

TrendMiner

What's new in 2025.R2

Welcome to the webinar. We will start momentarily.



Rob Azevedo

Head of Product Marketing



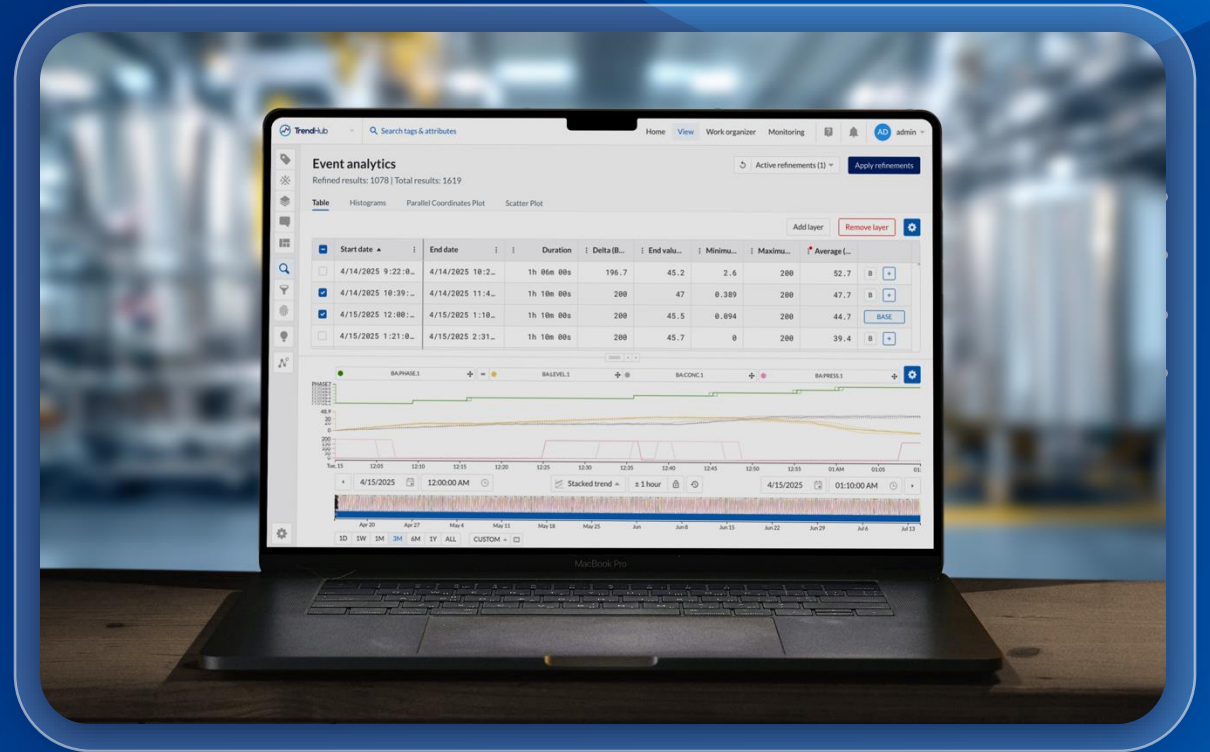
Christina Linne

Product Manager



Tim Haselaars

Product Manager





Listen only mode



**Use the question box
in the side panel.**

Live Q&A at the end.



**The recording will be sent
a day after the webinar +
Slides available as
handout**

2025.R2

"Collaborative analytics made easy"

