* 1. Employee Time Registration
     1. Introduction

In order to trace time spent by production operators working on the line, there will be functionality in APRISO system collecting and storing these. The data collected can be used for further analysis.

* + 1. Master Data Setup

Functionality described in this chapter uses following master data:

* Shift setup - done in APRISO with usage of a dedicated, standard screen
* User roles and assignments
  + 1. Prerequisites

In order to ensure proper working of functionality described in this chapter, following prerequisites need to be met:

* User has to have proper means in order to login to APRISO
* As part of employee time registration functionality is closely bound to order status management, the latter functionality needs to be operational
  + 1. Assumptions
* All actions in APRISO system are recorded against the user logged into the system. Only one user can be logged into one instance of APRISO client (IE browser) at the same time. It means that in case when the execution of operation needs to be recorded against more than one user, group 'login' functionality is required.
* Employee time registration functionality is dedicated for production operators
* In case when more than one operator is working at work station/center it may be required to identify production confirmation against a particular one. In order to do that, APRISO will query the operator to identify himself while performing an operation confirmation.
  + 1. Description



Figure 16 Employee time registration

1. Presence and labor

There are two aspects of employee time from APRISO point of view:

* Presence (attendance). It describes when given employee was present in a plant. APRISO does not record this information, as there is a dedicated system in KONE managing that.
* Labor. It describes the time operator spent doing his work. In APRISO, labor will be understood as an execution time of the operation in relation to the particular operator (or operations in case of group execution)

1. Employee time registration

When production operator wants to start working with the system, he needs to login using proper method. Once he's logged in, the first functionality he starts working with is the Production cockpit. Production cockpit gives an option of group login - in case when more than one operator works on the same work station or work center, he will have to be registered using group login functionality. Group login is usually done by person in charge (like supervisor).

Whenever the production operation is started, stopped or completed, APRISO registers its time, which is called execution time. By knowing on which station the execution took place and which operators were logged in the context of this station, APRISO is able to record execution time in a context of particular operator(s). This is how the labor data is created in APRISO. Note that in case of simultaneous execution (several operators working at the same time), the execution time is split evenly among them. This assumption is valid for regular production and for the repair time, the operators will have to be registered separately.

1. End of shift

As operators work according to the shift pattern, there can be two situations related:

* One shift ends and another follows
* Last shift ends

For proper time registration and data integrity, both situations need to be reflected in APRISO. It happens in a following way:

* In case when one shift ends and another one follows, it is enough that operators are simply logged out of the system. No stopping/suspending production order is required in APRISO.
* In case when the last shift ends, operator will have an option to use end of shift functionality. This one will stop the execution of production order(s) by changing its (their) status, so the operator does not have to do that manually. End of shift is logically connected to the logoff procedure.

In case when given operator stays over the shift, he simply does not log out and end of shift functionality does not have to be used.

Using end of shift button closes any open repair time as well.