Shift Production

Overview

XLReporter can automatically log process data into an Excel worksheet in different cells at different times. The data can be from a single source or multiple sources. The shift production report is an example of this type of report where process values logged every 20 minutes for each shift and displayed for side-by-side comparison.

Key Features

- Report templates include Excel features such as charts, formatting and calculations.
- Workbooks and worksheets are created automatically.
- Real time group connections display process values as a row or column in the report.
- Group connection identifiers determine the data for the report.
- Reports are generated automatically using a time based schedule.

Specifics

- The hours for each shift are midnight to 8:00AM, 8:00AM to 4PM and 4PM to midnight.
- A real time group is used three times (one for each shift) in three different data connections. Each connection is assigned a group identifier 1, 2 and 3.
- The UpdateGroupSheet command in the schedule uses the Name Type \{hD:8\} as its group identifier to updated the values for the current shift. This Name Type produces the values 1 (midnight to 8:00AM), 2 (8:00AM to 4PM) and 3 (4PM to midnight).

Configuration

The configuration for the template is done in Excel.

Create the Template

Select XLReporter, Template, New to create the new template.
Enter a Name that reflects the purpose of the report.
Use a blank template or import an existing workbook.

**Design the Template**

Lay out the template.
- Use Excel’s icon sets as performance indicators. This is part of Excel’s conditional formatting.
- Use Excel formatting and formulas to create a summary table.

Select **XLReporter, Template, Report Names** to configure the report names.
- The Target Workbook provides the name for the report workbooks generated. Use Name Types for the month and year, e.g. {MMM} and {YYYY}.
- The Target Worksheet provides the name for the report worksheets generated. Use a Name Type for the day, e.g., {DD}.

Select **XLReporter, Data, Connect** to configure the data connections.
- Use an Expression connection to the Name Type {DATE} to display the date in the header of the report.
- Use a Real Time Group to retrieve the process values and display them in the report. The Source is the name of the group and the Target is where it is displayed. The same group is connected multiple times to columns for each shift.

![Image of data connections configuration]

- For shift 1, add a data connection using the real time group with the Group identifier 1, the Target Type as Column Position and the Position as mD/20.
- For shift 2, add a data connection using the same real time group with the Group identifier 2 and the Target Position as mD-480m/20.
- For shift 3, add a data connection using the same real time group with the Group identifier 3 and the Target Position as mD-960m/20.

**Design the Schedule**

Select **XLReporter, Design, Schedule** to open the Schedule Designer.

![Image of schedule configuration]

- Use an UpdateGroupSheet command to update the report with the Group identifier {hD:8}.
Deploy the Template

- In the Reports folder of the project, delete any test reports that may have been created.
- Open the schedule and select File, Save and include the schedule when prompted. Schedules can also be included using Scheduler, Select Schedules.
- Select Scheduler, Start to start the Scheduler.