



Date: August 20, 2008

From : Arik Friedman / Lavie TimeTech Ltd.

To : All Lavie dealers

RE: TimeKeeper-SAP Interface (SAP Certified)

Dear All,

1. We are happy to inform you that SAP Germany have approved the TimeKeeper-SAP interface that complies with SAP's HR-PDC Standard\* (Human Resources-Plant Data Collection) requirements supporting a transparent bi-directional data transfer between TimeKeeper and SAP.

\* For further details regarding the SAP HR-PDC standard, see [WWW.SAP.COM](http://WWW.SAP.COM) (i.e. HR-PDC Interface description for SAP R/3 Release 4.5a 4.6)

2. The certified interface include:

**Importing from SAP:** Employees data, employee Balances Table, Valid Transaction types, Absences, Objects, Work centers, Orders, Projects, pay-codes and expenses.

**Exporting to SAP:**

- Daily Attendance (IN, OUT, Callback, On-call and Absences).
- Department Allocation Transactions (daily)
- TimeCosting Transactions (daily) including Order (SAP: Internal Order), Project (SAP: WBS Element) & Cost center (COSTCENTER).



**Please note that SAP is LIMITED TO THESE 3 STATIC LEVELS i.e. Level 1 (Order), Level 2 (Batch) and Level 3 (Part) and therefore LEVEL 4 (Process) IS NOT SUPPORTED.**

**In other words, customers who run a 2 level system (the "popular" combination of level 1 and level 4) or a 3 level system (Order, Part and Process) will not use the SAP interface. For those cases we will utilize the Import/Export utility.**

- Additional expenses (SAP: employees expenditures) i.e. SALDAY, Manual pay-categories and KM/Miles.

### 3. Steps in the interface process

While the interface is a completely transparent and seamless process, below is a detailed description of the internal steps in the process. In principal, the SAP interface includes the following steps: Identifying the transactions for transfer, Creating the transactions in IDOCS\* format (steps 2 & 3) and the transactions "Pick-up" (by BAPI-HANDLER software\*\*)

\* IDOC - Intermediate Document is a standard SAP document format. IDOCS allow different application systems to be linked via a message-based interface.

\*\* BAPI-HANDLER - BAPI-HANDLER is a third party product (made by ICARO) that is required for the interface process

To elaborate:

- 1) **Loading the validation tables for validating the transactions from SAP to TimeKeeper-SQL** (e.g. an IN Punch is a valid transaction that should be exported from TimeKeeper).

Please note that the validation table holds (by default) all the "possible" transactions between TK and SAP. The Validation table can be customer-specific (e.g. customer who is not running TC will not export jobs) in the following manner: Valid Transactions may be disabled BUT CANNOT BE ADDED TO THE LIST.

- 2) **Identifying valid transactions in TimeKeeper's daily tables (i.e. DAILY, DADAY, TCDAY) and creating the SAP transactions (in IDOCS format) within TK's database after verification** e.g. all OUT punches from TimeKeeper's DAILY will be identified and created via IDOCS.
- 3) **Exporting the SAP Transactions (IDOCS) from TK's database to SAP's pre-defined location** e.g. the table will be copied from TimeKeeper's database to a text file (IDOCS format) as per SAP's settings.
- 4) **BAPI-HANDLER kicks-in (as per a pre-defined schedule) for "picking-up" up the file and importing it to SAP's database.** Please note that BAPI-HANDLER is a third party product (made by ICARO) that is required for the interface process

### 4. Implementing TimeKeeper-SAP interface for existing/new customers: Setup steps

- 1) New TimeKeeper Programs – The programs that create the SAP transactions will be installed as an integral part of the standard installation procedure. For existing customers, the new programs can be copied to the application directory.
- 2) New database tables – The new SAP-Specific database tables have been added to the DATA-SET database in which we are using when creating a blank database. This means that for new customers, the SAP-specific tables will already be "built-in". With existing TK customers, SAP-specific tables will be added by upgrading/running a script provided by Lavie.
- 3) Installing/configuring the BAPI-HANDLER package - BAPI-HANDLER is an application owned by ICARO. Launching BAPI-HANDLER requires additional parameter settings in SAP that needs to be done by SAP consultant.



**Note: SAP Interface is available for TimeKeeper-SQL Only.**



## **5. Implementation costs**

- a. SAP Interface – Interface cost i.e. to be determined
- b. BAPI-Handler application (ICARO) – 1280 Euro
- c. Installing/configuring BAPI-HANDLER – Requires a SAP consultant (may require an additional cost).

Best regards,

Arik Friedman  
Int'l Support Manager  
Lavie TimeTECH Ltd.