

SAP Manufacturing Execution  
How-To Guide



# How To Set Up and Use the SAP ME Labor Tracking Feature

**Applicable Release: SAP ME 6.0**

**Version 2.3**

**March 26, 2014**

# SAP ME How-To-Guide for Labor

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## Document History

Document Version	Description	Author
1.0	Initial version	Maryana Naboka
2.0	Updated after feedback from Fields	Maryana Naboka
2.1	Added info regarding ODSLaborRollup.bat (3.4.3.3)	Chet Moutrie
2.2	Clarified labor tracking for collaborating operators (3.2.3.1)	Chet Moutrie
2.3	Added more labor rollup information (3.4.3.3)	Chet Moutrie

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## 1. Introduction

### 1.1 Purpose

This ME Help How-To-Guide for the Labor Tracking feature is intended to provide sufficient information to enable the user to easily configure and readily utilize Labor Tracking feature making use of available best practices.

### 1.2 Glossary

Labor On	An action performed by the system where a user is recorded as working on an SFC number at the same operation.
Labor Off	An action performed by the system where a user who is working on an SFC number is recorded as no longer working on the operation for the SFC number.
User Labor Time	The time between a user's clock-in and clock-out time. User labor is typically used for payroll and supervisory purposes.
SFC Labor Time	The time an SFC number was worked by operators. SFC labor is typically used for Labor Tracking for billing and cost accounting purposes.
Direct Labor Time	Time users spend performing certain tasks, such as restocking, building a product, or adding value to a product.
Indirect Labor Time	Time users spend idle or performing tasks not associated with producing a product.
Labor Charge Code (LCC)	A code that specifies what type of labor a worker has performed during a specific block of time.
SFC LCC	Labor charge code associated with a particular SFC. It is typically used to calculate how much time was spent building each SFC number in order to bill customers.
User LCC	Labor charge code associated with a user. It is used to track the amount of time each user spends on particular task. This LCC is used only when SFC numbers are not being worked by the user.
Cost Center	The smallest segment of your organization for which you collect and formally report costs.

## 2 Labor Overview

This overview provides a high-level description of the Labor Tracking feature.

### 2.1 Description and Applicability

The Labor Tracking feature allows you to track both employee labor time and the time spent building a product at your site. This component enables you to do the following:

- Track the time employees spend building products
- Track the time and attendance of exempt and non-exempt employees
- Help meet government requirements
- Improve shop floor labor efficiency
- Satisfy union contracts that stipulate "piece part" pay rates

You can display the tracked information in the following ways:

- Using standard or custom reports in SAP ME
- Using the *Supervisor Time Edit and Approval* activity
- Exporting the information to external payroll or billing systems

When you set up Labor Tracking for your site, you decide the following:

- Which labor charge codes (LCCs) to use
- What cost centers to use and what users to assign as cost center supervisors
- How to distribute users between cost centers
- How to define your shifts
- How users will clock in and clock out of the system
- Whether distributed labor time needs to be collected
- How to set your labor rules
- Whether users need to access, approve, and limitedly edit their time records

### 2.2 Business Purposes / Functions

Labor Tracking feature provides the following functions:

- Clocking in

Labor Tracking begins with clocking in. When a user arrives at work at the beginning of a shift and clocks in, Labor Tracking begins tracking the user's time and charges it to the user's default LCC. There are several ways you can allow users to clock in, depending on how you run your plant and the information you need. For more information, see [Clock In/Out](#).

- Tracking labor time in POD

The system generates SFC numbers when you release product demand to the shop floor. The system assigns the LCC associated with a shop order to each SFC number as it generates them.

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If you need to track the time spent on work in a POD, you can set up the system so that it charges time against the LCCs assigned to each SFC number started and completed in POD.

You can allow users or supervisors to change the LCC associated with an SFC number after the system assigned it. For more information, see [Setting Up Default SFC LCCs](#).

- Collecting distributed labor time

If you need to support ERP distributed labor time collection, you can allow user to collect distributed labor work time for the input fields that correspond to ERP Operation Standards activities. On the *Labor Off* action in the POD, user can collect distributed labor work times for each SFC number. These records are summarized during rollup. For more information, see [Setting Up Collect Work Time](#).

- Working outside the POD

You can track the time of employees who do not work in the POD by having them change their user LCC to the work they are doing.

- Handling clock-in problems

If you have a strict clock-in policy, users may forget to clock in or out or try to clock in too early or late. When this happens, the supervisor can clock users in or out using the *Supervisor Clock-In/Out* production activity.

- Changing user LCCs

You can require your users to clock out for breaks and meal times, or you can allow them to change their labor charge codes manually.

For example, when it is break time, the production operator opens the *Change User LCC* activity and enters the LCC for the break. When operators return from break, they can manually change the LCC back to their default LCC. For more information, see [Defining User Shifts](#).

- Changing SFC LCCs

If changes on the shop floor during production require you to change the LCC for an SFC number, you can allow operators to make changes in the *Change SFC Labor Charge Code* activity.

- Clocking out

At the end of a shift, users clock out, and the system stops tracking their time. For production operators, you can set up Labor Tracking to automatically sign off their SFC numbers when they clock out.

- Rolling up

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Rollup is a background feature of Labor Tracking, which you can use to periodically summarize labor tracking data in the database. To determine what data you want to collect, configure the settings in the *Labor Rule Maintenance*.

To perform rollup automatically, you can run a batch file at intervals, such as every hour, every four hours, or once a day. For more information, see [Defining Labor Rules](#).

- Editing and approving time records

Once the system rolls up time records, cost center supervisors can edit and approve time records for their employees in the *Supervisor Time Edit and Approval* activity. Users can use this activity in the *User* mode to review labor time rollup data that was recorded through the SAP ME activities, and enter or edit their indirect labor records as well as distributed labor time records collected on *Labor Off* prior to their supervisor approval. Approved time records can be exported to another system, such as SAP ERP. For more information, see [Editing and Approving Time Records](#).

- Viewing Labor Tracking reports

Some Labor Tracking reports are available in real time. For more information, see [Viewing Labor Tracking Reports](#).

## 2.3 High-Level Process Flow

This figure illustrates the primary flow of user and system actions for tracking labor in POD:



## 3 Labor Functions

### 3.1 Clocking In/Out

#### 3.1.1 Description and Applicability

You can use this function to track actual user's time elapsing between the shift start and end and charge it to the user's default Labor Charge Code (LCC).

#### 3.1.2 Prerequisite

1. You have set the *Enable Labor Tracking* system rule to *True* in *System Rule Maintenance*.
2. You have created cost centers in *Cost Center Maintenance*.
3. You have assigned user to cost center in *User Maintenance* on the *Labor Tracking* tab page.
4. You have set up set up Labor Tracking for clock in (see *Setting Up Clock-In/Out*).
5. You have the *Clock In/Out* (LT210) activity available in POD if you want the users to clock-in and out manually in POD.

#### 3.1.3 Features

##### 3.1.3.1 Clocking-in

You can allow users to clock in and clock out in the following ways:

- Automatic clock-in on user log on to the system

When you use this option, your employees clock in on the logon screen. Your employees do not use a card reader or the Labor Tracking clock-in activities to clock in. The system automatically clocks in or clocks out each employee when he or she logs on or logs off of the system.

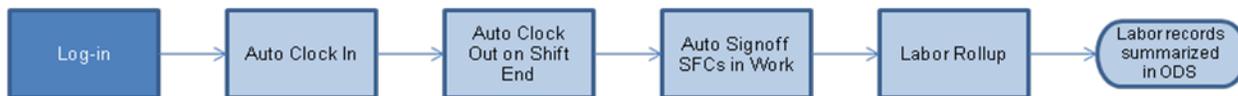
Note: For more information on user logon, see the User Management How-to Guide.

You can also set up the system to automatically clock out user on rollup and assign the normal shift end time for this clock-out if a user does not clock out at shift end. For this, select the *Automatic Clock-Out at Shift End* checkbox in *Labor Rule Maintenance* on the *Attendance* tab page. Note that automatic clock-out will not be performed if the user performs work in the POD after shift end. Here you can also automatically sign off the SFC numbers in work as described in the [Automatic Signoff on Clock-Out](#) section of this document.

The following figure illustrates the primary flow of user and system actions for automatic tracking labor in POD. It assumes that automatic clock-in at logon, automatic clock-out at shift end, and signoff of SFC numbers in work have been set up in *Labor Rule Maintenance* on the *Attendance* tab page and labor rollup has been scheduled to run automatically at some point after the shift end as described in the [Rolling Up Labor Records](#) section of this document.

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- Manual clock-in before user log on to the system

When you use this option, your employees cannot log on to the system before they clock in.

To clock in, your employees can use the following:

- A card reader
- A PC running clock in, set up at one or more special stations
- Manual clock-in in POD

If your plant has a lenient clock-in policy, or if you require only some users to clock in, you can allow users to clock in either before or after they log on to the system. This option does not require users to clock in, so some employees may not clock in at all.

When you use this option, your employees can use the following to clock in:

- A PC running clock-in, set up at one or more special stations
- The *Clock In/Out* (LT210) plug-in in the Production Operation Dashboard

To view your clock-in status and/or to clock in/out in POD, do the following:

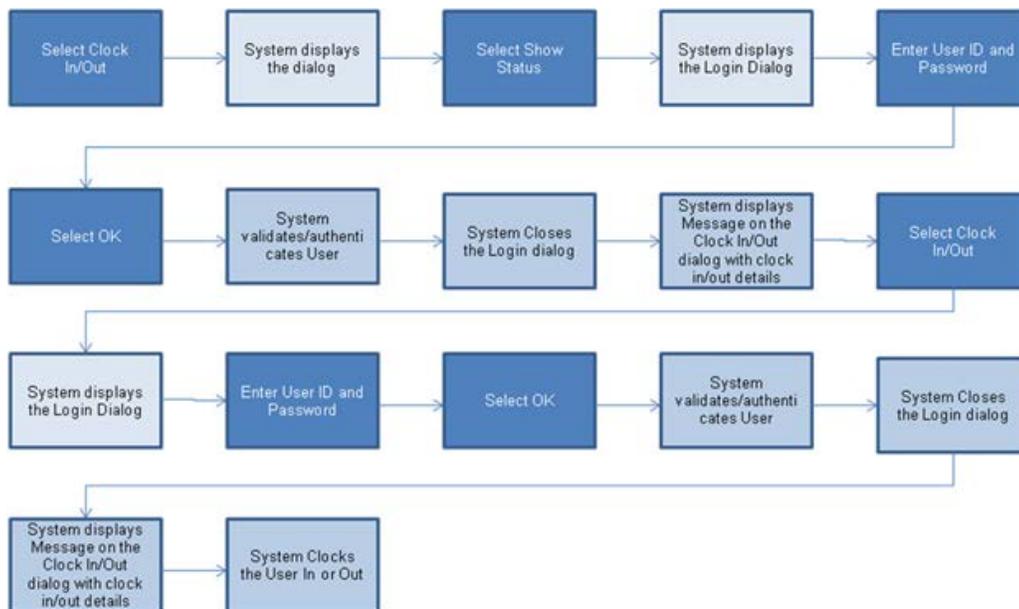
1. Open the *Clock In/Out* (LT210) plug-in by choosing the POD button.
2. Choose the *Show Status* button in the plug-in. The system displays the logon screen.
3. Enter your password and choose *OK*. The system displays your current clock-in status in the message bar of the plug-in.
4. Choose the *Clock In/Out* button in the plug-in. The system displays the logon screen.
5. Type in your password and choose *OK*.