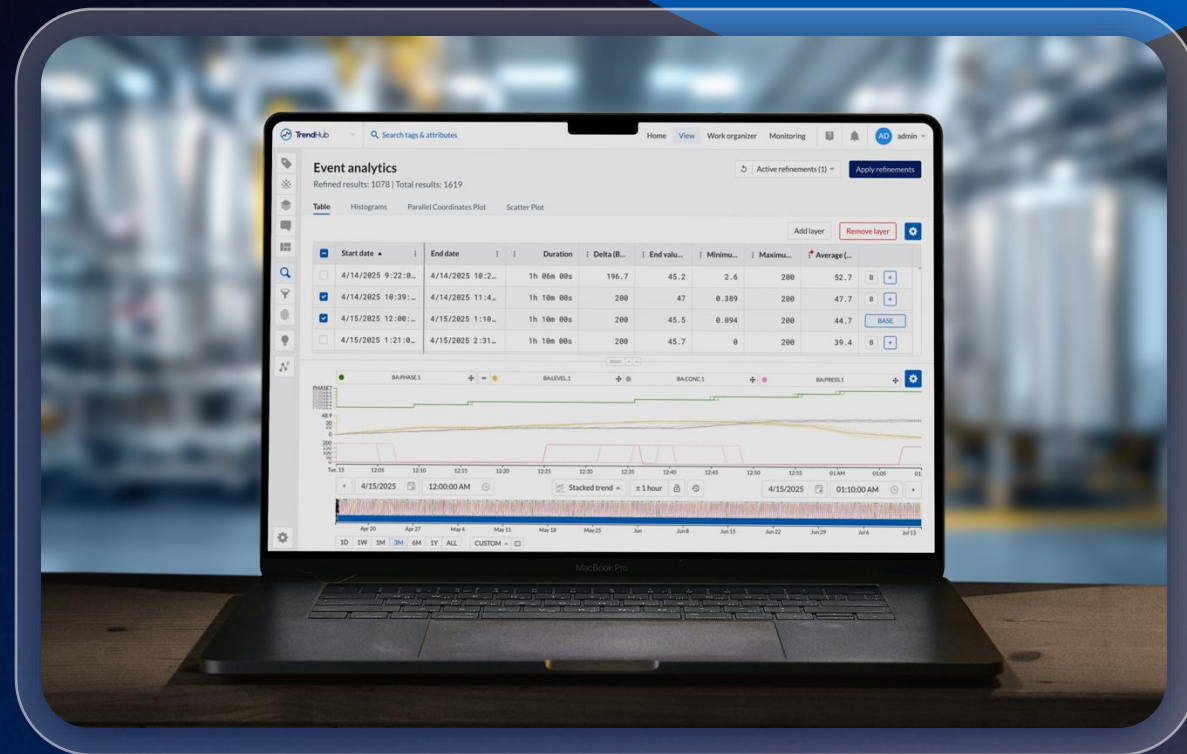
Collaboration

Analytics

Performance

Ecosystem

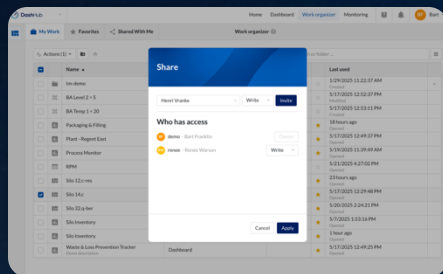
Innovation



2025.R2

Collaboration

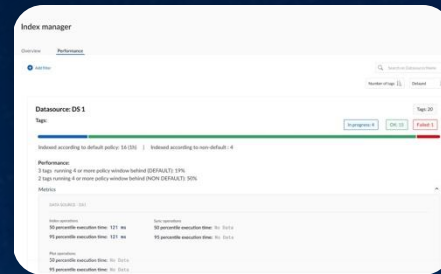
Share write permission



Performance

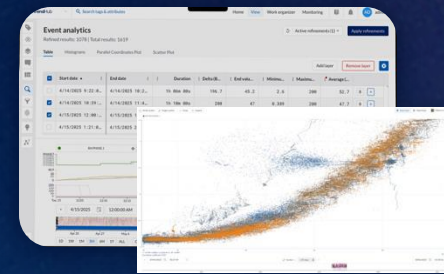
Datasource lightning lane

Index Manager:
Performance insights



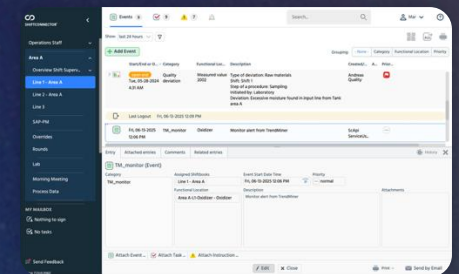
Analytics

Event and timeseries view



Ecosystem

Eschbach Shiftconnector



COLLABORATION

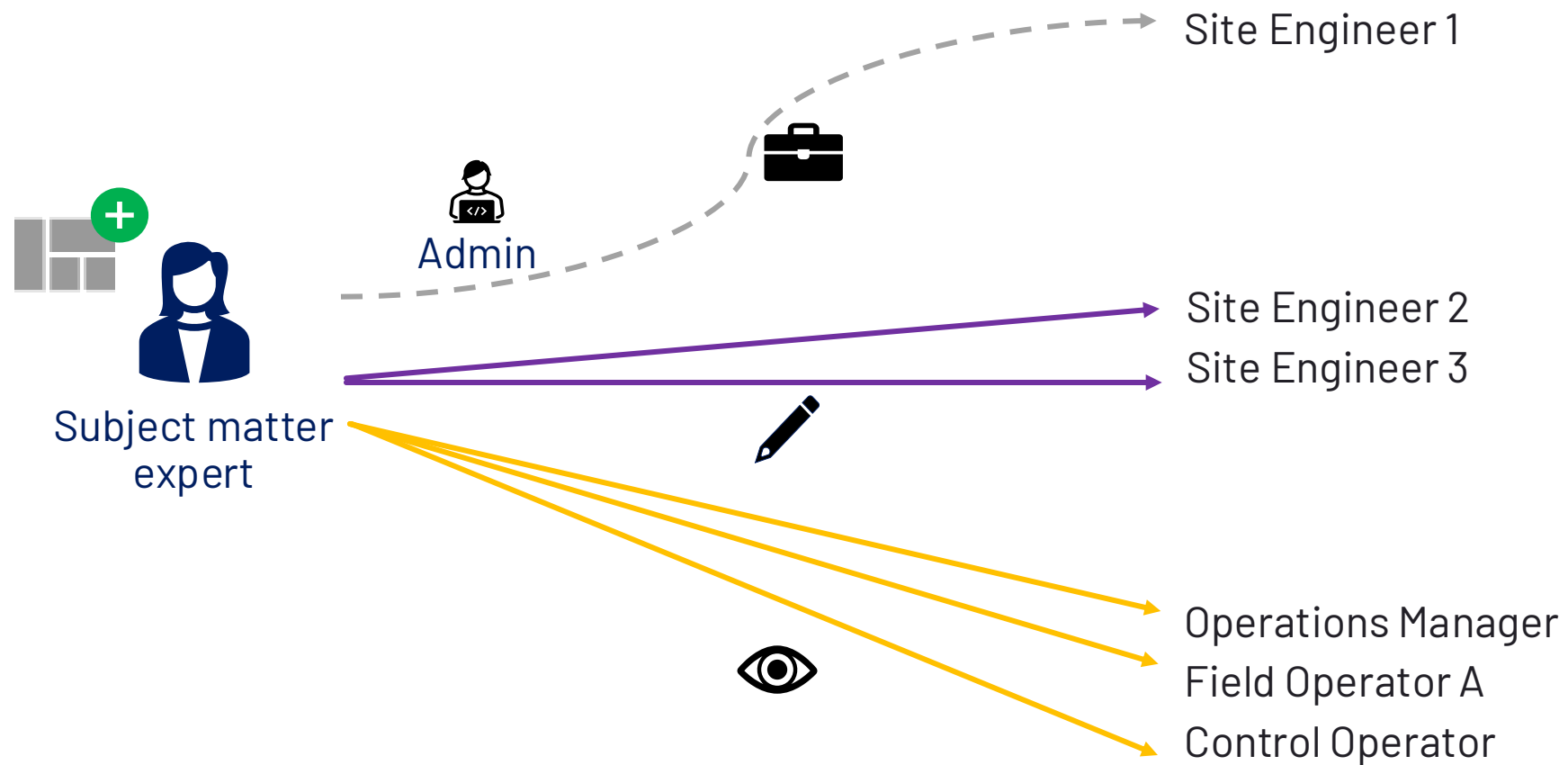


Christina Linne
Product Manager





