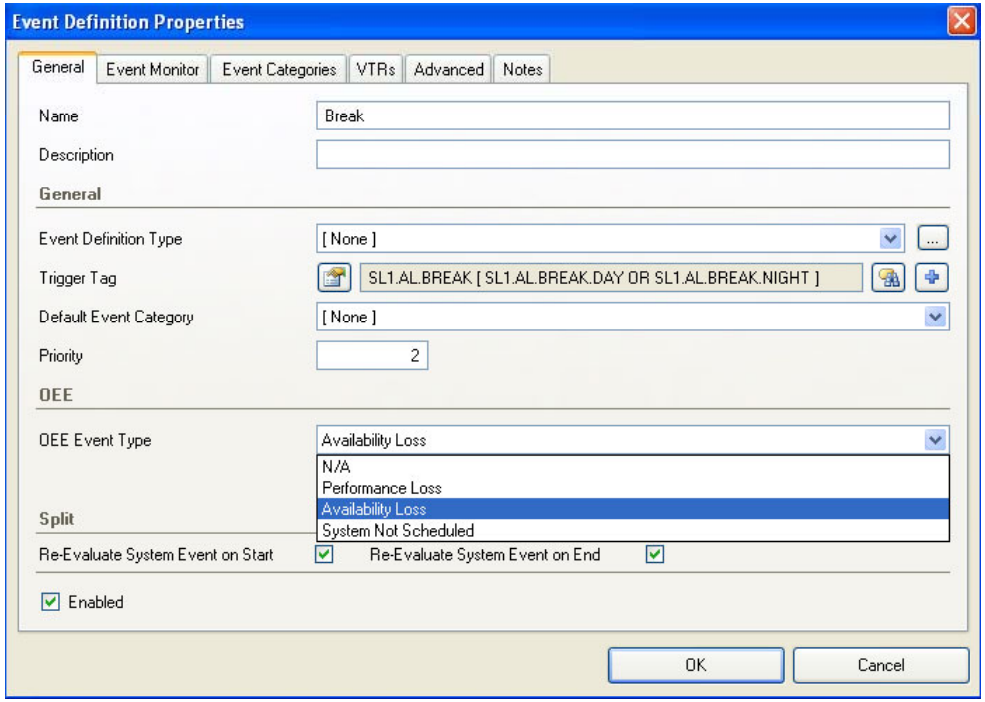
OEE

- Availability represents the percentage of time the process is available for production.
- Performance represents the ratio of the total units produced vs. the theoretical units that could be produced.
- Quality is the ratio of good vs. total units.

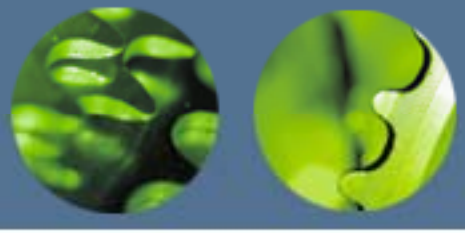


Break (15 Minutes)

OEE and Event Definitions



- Event Definitions Properties Page
  - OEE Event Type
  - Default option is N/A
  - If tracking OEE for the parent System, one of these options should be selected:
    - Performance Loss
    - Availability Loss
    - System Not Scheduled