The system clocks you in or out if this is allowed by the attendance rules defined in Labor Rule Maintenance.

Note: If you want to view your status and to clock in or out when another user is logged in to SAP ME, enter your user ID and password and choose the OK button on the logon screen of the Clock In/Out plug-in.

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The following figure illustrates the primary flow of user and system actions for manual clock in POD:



## 3.1.3.2 Handling Clock-In Problems

SAP ME Labor Tracking feature provides the ability to clock in/out users by supervisor. You can use this feature in the following cases:

- Users forgot to clock in or out.
- Users arrived at work after the latest time they could clock in.
- Users arrived at work before the earliest time they could clock in.
- You want users to work at shift they usually do not work.

The supervisor can clock users in or out in the *Supervisor Clock-In/Out (LT220)* production activity.

To clock in or out your supervised users, do the following:

1. Open the *Supervisor Clock In/Out (LT220)* plug-in by choosing the POD button.
2. Enter the user ID.
3. Change the date and time and enter comments, if required.
4. Choose the *Clock In/Out* button.

The system changes the clock-in status of the supervised user.

This activity also allows supervisors to view whether their supervised employees have clocked in or clocked out.

To check the clock-in status of your supervised users, do the following:

1. Open the *Supervisor Clock In/Out (LT220)* plug-in by choosing the POD button.

2. Enter the user ID.
3. Choose the *Show Status* button. The system displays the clock-in status of the supervised user.

Note that to use this feature supervisors need to be defined for the cost center in *User Maintenance* on the *Supervisor* tab page, and supervised users must be assigned to the corresponding cost center in *User Maintenance* on the *Labor Tracking* tab page.

### 3.1.3.3 Automatic Signoff on Clock-Out

You can set up Labor Tracking to automatically sign off SFC numbers when operators clock out. For this, define *Signoff* as *Action Applied at Clock-Out to SFCs in Work* in *Labor Rule Maintenance* on the *Attendance* rules tab page.

## 3.2 Tracking Labor Time in POD

### 3.2.1 Description and Applicability

You can use this function to track labor time spent on processing SFC numbers in POD.

### 3.2.2 Prerequisites

1. You have set the *Enable Labor Tracking* system rule to *True* in *System Rule Maintenance*.
2. You have created LCC codes in *Labor Charge Code Maintenance*.
3. You have assigned default LCC for shop orders in *Labor Rule Maintenance* or specified the labor charge code for a shop order in the *Shop Order Maintenance, Create and Release SFC*, or *Shop Order Release* activities.
4. You have the *Labor On* and *Labor Off* activities available in POD.
5. You have set up collecting distributed times as described in the [Setting Up Collect Work Time](#) section of this document.

### 3.2.3 Features

#### 3.2.3.1 Tracking General Time Spent on Each SFC Processing

If you need to track the time spent on work in a POD, you can set up the system to charge time against the LCCs assigned to each SFC number that is started and completed in POD. This is performed through the *Labor On* and *Labor Off* activities.

The system starts tracking time spent on SFC number processing at operation when the operator labors on to the SFC number. The system stops tracking the time spent on SFC number processing at operation when user labors off from the SFC number. You can set up your POD to automatically labor on the user on SFC start and labor off on SFC complete. For this, attach the *Labor On* activity (LT370) to the *Start* button and attach *Labor Off* (LT380) to the *Complete* button in *POD Maintenance*. If you want to enable your users to labor off from the SFC number that has not been completed, you need to assign the *Labor Off* activity to the *Signoff* button in POD. Note that this is already set up in pre-defined PODs.

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You can also allow multiple collaborating operators to labor on to the SFC numbers that are already started at operation by another user. For this, each collaborating operator must log in to the system with his or her user credentials, select the SFC number in POD, and choose the standalone *Labor On* button. Note that the started SFC number must be assigned to the resource instead of operator. For that, retrieve your resource and select the *Process Resource* checkbox in *Resource Maintenance*.

Multiple operators collaborating on an SFC does not change how their labor time is recorded. All of the actual labor time for each operator is recorded in the same manner as it would be recorded if only that operator was working on the SFC.

Further, during the labor rollup, the system summarizes the obtained labor data and charges the time spent on SFC number processing against SFC LCCs depending on the settings you have defined on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*:

- The system logs the time between the labor on to and labor off from each SFC number against the SFC LCCs.
- The system logs the total time between the labor on to one SFC number and the labor on to the next SFC number against the first SFC LCC to accommodate time spent between labor off from the first SFC number and labor on to the next one.

For more information and examples, see the [Rolling Up Labor Records](#) section of this document.

Note that operators can change LCC for one or multiple SFC numbers from POD, if you assign the *Change SFC Labor Charge Code* (LT250) activity to the POD button and layout in *POD Maintenance*.

To change the SFC LCC, do the following:

1. Choose one or multiple SFC numbers

Note: To choose multiple SFC numbers, choose several SFC numbers in POD or enter the process lot number into the *SFC* field. Changing LCC for SFC numbers selected by shop order is not supported. Also note that LCC cannot be changed for SFC numbers in the *Active* status.

2. Open the *Change SFC Labor Charge Code* (LT250) plug-in in POD. The system displays current SFC LCC.
3. Enter new LCC.
4. Choose *Change*. The system changes SFC LCC to a new one.

### 3.2.3.2 Tracking distributed times spent on SFC number processing

If you need to know how much time your operators spend performing different activities while processing SFC numbers at an operation (for example, Setup, Teardown and Actual Processing), you may have them provide this information on *Labor Off*. For this, set up collecting distributed times as described in the [Setting Up Collect Work Time](#) section of this document.

In this case, when user performs labor off, the system opens the *Collect Work Time* plug-in where the user can do the following:

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- Review the time elapsed between user's labor on to and labor off from the selected SFC numbers
- Distribute elapsed time among pre-defined activities
- Review (if set up accordingly) planned time for each activity
- Validate (if set up accordingly) total distributed times against elapsed time

	Planned	Actual
Setting Up:	10 Minute	<input type="text"/> Minute
Processing:	30 Minute	<input type="text"/> Minute
Tear Down:	10 Minute	<input type="text"/> Minute

To collect time spent on different activities while processing SFC number, do the following:

1. Open the *Collect Work Time* plug-in for the *Labor Off* (LT230) activity by choosing the POD button.
2. Enter time spent for each activity while processing SFC number on current operation.
3. Choose *Ok*. The system saves the data and labors you off the SFC.

If the `ALLOW_ELAPSED_TIME_EXCESS` activity rule for *Labor Off* (LT380) is set to *Yes*, the system will check the total distributed times against time elapsed between labor on and labor off to the SFC numbers and will not let the user to save distributed times if the total exceeds the elapsed time.

### 3.3 Tracking Labor Time spent on working outside the POD

#### 3.3.1 Description and Applicability

You can use this function to track labor time that is not spent on processing SFC numbers in the POD.

#### 3.3.2 Prerequisites

1. You have set the *Enable Labor Tracking* system rule to *True* in *System Rule Maintenance*.

2. You have created LCC codes in *Labor Charge Code Maintenance*.
3. You have created cost centers and assigned the default user LCC for all users in the cost center in the *Default LCC* field of *Cost Center Maintenance*.

Note: If you want to assign a different default LCC for a specific user, enter the LCC in the appropriate row in the *Default LCC* column on the *Labor Tracking* tab page in *User Maintenance*.

4. You have associated each user with a cost center in *User Maintenance*.
5. You have assigned the *Change User Labor Charge Code* (LT240) activity to the POD button and layout in *POD Maintenance*.

### 3.3.3 Features

If you need to track the time that is spent on work other than processing SFC numbers in POD, you can set up to charge time against the user LCCs that are either default or selected by the user. For example, a user can change his or her LCC to RESTOCKING while restocking product in a warehouse. When the user goes on break, he can change his or her LCC to BREAK. This is performed through the *Change User Labor Charge Code* POD plug-in.

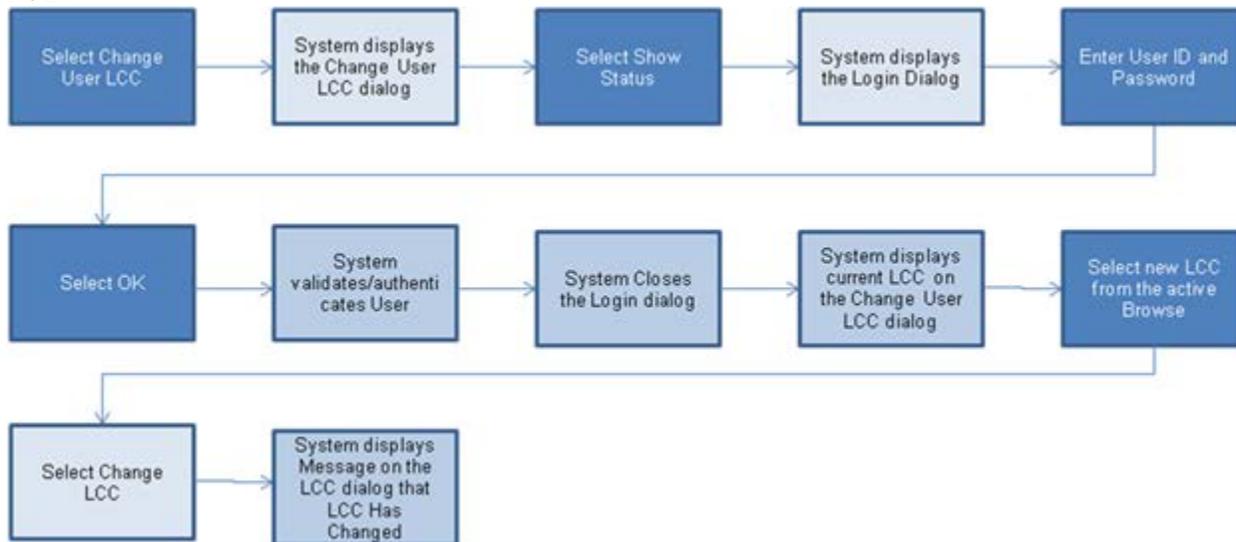
Operators can change their user LCC from POD, if you assign the *Change User Labor Charge Code* (LT240) activity to the POD button and layout in *POD Maintenance*.

