TrakSYS™ 11
Training
Lab Manual
Day 5

Revised August 23, 2019

Lab 17 | Production Scheduling

Overview

TrakSYS provides the infrastructure needed to generate schedules based upon complex logical algorithms. Line capabilities, production changeover matrixes, scheduling priorities and more can be used as a basis for determining the optimal prioritization and scheduling of jobs.

In this assignment, you will configure all the related entities for **Production Scheduling**. This will include looking at new properties for some familiar entities, as well as the configuration of new entities. You will explore the relations between all these entities and understand how they impact the Scheduling process.

Lastly, you will configure the built-in Content Page flow for the Scheduling Process. This will allow you to walk through the **User-based Scheduling Process,** a simple step-by-step flow. Additional modifications will be explored in the **Further Exploration** options for this lab.

Estimated Time to Complete This Lab

30 Minutes

Details

The following sections describe the detailed steps to be completed for this lab.

1. Configure a Production Scheduling Set (PsSet)

The first step to scheduling in TrakSYS is to identify a group of assets that will be scheduled together. This is done through the TrakSYS **Production Scheduling Set** (which will be called PsSet from this point onwards). Jobs can be related to a single PsSet to determine which assets is may be run on. TrakSYS scheduling occurs one group at a time, with each group being centered around a PsSet. To being scheduling, create a new PsSet for the Systems in the **Packaging C Area**.

- Navigate to **Configuration | Production Scheduling**.
- Select the **+ New** menu option under **Sets** in slice 1 and create a **PsSet** with the following properties.

Name	Packaging C
Key	PACK.C
Set Type	Discrete

This PsSet will later be referenced by a Content Page, so write down the PsSetID below.

PsSetID

2. Assign Systems to the PsSet

Once a PsSet has been created, the next step is to associate systems with the PsSet. This will determine which assets can be used when scheduling against a PsSet. In Area **Packaging C**, there are multiple systems pre-configured. Each one is based off a single template. Associate each of these **Template Children** with a your new PsSet.

- Navigate to **Configuration | Systems**
- Select **Packaging - Packaging C**.
- Edit each **System** (Line 12-15) to be associated with the **Packaging C** PsSet

Production Schedule Set (Prod Sched Tab)	Packaging C

The systems and PsSet have now been configured. It is now possible to schedule a set of Jobs against the PsSet.

3. Configure Changeover Families

In order to schedule effectively, various priorities must be considered. This includes prioritizing variables like changeover times between products, run rates on different machines, and general preferences. A significant amount of this information is product dependent. While Target and Theoretical Rates have already been covered in previous labs, there are many other properties that still need to be identified with products.

One key factor in scheduling is Changeover durations. In TrakSYS, this is completed through **Changeover Families** and **Changeover Types**. First, configure a **Changeover Family**.

- Navigate to **Configuration | Products | Changeover Family.**
- Select the **Packaging Families** under slice 1. Select the **+ New** menu option under **Families** in slice 2 and create the following **Changeover Family**.

Name	Small Bottle Products
Key	SMALL

A Changeover Family will later be associated with each product. It is used to identify different groupings of products based upon their Changeover requirements. Unlike the normal **Product Type** property, the Changeover Family is not a developer-use field, as it is referenced by the scheduling algorithm. Before continuing, also note that another Changeover Family has already been configured for **Large Bottle Products**.

4. Configure Changeover Types

A Changeover Type will identify the duration needed to change between two products based upon their Changeover Families. Changeover Types can be provided for every combination of Changeover Families and are **direction specific**, meaning that a changeover from Family A to Family B is not the same as a changeover from Family B to Family A. In addition, **generic Changeover Types** can be identified, such as a generic changeover from Family A to any family. Whenever possible, the TrakSYS Scheduler will use the most specific Changeover Type identified.

Create a Changeover Type for **Small Bottles to Large Bottles**.

- Navigate to **Configuration | Products | Changeover Type.**
- Select the **Packaging C Changeovers** under slice 1. Select the **+ New** menu option under **Types** in slice 2 and create the following **Changeover Types**.

Name	Small to Large
Key	SMALL-TO-LARGE
From	Small Bottle Products
To	Large Bottle Product
Pre Duration (Minutes)	60

As **Further Exploration**, additional Changeover Types can be configured.