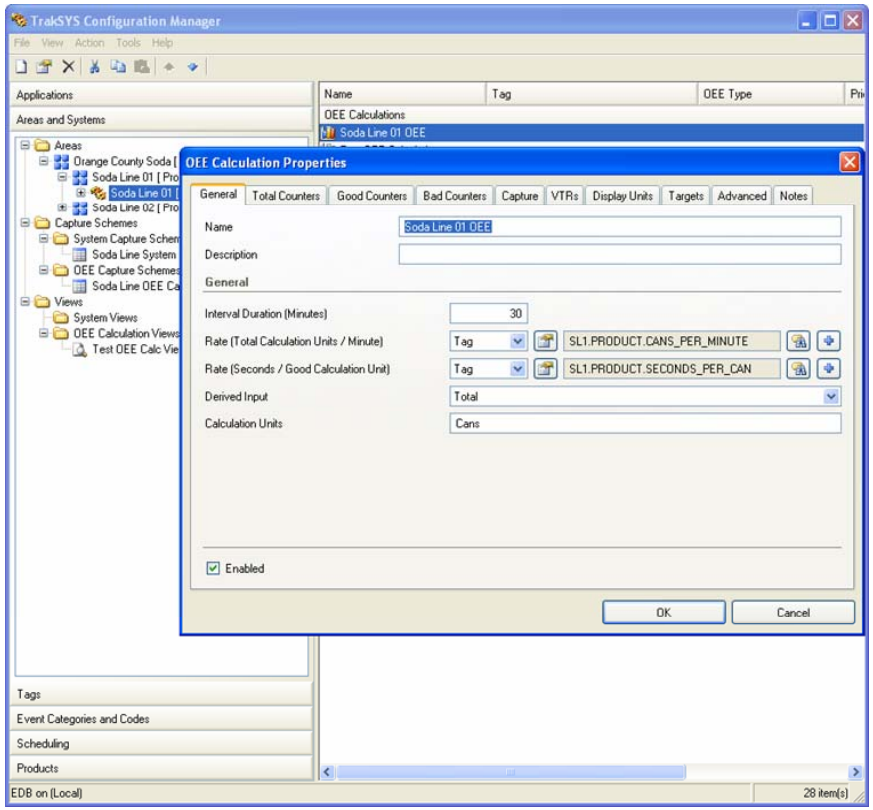


Lab 09: Configuration Manager – Virtual Tags, and AL & SNS Event Definitions

OEE Calculations

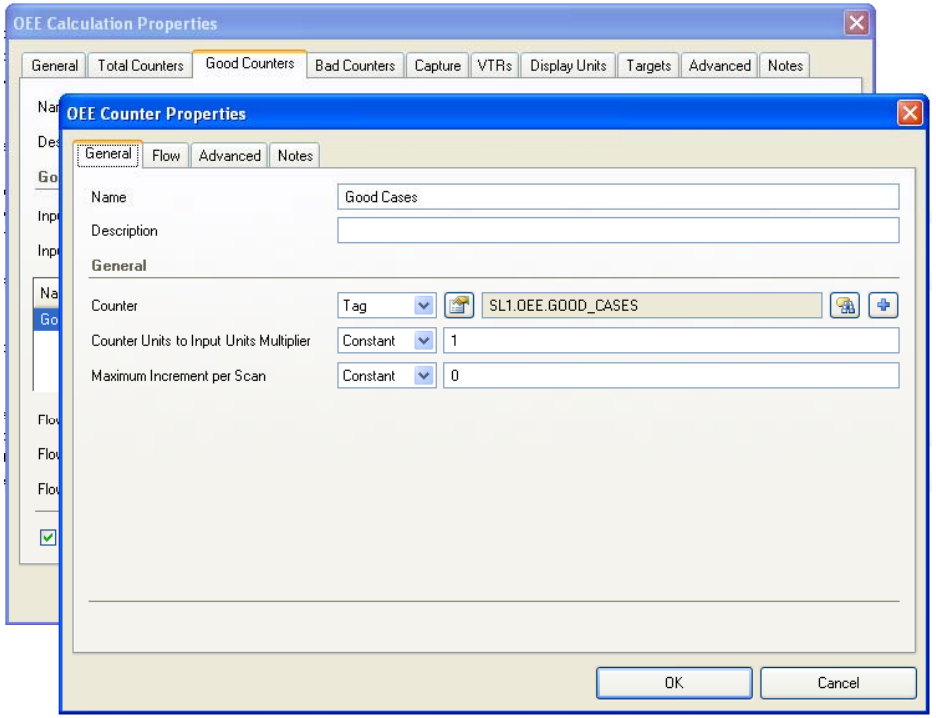
OEE Calculations

- OEE Calculations define how Logic Manager computes and records the OEE information
- Key OEE Properties
  - Rate (Total Calculation Units per Minute): The theoretical number of units that can be produced in one minute
  - Derived Input: Indicates which counter is going to be calculated by the Logic Manager based on the other two (Total, Good, or Bad)
  - Calculation Units
  - Interval Duration (usually between 30 and 60 minutes)