To change the user LCC, do the following:

1. Open the *Change User Labor Charge Code* (LT240) plug-in.
2. Choose the *Show LCC* button. The system displays the logon screen.
3. Enter your password and choose *OK*. The system displays your current LCC.
4. Enter another LCC in the *New LCC* field and choose the *Change LCC* button in the plug-in. The system changes your user LCC.

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The following figure illustrates the primary flow of user and system actions for changing user LCC in POD:



### 3.4 Rolling Up Labor Records

#### 3.4.1 Description and Applicability

You can use this function to summarize labor records. The summarization is performed by the script that is triggered either manually or automatically (recommended) according to the labor rule settings you define on the *Rollup Processing* tab page in the *Labor Rule Maintenance* activity.

#### 3.4.2 Prerequisites

1. You have set the *Enable Labor Tracking* system rule to *True* in *System Rule Maintenance*.
2. You have defined labor rule settings in *Labor Rule Maintenance* activity.
3. The users are tracking their labor time spent on SFC number processing or on tasks outside the POD as described in [Tracking Labor Time in POD](#) and [Tracking Labor Time Spent on Working Outside the POD](#).

#### 3.4.3 Functions

##### 3.4.3.1 SFC Labor

SFC labor is the amount of time an SFC number was worked on by operators. It is the length of time for various SFC LCCs. If you use Labor Tracking for billing and cost accounting purposes, we recommend that you track SFC labor.

When the system records SFC labor, it also includes such information, as the SFC LCC, the shop order, and whether the labor was reworked.

## 3.4.3.2 User Labor

Generally, user labor is the time between a user's clock-in and clock-out time. If you use Labor Tracking for payroll and supervisory purposes, we recommend that you track user labor.

When the system records user labor, it includes the following information:

- Quantity of SFC numbers completed in a certain time
- Length of time for various user LCCs
- Whether the labor was reworked
- Time spent on specific shop orders

## 3.4.3.3 Running Rollup

Labor rollup is performed by the ODSLaborRollup.bat (or .ksh) file that is delivered with the product. You can run labor rollup manually or set it up to run periodically using a scheduler. Setup the Labor Rollup script to run every hour, or as required, either through the Windows scheduler or through Unix. If it is not set up to run, this will prevent the labor extract and expansion from occurring, which in turn prevents you from being able to see any data in the Supervisor Time Edit activity. When you set the .bat file up to run periodically, the last command (Pause) must be removed from the .bat file.

For more information about rollup, see rollup examples in the [Defining Rollup Rules](#) section of this document.

## 3.4.3.4 Exporting Rollup Information

You can export the information rollup summaries to .xml files to use them with other systems.

## 3.5 Editing and Approving Time Records

### 3.5.1 Description and Applicability

Supervisors use this function to review, edit, and approve the summarized labor records of the users in the cost centers they supervise after rollup has been run. The system can be set up to also allow users to review and limitedly edit their time records. These actions are performed in the *Supervisor Time Edit and Approval* activity.

### 3.5.2 Prerequisites

Users have been assigned to cost centers on the *Labor Tracking* tab page of *User Maintenance*.

Designated users have been assigned as supervisors to one or more cost centers on the *Supervisor* tab page of *User Maintenance*.

Rollup has been performed. Otherwise, no labor records will be visible.

## 3.5.3 Functions

### 3.5.3.1 Supervisor and User Modes

The *Supervisor Time Edit and Approval* activity supports the following modes:

- *Supervisor* mode
- *User* mode

You choose an activity mode by setting up the `ACTIVITY_MODE` activity rule to `SUPERVISOR` or `USER` correspondingly in *Activity Maintenance*.

Depending on the mode, different fields are displayed in the activity and you can perform different tasks with the time records.

Note that you can have both *Supervisor* and *User* modes available in the system simultaneously. For this, create a copy of the `LT260` activity with a new name in *Activity Maintenance* and change the mode and (optionally) the description for the copied activity. After saving the changes, add permissions for the new activity to the desired user group on the *Permissions* tab page of the *User Group Maintenance* activity.

In the *User* mode, operators can view and edit their summarized labor records. They can correct or add missing indirect labor information after rollup. The records are grouped by clock-in/clock-out date.

In the *Supervisor* mode, cost center supervisors can review and edit summarized labor records of their supervised users.

Note that you must be a supervisor of the cost center to view the other user's records in this mode.

After the records have been reviewed, cost center supervisor approves them. Approved records can be exported to SAP ERP.

Note that if the `USER_ACCEPT_REQ` activity rule is set to `YES`, user must accept the *New* labor records before the supervisor can approve them.

The status of approved records that are successfully transferred to SAP ERP is changed to *Exported*. The exported labor records can be also reviewed but they cannot be edited in SAP ME.

In the *Supervisor* mode, you can review the following data:

- Summarized labor records for supervised users on the *Main* tab page
- Details for the selected labor record on the *User Labor Time Summary* screen
- User's labor records for a specific day on the *Edit Employee Labor Summary Record* screen
- Summarized labor time distributed among the pre-defined activities in the *Collect Work Time* activity

In the *User* mode, you can review the following data:

- Your summarized labor records on the *Main* tab page
- Your details for the selected labor record on the *User Labor Time Summary* screen

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- A portion of your labor record on a specific day between specific clock-in and clock-out on the *User Summary Record* screen
- Summarized labor data you have collected in the *Collect Work Time* activity

In the *Supervisor* mode, you can perform the following actions with labor records:

- Approve or unapprove labor records
- Adjust a user's clock-in or clock-out time
- Insert missing day
- Add and edit or delete a particular direct or indirect labor record
- Add or edit distributed labor times collected in the *Collect Work Time* activity

Note that six distributed labor time input fields are displayed with the default labels and units unless you have defined specific labels in *Standard Value Key Maintenance* and time units in *Scheduling Standards Maintenance*.

In the *User* mode, you can perform the following actions with labor records:

- Review your summarized labor data
- Create new and delete existing indirect labor record
- Accept direct labor data before your supervisor approval
- Add or edit distributed times

Note that six distributed labor time input fields are displayed with the default labels and units unless you have defined specific labels in *Standard Value Key Maintenance* and time units in *Scheduling Standards Maintenance*.

Note that after your labor records have been approved by your supervisor, you cannot edit them.

### 3.5.3.2 Approval States of Labor Records

By the approval state of the labor record, you can easily identify labor records that require your review. There are the following approval states:

Approval State	Definition
<i>New</i>	Labor records to be approved or unapproved by supervisor
<i>Accepted</i>	Labor records that have been accepted by the supervised user in <i>User</i> mode
<i>Unapproved</i>	Labor records that have been unapproved by supervisor
<i>Approved</i>	Labor records that have been approved by supervisor

### 3.5.3.3 Activity Rules

You define the actions supervisors and operators can perform with the labor records in the *Supervisor Time Edit and Approval* activity by setting up the activity rules.

The following rules control supervisor actions in the activity:

- **ALLOW\_TIME\_EDIT**: The cost center supervisor can edit, create, or approve labor records. If this rule is set to *NO*, the supervisor can only retrieve and review the labor records.
- **FORCE\_APPR\_REVIEW**: If set to *YES*, the cost center supervisor is required to approve time records of their supervised users on the *Employee Labor Summary Record* screen instead of the *User Labor Time Summary* screen to assure each record reviewing prior to approval.
- **SPVR\_COMMENT\_REQ**: If set to *YES*, a supervisor comment is required before the record changes can be saved.
- **TIME\_CARD\_APPR\_REQ**: If set to *YES*, all time records created by rollup are required to be pre-approved by supervisor before they can be exported to SAP ERP.

The following rules control user actions in the activity:

- **ALLOW\_TIME\_EDIT**: If set to *YES*, the user can limitedly edit, create, or approve labor records. If this rule is set to *NO*, the user can only retrieve and review the labor records.
- **CHECK\_EDITED\_TIMES**: If set to *YES*, compares the difference between a user's clock-in and clock-out times with the total labor time charged to the user for the day to assure that total time of labor records for a day does not exceed the time elapsed between clock-in and clock-out.
- **LABOR\_CHECK\_TOLERANCE**: Specifies the number of minutes the time elapsed between a clock-in and clock-out can differ from the total labor time charged to the user for the day. The default value for this rule is 0 (zero).
- **USER\_COMMENT\_REQ**: If set to *YES*, a user comment is required before the record changes can be saved.
- **USER\_ACCEPT\_REQ**: If set to *YES*, the user acceptance is required before the supervisor can approve or unapprove the *New* labor records.

### 3.5.3.4 Creating New Indirect Labor Record

User can create new indirect labor record by doing the following:

1. In *Supervisor Time Edit and Approval*, choose *More... > Insert Indirect Labor Record*. The *User Summary Record* screen opens.

Note that you can also add an indirect labor record on the *User Labor Time Summary* screen for the specific day by choosing *Actions > Insert Indirect Labor Record*.

2. Enter necessary information and choose the *Apply* button. The system adds new record and it is displayed in the table.

### 3.5.3.5 Deleting the Existing Indirect Labor Record

Users can delete their indirect labor record by doing the following:

1. In *Supervisor Time Edit and Approval*, retrieve labor records. The system displays the time records in the table.

2. Choose the icon in the *Details* column for the day you want to delete indirect labor for. The *User Labor Time Summary* screen opens.
3. Choose the rows you want to delete and choose *Actions > Delete Indirect Labor Record Selected*.

Note that you can also delete an indirect labor record from the *Supervisor Time Edit and Approval* screen by selecting the labor record and choosing *More.. > Delete Indirect Labor Record Selected*.

4. Choose *Ok* to confirm deletion and close the *Actions* screen. The system deletes the record and updates the table.

Note that you cannot delete the labor record after it has been approved by your supervisor or exported.

### 3.5.3.6 Accepting Direct Labor Records

If the `USER_ACCEPT_REQ` activity rule is set to *YES*, operators need to accept their *New* labor records, otherwise the supervisor cannot approve or unapprove them.