5. Assign Product Families and Product Changeover Type Sets

Product Families and Changeovers refer to general groupings of products. The last step in the process is to assign these new entities to their **Product configuration**. Once this association is made, the properties can be used in Scheduling.

Assign the **Packaging C Product Set** to the **Packaging C Changeover Set**. Afterwards, assign each of the **200 Bottles Size Products** to the **Small Bottle Product Family**. While doing so, also examine the **Prod Pre/Post Gap** and **Prod Pre/Post Padding** values that have been configured on each Product.

- Navigate to **Configuration | Products.**
- Select and Edit the **Packaging C Product Set** under Slice 1.
- Update the following Property.

Product Changeover Type Set (Prod Sched Tab)	Packaging C Changeovers

- Navigate to **Configuration | Products.**
- Select the **Packaging C** Product Set.
- Select and edit **Adravil 200** & **Prospirim 200**. Update the following Property.

Changeover Family (Prod Sched Tab)	Small Bottle Products

Before continuing, also note that **Adravil 500** & **Prospirim 500** have been pre-configured as part of the **Large Bottle Products** Changeover Family.

6. Configure a Production Scheduling Page

With all the detailed configuration complete, the next step is to create the **User Interfaces** to complete the scheduling process. TrakSYS includes a set of Content Pages to enable operators to complete a **standard scheduling flow**. Add this flow to your training implementation.

- Navigate to **Developer | Page Definitions.**
- Select **Training - Day 5 | Hubs | Lab 17**. Select the **+ New Hub 3** option in slice 2.

- Select the **Production Schedule** Content Page, you can find it under **Content Page | TrakSYS | Application| Production Scheduling** and set the following properties…

Name	Packaging C Scheduler
Key	PackCSchedule
Production Scheduling Set (Properties Tab)	<Your **PsSet ID** from **Step 1**>

This page acts as the starting point for Scheduling. From here, the entire flow can be completed. Navigate to your new page using the **Preview** button.

7. Simulate Jobs for Production Scheduling

In order to complete Production Scheduling, there needs to be jobs to schedule. Since this training takes place in a contained environment, there aren't any jobs to schedule. To remedy this, a **Simulation** page has been provided for you. Use this simulation page to generate the data needed to see the **Production Scheduling** happen.

- Navigate to **Training | Day 5 | Lab 17 | Simulation.**
- Click the Blue Tile that says **Packaging C – Generate Jobs**
- Wait until the **Packaging C** tile turns green.

Navigate to **Training | Day 5 | Lab 17 | Packaging C Scheduler** to view the resulting job set.

8. Create and Commit a Production Scheduling Stage (PsStage)

With the configuration set, appropriate data available, and the user interfaces ready, the Scheduling process can now be completed. The process occurs in two steps:

The first step is to create **PsStages**. These Stages are **potential** schedules for jobs. They are based upon the settings provided and show what the schedule might look like. They do not impact the data yet. The intent is for a user create multiple stages, compare them, and then decide which they prefer.

The second step is to **commit** the desired **PsStage**. This will update the job records to have **Planned Start Date Times** and **Job System Planned** that were decided in the PsStage. Once committed, all other PsStages for the PsSet will be deleted as well.

- Navigate to you newly created scheduler, Training | Day 5 | Lab 17 **| Packaging C Scheduler.**
- Select **Generate Schedule**, at the top left of the page under Production Schedule.
- Set the following property for your **PsSet**.

Name	Standard
Extend Jobs Over Unscheduled Time	<checked>

The other properties can be adjusted to change the results, but do not need to be changed for the scheduling to work.

- Then click the **Generate** button and wait for schedule to be generated.
- Navigate back to **Packaging C Scheduler** and create a 2nd **PsStage** with the following Name:

Name	Alternative
Extend Jobs Over Unscheduled Time	<unchecked>

- After creating the **Alternative** PsStage you can click either PsStage and view the changes it makes towards scheduling jobs.

There are now two potential options for the schedule, based upon the scheduler's preference. From the **Production Schedule Stages** page, the staged jobs can be further adjusted as needed, or new Stages can be created with new settings. The only remaining step for the scheduler is to decide when a Stage is suitable for production use and to commit that Stage.