OEE Counters

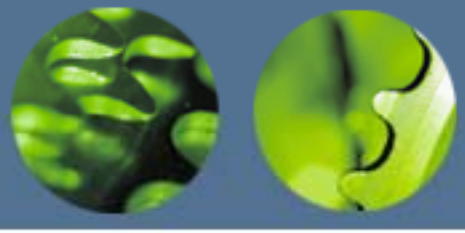
- OEE counters track Total, Good, and Bad production units:
  - Logic Manager monitors the change in the Counter Tags' values rather than their actual values
  - Units Multiplier
  - Maximum Increment per Scan



Demonstration

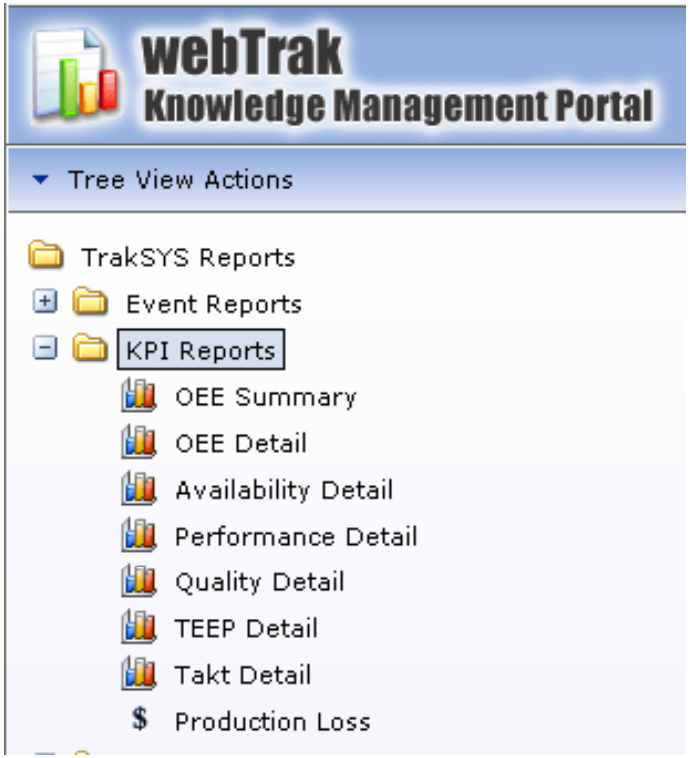
- Discuss OEE Record Interval times (typically between 30 and 60 minutes)
- Show/Discuss different Units and Multipliers