To accept your labor records, proceed as follows:

1. In *Supervisor Time Edit and Approval*, retrieve labor records. The system displays the time records in the table.
2. Choose the rows you want to approve in the first column in the table and choose *More... > Accept Selected*. The current approval state of the row the *Approval State* column changes from *New* to *Accepted*.

### 3.5.3.7 Adding or Editing Summarized Labor Data Collected in Collect Work Time

If operators have not collected distributed labor times in the POD on *Labor Off* or the entered data need to be changed, the supervisor or the operators themselves can add or correct the data by doing the following:

1. In *Supervisor Time Edit and Approval*, retrieve labor records. The system displays the time records in the table.
2. Choose the icon in the *Details* column for the day and user you want to add or edit the distributed time. The *User Labor Time Summary* screen opens.
3. Choose the icon in the *Details* column. The *Edit Employee Labor Summary Record* screen opens. Enter necessary information in the distributed labor time input fields, and choose *Apply* to save the data and return to the *User Labor Time Summary* screen.

Note that six distributed labor time input fields are displayed with the default labels and units unless you have defined specific labels in *Standard Value Key Maintenance* and time units in *Scheduling Standards Maintenance*.

In addition to the procedures above, cost center supervisor can do the following:

### 3.5.3.8 Approving User's Time Records

To approve or unapprove user's records, proceed as follows:

1. In *Supervisor Time Edit and Approval*, enter the cost center you supervise in the *Cost Center* field.
2. To limit the time records to those you want to work with, enter data in one or several of the following fields:
  - *Shift*: The shift whose records you want to work with
  - *User ID*: The user ID whose records you want to work with
  - *Labor Date Range*: The time span for the records you want to work with
  - *Approval State*: The approval state of the records you want to work with
3. Retrieve the data. The system displays the time records that meet the criteria you specified. For each day, the system displays one row for each employee. Note that this is only possible when your supervised users perform clock-in and clock-out. If not, labor records will not be grouped by day.
4. Choose the rows you want to approve in the first column in the table and choose *More... > Approve* on the toolbar. The current approval state of the row appears in the *Approval State* column.

Note that the system will not allow you to perform this step prior to approving all time record details in the *User Labor Time Summary* screen, if the FORCE\_APPR\_REVIEW activity rule is set to *YES*.

5. If the FORCE\_APPR\_REVIEW activity rule is set to *YES*, choose the icon in the *Details* column in the row with the labor record you need. The *User Labor Time Summary* screen opens.
6. Select the time records you want to approve in the table and choose *Actions > Approve*.

Note that if the SPVR\_COMMENT\_REQ activity rule is set to *YES*, the system will not allow you to perform this step prior to adding comment on the *Edit Employee Labor Summary Record* screen.

7. To add a comment, choose the icon in the *Details* column in the row with the labor record you need. The *Edit Employee Labor Summary Record* screen opens. Enter your comment in the *Supervisor's Comment* field and choose the *Apply* button.
8. When you have finished approving time records, choose the *Close* button. The system marks the time records you selected as approved and returns to the main screen.
9. To remove approval from one or more rows, in either the *Supervisor Time Edit Approval* screen or the *User Labor Time Summary* screen, select records and choose *More... > Unapprove* or *Actions > Unapprove* correspondingly.

Note that you cannot change the approval state of an *Exported* record.

### 3.5.3.9 Adjusting User's Clock-In or Clock-Out Time

At times, you may need to change the clock-in or clock-out time for a user on a particular day. Note that this is only possible if the user has clocked-in or out. If the user has not clocked in or out in the particular day, you need to insert missing day first as described in the [Inserting Missing Day](#) section.

To do this, proceed as follows:

1. In *Supervisor Time Edit and Approval*, if the table is not displayed, retrieve labor records. The system displays the time records in the table. Each row represents either a labor day or a distinct record for the user depending on your clock-in policy.
2. Choose the icon in the *Details* column for the day and user you want to adjust the clock-in or clock-out time. The *User Labor Time Summary* screen opens.
3. Choose *Actions > Adjust Clock-In/Clock-Out*. The *Adjust Clock-In And Clock-Out Time* screen opens.
4. Enter the new date and time for the user's clock-in and clock-out and identify either shop order or labor charge code.
5. When you have finished entering information, choose *Save*. The system changes the clock-in and clock-out time and date for the user to the values you entered, and returns to the *User Labor Time Summary* screen. Choose *Close* to return to the *Supervisor Time Edit and Approval* screen.

### 3.5.3.10 Inserting Missing Day

To insert missing day for the user, proceed as follows:

1. In *Supervisor Time Edit and Approval*, if the table is not displayed, retrieve labor records. The system displays the time records in the table. Each row represents either a labor day or a distinct record for the user depending on your clock-in policy.
2. Choose *More>Insert Missing Day*. The *Insert Missing Day* screen opens.
3. Enter user ID, clock-in and clock-out date and time, user shift, LCC and your comment.
4. When you have finished entering information, choose *Save*. The system adds missing day for the user with the values you entered. Choose *Close* to return to the *Supervisor Time Edit and Approval* screen.

### 3.5.3.11 Editing User's Time Records

To change the details of a time record for an employee on a particular day, proceed as follows:

1. In *Supervisor Time Edit and Approval*, retrieve labor records. The system displays the time records in the table. Each row represents either a labor day or a distinct record for the user depending on your clock-in policy.
2. For the labor day record you want to edit, choose the icon in the *Details* column. The *User Labor Time Summary* screen opens displaying all time records for the selected day.
3. To change a time record, choose the icon in the *Details* column, make changes in the *Edit Employee Labor Summary Record* screen that opens, and choose *Apply* to return to the *User Labor Time Summary* screen.
4. To add a time record to an existing day record, on the *User Labor Time Summary* screen, choose *Actions > Insert New*, enter data in the *Edit Employee Labor Summary Record* screen, and choose *Apply*.

## 3.6 Viewing Labor Tracking Reports

The real time labor tracking information is provided in *LCC Summary Report* and *On Premises Report*. The *LCC Summary Report* provides information about SFC labor, such as labor time spent on processing shop order and LCCs this time is charged to.

*On Premises Report* provides information about user labor. It displays all user clock-ins and clock-outs during the time period defined in *Labor Rule Maintenance* on the *Attendance* tab page.

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Managers can use the *On Premises Report* to determine whether a user has clocked in or clocked out during this time period. Here they can see the users' clock-in status per shift, cost center, LCC, whole site, individual user, or specific status.

Note that summarized labor records can be viewed by cost center supervisors in the *Supervisor (User) Time Edit* (LT260) activity after labor rollup is run.

## 4 Labor Tracking Setup

### 4.1 Description and Applicability

You can use this process to set up one or multiple labor tracking functions.

### 4.2 Defining User Shifts

You use *User Shift Maintenance* to tell the system when your shifts start and end. In this activity, you can specify the following values:

- The earliest time users can clock in
- The latest time users can clock in
- The earliest time users can clock out
- The latest time users can clock out
- How the system allocates time past midnight on a shift
- Scheduled breaks for the shift

#### 4.2.1 Creating Variations of the Same Shift

Characteristics of your shifts may vary due to such factors as union rules or seasons. You can include shift variations in Labor Tracking by creating a row for each variation on the *Main* tab page in *User Shift Maintenance* and specifying the dates for which the variation is in effect. For example, your plant starts shifts in summer earlier than it does the rest of the year.

Only one row can be current. You cannot create a row that has the same *Valid From* date as an existing row. If dates in the *Valid From* and *Valid To* columns overlap the dates in another row, the system marks the row with the *Valid From* value that is closest to today as current.

#### 4.2.2 Classifying Days in a Shift

You classify each shift for each day of the week as one of the following:

- Production  
When a shift or plant is scheduled to work
- Non-production  
When a shift or plant is not scheduled to work

You also classify each day of the week as one of the following:

- Normal  
Not a holiday or weekend

- Holiday

Set aside for a special observance in your country or culture

- Weekend

The close of one week and the beginning of another

### 4.2.3 Scheduling Breaks for the Shift

The system allows you to schedule breaks for your shifts by specifying one of the break types.

You can define more than one break for a shift.

To specify breaks for the shift, choose the link in the *Break* column. On the *Break Edit* screen, create a row for each break in the shift. Input the break start and end type time and specify the break type. The system comes with two break types: *Meal* and *Short Break*. *Meal* implies a break for a meal, such as lunch or dinner. *Short Break* may indicate a fifteen minutes required break time three hours into the shift. Note that you can create new break types by adding entries in the IDAT file.

### 4.2.4 Handling Shift Exceptions

The system allows you to be flexible while enforcing your shift definitions.

You can allow users to do the following:

- Clock in on non-production days

To allow all users to clock in on non-production days, select the *Allow Clock-In on Non-Production Day* checkbox in *Labor Rule Maintenance*. To allow only certain employees to clock in on non-production days, set the *Allow Clock-In on Non-Production Day* labor rule to *true* for the employee's user record on the *Labor Rules* tab page in *User Maintenance*.

- Clock in or clock out early or late

If you want to allow all users to clock in or clock out before or after the time you specify in their shift definition, use the *Clock-In/Out Range Control* field in *Labor Rule Maintenance*. On the *Labor Rules* tab page in *User Maintenance*, you can override this rule for employees, whose clocking in and out you want control differently.

## 4.3 Setting up Labor Charge Codes

### 4.3.1 Labor Charge Code (LCC) Concept

Labor Charge Code is used to specify what type of labor a worker has performed during a specific block of time.

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Companies use labor charge codes (LCCs) to accumulate totals of how much time their employees spend performing various tasks. The company may use these totals for payroll.

You create LCCs and define their characteristics in *Labor Charge Code Maintenance*.

You can create temporary LCCs or indicate that an LCC is obsolete or expired in the *Valid To* and *Valid From* fields in the *Labor Charge Code Maintenance* activity. If you change your mind, you can also override the expiration date.

You must classify each labor charge as one of the following:

- Direct

Direct labor is time users spend performing certain tasks, such as restocking, building a product, or adding value to a product. Most companies classify the LCCs for rework and assembly tasks as direct labor.

- Indirect

Indirect labor is time users spend idle or performing tasks not associated with producing a product. Most companies classify the LCCs for general meetings and training as indirect labor.

You can create new labor subtypes by adding entries in the IDAT file.

In addition to labor types described above, LCC can have the following attributes:

- *Labor Subtype*
- *Valid From*
- *Valid To*
- *Custom Data*

## 4.3.2 Setting Up Default User LCCs

User LCCs are labor charge codes associated with a particular user. For example, to track the amount of time each user spends restocking, you can create an LCC named RESTOCKING. When a user clocks in, Labor Tracking begins tracking the user's time and charges it to the user's default LCC.

