External Supply of the Time Sheet

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External Supply of the Time Sheet

Use
If you implement an external application for time recording in your enterprise, you can use it to supply the SAP Time Sheet [Ext] with external time data. In addition, you can use your external application to display a Time Sheet worklist [Ext.] for each personnel number or time sheet data.

A standardized interface is available for this purpose.

Graphic Showing the Data Flow Between the SAP Time Sheet and the External Application
Prerequisites

You use the *Time Sheet* to record and process durations in hours; your external application must therefore also make working times available as a number of hours. Clock-in and clock-out entries alone cannot be processed in the *Time Sheet*.

Features

You can use the interface for supplying the *Time Sheet* with external data to fill all the fields that you have set up in the *Time Sheet*.

You can make data available to the following SAP components:

- *Human Resources* (Attendances/absences and employee remuneration information)
- *Controlling* (Activity allocation)
- *Plant Maintenance /Customer Service* (Confirmations)
- *Project System* (Confirmations)
- *Materials Management* (External services)

If you implement *SAP Human Resources*, you can make the master data created there available for checking using the external application. You can transfer the master data in two ways:
External Supply of the Time Sheet

1. Using the Interface Toolbox
   A delta download providing the external system with master data takes place in this version of data transfer. The Interface Toolbox enables you to store master data in files that match the table structure of the external system. In this way, the tables of the external systems do not have to be modified to match the structures.

2. Using master data distribution by IDoc [Ext.]
   In this version of data transfer, all HR master data is replicated. In the external system, the applicable tables must be modified to match the structures of the IDocs. In addition, you must maintain the ALE Distribution Model [Ext] as required.
Data Flow Between the Time Sheet and a Customer Application

Purpose
A customer application is linked to the Time Sheet by the business objects CATimeSheetManager, EmployeeCATimeSheet, and CATimeSheetRecord. These business objects contain the methods for transferring data.

For more information, see the BAPI Browser for the SAP System.

Before the data is posted, you must validate it synchronously using the Test run parameter. If errors occur during validation, you must correct them in the external application.

⚠️
You should post the data asynchronously using IDocs [Ext.]. In this way, you ensure that the data is consistent in both systems.

Prerequisites
You must maintain the ALE Distribution Model [Ext.].

Process Flow
Data Flow Between the Time Sheet and a Customer Application

Methods:
- CATimeSheetManager.Insert
- CATimeSheetManager.Change
- CATimeSheetManager.Delete

Methods:
- EmployeeCATimeSheet.GetWorkList
- CATimeSheetRecord.GetList

Test run parameter

Customer application

IDoc interface

Validate data: Test run parameter

Data without errors

Transfer data

Access data

Recorded data

Valuated data
Transferring Data from an External Application to the SAP Time Sheet

1. You must validate each data packet for each method using the Test run parameter. The validation is synchronous.
2. If no errors occur during validation, the data is written to an IDoc.
3. The IDoc is transferred to the SAP System.
4. The IDoc calls the appropriate method.
5. The system posts the IDoc in the database table for the Time Sheet, CATSDB. The system only posts the IDoc when the IDoc does not contain any data records with errors.
6. Based on the working time attributes you entered, the system writes the data from CATSDB to the interface tables of the target components, where it is ready for transfer to the target components.

Accessing Time Sheet Data

If you want to display a worklist or data from the Time Sheet in the external application, you must implement the relevant methods.

Result

You have supplied the SAP Time Sheet with data records using an external application, or you have displayed data or a worklist from the Time Sheet in an external application.