- View the resulting **PsStages**. Select one, and then select the **Commit** menu option from under the **Production Schedule** header.
- Verify that you would like to Commit that Stage by selecting the **Commit** button.

Once completed, you can view the now-scheduled jobs on your **Packaging C Scheduler** page, as well as through the **SDRO** pages that have been pre-configured for you (Line 12-15).

Conclusion

In this exercise, you have become familiar with **PsSets**, **Product Changeover Families**, **Product Changeover Types**, and how each of the entities are related to one another. You have also walked through the Content Page flow for **Production Scheduling** and seen the process as well as the results of your configuration.

While the example completed in this lab was structured and limited, you will have noticed that there are many other options available when scheduling. This lab servers as a demonstration of the common flow and capabilities of the Scheduling engine, but additional scripting, rules, and interfaces can be developed to adjust the flow based upon the implementations needs.

Common Mistakes

None

Further Exploration

Adding Systems

The **Packaging C Area** contains only template systems. This was by design to allow for you to easily add additional systems to the configuration easily. Try creating additional Systems by using the template. Once completed, you can then change certain properties of those systems, as noted in the **Systems with Different Configurations** topic below.

Note that, in order to effectively duplicate these Systems, you will need to complete many steps, including the tag duplication, tag mapping, product set and schedule assignment, and Ps Property assignments. If you need help, please ask a Trainer.

Systems with Different Configurations

Each line that is used in this lab from the same template and is set to be identical. However, these systems do not have to be the same.

Go back to your configuration and change out some of the configuration on a few of the lines. This can include the following:
- Changing a System to use a different Schedule. There is a **Packaging D Schedule** that can be assigned to a system that works less hours than the **Packaging C Schedule**.
- Changing a System to use a different Product Set. There is a **Packaging D Product Set** that does not have all the Products that **Packaging C Product Set** has.
- In addition to changing a System's Product Sets, you can also change the **Changeover Types.** Changing a **Packaging D Product Set** to use **Packaging D Changeovers** will result in that System having much longer changeovers when using **Large Bottle Products**.

Changing the Scheduling Priorities

On your **Packaging C Scheduler** page, try creating multiple stages with different properties. Based upon your settings, you may see the jobs change in order. It may not be as obvious with some of the first jobs assigned, but you will commonly see large differences in the schedule towards the end of the Scheduling logic.

Lab 18 | Notifications, Items and Locations

Overview

TrakSYS can provide timely **Notification** to **Users** based upon various triggers. In the first part of this lab, you will configure TrakSYS to send a notification to a Supervisor every time a Changeover starts or ends. While the Training environment does not actually support a mail server, a special screen will be provided to show you the resulting data that is generated on these triggers.

TrakSYS also provides a flexible infrastructure to model and manage individual physical objects within the manufacturing environment. Nearly any mobile, identifiable item may be recorded and tracked as it moves through its lifecycle.

In the second part of this lab, you will configure the **Item** and **Location** structures in TrakSYS to manage the creation, movement and inspection of **Cases** and **Pallets** in the **OCV** process. You will explore how item movements can be tracked and visualized using a small pre-configured user interface.

Estimated Time to Complete This Lab

30 Minutes

Details

The following sections describe the detailed steps to be completed for this lab.

1. Configure a Notification Definition

When a Changeover has started, an alert should be sent to the **Supervisors**. Define a **Notification Definition** with the content to be sent when Changeover Starts are detected.

- Navigate to **Configuration | Notifications**.
- Locate and select the **Packaging** Group.
- Select the **+ New** menu option under **Notification Definitions** in slice 2.

Name	Changeover Started
Key	ChangeoverStart
Message Type	Alert
Status Type	Information
Title Content	{entity[args.SystemID]|System.Name} Changeover Started
Body Content	A Changeover has been started on Line {entity[args.SystemID]|System.Name}.

2. Configure a Notification Target

Define a group of **Users** to which **Changeover Started** emails should be sent by defining a **Notification Definition** for **Packaging Schedulers**.

- Navigate to **Configuration | Notifications | Targets**.

- Locate and select **Packaging** Group.
- Select the **+ New** menu option under **Notification Targets** in slice 2.