To set up the default user LCC, do the following:

1. In *Labor Charge Code Maintenance*, create LCCs for users.
2. In *Cost Center Maintenance*, retrieve a specific cost center, and enter the default user LCC for all users in the cost center the *Default LCC* field.
3. In *User Maintenance*, associate each user with a cost center.
4. If you want to assign a different default LCC for a specific user, on the *Labor Tracking* tab page in *User Maintenance*, enter the LCC in the appropriate row in the *Default LCC* column.

### 4.3.3 Setting Up Default SFC LCCs

SFC LCCs are labor charge codes associated with a particular SFC number. LCC is assigned to SFC numbers when they are released to the shop floor.

Companies may use SFC LCCs to calculate how much time was spent building each SFC number in order to bill customers.

You can specify the labor charge code for a shop order in the *LCC* field in the *Shop Order Maintenance*, *Create and Release SFC*, or *Shop Order Release* activities. If the *LCC* field is blank, the system assigns the LCC in the *Default LCC for Shop Orders* field in *Labor Rule Maintenance*.

To set up the default SFC LCC, do the following:

1. In *Labor Charge Code Maintenance*, create an LCC for SFCs to be used as default.
2. To specify a default SFC LCC for all SFC numbers, choose the *Use Default LCC for Shop Orders When LCC Not Provided* checkbox and enter the default LCC in the *Default LCC for Shop Orders* field on the *LCC Rules* tab page in *Labor Rule Maintenance*.
3. To override the default SFC LCC for unreleased SFC numbers when you create shop orders, in *Shop Order Maintenance*, enter the new SFC LCC in the *LCC* field.
4. To override the default SFC LCC for unreleased SFC numbers when you release them, in either *Shop Order Release* or *Create and Release SFC*, enter the new SFC LCC in the *LCC* field.
5. To change the LCC for SFC numbers after release, use *Change SFC LCC* POD plug-in as described in [Tracking General Time Spent on Each SFC Processing](#) section of this document.

If you import shop orders through *Integration*, the system can use the labor charge code from your ERP or other system. See your SAP ME consultant for more information about using *Integration*.

## 4.4 Setting Up Cost Centers

Labor Tracking allows you to define your cost centers in hierarchies to reflect your company's organization or chains of command and responsibilities.

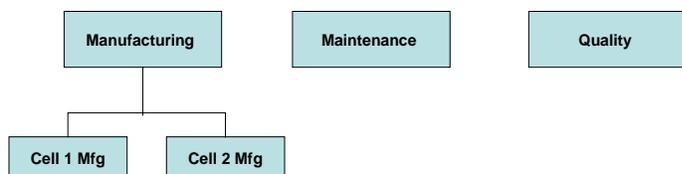
For example, you have the following cost centers:

- Maintenance
- Manufacturing
- Quality

Your company divides the Manufacturing cost center in the following way:

- Cell 1 Mfg
- Cell 2 Mfg

The figure below depicts the relationship:



Manufacturing is the parent cost center of Cell 1 Mfg and Cell 2 Mfg. Parent cost centers are also called rollup centers because data from the cost centers under the parent must be included in the parent cost center's totals.

To create a cost center hierarchy, proceed as follows:

1. In *Cost Center Maintenance*, create the parent cost center:
  - In the *Cost Center* field, enter the ID for your cost center.
  - Set cost center status to *Enabled* and enter default user Labor Charge Code (LCC).

Note: You must create default LCC prior to creating your cost center as described in [Setting Up Default SFC LCCs](#) section of this document.

2. Create the lower level cost centers, and assign each to its parent in the *Parent/Rollup CC* field.

Once you have defined cost centers, you can assign users and supervisors to a cost center.

To assign a user to a cost center, do the following:

1. Retrieve the user record in *User Maintenance*.

2. On the *Labor Tracking* tab page, in the *Cost Center* column, enter the name of the cost center.

To assign a supervisor to a cost center, do the following:

1. Retrieve the supervisor's user record in *User Maintenance*.
2. Enter the name of the cost center in the *Supervised CCS* column on the *Supervisor* tab page in *User Maintenance* activity.
3. If you want to assign a user as a temporary supervisor over a cost center, you can limit the supervising time period by entering corresponding dates into the *Valid From* and *Valid To* column.

A cost center can have more than one supervisor.

## 4.5 Defining Labor Rules

You can define rules that govern how certain features of Labor Tracking work at your site, including employee attendance, default SFC LCCs, and rollup. You can set labor rules in *Labor Rule Maintenance* activity.

### 4.5.1 Defining Attendance Rules

On the *Attendance Rules* tab page, you can determine the following:

- How users perform clock-in
- How strict the control of the employee clock in and out is
- Whether you want Labor Tracking to automatically clock out users who forget to clock out themselves, and whether to automatically sign off users SFC numbers at clock out

To identify how the users perform clock in, select the value of *Clock-In Control* as follows:

- *Automatic Clock-In at Logon*: To clock in users automatically when they log on to the system.
- *Require Clock-In Before Logon*: To prevent users from logging on until they have clocked in.
- *Manual Clock-In* (default): To let users log on with no clock in and perform manual clock-in/out in POD, if required.

To automatically clock out user on rollup and assign the normal shift end time for this clock-out if a user does not clock out at shift end, select the *Automatic Clock-Out at Shift End* checkbox. Note that automatic clock-out will not be performed if the user performs work in the POD after shift end.

To allow users to clock in on a day defined as non-production for their shift in *User Shift Maintenance*, select the *Allow Clock-In on Non-Production Day* checkbox. Note that supervisors can always clock employees in on non-production days using the *Supervisor Clock-In/Out* (LT220) activity as described in the [Handling Clock-in Problems](#) section of this document.

To define how strict the control of the employee clock in and out is, select the value of *Clock-In/Out Range Control* as follows:

- *Only Within Interval*: To allow users to clock in only during the clock-in interval, and clock out only during the clock-out interval.
- *Only Within Shift and Interval*: To allow users to clock in during the clock-in interval and during the shift, and clock out only during the clock-out interval and during the shift.
- *Anytime* (default): To allow users to clock in and out at any time.

Note that you define shifts and clock-in and clock-out intervals in the *User Shift Maintenance* activity.

To define whether to sign off the operator's active SFC numbers on automatic clock-out, specify the value in the *Action Applied at Clock-Out to SFCs* in the *Work* field as follows:

- *None* (default): To leave the operator's SFC numbers in the *Active* status
- *Signoff*: To sign off the operator's SFC numbers

### 4.5.2 Defining Rollup Rules

On the *Rollup Processing Rules* tab page, you define how to summarize the collected labor records:

- Whether you will collect information for SFC labor, user labor, or both
- What information you want to collect along with SFC labor information, such as cost centers, customers, materials, operations, and resources
- How you want to track idle time between SFC numbers, and how you want to distribute labor time when operators work multiple SFC numbers

To define what labor types to summarize during the rollup, select one or both of the following options:

- *Enable SFC Labor Summarization*
- *Enable User Labor Summarization*

To define by what object or combination of objects to summarize SFC labor, select one or multiple options in *Summarize SFC Labor By*.

Additionally, you can summarize SFC or user labor by one or multiple custom data fields. For this, enter the custom data fields in the format <table>.<data field ID> into *Summarize SFC Labor by Custom Fields* or *Summarize User Labor by Custom Fields*.

For example, if you want to summarize user labor data by pay grade and have added a custom data field for PAY\_GRADE field ID in *User Maintenance*, enter USR.PAY\_GRADE into the *Summarize User Labor by Custom Fields* field. The system will summarize your labor data by pay grade attribute values defined for your users in *User Maintenance*.

Note that custom data summarization is supported for the following tables: ITEM (Material), USR (or USER), LABOR\_CHARGE\_CODE, USER\_GROUP, COST\_CENTER.

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To use multiple custom data fields for SFC data summarization, use a comma-delimited list. For example, to summarize the records by a combination of material color and user pay grade, enter ITEM.COLOR, USR.PAY\_GRADE assuming that you have defined and assigned custom data fields with these field IDs.

You can also use an \* wildcard instead of the data field ID to summarize by combination of all custom data fields for a given table. For example, USR.\* means all custom fields defined for the user in *User Maintenance*. The rollup will create a record for each combination of the fields you are summarizing on for a given date.

To specify the number of days the system retains SFC labor and user labor records after approval, define it in the *Labor Age* field.

To indicate how to distribute the time spent on multiple SFC numbers, select the value of *Distribution of SFC Labor Time* as follows:

- *Equal*: To divide SFC labor time equally between SFC numbers
- *LCC*: To divide SFC labor time equally between SFC LCCs
- *All*: To allocate SFC labor time fully to each SFC number
- *Quantity*: To divide SFC labor time based on the prorated SFC quantity

To indicate how to track the idle time between SFC numbers, select the value of *Idle Factor for Labor Time* as follows:

- *Labor on to Labor on*: To associate idle time between SFC numbers with the SFC user previously labored on to
- *Labor on to Labor off* (default): To associate idle time between SFC numbers with the user's LCC

The following examples illustrate common settings for rollup. They assume operators work on SFC numbers one at a time. If operators work on multiple SFC numbers, the system divides SFC labor according to the setting of the *Distribution of SFC Labor Time* field in *Labor Rule Maintenance*.

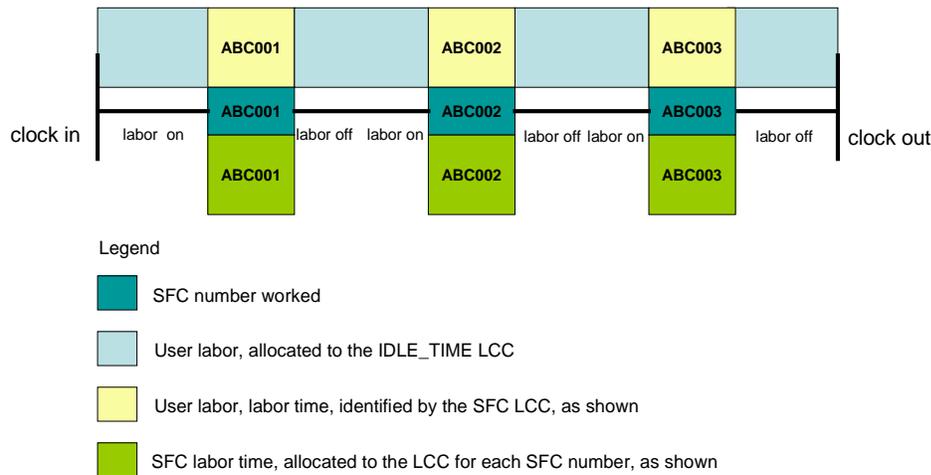
## Example 1

### Setup

Prerequisites:

- On the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, you have set the *Idle Factor for Labor Time* field to *Labor on to Labor off*.
- You have created an indirect user LCC in *Labor Charge Code (LCC) Maintenance* named IDLE\_TIME. This is the default user LCC for the operators in this example.
- You have set up *Labor on* to run on *Start* and *Labor off* to run on *Complete* in *POD Maintenance*.