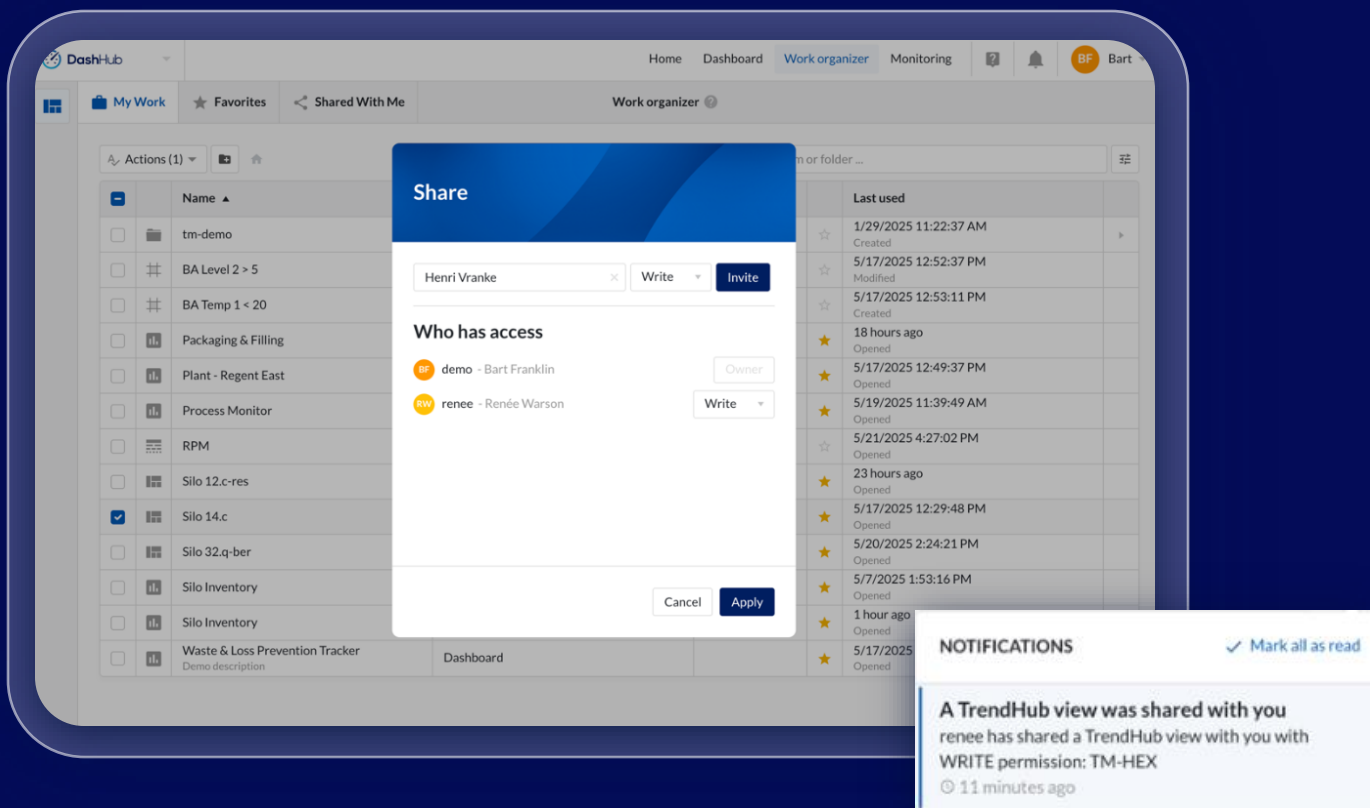
COLLABORATION WITHIN AN ORGANIZATION





COLLABORATION

SHARING WRITE PERMISSION

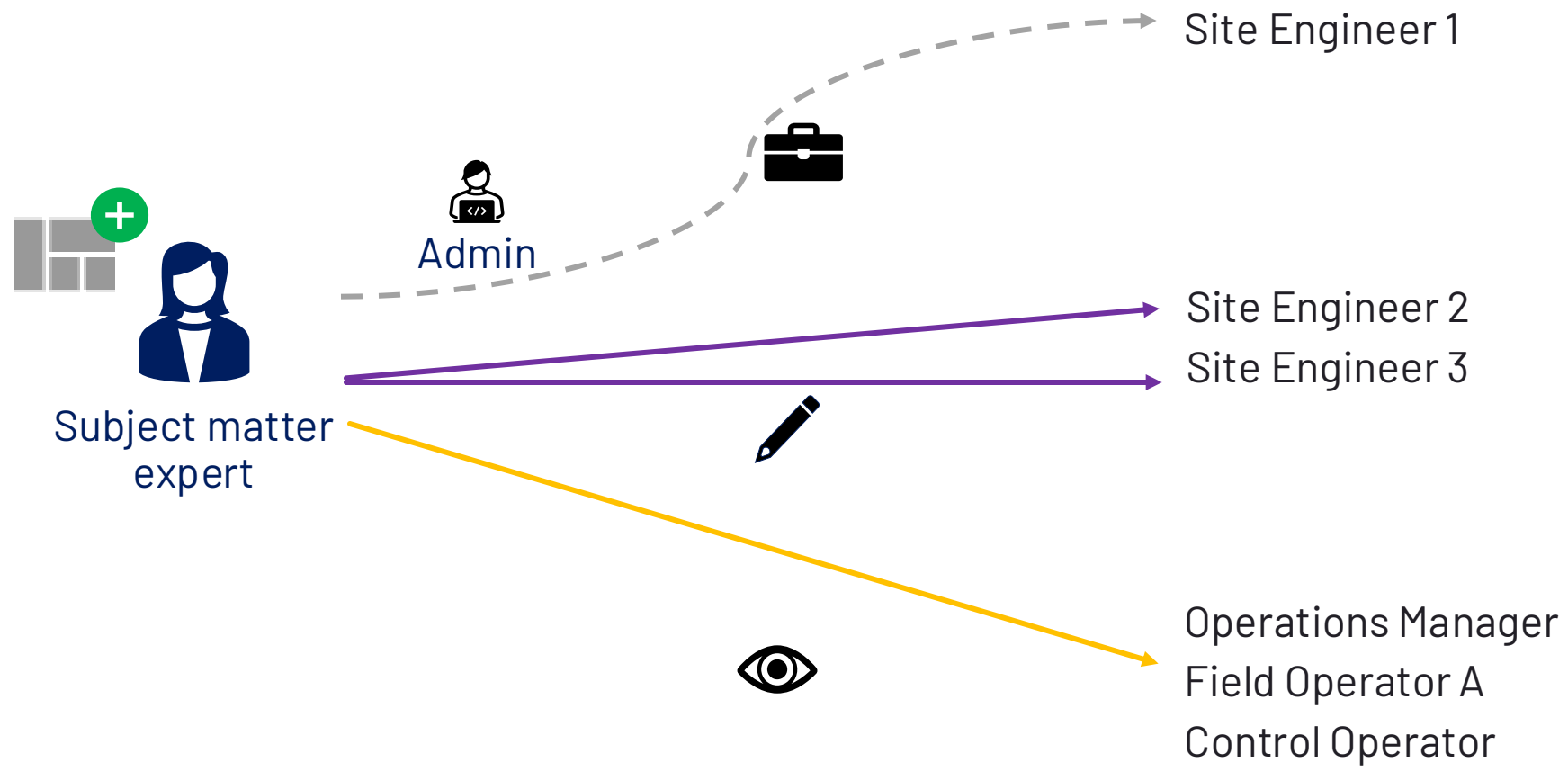


Permission Management

Recipient Notification



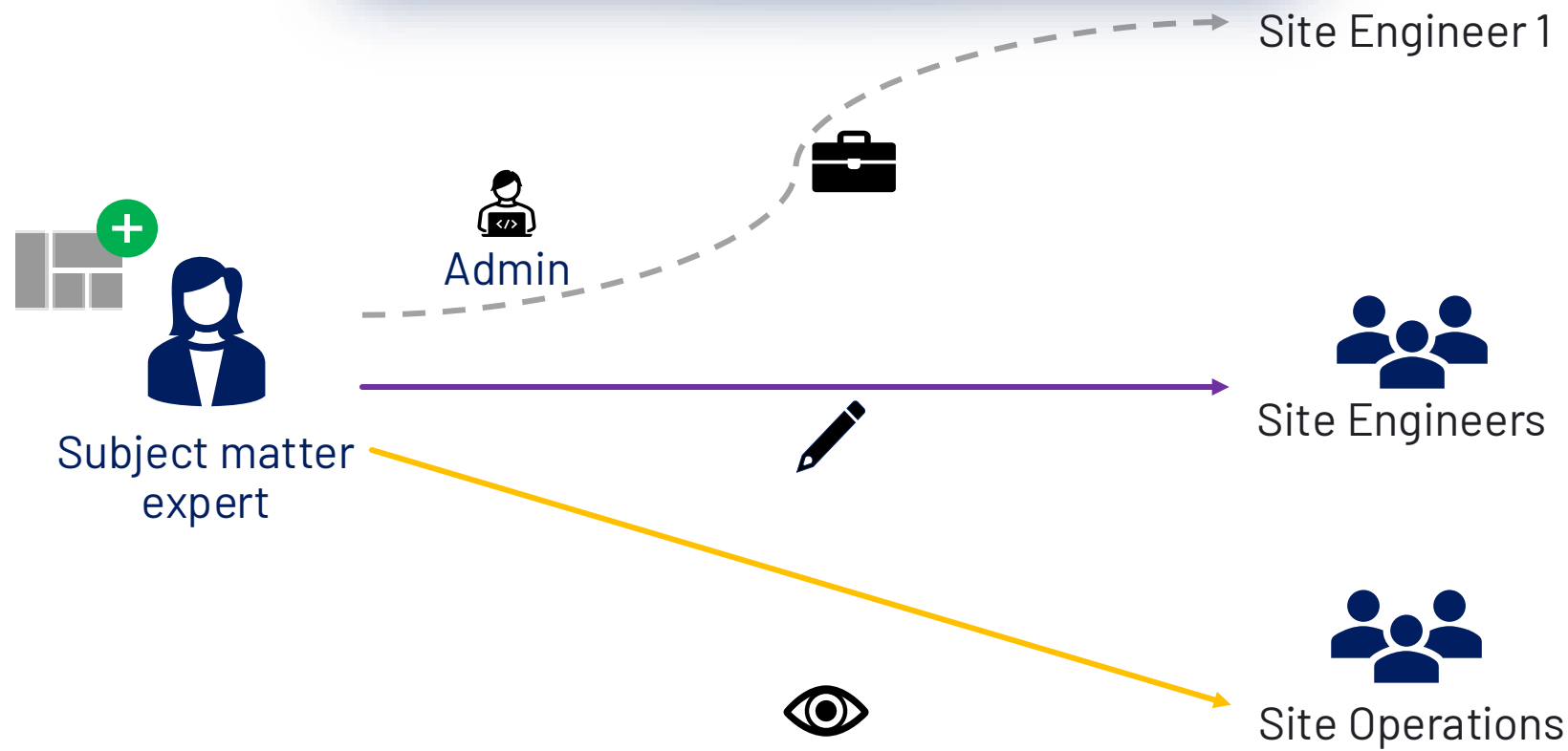
COLLABORATION WITHIN AN ORGANIZATION





COLLABORATION WITHIN AN ORGANIZATION

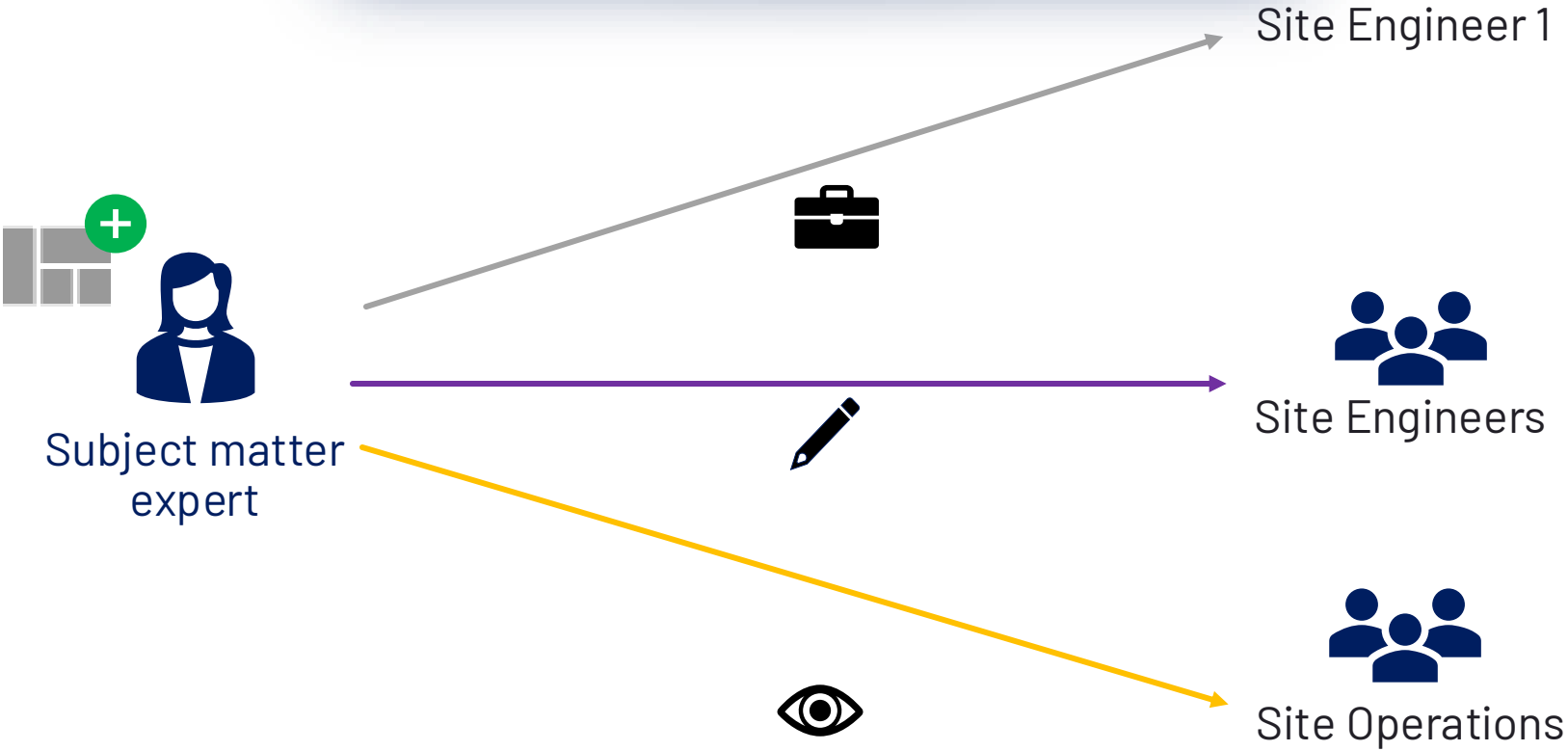
Coming Soon





COLLABORATION WITHIN AN ORGANIZATION

Coming Soon



PERFORMANCE



Christina Linne
Product Manager

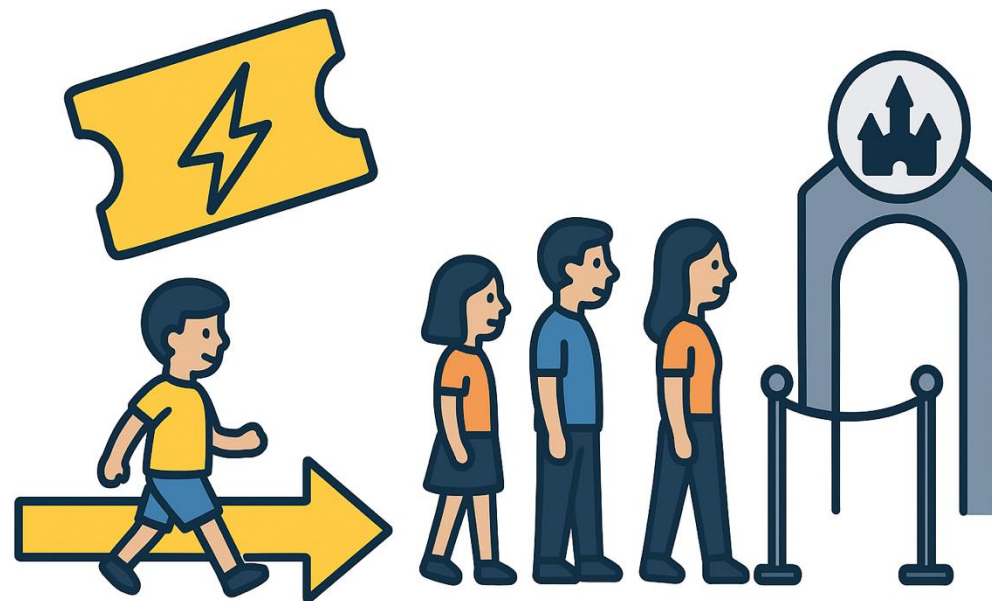




PERFORMANCE DATA INDEXING