Name	Administrators
Key	Admins

Once the **Notification Target** is created add **Administrator** to the list of **Users**.

- Locate and select the **Admin Target** Notification Target.
- Select the **Users** option in the **Related** menu in slice 3.
- Select the **+ New** menu option under **Users** in slice 2.

User	Administrator
Days	<select all>

3.   Associate a Notification with an Event Start

Complete the messaging configuration by associating the **Notification Definition** and **Notification Target** with the **Packaging Line 12 | Changeover Start** trigger.

- Navigate to **Configuration | Systems** and select **Packaging | Packaging C | Line 12 | Event Definitions | Changeover**.
- Select the **Notifications** option in the **Related** menu in slice 3.
- Select the **+ New** menu option under **Notifications**.

Notification Definition	Changeover Started
Notification Target	Admin Target
Type	On Start

4.   Configure the Maintenance Service | Restart the Logic Service

Define a **Maintenance Service** for the implementation, start the Maintenance Service, and restart the Logic Service.

- Open the **TrakSYS Installation Manager.**
- On the **Overview** tab, click on the **TrakSYS Settings** button on the right-side bar.
- Locate the **Notification | MaintenanceServiceHost** setting.
- Enter the **name of the training server** then select **OK.**
- Navigate to the **Services** tab and **Restart** the **Maintenance Service** and **Logic Service**.

The Maintenance Service needs to be restarted to being using the new **Host** information. The **Logic Service** needs to be restarted to being tracking the new **Job End** trigger that you configured.

5.   Trigger an Alert

Using the pre-configured SDRO's from the previous lab, trigger a **Changeover** on **Line 12**. Afterwards, view the **Lab 18 Lab Check** to see the resulting **Notifications**.

- Navigate to **Training | Day 5 | Lab 18| Line 12**.
- Under the **Manual Events** header, click the **Start** button next to **Changeover**.
- Navigate to **Training | Day 5 | Lab 18.** View the resulting **Notification** record.

Once Changeover has been triggered you will see a **Red Number** on the **Bell Icon** at the top right of your screen. This is how Alert Type Notifications appear for users in Traksys. Click the Bell Icon to view the notification.

Note that the **Notification** may not be processed immediately by the Maintenance Service, so you may see some of the Expression Syntax still. This is typically resolved shortly after the notification is created.

*This is the last step of the lab involving **Notifications**.

6. Configure Locations

*This step begins the part of the lab that involves **Items and Locations**.

After production in **OCV Packaging** is complete, **Pallets** and sometimes **Cases** are placed in the **Warehouse** to await inspection and release. Configure the following 4 **Warehouse Rack Locations** as targets for **Item** placement.

- Navigate to **Configuration | Locations**.
- Select the **+ New Root** menu option under **Locations** in slice 1 and create the following **Locations**.

Name	Unique ID
Rack 1	R1
Rack 2	R2
Rack 3	R3
Rack 4	R4

7. Configure Item Definitions

To better manage post-manufacturing activities, the **OCV** plant will track the location and status of production in the **Warehouse**. Configure the following 2 **Item Definitions** to allow **Items** to be classified as a **Pallet** or a **Case**.

- Navigate to **Configuration | Locations | Item Definitions**.
- Create an **Item Definition** Group using the **+ New** menu option under Groups.

Name	Packaging Items
Key	PACK

- Select the **Packaging Items** Group.
- Select the **+ New** menu option under **Item Definitions** in slice 2 and create the following **Item Definitions** (see next page for details).

Name	Code
Case	CS
Pallet	PL

8. Configure Item Log Definitions

As **Pallets** and **Cases** are produced and moved, TrakSYS will log each type of action on the **Item**. Configure the following **Item Log Definitions** to define the possible actions/state transitions that can occur to the **Packaging Items**.

- Navigate to **Configuration | Locations | Item Log Definitions**.
- Select the **+ New** menu option under **Groups** to create an **Item Log Definition** Group with the following properties.

Name	Packaging Actions
Key	PACK

- Select the **Packaging Actions** Group.
- Select the **+ New** menu option under **Item Log Definitions** in slice 2 and create the following **Item Log Definitions**.