Lab 10: Configuration Manager – OEE Calculations and OEE Counters



KPI Reports

KPI Reports

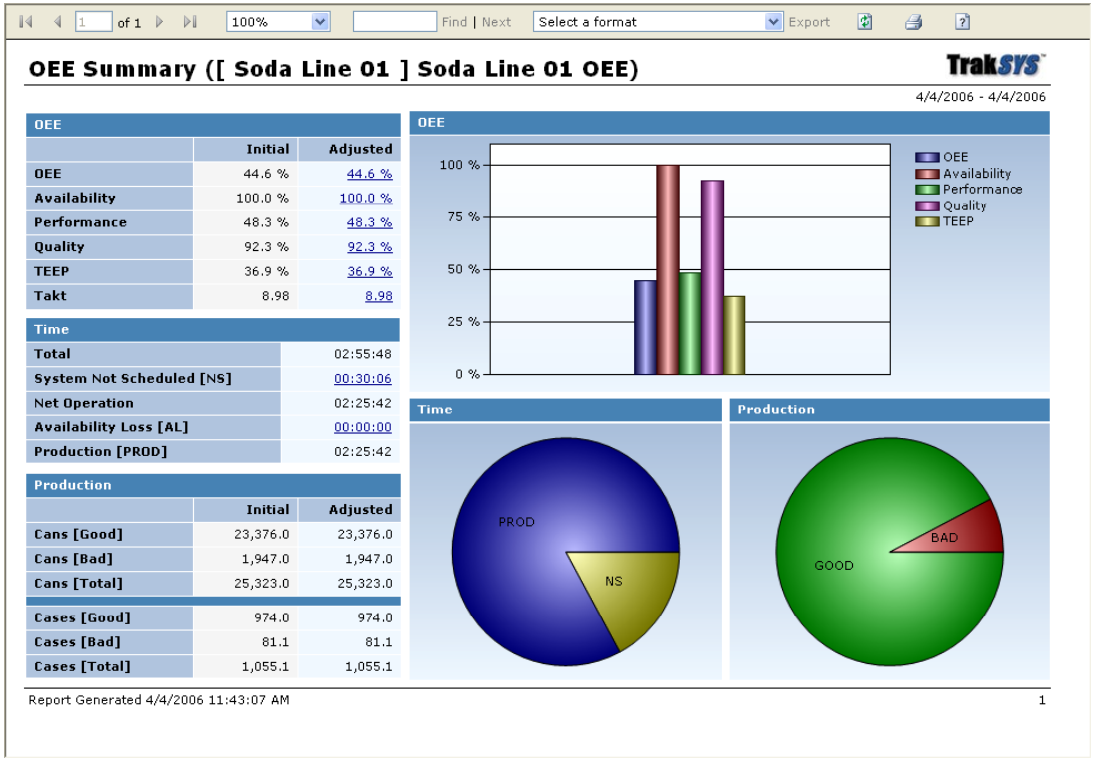


- Display standard productivity KPIs such as OEE, TEEP, and Takt Time
- OEE Reports
  - OEE Detail
  - OEE Summary
  - Availability Detail
  - Performance Detail
  - Quality Detail

OEE Reports

OEE Summary Report

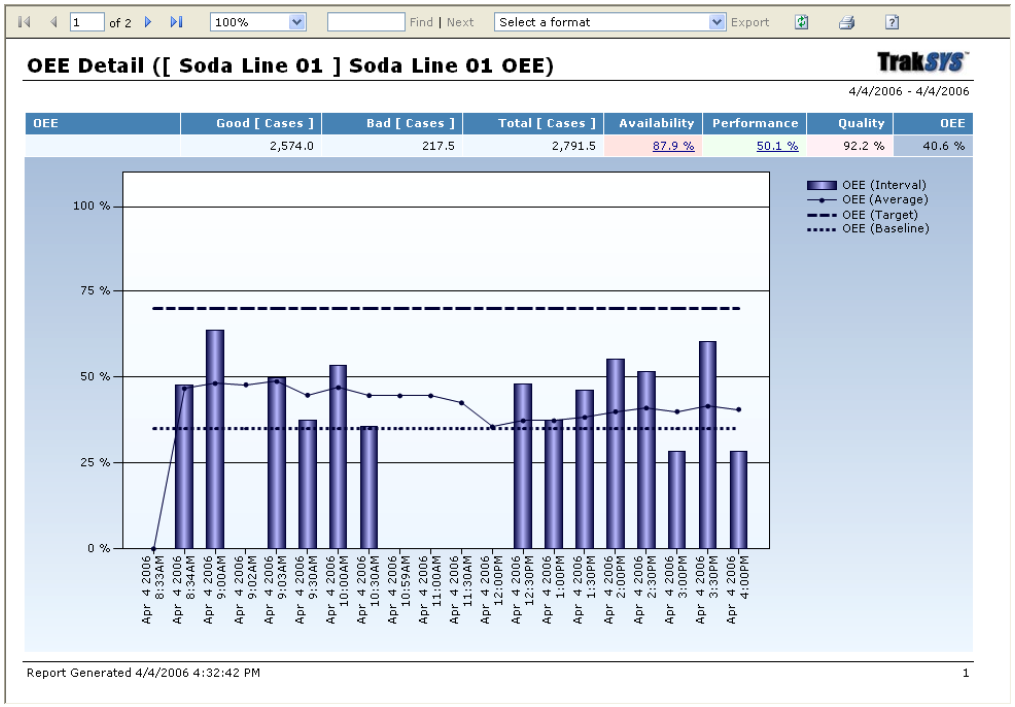
- Displays OEE and related KPI data for the selected date range based on the selected OEE Calculation
- Allows filtering by other parameters such as Shift, Team, Product, and etc…