Lightning lane
for fast data sources

Better feedback
for administrators

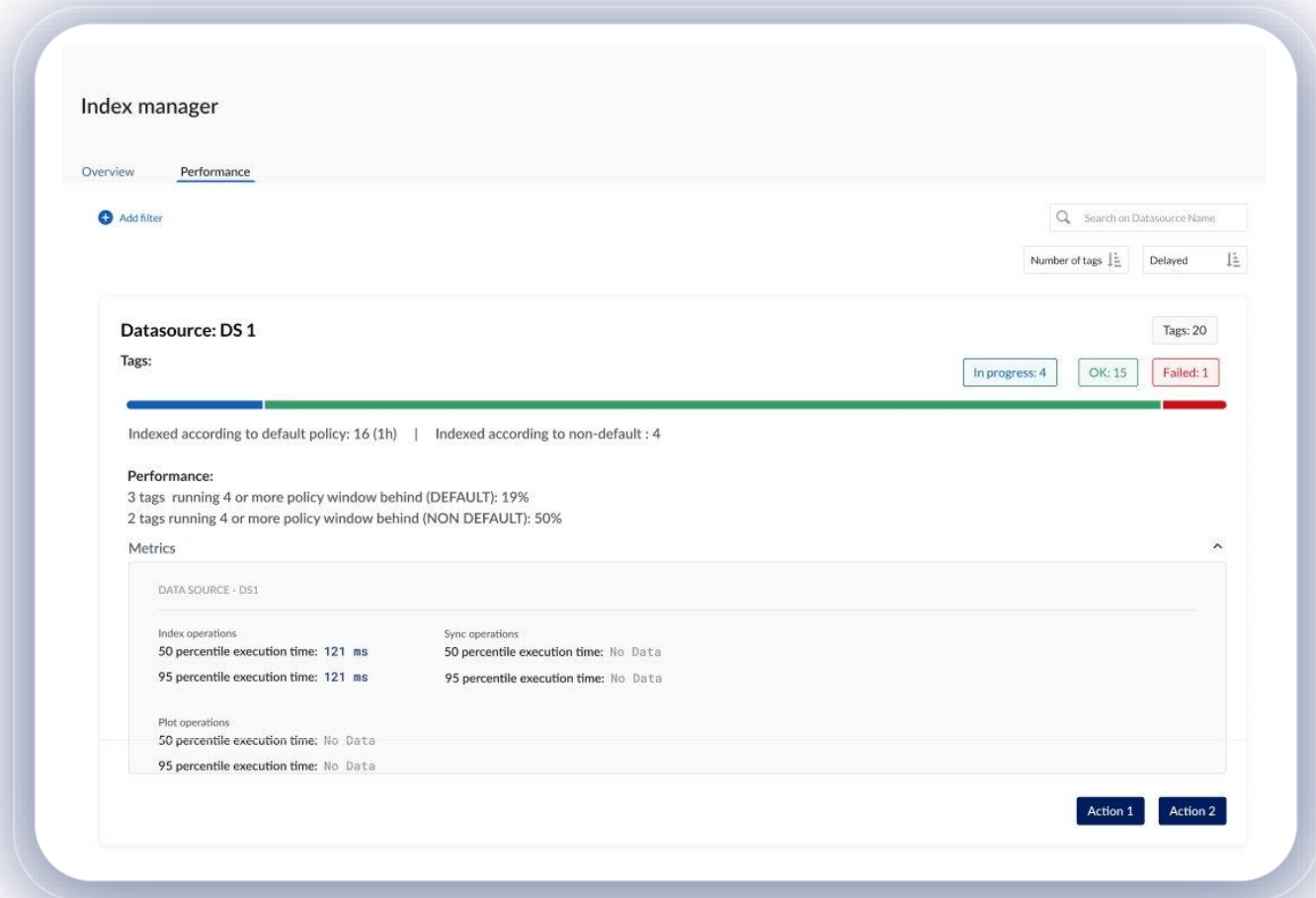




PERFORMANCE DATA INDEXING

Lightning lane
for fast data sources

Better feedback
for administrators



ANALYTICS



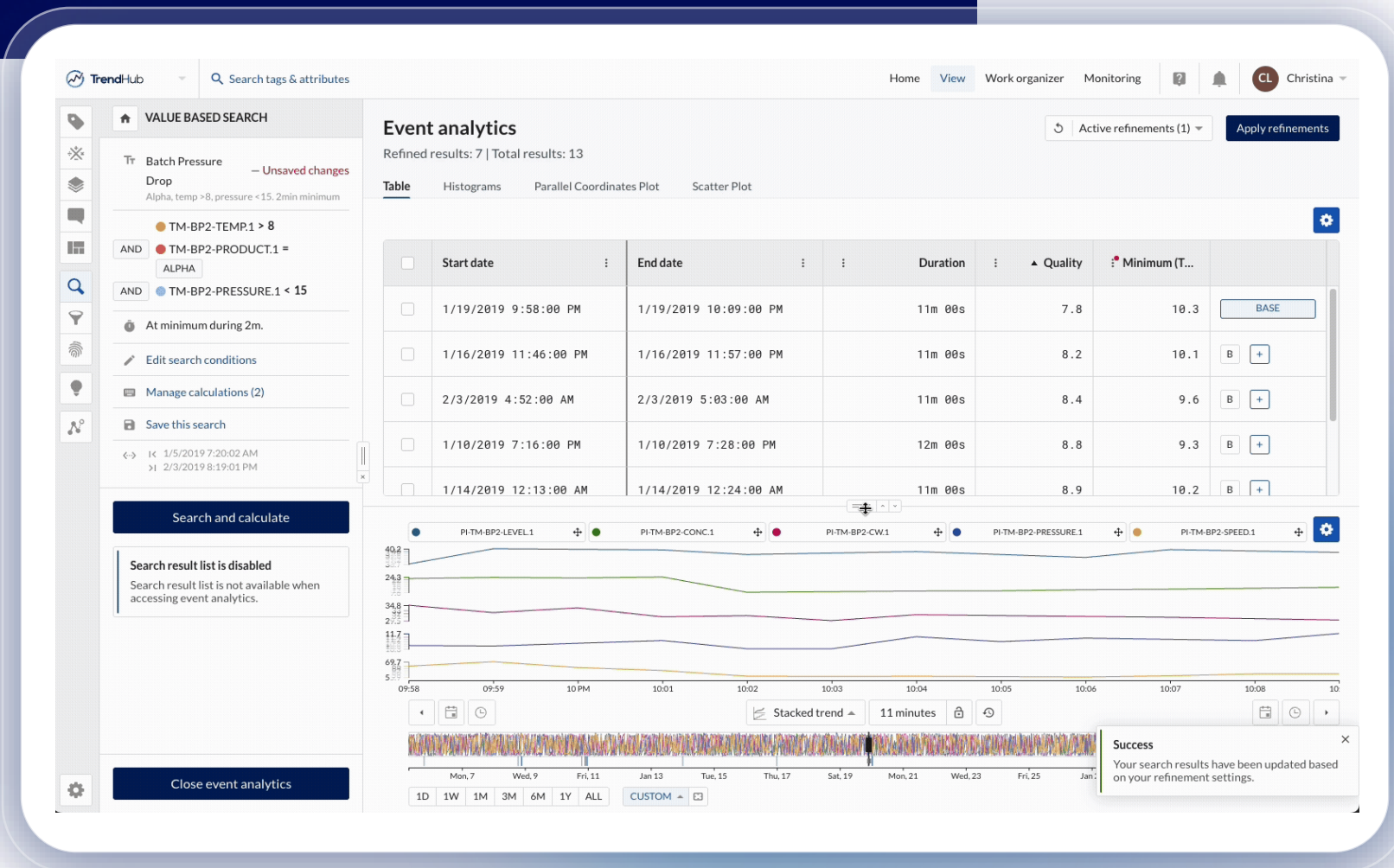
Christina Linne
Product Manager



ANALYTICS SIMULTANEOUS PLOTTING

Investigate specific events

Analyze process behavior
throughout different events





SCATTER PLOT ENHANCEMENTS

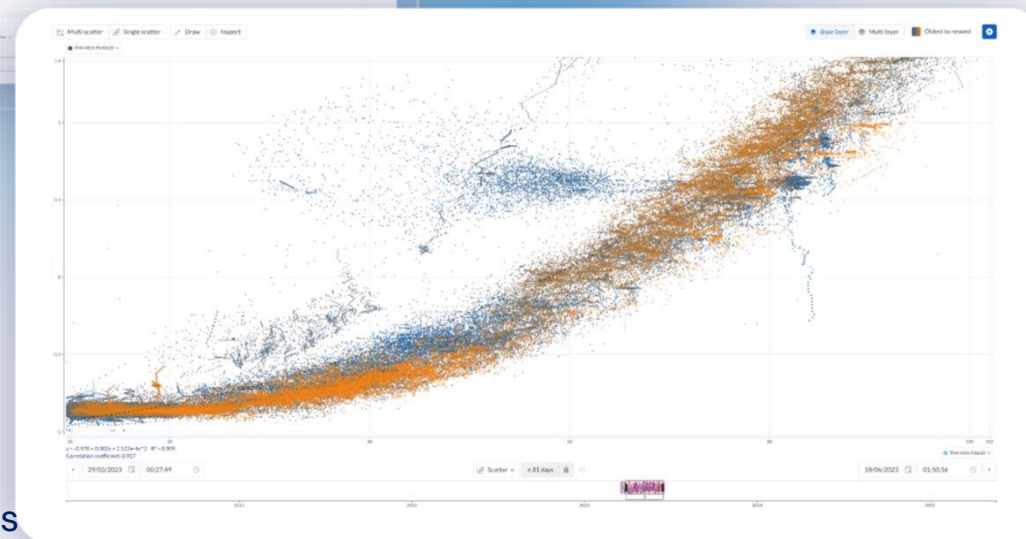
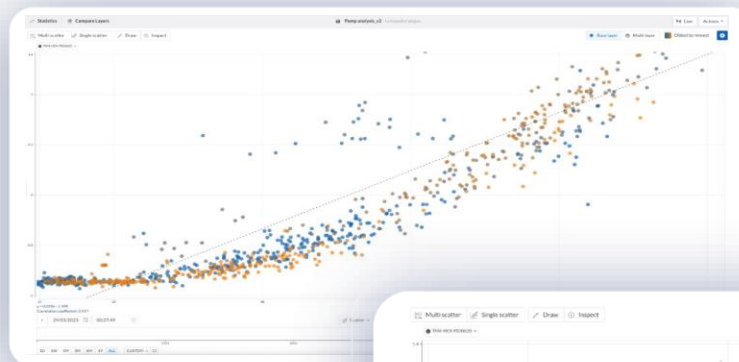
More data points