The figure below illustrates *Example 1* and is followed by an explanation:



## What Operators Do

Production operators clock in at the beginning of the shift, and the system starts charging their time against IDLE\_TIME. At the workstation, the operator works one SFC number at a time in the POD. The operator clocks out at the end of the shift without changing his or her user LCC during the shift.

## User Labor Results

If you selected the *Enable User Labor Summarization* checkbox on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, the system logs the following against the user's default LCC, IDLE\_TIME:

- Time between clock in and the labor on to the first SFC number
- Time between the labor off from one SFC number and the labor on to another
- Time between the labor off from the last SFC number and clock out

The system logs the time between the labor on to and labor off from an SFC number against the respective SFC LCC. The system associates this time with the user.

## SFC Labor Results

If you selected the *Enable SFC Labor Summarization* checkbox on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, the system logs the time between the labor on to and labor off from each SFC number against the SFC LCCs.

## Example 2

### Setup

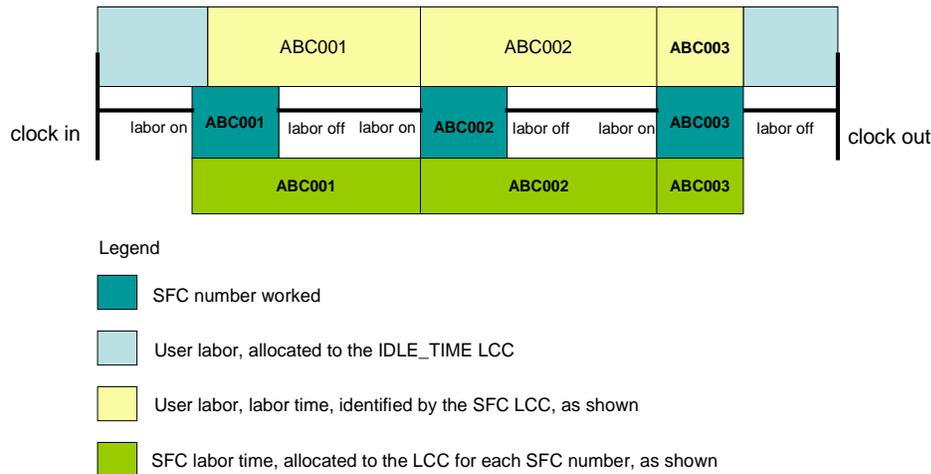
Prerequisites:

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- You have set the *Idle Factor for Labor Time* field to *Labor on to Labor on* on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*.
- You have created an indirect user LCC in *Labor Charge Code Maintenance* named `IDLE_TIME`, and this is the default user LCC for the operators in this example.
- You have set up *Labor on* to run on *Start* and *Labor off* to run on *Complete* in *POD Maintenance*.

The figure below illustrates *Example 2* and is followed by an explanation:



## What Operators Do

A production operator clocks in at the beginning of the shift, and the system starts charging time against IDLE\_TIME. At the workstation, the operator works one SFC number at a time in the POD. The operator clocks out at the end of the shift without changing the user LCC during the shift.

## User Labor Results

If you selected the *Enable User Labor Summarization* checkbox on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, the system logs the following against the user's default LCC, IDLE\_TIME:

- The time between clock in and the labor on to the first SFC number

The time between the labor off from the last SFC number and clock out The system logs the time between the labor off from one SFC number and the labor on to the next SFC number against the previous SFC LCC. The system associates this time with the user.

## SFC Labor Results

If you selected the *Enable SFC Labor Summarization* checkbox on the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, the system logs the total time between the labor on to one SFC number and the labor off from the next SFC number against the first SFC LCC.

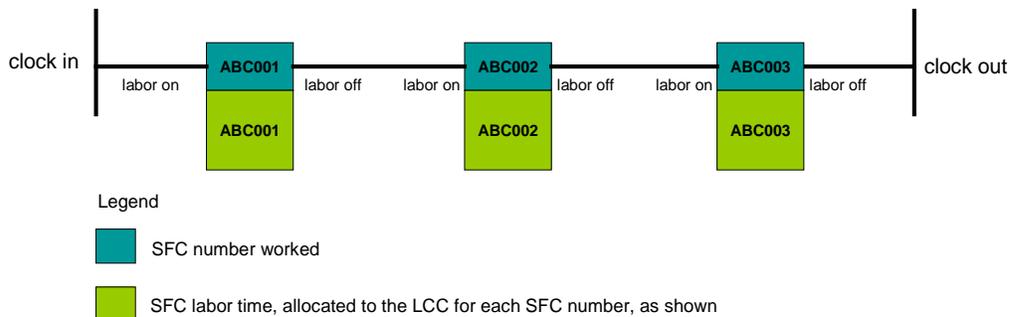
## Example 3

### Setup

#### Prerequisites

- On the *Rollup Processing Rules* tab page in *Labor Rule Maintenance*, you have set the *Idle Factor for Labor Time* field to *Labor on to Labor off*.
- You have set up *Labor Tracking* with no clock in required.
- You have selected the *Enable SFC Labor Summarization* checkbox, and cleared the *Enable User Labor Summarization* checkbox on the *Rollup Processing Rules* tab in *Labor Rule Maintenance*.
- You have set up *Labor on* to run on *Start* and *Labor off* to run on *Complete* in *POD Maintenance*.

The figure below illustrates *Example 3* and is followed by an explanation:



### What Operators Do

Without clocking in or clocking out, a production operator works one SFC number at a time in the POD.

### User Labor Results

Without clocking in or clocking out, the system does not count user labor results.

### SFC Labor Results

The system logs the time between the labor on and labor off to or from each SFC number against the SFC LCCs.

## 4.6 Setting up Clock-in/out

### 4.6.1 Setting Up Labor Tracking for Clock-In During Logon

To automatically clock in all users when they log on to the system, select *Automatic Clock-In at Logon* in the *Clock-In Control* field in *Labor Rule Maintenance* (see [Defining Labor Rules](#)).

Note: You do not have to enter any identification value other than the user ID in *User Maintenance*. The system ignores any value in the *ID for Clock In/Out* field in *Labor Rule Maintenance*.

### 4.6.2 Setting Up Labor Tracking for Clock-In Before Logon

To require all users to clock in before logging on to the system, proceed as follows:

1. In *Labor Rule Maintenance*, do the following:
  - o In the *ID for Clock-In/Out* field, select the value you want employees to use when clocking in.
  - o In the *Clock-In Control* field, select *Require Clock-In Before Logon*.
2. Set up a card reader where users can clock in.

### Setting Up a Card Reader

If you want your users to clock in and clock out at an electronic card reader, a developer or system integrator must set up the card reader. For more information, see your SAP ME consultant.

1. Set up your card reader to send an HTTP request each time a user swipes a badge or other card when entering the plant.
2. Send the HTTP request to the following application available at the /manufacturing-xml context:

`com/sap/me/integration/xchange/client/ClockInOutInterface.jsp`

This application does not have a GUI interface.

3. In the `message=` parameter, enter the following XML. All tags are required.

#### Syntax

1. `<CLOCK_INOUT>`
2. `<SITE>`
3. A site string
4. `</SITE>`
5. `<CLOCK_ID>`
6. ID for clock in/out
7. `</CLOCK_ID>`
8. `<CLOCK_WHEN>`
9. Date/time when to log this action, sent in a string form of long value, representing GMT.
10. `</CLOCK_WHEN>`
11. `</CLOCK_INOUT>`

End of the source code.

Response when a failure occurs:

#### Syntax

```
12. <CLOCKINOUT_ERROR>
13. <MESSAGE>
14. Error message for display. In locale of the server.
15. </MESSAGE>
16. </CLOCKINOUT_ERROR>
```

Response upon success:

### Syntax

```
17. <CLOCK_INOUT_RESPONSE>
18. <USER_NAME>
19. A string. First name space last name of user clocked in/out.
20. </USER_NAME>
21. <CLOCK_STATUS>
22. A string. IN or OUT clock functionality performed.
23. </CLOCK_STATUS>
24. <CLOCK_DATETIME>
25. A string form of long value, representing date and time of
    last clock in/out.
26. </CLOCK_DATETIME>
27. </CLOCK_INOUT_RESPONSE>
```

Note: You can also import this information using Data Xchange.

Users must have the same roles as for running Data Xchange and Production Interface. For more information see *SAP ME 6.0 Security Guide* available at <http://help.sap.com> -> *SAP Business Suite* -> *SAP Manufacturing* -> *SAP Manufacturing Execution* -> *SAP Manufacturing Execution 6.0*.

### 4.6.3 Setting Up Labor Tracking for Unrequired Clock-In in the POD

#### Procedure

1. In *Labor Rule Maintenance* activity, in the *ID for Clock-In/Out* field, select the value you want employees to use when clocking in, and select *Manual Clock-In* in the *Clock-In Control* field (see [Defining Labor Rules](#)).
2. In *User Maintenance*, on the *Labor Rules* tab page, you can define individual settings at the user level.
3. Add a *Clock-In/Out* plug-in to one or more PODs as described in [Adding a Plug-In to One or More PODs](#) section of this document.

### 4.7 Setting up Labor Tracking in POD

1. In *Labor Charge Code Maintenance* activity, define the labor charge codes for your site.
2. In *Cost Center Maintenance* activity, you define the cost centers for your site.
3. In *Production Calendar Maintenance* activity, you set up a production calendar.
4. In *User Shift Maintenance* activity, you define user shifts and schedule them.

Note: You can specify the holidays for your site in the *Holiday.idat* file. For more information, see your SAP ME consultant.

5. In *User Maintenance*, do the following:
  1. On the *Labor Tracking* tab page, assign users to shifts and cost centers.
  2. On the *Supervisor* tab page, assign cost centers to users who are supervisors.

Note: The system uses the *UserTypeBO.idat* file to define options, such as *Exempt*, *Non-Exempt*, and *Contract*, in the *User Type* column. You can use the options specific to your site by changing this file. For more information, see your SAP ME consultant.