OEE Reports

OEE Detail Report

- Displays grouped OEE data for the selected date range based on the selected OEE Calculation
- Allows filtering by other parameters such as Shift, Team, Product, and etc…
- Contains two sections:
  - A graph showing the calculated KPI for the selected period and other data based on selected OEE Calculation
  - A tabular representation of the specified KPI data



OEE Component Reports

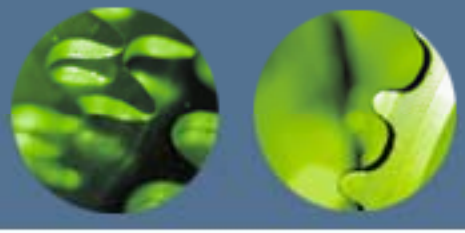
- These KPI reports, along with Event Reports, are useful in investigating the root causes of productivity losses
  - Availability Detail Report
  - Performance Detail Report
  - Quality Detail Report

Demonstration

- Open and discuss the different KPI Reports

Lunch (1 Hour)

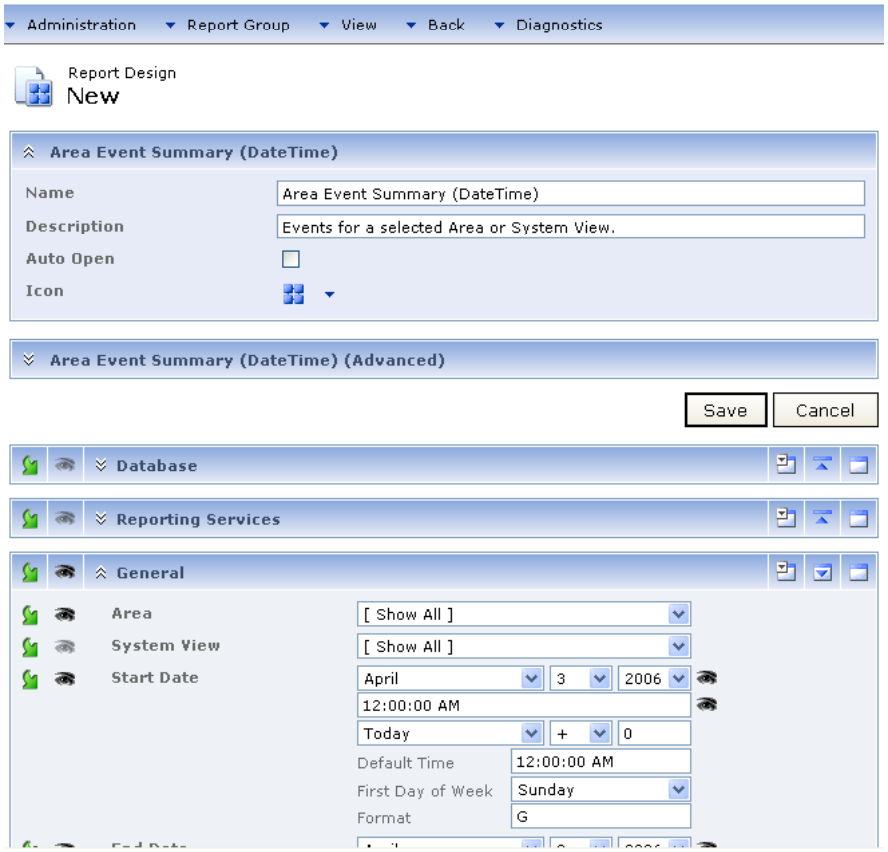
Lab 11: webTrak – KPI Reports