More regression types

Reference lines

20x

more data points



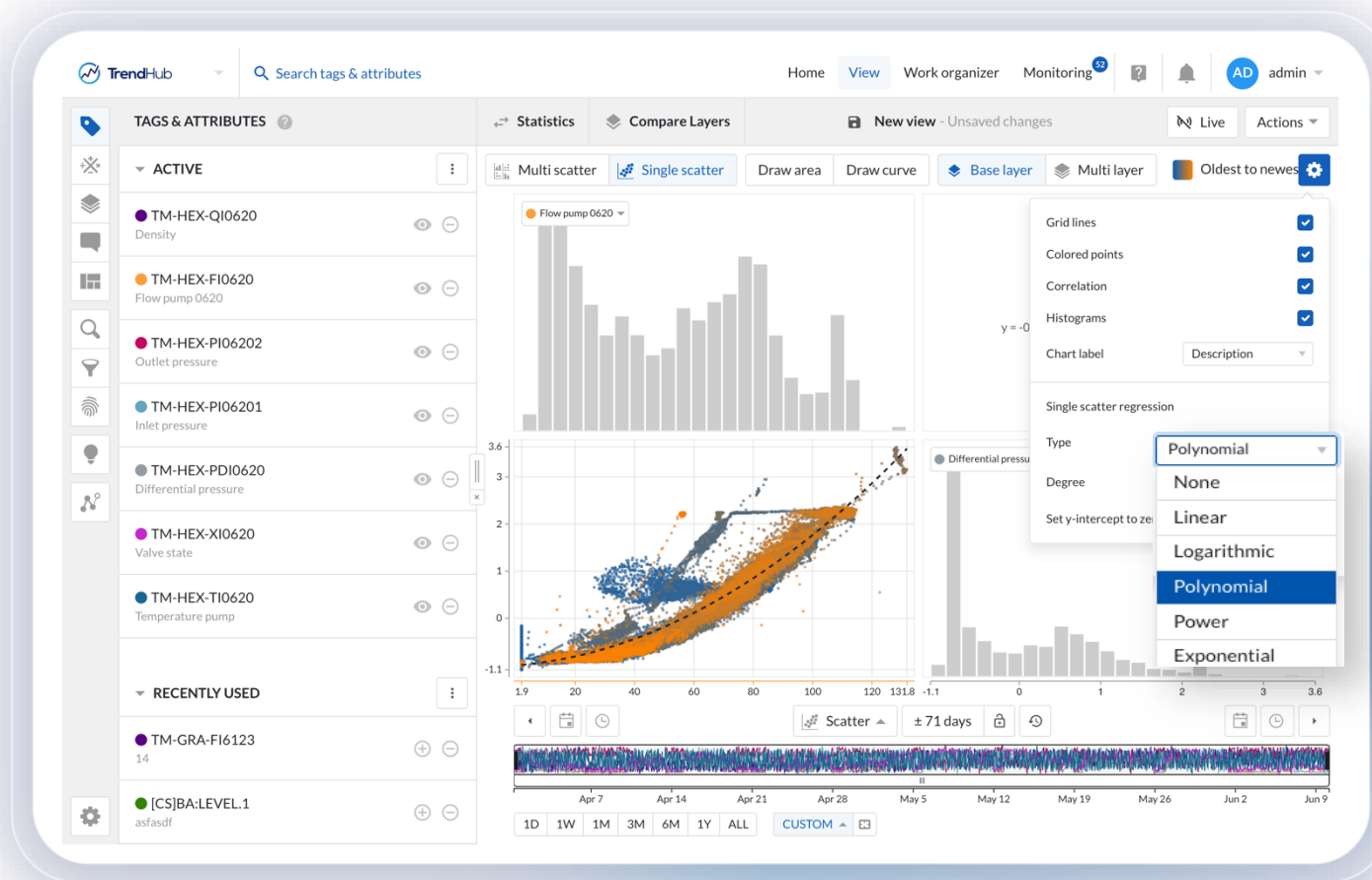


SCATTER PLOT ENHANCEMENTS

More data points

More regression types

Reference lines





SCATTER PLOT ENHANCEMENTS

More data points

More regression types

Reference lines



ECOSYSTEM HIGHLIGHTS



Tim Haselaars

Product Manager

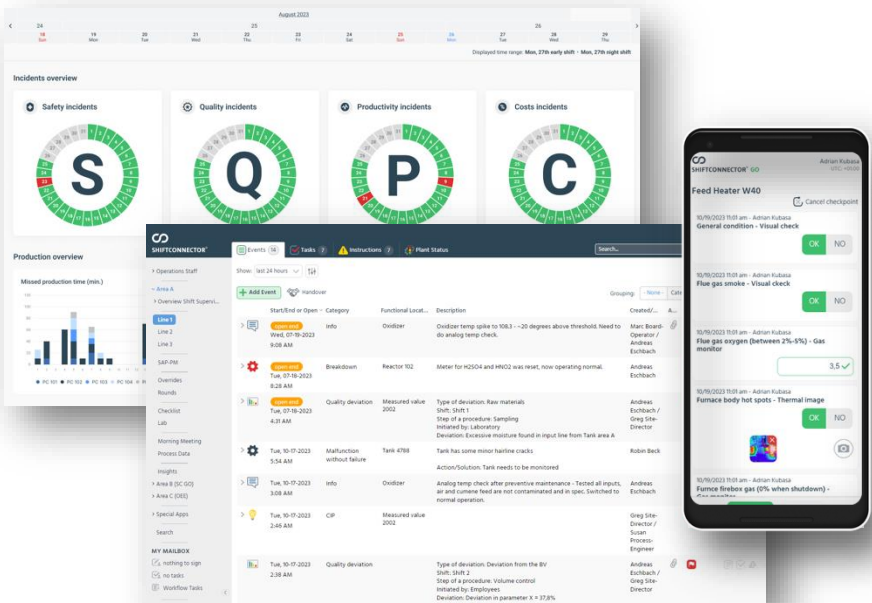


INTEGRATION UPDATE

eschbach



SHIFTCONNECTOR®





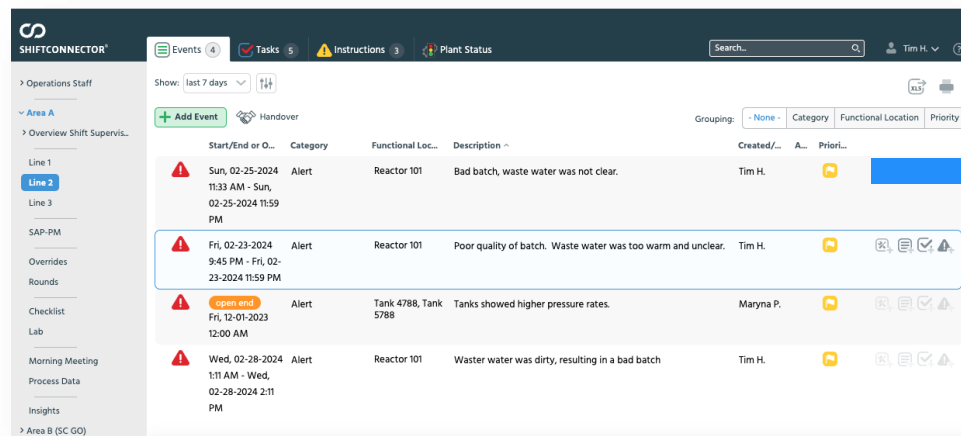
2024.R1

Initial Release

2024.R3

Improved Sync

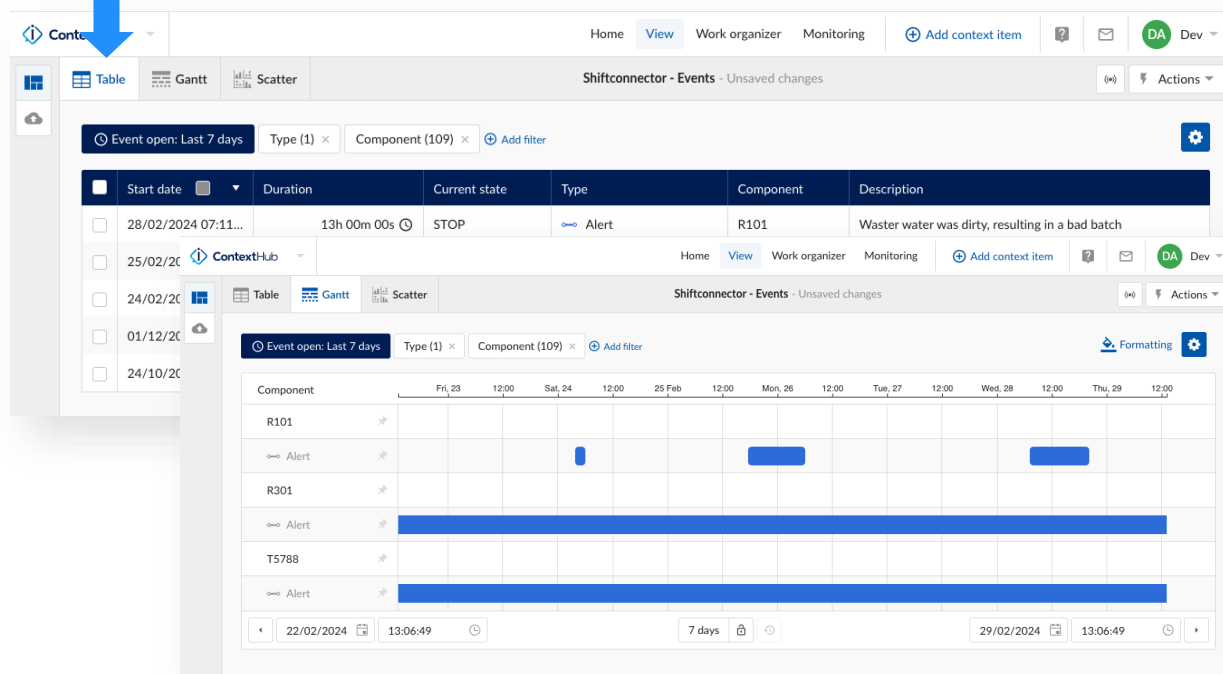
Shiftconnector® – Root cause analysis



Shiftconnector® Events table showing a list of events with columns: Start/End or O..., Category, Functional Loc..., Description, Created/..., and Priority. A blue arrow points from the 'Alert' category of the first event to the 'Contexti-Hub' in the TrendMiner interface.

| Start/End or O... | Category | Functional Loc... | Description | Created/... | Pri... |
|---|----------|----------------------|--|-------------|--------|
| Sun, 02-25-2024 11:33 AM - Sun, 02-25-2024 11:59 PM | Alert | Reactor 101 | Bad batch, waste water was not clear. | Tim H. | |
| Fri, 02-23-2024 9:45 PM - Fri, 02-23-2024 11:59 PM | Alert | Reactor 101 | Poor quality of batch. Waste water was too warm and unclear. | Tim H. | |
| Fri, 12-01-2023 12:00 AM | Alert | Tank 4788, Tank 5788 | Tanks showed higher pressure rates. | Maryna P. | |
| Wed, 02-28-2024 1:11 AM - Wed, 02-28-2024 2:11 PM | Alert | Reactor 101 | Waster water was dirty, resulting in a bad batch | Tim H. | |

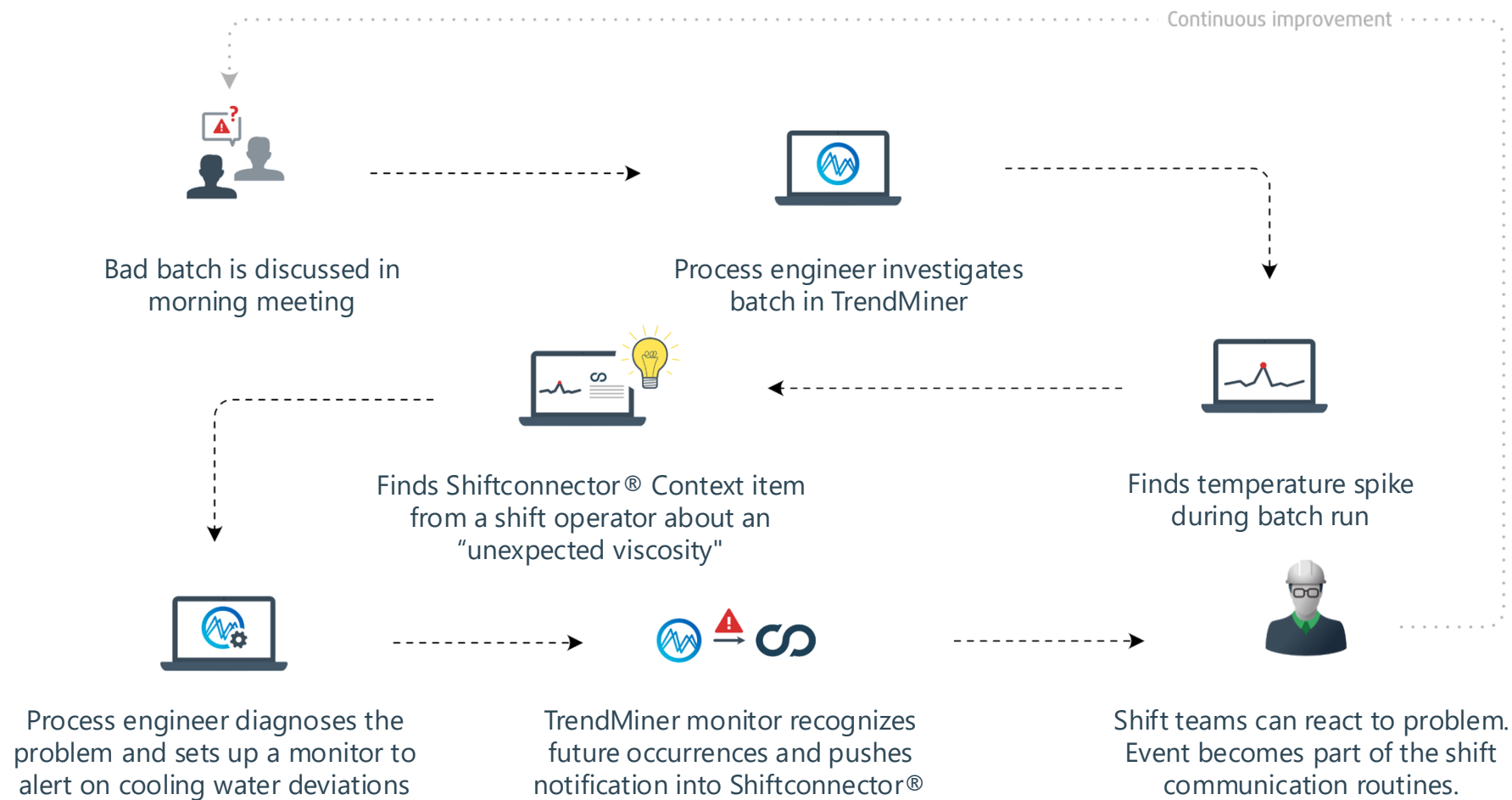
Plug 'n Play integration to use Shiftconnector® **events** as **context items**



Seamlessly **jump** into root cause analysis in TrendMiner



Operational Workflow





SHIFTCONNECTOR® 360 OVERVIEW



Represents the plant assets

Overview

Events

SHIFTCONNECTOR

Operations Staff

Area A

Overview Shift Superv...

Line 1 - Area A

Line 2 - Area A

Line 3

SAP-PM

Overrides

Rounds

Lab

Morning Meeting

Process Data

Insights

Area B (SC GO)

Area C (OEE)

Special Apps

Search

MY MAILBOX

Nothing to sign

No tasks

Configuration

Send Feedback

Version 7.22.0.2592

360° Overview

Events 5

Tasks 9

Instructions 7

Plant Status

Search...

Mary Jane

?