Name	Code
Created	CR
Moved	MV
Inspected	IS
Released	RL

9. Open the Items and Locations Page

A small user interface has been pre-configured using **Visual Page Definitions** to allow the visualization of **Items** and allow **Move** and **Inspection** actions to be performed. Locate and open the **Items and Locations Page** under the **Training | Day 5 | Lab 18**.

10. Create Items

Create some new **Items** by clicking the **New Pallet** and **New Case** buttons on the top left portion of the screen. This function simulates the automated creation of a production **Item**.

- Note that new entries created in the **Items** table do not yet have a **Location** assigned.
- The **Item Log** table on the right side of the page. **Item Log** entries for **Create** should be automatically added for each production **Item**.

11. Move Items

Selecting a row in the **Item** table reveals details and actions in the center of the **Page**. Select some of the Items and click the **Move** buttons **(Rack 1-4)** to place them in specific **Locations**.

- Note the row in the **Item** table is updated with the current **Location**.
- The **Item Log** table on the right side of the page. **Item Log** entries for **Move** should be automatically added for each **Move** action.

- The **Location** tiles at the bottom of the **Page** summarize the total number of items present at each **Location**.

12. Execute other Actions on Items

Execute some **Inspection** and **Release** actions on the production **Items**.

- Note the **Item Log** table on the right side of the page. **Item Log** entries for be automatically added for each action.

Conclusion

In this exercise, you have become familiar with **Locations** (representing physical places), **Items** (representing individual things), and the various structures allowing the tracking of movement and state throughout a process.

You have also seen an example of a **Visual Page Definition** based user interface solution to visualize contents and manage **Item** tracking and transactions. Examine the structure of these **Pages** as well as the script behind them to understand how similar solutions can be created.

Common Mistakes

None

Further Exploration

Notifications through API

Outside of Notification Triggers, Notifications can be created and sent through API as well. This Further Exploration activity will explore the programmatic method of sending notifications through the web, instead of through the Logic Service.

You will attempt to create the configuration and scripting required to send a Notification anytime a new Item is created. Configure your own Notification Definition and Notification Target if desired.

Determine what **Notification Definition** and **Notification Target** you want to use. Once you have done so, write down their **Key** below. This will be used in the API.

Definition Key		**Target Key**

Then, go to the **Items and Locations** page in the **Lab 18 Hub**. Under the **NewItem_Click** method is a set of commented script for sending a notification. Uncomment the script and make the adjustments as necessary. Afterwards, save the script, navigate to your page, and test it by creating a new Item.

As a final note to this activity, the patterns shown here can be repeated anywhere that scripting is available. Notifications can be triggered through Logic Service Script Classes, DMS Modules, and even Web Services, so long as it is properly configured.

Lab 19 | SPC Configuration

Overview

In this assignment, you will configure TrakSYS to accept periodic SPC measurements of bottle fill weights from the **Packaging Line 12 System**. Every hour, operators will remove 2 bottles from the line and weight them, recording their weights in an SPC form. As measurements are entered, TrakSYS should compare the values against pre-configured business rules and record violations to the database, and send an email notification to line supervisors so that immediate corrective actions can be initiated.

Estimated Time to Complete This Lab

30 Minutes

Details

The following sections describe the detailed steps to be completed for this lab.

1.   Configure a Sample Definition

In order to record periodic bottle fill weight measurements on the **Packaging C Lines**, configure a **Sample Definition** to store SPC sample data.

- Navigate to **Configuration | Systems | Packaging C**.
- Locate and select the **Packaging Line 12** System.
- Select the **Sample Definitions** option in the **Related** menu in slice 3.
- Select the **+ New** menu option under **Sample Definitions**.

Name	Fill Weight
Key	FW
Calculation Type	Variable Control
Sample Count	2
Process Target (Limits Tab)	50
Process Lower Control Limit (Limits Tab)	40
Process Upper Control Limit (Limits Tab)	60
Process Lower Specification Limit (Limits Tab)	30
Process Upper Specification Limit (Limits Tab)	70
Notes (Notes Tab)	Remove 2 bottles from the process, weigh and enter the results for each bottle. Record any relevant notes.

2.   Configure an SPC Rule Definition

As fill weight samples are recorded, TrakSYS should be configured to examine the mean of each group of values and trigger a rule violation record when the average exceeds the control limits.