Report Design

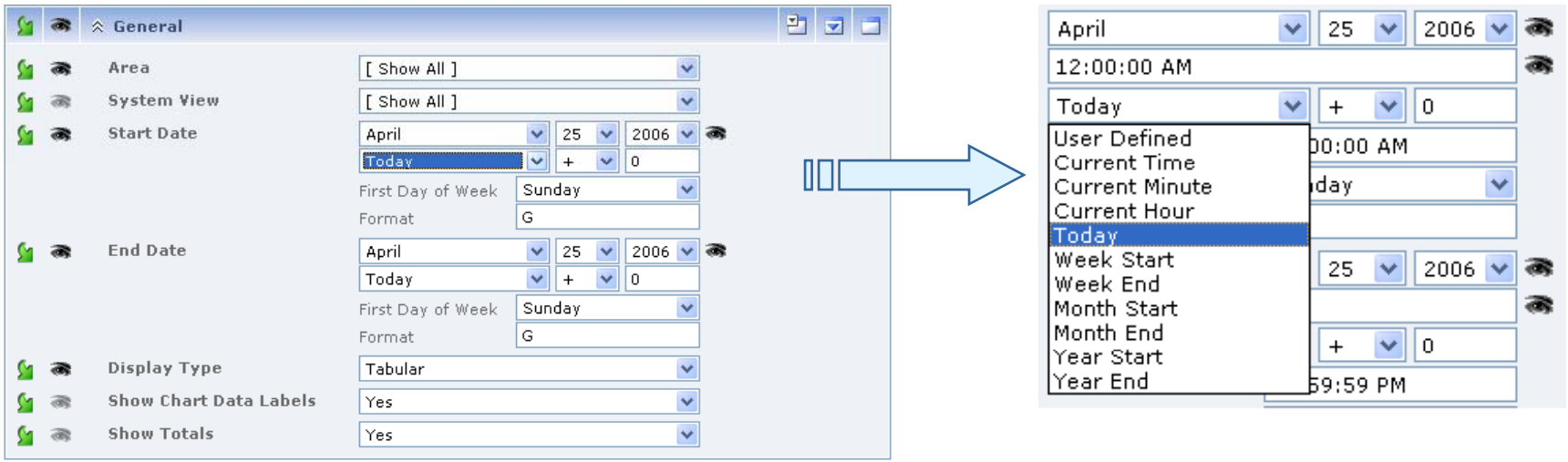
Report Design

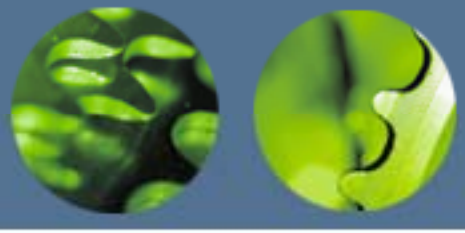
- Report Designer
  - Is accessible to Administrators or Report Users with Publisher rights
  - Allows changing parameter **values** and their **visibility** to report end users
  - Displays and edits report properties
- Parameters
  - The values passed to the report for data retrieval and display
  - Default values can be preset in Design Mode
  - Visibilities can be set in Design mode



Report Date/Time Picker

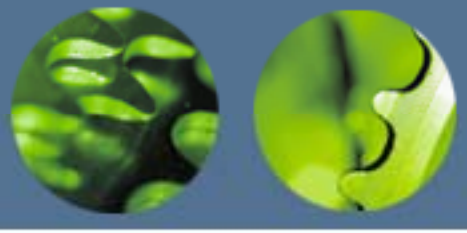
- Allows selection of an exact or relative date /time for a report parameter
- Examples include:
  - Exact date range (e.g. 1/12/2006 through 1/26/2006)
  - Current Date, Week, Month, and etc…
  - Last N Days, Hours, Minutes, and etc…