August 2025

September 2025

Start Shift Handover

Displayed time range: Sun, 08-24-2025 10:00 PM - Mon, 08-25-2025 6:00 AM

Line 1

Handover 0

No entries

Events 5 + Add Event

Start: Wed, 05-29-2024 09:08 AM

Info

Oxidizer temp spike to 108.3 - ~20 degrees above threshold. Need to do analog temp check.

DBSchema: SC7.9.x

Functional Location: Area A-L1-Oxidizer - Oxidizer

Start: Tue, 05-28-2024 08:28 AM

Breakdown

Meter for H2SO4 and HNO2 was reset, now operating normal.

DBSchema: SC7.9.x

Functional Location: Area A-L1-R102 - Reactor 102

Start: Tue, 05-28-2024 04:31 AM

Quality deviation

Type of deviation: Raw materials

Shift: Shift 1

Step of a procedure: Sampling

Initiated by: Laboratory

Deviation: Excessive moisture found in input line from Tank area A

Functional Location: Area A-L1-T4788-M2002 - Measured value 2002

Type of deviation: Raw materials

Cause: Not ascertainable

Measure: Raw material check

Safety relevant: False

Step of a procedure: Sampling

Initiated by: Laboratory

Deviation: Excessive moisture found in input line from Tank area A

To Dos 7 + Add Task

Due: Thu, 09-21-2023 07:24 AM

General

Conduct training of affected employees.

Functional Location: Area A-L1-R101-D7988 - Distillator 7988

Due: Tue, 08-27-2024 03:00 PM

General

Issues with centrifuge, get in spec immediately.

In Progress 2 + Add Task

Due: Wed, 08-28-2024 09:10 AM

General

Clean Area broth tank for start of new campaign

Priority: high

Functional Location: Area A-L1-T4788 - Tank 4788

Earliest Start: Wed, 08-28-2024 11:00 AM

Due: Thu, 08-29-2024 11:00 AM

General

Stage raw material at line 1 for night production

Done 0 + Add Task

No entries



SHIFTCONNECTOR® CONFIGURATION



Configurable event categories

Synced with TrendMiner

Categories

Search...

Tenant: Chemicals USA Status: All Events Tasks Directives Save & close Cancel

+ Create new category

| Name | Tenant | System name | Form template | |
|----------------------------|---------------|---|---------------------------------|--|
| Pump Check NOK | Chemicals USA | Chemicals_Chemistry_Event_PumpCheckNOK | Pump NOK | ✓ + |
| Quality | Global | GLOBAL_Event_Quality | Default | Field deviation - Global: EventStatus ✓ + |
| Quality deviation | Chemicals USA | Chemicals_Chemistry_Event_Qualitydeviation | Quality deviation | ✓ + |
| Review | Chemicals USA | multisignature | Review | Field deviation: AssignedShiftbooks ✓ + |
| Round cancelled | Global | GLOBAL_Event_Roundcancelled | GO_event_round_cancelled | ✓ + |
| Round missed | Global | GLOBAL_Event_Roundmissed | GO_event_round_missed | ✓ + |
| Round result | Global | GLOBAL_Event_Roundresult | GO_event_round_result | ✓ + |
| Roundtrip not ok | Chemicals USA | Chemicals_Chemistry_Event_Roundtripnotok | Roundtrip not ok | ✓ + |
| Roundtrip ok | Chemicals USA | Chemicals_Chemistry_Event_Roundtripok | Roundtrip ok | ✓ + |
| Safety | Chemicals USA | Chemicals_Chemistry_Event_Safety | Safety | ✓ + |
| Safety | Global | GLOBAL_Event_Safety | Default | Field deviation - Global: EventStatus ✓ + |
| Safety Checklist Execution | Chemicals USA | Chemicals_Chemistry_Event_SafetyChecklistExe... | Safety Checklist Execution | ✓ + |
| Sample | Chemicals USA | Chemicals_Chemistry_Event_Sample | Sample | ✓ + |
| Shift Presence | Chemicals USA | Chemicals_Chemistry_Event_ShiftPresence | Shift Presence | ✓ + |
| ShiftconnectorGoOverdue | Chemicals USA | Chemicals_Chemistry_Event_ShiftconnectorGoO... | ShiftconnectorGoOverdueTemplate | ✓ + |
| ShiftconnectorGoResult | Chemicals USA | Chemicals_Chemistry_Event_ShiftconnectorGoR... | ShiftconnectorGoResultTemplate | ✓ + |
| Task created | Chemicals USA | autoEventForTaskCreation | Default | Field deviation: EventStatus ✓ + |
| Task edited | Chemicals USA | autoEventForTask | Default | Field deviation: Attachments EventStatus ✓ + |
| TM_monitor | Chemicals USA | Chemicals_Event_TM_monitor | Info | ✓ + |
| Tool Improvement | Global | GLOBAL_Event_ToolImprovement | Tool_improvements | ✓ + |

Send Feedback

Version 7.22.0.2592



SHIFTCONNECTOR® CONFIGURATION



Configurable category elements

ShiftConnector® Category

The screenshot displays the ShiftConnector Configuration interface. On the left is a dark sidebar with a navigation menu. The main content area is titled 'Categories' and features a table of categories. A modal window on the right shows the configuration for the 'TM_monitor' category.

Sidebar Menu:

- Operations Staff
- Area A
- Area B (SC GO)
- Area C (OEE)
- Special Apps
- Search
- MY MAILBOX
 - Nothing to sign
 - No tasks
- Configuration
 - Organizational Register
 - Log Information
 - Users
 - Teams
 - Expertises
 - Signature Reasons
 - Roles
 - Groups
 - Master Data
 - Localization
 - Fields and Forms
- Send Feedback

Categories Table:

| Name | Tenant | System name | Form template |
|------------|---------------|----------------------------|---------------|
| TM_monitor | Chemicals USA | Chemicals_Event_TM_monitor | Info |

TM_monitor Configuration Modal:

- Status: Active
- Type: Events
- Name: TM_monitor
- System name: Chemicals_Event_TM_monitor
- GUID: 7dd8f2c7-f2e0-468a-b768-2a5d50f91ed1
- Icon: [Icon]
- Show 'Event' next to category name: ☒
- Tenant: Chemicals USA
- Form template: Info
- Fields Settings:
 - Assigned Shiftbooks
 - Attachments
 - Category
 - Description
 - Event Start Date Time
 - Priority
 - Functional Location
- Assign to structure item: No assignments



TRENDMINER CONFIGURATION



Synced Shiftconnector®
categories
as
TrendMiner Context Types

The screenshot displays the ContextHub configuration interface. On the left, a sidebar lists various configuration categories: PLATFORM CONFIGURATION, Context item workflows, Context item types, Context fields, DIGITAL TWIN MANAGER, Asset structure, Asset permissions, Asset specific types, SCHEDULE MANAGER, Schedule configurations, and Settings. The main area is titled 'Context item types' and contains a search bar with 'TM_' entered. Below the search bar is a table with the following data:

| Source | Technical identifier | Name |
|----------------|----------------------------------|------------|
| Shiftconnector | 0a709a0bc58e45e7b4c1ae5d13629b62 | TM_monitor |

Below the table, it indicates '1 of 1' items. A modal window titled 'Configure TM_monitor' is open on the right, showing the configuration details for the 'TM_monitor' context type. The modal includes sections for TYPE DEFINITION, VISUALIZATION, CONTEXT FIELDS, and OPTIONS.

Configure TM_monitor

TYPE DEFINITION

Technical identifier (used in imports, API calls, etc.) Optional
0a709a0bc58e45e7b4c1ae5d13629b62

Name
TM_monitor

Workflow Optional
Workflow: ShiftConnector entry item

VISUALIZATION

Color 4A75E2 Icon Flow-line

CONTEXT FIELDS

Assigned shiftbooks Toggle: On

[Add context field](#)

OPTIONS

☐ Approvals available

☐ Turn on history

Cancel Save



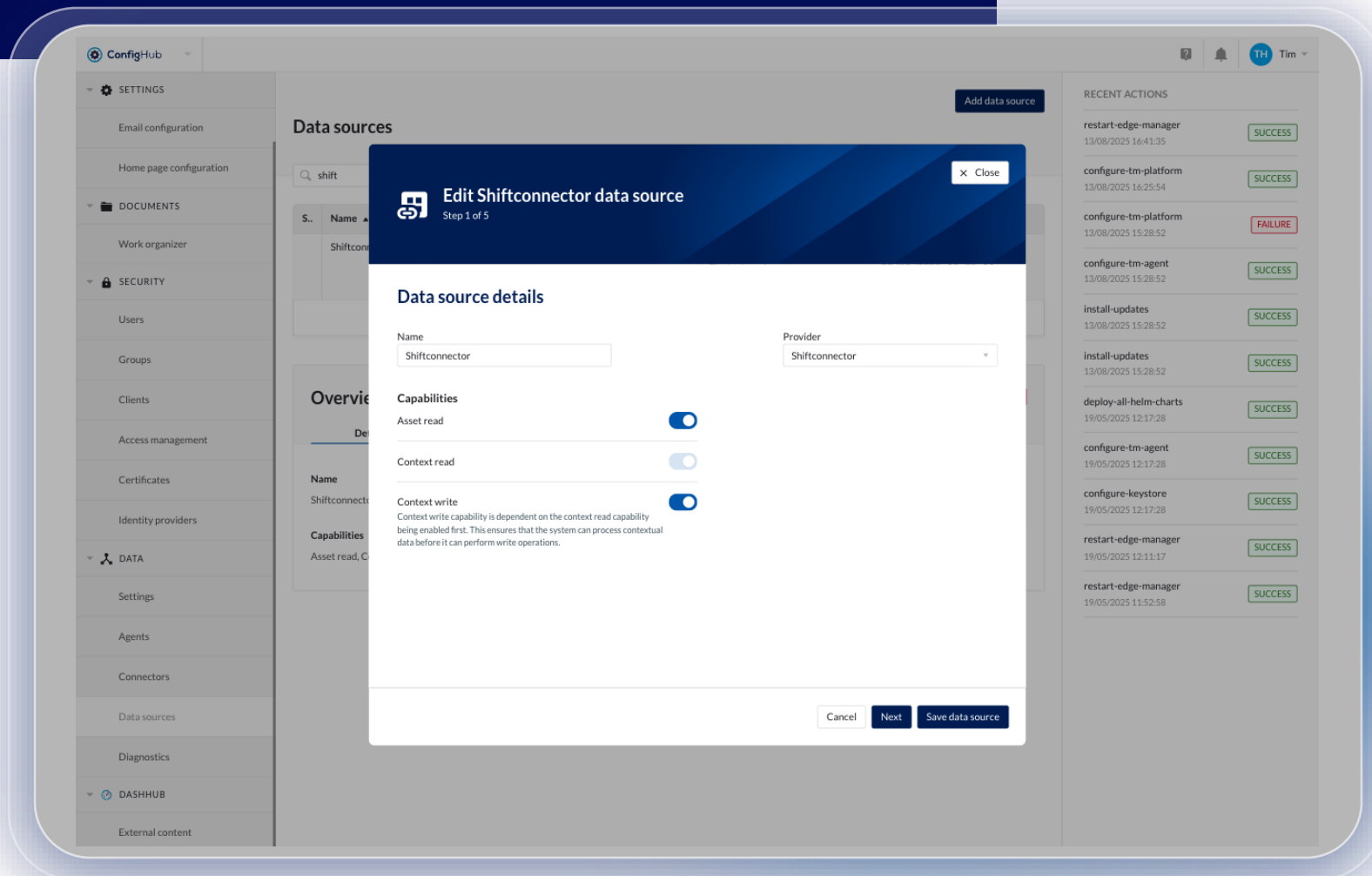
TRENDMINER CONFIGURATION



Configure Data source

Provider Shiftconnector

Context Write





TRENDMINER CONFIGURATION



Connection details

Shiftconnector® API credentials

The screenshot displays the Trendminer ConfigHub interface. A modal dialog titled 'Edit Shiftconnector data source' (Step 2 of 5) is open, showing the 'Connection details' section. The dialog includes input fields for Username (ScApiServiceUser), Password (masked with dots), Tenant ID (f9ced03c-c121-4207-99e3-6c68c430e9c7), and Host (https://extended-demo-trendminer3.shiftc...). A 'Test connection' button is located below the input fields. The background interface shows a sidebar with navigation options like SETTINGS, DOCUMENTS, SECURITY, and DATA. The main area displays 'Data sources' and a list of 'RECENT ACTIONS' with status indicators (SUCCESS, FAILURE).