Configure an **SPC Rule Definition** for the **Fill Weight Sample Definition** on **Packaging Line 12**. Select the template choice of **6 consecutive points trending down** and utilize the built-in script

to register a rule violation if the **Mean** of 6 consecutive **Sample Sub-Group** continues to decrease in value.

- Locate and select the **Fill Weight** Sample Definition.
- Select the **Rule Definitions** option in the **Related** menu in slice 3.
- Select the **+ New** menu option under **Rule Definitions**.

Name	6 Trending Down
Rule Type	6 Consecutive Points Trending Down

3.   Restart the Logic Service

Ensure that the **TrakSYS Logic Service** is re-started. This service will monitor **Tag** value changes and enable functionality in the **SPC** user interfaces.

4.   Open the SPC Page

A small user interface has been pre-configured using **Visual Page Definitions** to allow the visualization of **SPC** data and allow manual sample data to be recorded. Locate and open the **SPC Page** under the **Training | Day 5**.

- Navigate to **Training | Day 5 | Lab 19 | Fill Weight [P12]**.

This page is instanced and will only appear after configuring the **Sample Definition**.

5.   Enter SPC Sample Data

Periodic checks like **Fill Weight** are often done at the plant floor and manually entered into TrakSYS. Enter the following **6** measurements using the **New Sample Sub-Group** link at the upper left side of the **Page**.

Note that each **column** in the table below represents a single **Sample Sub-Group** entry form session.

- On the **Fill Weight [P12]** Page, select **+ New Sample Sub Group** button to enter the following samples.

	Sample 1	Sample 2
Group 1	60	50
Group 2	59	49
Group 3	58	48
Group 4	57	47
Group 5	56	46
Group 6	55	45

Note the simple work instructions are displayed in the right margin. These can be managed in the **Notes** field of the **Sample Definition**.

6. Observe the X-Bar Chart Data

The **SPC X-Bar Chart** (upper) plots the **Mean** of the **Samples** for each **Sample Sub-Group** against the **Control** and **Specification Limits**. This **X-Bar Chart** is configured to use **Upper** and **Lower Control Limits** set in the **Sample Definition**. It is also configured to mark the point as **Red** if its **Mean** value exceeds one of the **Control Limits** or if it has a **Rule Violation**.

The last point on the chart should display a red point due to the **Rule Violation**.

7. Observe the Range Chart Data

The **SPC Range Chart** (lower) plots the **Range** of the **Samples** for each **Sample Sub-Group** against **Control Limits**. This **Range Chart** is configured to auto calculate the **Range Control Limits** based on the values in the data set. It is also configured to mark the point as **Red** if its **Range** value exceeds one of the **Control Limits** or if it has a **Rule Violation**.

8. Examine the Solution Pages

Take some time to enter the **Parts** and **Script** editors for the **SPC Page** to examine the inner workings, techniques and patterns.

Conclusion

In this exercise, you have enabled the TrakSYS structures to record periodic fill weight measurement data, analyze the incoming values in real-time and apply check rules, record rule violation failures, and alert supervisors to potential quality issues.

This configuration infrastructure lays the groundwork for data entry user interfaces and/or automated data capture scripts to monitor and capture SPC data and facilitate quality improvements in the manufacturing process.

Common Mistakes

None

Further Exploration

Below are optional activities that can be completed to further your understanding.

Map the Product Attributes to the Fill Weight

In this lab, the values being used for the limits of the Fill Weight Sample Definition were hard-coded. Regardless of the product, these values will not change. In most implementations, this is not a realistic scenario.

The products used in **Packaging C** have been configured to have attributes relating to SPC, and they have **Product Maps** configured to push these values to the appropriate tags. Try setting the Sample Definition to use these tags. Use the **BOTTLE_SIZE** tag for **Target**, and the **BOTTLE_SIZE_UCL** and **BOTTLE_SIZE_LCL** as the UCL and LCL respectively.

To do this, you will need to find the appropriate tags, map them to the **Template System**, and **Assign Tags** from the parent system. All the needed **Tags** and **Product Maps** have been

preconfigured for you. If done properly, you will be able to set-up all **Template Children** to use the product attributes. You can then test this by running jobs with different products through the Lab 17 SDRO pages.