6. Set up the default user and SFC LCCs (see [Setting Up Default SFC LCCs](#)).
7. In *Labor Rule Maintenance*, set the labor rules you want the system to enforce for your site (see [Defining Labor Rules](#)).
8. In *Activity Maintenance*, retrieve the activity *Supervisor Time Edit and Approval* (LT260) and set the activity rules you want for your supervisors and users (see *Editing and Approving Time Records*).
9. If required, set up *Collect Work Time* (see [Setting Up Collect Work Time](#)).
10. Do one of the following:
  1. Set up Labor Tracking for clock in at logon (see [Setting Up Labor Tracking for Clock-In During Logon](#)).
  2. Set up Labor Tracking for clock in before logon (see [Setting Up Labor Tracking for Clock-In Before Logon](#)).
  3. Set up Labor Tracking for unrequired logon (see [Setting Up Labor Tracking for Unrequired Clock-In in the POD](#)).
- If any of your users are allowed to change their labor charge codes in the POD, create a button and layout associated with LT240 in each of the PODs used by those users.

## 4.7.1 Adding a Plug-In to One or More PODs

For plug-ins (for example, *Labor On*, *Labor Off*, *Clock In/Out*, *Change User LCC*, *Change SFC LCC*, *Supervisor Clock In/Out*) to appear in one or more PODs, you need to define this plug-in to each desired POD in *POD Maintenance*.

To add a plug-in to POD, do the following:

1. In *POD Maintenance*, retrieve the desired POD.
2. On the *Buttons* tab page, select *Insert New* link. *Button Details* screen opens.

Note that as an option, you can select the *Details* icon in the desired *Button* row to add a plug-in to the existing button.

3. Select the *Insert New* link and enter the activity ID into the *Activity* column. Select *Apply*.
4. On the *Layout* tab page, enter activity ID to specify how your plug-in will be displayed in the POD. Choose *Apply*.

Please note that this is to be done only for GUI plug-ins like *Clock In/Out*, *Change User LCC*, *Change SFC LCC*, and *Supervisor Clock In/Out*. For the *Labor Off* plug-in, you need to define activity ID in the *Layout* tab only if you need to collect distributed labor times. *Labor On* plug-in does not need to be specified in the *Layout* tab of *POD Maintenance*, as it has no GUI.

5. Save your entries.

## 4.7.2 Setting Up Collect Work Time

You can use this process to set up collection of distributed work times by user in the POD on *Labor Off*.

1. In *Standard Value Key Maintenance* activity, define standard value key fields to be used later for collecting distributed times.
2. In *Scheduling Standards Maintenance* activity, assign these fields to a routing step at which users need to collect their distributed work.
3. In *POD Maintenance*, create a pushbutton associated with the *Labor Off* activity (LT380) and assign it to your layout.

Note that distributed labor times that have been collected in this activity can be reviewed and edited in the *Supervisor Time Edit and Approval* activity after labor rollup has run.

## 4.7.3 Setting Up Supervisor Time Edit and Approval

### Prerequisites

1. Users have been assigned to cost centers on the *Labor Tracking* tab page of *User Maintenance*.
2. Designated users have been assigned as supervisors to one or more cost centers on the *Supervisor* tab page of *User Maintenance*.
3. After you have set up Labor Tracking, users have done at least one of the following:
  - Clocked in and clocked out
  - Labored on and labored off to SFC numbers in the POD
  - Changed their user LCCs
  - Collected distributed work time
4. After the actions above, rollup has been performed. Otherwise, no labor records will be visible.

### Procedure

1. In *Activity Maintenance*, retrieve the *Supervisor Time Edit and Approval* (LT260) activity and set up the `ACTIVITY_MODE` activity rule to SUPERVISOR or USER.

Note that you can have both *Supervisor* and *User* modes available in the system simultaneously. For this, create a copy of the LT260 activity with a new name in *Activity Maintenance* and change the mode and (optionally) the description for the copied activity. After saving the changes, add permissions for the new activity to the desired user group on the *Permissions* tab page of the *User Group Maintenance* activity.

2. Save your entries.

## 5 Usage Scenario Examples

### 5.1 Tracking Operators Labor Time

In the following example, the system tracks labor time of the shop floor operators belonging to the cost center *EA*. This cost center is used for charging work on primary operator's activities for building the main product *Engine A*. Operators John and Julia are assigned to this cost center, as most of the time they work on assembling and testing this product. Thus, most of their activities need to be charged against this cost center: assembling and testing are tracked as direct labor, other activities, such as restocking, or even idle time between processing different engine instances – as indirect labor. However, sometimes they are assigned different tasks which also need to be tracked in the system. Cost center *TRAINING\_INT* is used for charging time spent on internal trainings and can be charged only for indirect training activities. Cost center *EB* is used for tracking direct and indirect labor spent on building *Engine B*. Typically, John and Julia do not work on *Engine B*, but when they sometimes are assigned to do it, their labor spend on building it need to be charged against cost center *EB*.

Operators work in one shift Monday through Friday from 8 a.m. till 5 p.m. They manually clock in in the POD as soon as they arrive. They are allowed to clock in during the 20 min interval: from 7:50 a.m. till 8:10 a.m. And they are allowed to clock out from 4:55 p.m. till 5:15 p.m. If they fail to clock in or clock out during these time slots, they need to explain the reason to their supervisor Maria and she will do it for them.

Maria is a supervisor of cost center *EA*. She is not directly involved into producing the product, and according to the company policy, her time does not need to be tracked in the system. One of her responsibilities is daily tracking the labor time of *EA* cost center members. This includes reviewing and approving user time sheets to ensure they contain all actual and correct information, clocking in/out the supervised users in case they are late or forgot to clock in/out in time, etc.

#### 5.1.1 Prerequisites

1. The following shift is created in *User Shift Maintenance*:

Field	Value
Shift	SHIFT1
Description	Main Shift
Shift Begin	08:00
Clock-In Start	7:50
Clock-In End	08:10
Shift End	17:00
Clock-Out Start	16:55
Clock-Out End	17:15
Labor Assignment	Actual Day
Calendar Rule	
Sunday	Non-Production, Normal
Monday	Production, Normal
Tuesday	Production, Normal
Wednesday	Production, Normal
Thursday	Production, Normal

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Friday	Production, Normal
Saturday	Non-Production, Normal

2. The following labor charge codes are created in *Labor Charge Code Maintenance*:

LCC	Description	Labor Type	Labor Subtype
PRODUCTION_A	Producing Engine A	Direct	Production
IDLE_A	Idle Time	Indirect	Idle
RESTOCKING_A	Restocking components for Engine A	Indirect	None
PRODUCTION_B	Producing Engine B	Direct	Production
IDLE_B	Idle Time	Indirect	Idle
TRAINING	Internal Training	Indirect	None
BREAK	Break	Indirect	Break

3. The following cost centers are created in *Cost Center Maintenance*:

CC	Description	Default LCC
EA	Engine A	IDLE_A
EB	Engine B	IDLE_B
TRAINING_INT	Internal Training	TRAINING

4. The users John and Julia are assigned to the SHIFT1 and EA cost center on the *Labor Tracking* tab page in *User Maintenance*.
5. The user Maria is assigned as a supervisor to cost center EA on the *Supervisor* tab page in *User Maintenance*.
6. Activity LT260 is modified in *Activity Maintenance* as follows:

Activity Rule	Rule Setting
ACTIVITY_MODE	SUPERVISOR
FORCE_APPR_REVIEW	NO
SPVR_COMMENT_REQ	NO

7. A new activity LT260\_USER is created out of LT260 in *Activity Maintenance* as follows:

Activity Rule	Rule Setting
Description	User Timesheet
ACTIVITY_MODE	User
USER_COMMENT_REQ	NO

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8. The newly created *User Timesheet* activity is assigned to the user group Julia and John belong to in on the *Permissions* tab page in *User Group Maintenance*.
9. The following attendance rules are defined in *Labor Rule Maintenance* on the *Attendance Rules* tab page:

<b>Rule</b>	<b>Setting</b>
Clock-In/Out Range Control:	Only Within Interval
Clock-In Control:	Manual Clock-In
ID for Clock- In/Out:	User ID
Action Applied at Clock-Out to SFCs in Work:	Signoff

10. The following rollup processing rules are defined in *Labor Rule Maintenance* on the *Rollup Processing Rules* tab page:

<b>Field</b>	<b>Value</b>
Enable SFC Labor Summarization	Selected
Enable User Labor Summarization	Selected
Idle Factor for Labor Time	User ID

11. A new POD *PRODUCTION\_POD* with description *POD for Operators* is created based on *OPERATION\_DEF* POD in *POD Maintenance* as follows:
  - On the *Buttons* tab page:
    - LT370 is added to the *Start* button with sequence 20
    - LT380 is added to the *Complete* and *Signoff* buttons with sequence 20
    - A new button *Clock-In/Out* is created with activity LT210
    - A new button *Change User LCC* is created with activity LT240
  - On the *Layout* tab page, the following activities are added as a pop-over:
    - LT380

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- LT210
- LT240

12. The new activity *PRODUCTION\_OPER\_POD* with description *Production POD* is created in *Activity Maintenance* from the *DEF\_OPER\_POD* activity. *OPERATION\_DEF* part in *Class/Pass* field value is changed to *PRODUCTION\_POD*.
13. The following activities are assigned to the user group Julia and John belong to on the *Permissions* tab page in *User Group Maintenance*:
  - *Production POD*
  - *Labor On*
  - *Labor Off*
  - *Clock-In/Out Plug-In*
  - *Change User Labor Charge Code Plug-In*
14. The following activities are assigned to the user group Maria belongs to on the *Permissions* tab page in *User Group Maintenance*:
  - *Supervisor Time Edit and Approval*
  - *Supervisor Clock In/Out*
  - *LCC Summary Report*
  - *On Premises Report*
15. The following routings are created in *Routing Maintenance*:
  - Routing *Line\_EA* with operations *ASSEMBLY\_A* and *TEST*
  - Routing *Line\_EB* with Operations *ASSEMBLY\_B* and *TEST*
16. The following materials are created in *Material Maintenance*:
  - *Engine\_A* to be build on the routing *LINE\_EA*
  - *Engine\_B* to be build on the routing *LINE\_EB*
17. The standard value key *EA* is created in *Standard Value Key Maintenance* activity with the following activities:

Sequence	Activity Category	Field Label
1	Activity One	Preparation
2	Activity Two	Assembling
3	Activity Three	Check

18. The standard value key *EA* is attached to material *Engine\_A* and routing *Line\_EA* with the *Material-Routing* standard source at operation *Assembly\_A* in *Scheduling Standards Maintenance* on the *ERP Standards* tab page with the following settings:

Field Label	Planned Value	Unit of Measure
Activity One	1	Minute
Activity Two	5	Minute
Activity Three	2	Minute

19. The *Labor Off* activity (LT380) is modified *Activity Maintenance* as follows:

Activity Rule	Rule Setting
ALLOW_ELAPSED_TIME_EXCESS	NO
DISPLAY_PLANNED_TIME	YES

20. The labor rollup has been scheduled to run daily at 00.05 am.
21. The shop orders for material *Engine\_A* and *Engine\_B* with LCCs *PRODUCTION\_A* and *PRODUCTION\_B* respectively are created and released for production.