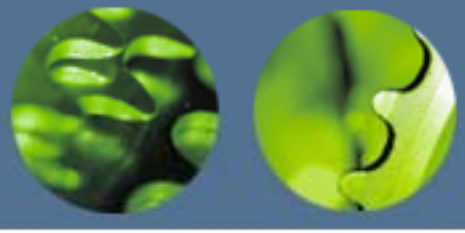
Demonstration

- Create a New Report
- Elaborate more on Date and Time picker parameters
- Give some examples for exact and relative Date & Time selection



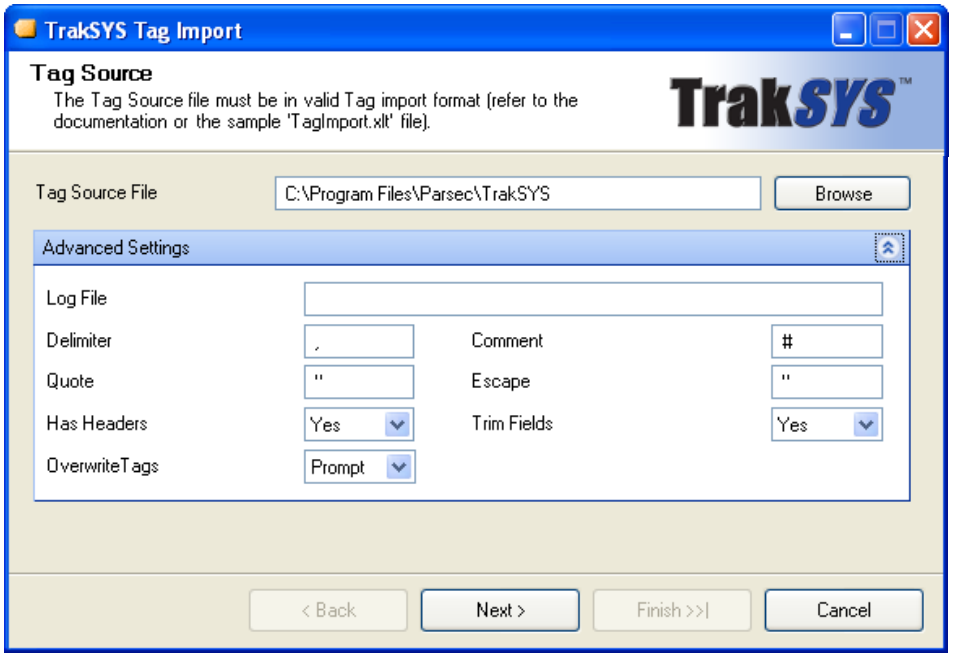
Lab 12: webTrak – Report Design

Break (10 Minutes)



Tag Import

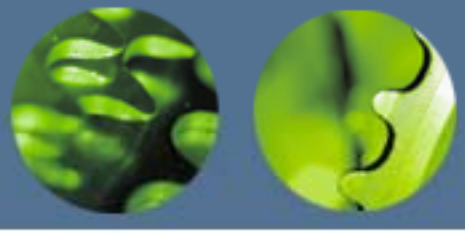
Tag Import



- A stand-alone application for batch importing Tags into the EDB database
- Input CSV files must adhere to a particular format
- Advanced Settings provide more control over processing and importing CSV files

Demonstration

- Open the Tag Import Template
- Enter sample Tags for import
- Point out the embedded comments for the columns
- Save Template as CSV
- Run Tag Import and import the Tag Import CSV
- Briefly show Advanced Settings



Lab 13: Tag Import

http://www.parsec-corp.com

http://traksys.parsec-corp.com

support@parsec-corp.com