| RECENT ACTIONS | |
|------------------------|-----------------------------|
| restart-edge-manager | 13/08/2025 16:41:35 SUCCESS |
| configure-tm-platform | 13/08/2025 16:25:54 SUCCESS |
| configure-tm-platform | 13/08/2025 15:28:52 FAILURE |
| configure-tm-agent | 13/08/2025 15:28:52 SUCCESS |
| install-updates | 13/08/2025 15:28:52 SUCCESS |
| install-updates | 13/08/2025 15:28:52 SUCCESS |
| deploy-all-helm-charts | 19/05/2025 12:17:28 SUCCESS |
| configure-tm-agent | 19/05/2025 12:17:28 SUCCESS |
| configure-keystore | 19/05/2025 12:17:28 SUCCESS |
| restart-edge-manager | 19/05/2025 12:11:17 SUCCESS |
| restart-edge-manager | 19/05/2025 11:52:58 SUCCESS |



TRENDMINER CONFIGURATION



Enable Context Write

Control Shiftconnector®
categories

The screenshot displays the TrendMiner configuration interface. A modal dialog titled "Edit Shiftconnector data source" (Step 5 of 5) is open, showing the "Context write details" section. The "Enable write" toggle is turned on. Below, there are two columns: "Available types" and "Assigned writable types".

| Available types | Assigned writable types |
|-------------------------|-------------------------|
| Performance Loss | CIP |
| OEE-Production Amount | Environment |
| Plant Status | Improvement Suggestion |
| Task edited | Info |
| Process Data | Plant Status |
| ShiftconnectorGoOverdue | TM_monitor |

At the bottom of the dialog are "Back" and "Save configuration" buttons. The background shows the "Data sources" section of the configuration hub, with a sidebar menu on the left containing categories like SETTINGS, DOCUMENTS, SECURITY, DATA, and DASHHUB.

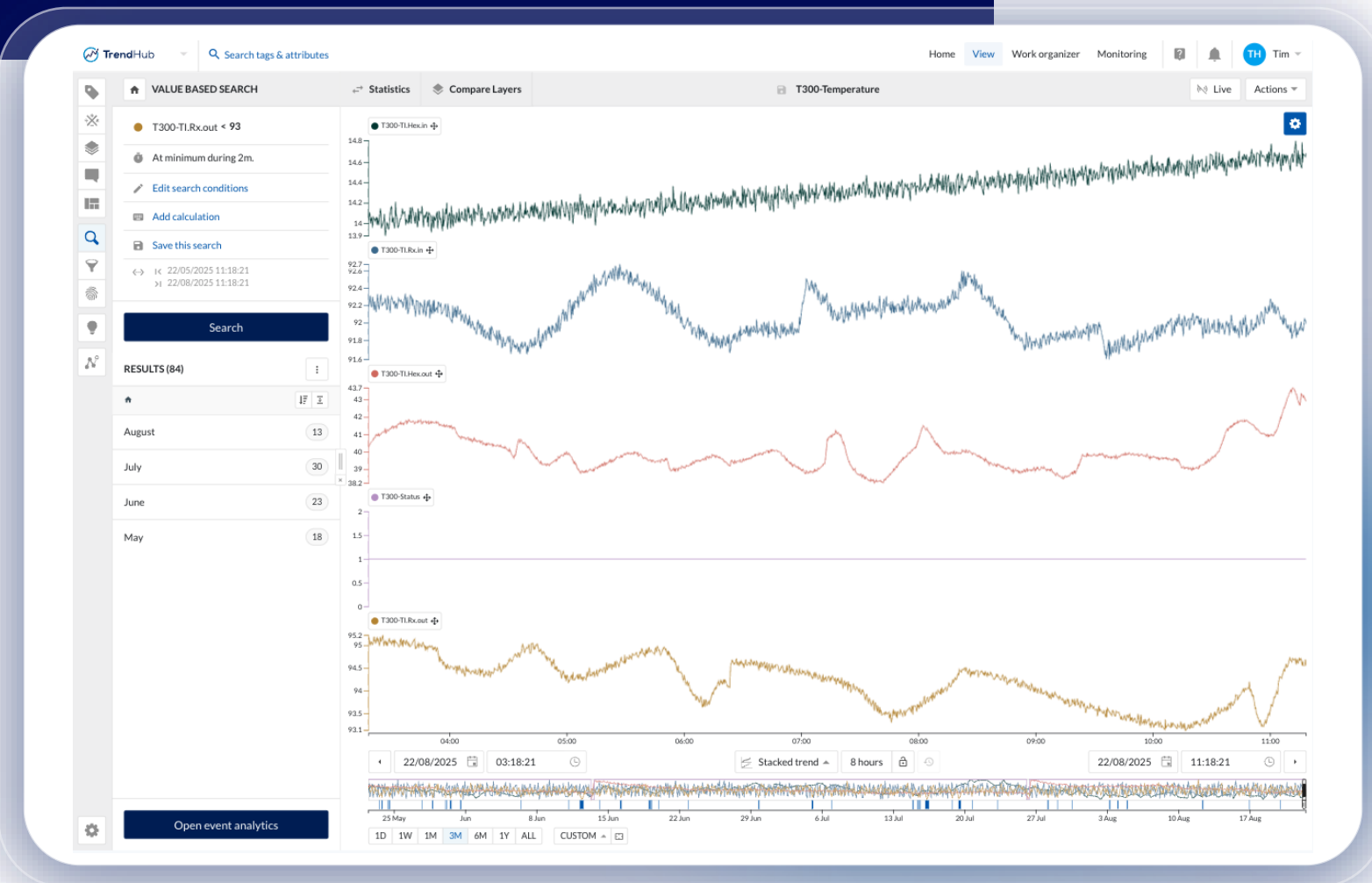


TRENDMINER MONITOR SETUP



Define tags

Define criteria to monitor





TRENDMINER MONITOR SETUP

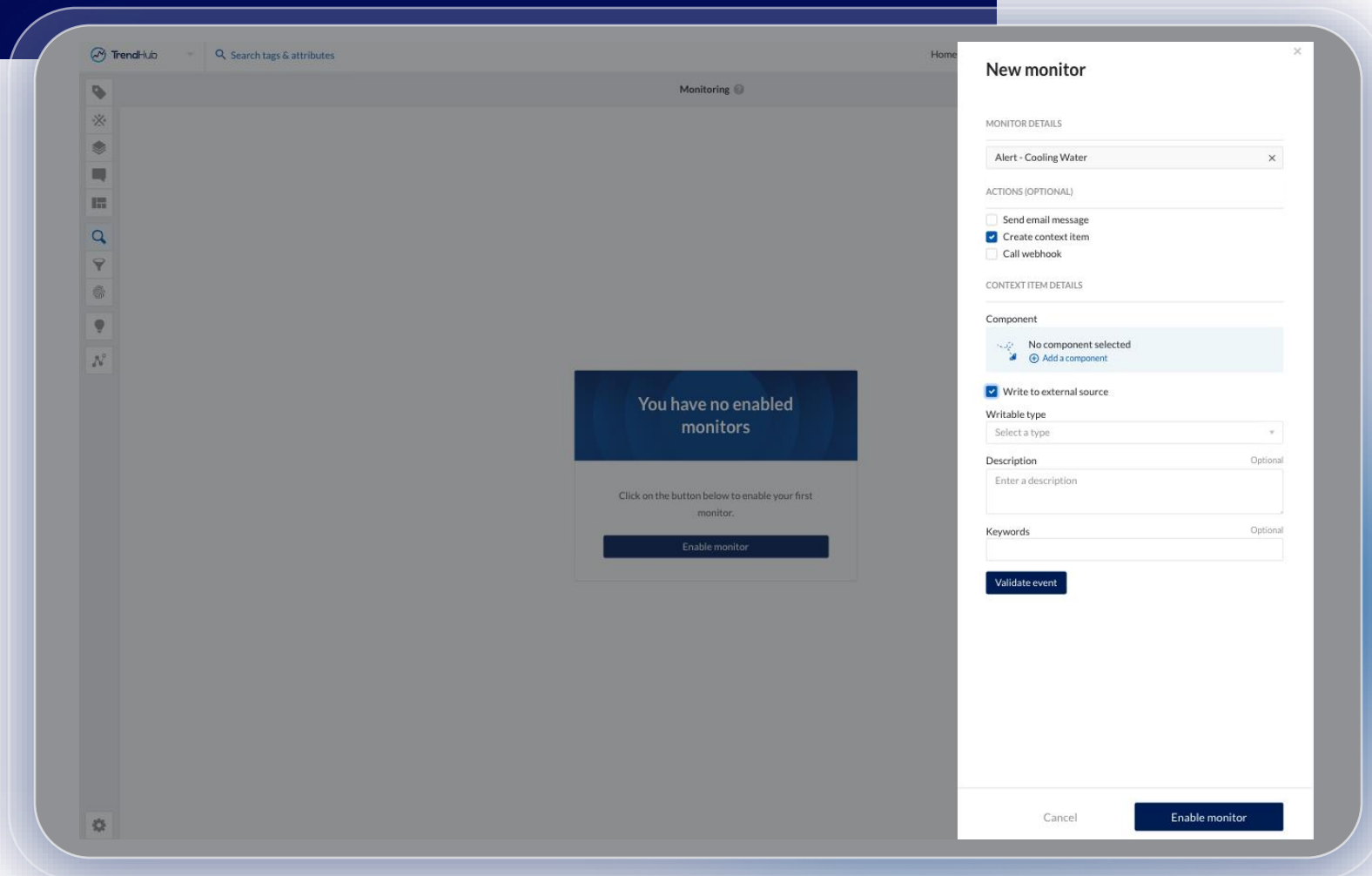


Enable monitor

Create Context Item

Write to External Source

Writable Type = Shiftconnector®
Category





TRENDMINER MONITOR SETUP



Enable monitor

Write to External Source

Complete form

Enable monitor

The screenshot displays the TrendMiner ContextHub Monitoring interface. The main area shows a message: "You have no enabled monitors" with a button to "Enable monitor". A "New monitor" dialog box is open on the right, containing the following fields and options:

- MONITOR DETAILS**: Alert - Cooling Water
- ACTIONS (OPTIONAL)**:
 - ☐ Send email message
 - ☒ Create context item
 - ☐ Call webhook
- CONTEXT ITEM DETAILS**:
 - Component**: Oxidizer (with a "Change component" link)
 - ☒ Write to external source
 - Writable type**: TM_monitor
 - Description**: Cooling water temperature spike detected, review heater. (Optional)
 - Keywords**: (Optional)
 - Assigned shiftbooks**: Line 1 - Area A (Optional)
- Buttons**: "Validate event", "Cancel", and "Enable monitor".