## 5.1.2 Procedure

### 5.1.2.1 Clocking-in

Operators come to the shop floor and log in to the system. They open POD and choose the *Clock-In/Out* button to clock in. Each operator enters user ID and password and chooses the *Clock In/Out* button in the plug-in. The system displays the logon screen. The user types in the password and chooses *OK*.

Operator Julia came in time and clocked in at 8:05 am. The system successfully clocked her in and started tracking her labor time against the *IDLE\_A* LCC, which is a default LCC of her cost center.

Supervisor Maria opens the *On Premises Report*. She enters the *EA* into the *Cost Center* field and chooses *Search*. The system presents the report which indicates that user Julia is clocked in and user John is not. His status remains *Clocked Out*.

Operator John arrived late and did not clock in by 8:10 am. The system did not clock him in as it is setup to only allow user clock in within the clock-in interval.

User John comes to his supervisor Maria and explains the problem and reason of the late arrival. Maria opens the *Supervisor Clock-In/Out* activity, enters the John's user ID, updates the actual time of arrival, and enters the reason of the late arrival into the *Comments* field. Maria chooses the *Clock-In/Out* button and the system clocks John in. John's time is also tracked against the *IDLE\_A* LCC, which is a default LCC of his cost center.

Supervisor Maria retrieves the *On Premises Report* for cost center *EA* again. Now all the employees of this cost center are clocked-in.

### 5.1.2.2 Laboring On/Off and Collecting Distributed Times

Operators select the operation *Assembly\_A* and resource *Default* and select SFC of the *Engine\_A* material. They choose the *Start* button. The system starts the selected SFC number and labors users on to it. User and SFC labor is being tracked against the *PRODUCTION\_A* LCC which is assigned to shop order of the started SFC number.

When users finish working on the SFC number at operation, they choose the *Complete* button. The system completes the selected SFC numbers at the *Assembly\_A* operation and displays the *Collect Work Time* plug-in. Here the users can see how much time they spent on processing the SFC numbers and can distribute this time among the activities Preparation, Assembling, and Check.

Julia spent 7 minutes on processing this SFC number. She indicates she worked 1 min on Preparation, 5 on Assembling and 2 on Check, and chooses *OK* button. The system compares the total time indicated for the distributed activities against the time spent on overall SFC processing. Total distributed times is 8 minutes which exceeds the overall time spent on SFC processing and system displays error message. Julia

changes the time spent on Assembly to 4 min and chooses *OK* again. The updated values pass the check and system saves the entries and labors Julia off from the SFC number. Her labor time is being tracked against their default LCC *IDLE\_A* again.

John has also spent 7 minutes on processing his SFC. But he does not distribute this time among the activities and just chooses *OK* in the plug-in. The system labors him off from his SFC number and continues tracking his labor time against his default LCC *IDLE\_A*. John will be able to distribute the time spent on processing this SFC number tomorrow in his timesheet.

After having worked for some time on assembling engine A, Julia is asked to assemble engine B to substitute missing operator. She enters the operation *Assembly\_B* and resource *Default* in POD, selects SFC number of the *Engine\_B* material and chooses the *Start* button. The system starts the selected SFC number and labors her on to it. User and SFC labor is being tracked against the *PRODUCTION\_B* LCC which is assigned to shop order of the started SFC number. This time will be charged to the *EB* cost center.

When Julia finishes working on the SFC number at operation, she chooses the *Complete* button. The system completes the selected SFC numbers at the *Assembly\_B* operation and labors her off from the SFC number. The *Collect Work Time* plug-in is not displayed as no standard value key is assigned to this routing operation and/or material.

### 5.1.2.3 Monitoring SFC Labor in Real Time

During the working day, Maria monitors labor time spent by operators on shop orders processing. She may do this by specific order or LCC. Today she is interested on how much time is spent on shop orders with *Production\_A* LCC and how much time is spent on the shop order for *Engine\_B* which is processed by Julia.

For this, Maria opens the *LCC Summary* report, enters *PRODUCTION\_A* into the *Labor Charge Code* field, Today into the *Date Range* field and chooses *Search*. The system displays all shop orders with this LCC that have been processed today along with the time spent on each of them.

Then she clears the screen, enters the shop order number for *ENGINE\_B* Julia worked on today and chooses *Search*. The system displays time logged for this shop order and labor charge codes this time is charged to.

### 5.1.2.4 Changing User LCC

John needs to restock goods. To indicate this, he chooses the *Change User LCC* button in POD. The system displays the *Change User LCC* plug-in. John chooses the *Show LCC* button in plug-in, enters password and chooses *OK*. The system displays *IDLE\_A* as his current LCC. John enters *RESTOCKING\_A* into the *New LCC* field and chooses the *Change LCC* button in the plug-in. The system starts tracking his labor time against this LCC. This time will be charged to the *EA* cost center as indirect labor.

Similarly when in the afternoon John and Julia participate in internal employee training, they need to change their user LCC to *TRAINING\_INT*. The time spent on training will be charged to the *TRAINING* cost center. However, user John has forgot to do this and will have to add this information in his timesheet the next day.

## 5.1.2.5 Clocking out and rolling up labor records

At the shift end, users open the *Clock In/Out* plug-in in POD to clock-out. Julia forgets to do this and system will clock her out automatically when running the scheduled labor rollup script. Her clock-out time will be visible in the system as 5 pm, which is her shift end time.

Labor rollup automatically runs at 00.05. No user interaction is required.

## 5.1.2.6 Viewing User Timesheet

Next day, after labor rollup has run, users can review their time sheet to verify everything is correct. Julia opens the *User Timesheet* activity, selects *Yesterday* in the *Labor Date Range* field and submits *Retrieve*. The system displays one row with status *New* for yesterday's date. The clock-out time is 5:00:00 pm, which equals the shift end time.

Julia chooses the *Details* icon. The system displays the table with 4 rows; each row represents time logged for the particular LCC:

- IDLE\_A
- TRAINING
- PRODUCTION\_A
- PRODUCTION\_B

PRODUCTION\_A and PRODUCTION\_B represent the direct labor spent on processing SFC number, so there are shop order numbers in the corresponding rows. Julia selects the *Details* icon for the PRODUCTION\_A record and reviews the content. She can see the labor time distributed between the activities. Everything looks fine and Julia accepts the record. For this, she selects the record in the *User Labor Time Summary* screen and chooses *Actions ->Accept Selected*. She repeats this action for each time record or selects the whole day record in the initial *User Timesheet* screen and chooses *More -> Accept Selected*. The status of the selected records changes to *Accepted*.

John opens the *User Timesheet* activity, selects *Yesterday* in the *Labor Date Range* field, and submits *Retrieve*. The system displays one row with status *New* for yesterday's date. The warning status for the record contains SPRV Clock-In/Out, which means that John was clocked out by his supervisor. John chooses the *Details* icon. The system displays the table with his time records for yesterday. The table contains the following records:

- IDLE\_A
- PRODUCTION\_A
- RESTOCKING\_A

The time he spent on training has not been recorded for TRAINING and was logged against RESTOCKING, as he forgot to change his user LCC. Now he needs to correct this manually.

First, he selects the details of the RESTOCKING\_A record, decreases the *Labor Time* value, enters comment (for example, "Decreased labor time, as time spent on internal training was logged here by mistake"), and chooses *Apply*. The system saves the changes and warning *User Labor Edit* is now displayed against this time record on the initial screen.

Then on the *Labor Time Summary* screen, he chooses *Actions->Insert Indirect Labor Record*. He enters TRAINING on the *Labor Charge Code* screen, enters training duration time into the *Labor Time* field, changes the *Labor Date* and the *Record Start Time* values so that they contain the training start and end time. Then he enters the comment (for example, “Forgot to change my LCC for training”) into the *User's Comments* field and chooses *Apply*.

The system adds a new record and warning *User Labor Edit* is now displayed against this time record on the initial screen.

John selects all his records and accepts them.

### 5.1.2.7 Timesheet Review by Supervisor

Maria opens the *Supervisor Time Edit and Approval* activity and retrieves the records for cost center *EA* and yesterday's date. She reviews the timesheets and approves the status of accepted records, if everything is OK. For this, she selects the record and chooses *Actions->Approve Selected*. The status of the record is changed to *Approved*.

Supervisor can also unapprove the accepted record, if it is incorrect or misses the required information. For example, when reviewing John's records, Maria notices that his *PRODUCTION\_A* record misses the distributed labor times. She indicates this in the *Supervisor's Comments* field and chooses *Apply*. Then she selects the record on the *User Labor Time Summary* screen and changes its status to *Unapproved* by choosing *Actions->Unapprove Selected*.

Now John needs to open this record in the *User Time Edit* activity, enter the values for distributed labor time and change status back to *Accepted*. After this, Maria reviews his record again and changes its status to *Approved*.

## 6 Overview of Changes

In Sap ME 6.0 Labor Tracking feature has been enhanced as follows:

- The new *Standard Value Key Maintenance* (SY170) activity has been added to allow users defining up to 6 activities to be used for direct labor time distribution.
- To support labor distribution, the existing *Scheduling Standards Maintenance* (SC100) activity has been enhanced with the ability to assign Standard Value Key on the routing and material-routing levels. Additionally, Material Routing and Material Operation were added as new standard sources.
- The *Labor On* (LT370) and *Labor Off* (LT380) activities have been removed from start and complete respectively and now can be set up both on *Start/Complete* and as independent actions.
- Additionally, *Labor Off* (LT380) has been enhanced with an option to display the *Collect Work Time* GUI plug-in allowing operators to distribute time elapsed between labor on and labor off among the activities defined in Standard Value Key.
- The *Supervisor Time Edit and Approval* (LT260) activity has been enhanced with the user mode, which allows users to view and edit their time sheets after labor rollup is run.
- The *Clock In/Out* (LT210) and *Change User LCC* (LT240) plug-ins have been modified to support new user ID and password authentication to UME.
- Activity IDs LT230 and LT200 are no longer used. LT 240 and LT210 are used instead.
- The *Labor Rules Maintenance* (LT130) activity has been modified to remove logon ID from the *Clock In/Out drop down* list; user ID is used instead.