Explore the SPC Parts

Three additional pages have been configured for you to see more of the SPC capabilities.

SPC (Standard): A spoke has been added to each of the **SPC Pages** that demonstrates the TrakSYS Content Page for **Variable Sample Definitions**.

SPC (Historical): A spoke has been added to each of the **SPC Pages** to provide an example of a custom SPC reporting page.

SPC Charts: This is a Hub 3 beneath **Lab 19** that contains the JavaScript versions of the 9 different SPC Chart Content Parts. They are all configured to use the same dataset to show how different methods of SPC evaluation can yield different results.

The pages are designed to use standard capabilities and minimal to no scripting. Look at the available properties of the parts and how they interact with one another.

Configuring a Task for SPC

Unlike the other Definitions, Sample Definitions do not have a trigger tag to determine when they are completed. However, Operators can be prompted to complete them using Task Definitions. The **SPC Variable NewEdit** Content Page accepts a **TaskID** values key. The page is designed to allow a developer to pass in a TaskID when completing an SPC Sample collection and, when the sample is complete, to simultaneously complete the Task as well.

Create an interface flow where a Task is created to prompt an Operator to complete an SPC check.
1. Create a Task Definition with a trigger tag.
2. Create a **TaskOverview** Content Page and set the **Task Definition** Filter property to the ID of your new Task Definition.
3. Create an **SPC Variable NewEdit** Content Page as a spoke from your **TaskOverview** Page and set the **Sample Definition** property to the ID of your desired Sample Definition.
4. On the TaskOverview Page, change the **Edit** Link property to link to your SPC Page, passing in the Task ID. (It will look something like this: **MySpcPage?TaskID={ID}**)

You should be able to trigger your task, see it in your Task Overview page and click it to navigate to the SPC New Edit page. Then you should be able to complete the SPC check and see the Task gets completed.

Configuring a Notification for SPC

A simple addition that can be made is to create a Notification whenever a rule fails or when a sample sub group is created. Create a new Notification Definition and Target or use existing ones to create an SPC related notification. These can be configured off of the Sample Definition and the child Sample Definition Rule Definitions.

Lab 20 | Support and Resources

Overview

As a final lab, you'll be going outside of the TrakSYS web and looking at the other resources that exist outside of the training environment.

First, look at the publicly available resources on the Parsec website. Then, try to access and navigate the Support Site. If you don't have access, you will be able to begin the process during this lab. Lastly, collect all your resources from training.

Estimated Time to Complete This Lab

15 Minutes

Details

The following sections describe the detailed steps to be completed for this lab.

1.   View the Parsec Website

In any web browser, go to https://parsec-corp.com/. From here, you can access general information about the capabilities of the TrakSYS software from a business use perspective.

Some topics, like **specific solutions** and **actual implementations**, are not covered in training, but related resources can be found in the Parsec Website. Be sure to look at the upcoming and past **webinars**, as well as various **white papers** and **case studies**, which can all be found under the company header.

2.   Register for the Support Site

If you have not done so already, register for the support site. This can be done at https://support.parsec-corp.com/account/signup. To do so will require a **License Serial Number** (LSN) and a company email address. If you do not have your LSN, you can choose to sign up later and skip the rest of this step. Once registered, you will need to validate an email and will have access to the Support Site.

If you have access to the support site, look around at the various sections. Depending on your account type (client, partner etc.) you will have access to different resources. For both, you will have access to the Support tab, which will include articles like the **TrakSYS Demonstration Database** and the **TrakSYS <Version> Reference Documentation**.

3.   Download Training Resources

Lastly, before you go, be sure to take all the resources from the training class with you. This includes the **Lab Manuals**, **PowerPoints**, and **Scripts** from the class. These can all be found in the C:\ of the computer. Additionally, be sure to take a backup of **your** database as it will be erased after the class has ended. It includes a license that is valid for at least a month. Finally, be sure to get your Trainer's contact information in case you have any additional questions.

Conclusion

You are familiar with the resources available to you or have begun the process to access them. You have successfully reached the end of the training course and have the tools to continue learning about the software if needed.

Thank you for attending the **TrakSYS Comprehensive Training Course**.