TRENDMINER EVENT REGISTERED



TrendMiner Continuously Monitors

Creates Context Item
with component, description, ...

The screenshot displays the ContextHub application interface. On the left, a sidebar contains a 'VIEWS' section with 'Open' and 'Start new view' buttons. The main area features a table of events with columns for 'Start date', 'Duration', 'Current state', 'Type', and 'Component'. A filter 'Event open: Last 8 hours' is applied. The table lists two events, both of type 'TM_monitor'. On the right, a detailed view for event 'C56-1 - TM_monitor' is shown. This view includes tabs for 'Details' and 'Attachments'. The 'Details' tab contains sections for 'CONTEXT ITEM DETAILS', 'OTHER PROPERTIES', 'EVENTS', and 'COMMENTS'. The 'CONTEXT ITEM DETAILS' section shows the component ID, type, description, keywords, and assigned shiftbooks. The 'OTHER PROPERTIES' section shows the event status as 'normal'. The 'EVENTS' section shows the start time and total duration. The 'COMMENTS' section shows a comment from a user with the initials 'TH'.

| Start date | Duration | Current state | Type | Component |
|---------------------|-------------|---------------|------------|-----------|
| 25/06/2025 15:01:11 | 57d 22h 59m | START | TM_monitor | 10083cc |
| 13/06/2025 12:06:00 | 63d 23h 40m | START | TM_monitor | 40e271b |

C56-1 - TM_monitor

Details | Attachments

CONTEXT ITEM DETAILS

Component: 40e271b4-e52c-49e8-9fa8-c8919bd575fa

Type: TM_monitor - Shiftconnector

Description: Cooling water temperature spike detected, review heater.

Keywords:

Assigned shiftbooks: Line 1 - Area A

OTHER PROPERTIES

EVENTSTATUS: normal

EVENTS

START: 13/06/2025 12:06:00

Total duration:

ITEM CREATED

SE service-account-tm-context 13/06/2025 12:06:00

COMMENTS

No comments yet.

TH e.g. I like having feedback on this

Add comment

SHIFTCONNECTOR® EVENT REGISTERED

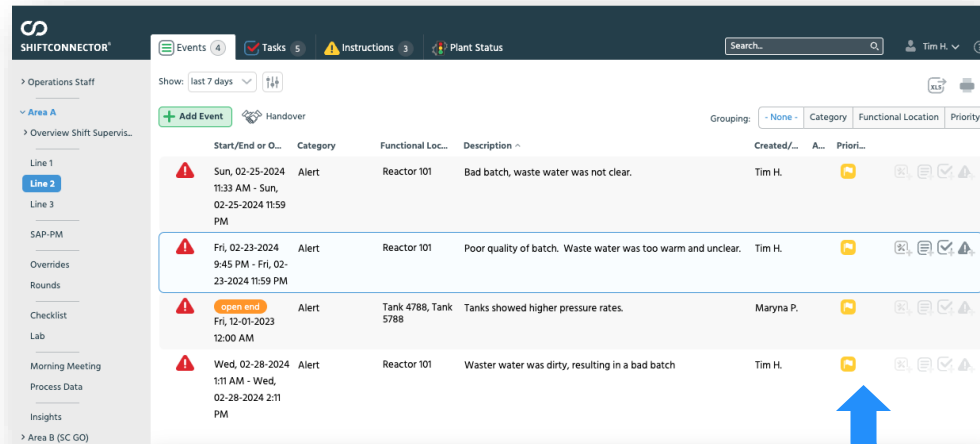


TrendMiner automatically
registers event with
time, location, description, ...

Mapped to Shiftconnector®
Category

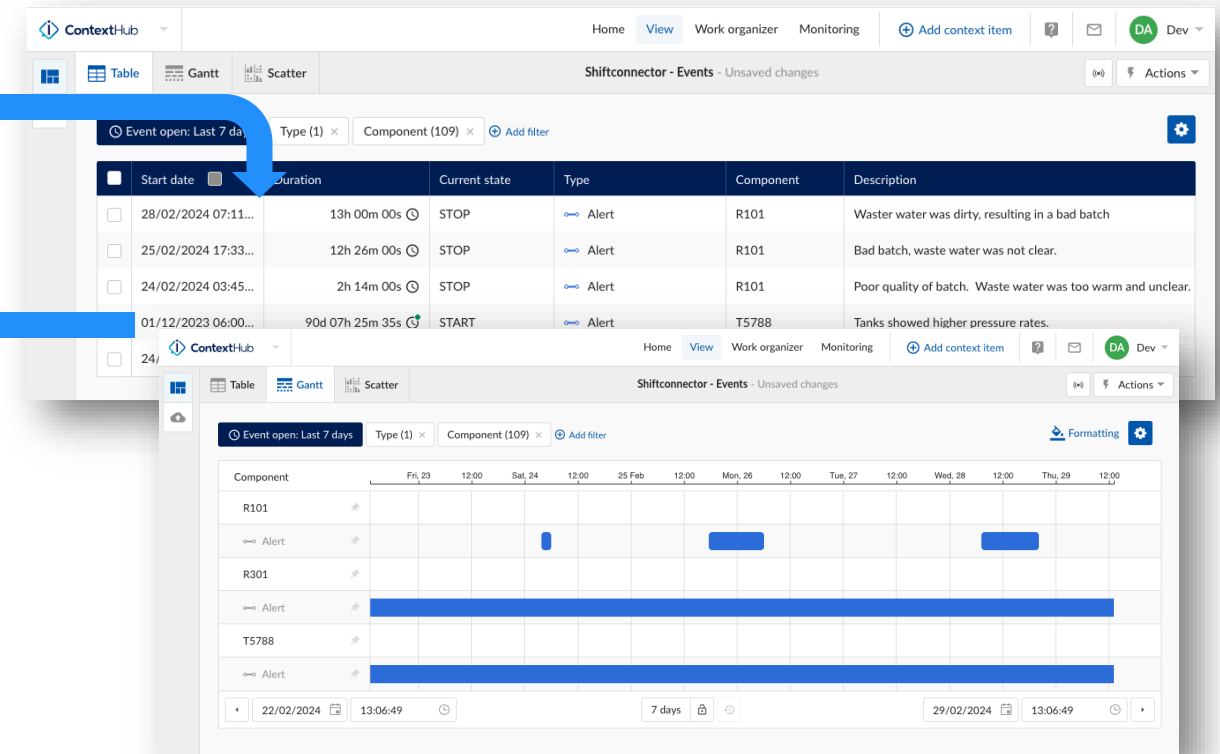
The screenshot displays the ShiftConnector mobile application interface. On the left is a dark sidebar menu with the following items: Operations Staff, Area A (expanded), Overview Shift Superv..., Line 1 - Area A (selected), Line 2 - Area A, Line 3, SAP-PM, Overrides, Rounds, Lab, Morning Meeting, and Process Data. Below the menu is a 'MY MAILBOX' section with 'Nothing to sign' and 'No tasks', and a 'Send Feedback' button at the bottom. The main screen shows a list of events. The top event is an 'open end' event from Tuesday, 05-28-2024 at 4:31 AM, categorized as 'Quality deviation' at 'Measured value 2002'. The description mentions 'Type of deviation: Raw materials', 'Shift: Shift 1', 'Step of a procedure: Sampling', 'Initiated by: Laboratory', and 'Deviation: Excessive moisture found in input line from Tank area A'. The creator is 'Andreas Quality'. Below this is a 'Last Logout' entry for Friday, 06-13-2025 at 12:09 PM. The selected event is from Friday, 06-13-2025 at 12:06 PM, categorized as 'TM_monitor' at 'Oxidizer'. The description is 'Monitor alert from TrendMiner'. The bottom section shows the event details for 'TM_monitor (Event)'. It includes the category 'TM_monitor', assigned shiftbooks 'Line 1 - Area A' and 'Area A-L1-Oxidizer - Oxidizer', event start date/time 'Fri, 06-13-2025 12:06 PM', priority 'normal', and description 'Cooling water temperature spike detected, review heater.' There are also fields for 'Attachments' and 'Comments'. At the bottom, there are buttons for 'Attach Event ...', 'Attach Task ...', 'Attach Instruction ...', 'Edit', 'Close', 'Print', and 'Send by Email'. The version number 'Version 7.22.0.2062' is visible at the bottom left of the app interface.

Two-Way Integration – Shiftconnector® & TrendMiner



| Start/End or O... | Category | Functional Loc... | Description | Created/... | A... | Priori... |
|---|----------|----------------------|--|-------------|------|-----------|
| Sun, 02-25-2024 11:33 AM - Sun, 02-25-2024 11:59 PM | Alert | Reactor 101 | Bad batch, waste water was not clear. | Tim H. | | |
| Fri, 02-23-2024 9:45 PM - Fri, 02-23-2024 11:59 PM | Alert | Reactor 101 | Poor quality of batch. Waste water was too warm and unclear. | Tim H. | | |
| open and Fri, 12-01-2023 12:00 AM | Alert | Tank 4788, Tank 5788 | Tanks showed higher pressure rates. | Maryna P. | | |
| Wed, 02-28-2024 1:11 AM - Wed, 02-28-2024 2:11 PM | Alert | Reactor 101 | Waster water was dirty, resulting in a bad batch | Tim H. | | |

Use Shiftconnector® **events** as TrendMiner **context items**



Automatic registration of TrendMiner **alerts & context items** as Shiftconnector® **events**



OUR ECOSYSTEM KEEPS IMPROVING



Canary Historian
Custom type mapping



PREVIEW

PlantIntegration V5
Preview release available



DEPRECATION

Honeywell PHD
Sunset
R3.30 & R4.00 from 2025.R4



Q&A

Will start shortly





HAVE A BRIGHT IDEA FOR TRENDMINER?

- Sign up and login at community.trendminer.com
- Wait while you get verified as a customer
- Get access to the Product Ideas section
- Share your Product Idea
- Explore other process experts' ideas
- Vote for the best ones





IDEAS IN ACTION

Implemented

- Tag aliases in dashboards
- Shared "Write" access on Dashboards
- Save context item searches created in TrendHub
- Enhance tag name

Coming Soon

- Sharing dashboards with groups
- Gauge tile
- Statistics table tile in DashHub





HEAR MORE AT TRENDLAB 2025

Discover what's next in TrendMiner, learn from the success stories of other customers, take part in testing product prototypes, and share your feedback directly with our product team.

Join us at TrendLab 2025;

- September 30th – October 1st in **Cologne EU**
- October 8–9th in **Houston US**

community.trendminer.com/p/trendlab





Q&A

2025.R2

