



## Proforma Invoicing of Services x LegalDesk Integration

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## Summary

1. Business Context (Introduction).....	3
2. Systems Involved .....	3
3. Integration .....	3
4. Scope .....	3
5. Installation/deployment/utilization requirements.....	4
5.1. Microsiga Protheus® .....	4
6. Installation/Update .....	4
7. Version Control .....	5
8. Support.....	5
9. Transactions/Entities/Single Messages .....	6
10. Information Flow.....	7
10.1.Registers .....	7
11. Information Flow.....	7
12. How to do it.....	7
13. Checklist application support.....	7

## 1. Business Context (Introduction)

The JuriTIs TOTVS franchise has developed the LegalDesk system to offer an interface that is more modern, friendly, easy and intuitive for lawyers, associates and other Law Office participants.

LegalDesk also provides better accessibility, as it is achieved via browser (Internet Explorer, Google Chrome), Outlook and Mobile (IOS, Android, Windows Phone).

Some of the modules of this system: File, Management Reports, Proforma Invoice Revision, Time Sheet, etc.

For purposes of office invoicing, we still recommend the use of the Services Proforma Invoicing module (SIGAPFS) of Microsiga Protheus®, which allows the automation and organization of Invoices, Control of Receipts and Payments and agility in Financial Management.

This administrative tool empowers you to follow up on financial events and law office resources. Yielding immediate answers, it directly affects work results, since the system itself organizes and manages the information, as well as the data exports to Microsoft® applications, and the automatic updating of legal values and foreign currencies.

This need has led to the integration of registration data and transactions of the Services Proforma Invoicing module (SIGAPFS) of Microsiga Protheus® with LegalDesk, available for invoicing through SIGAPFS and Cases created in SIGAPFS, available in LegalDesk.

## 2. Systems Involved

Microsiga Protheus® Services Proforma Invoicing module (SIGAPFS); Legal Desk - System developed by the TOTVS JuriTIs franchise.

## 3. Integration

Currently you must directly access Microsiga Protheus®, through the SIGAPFS module, to make entries of Time Sheets, Expenses, Tabulated Items, Customers and Cases.

The integration with the LegalDesk system enables you to execute these activities from the various LegalDesk user interfaces, such as by working offline while away from the office or by performing some activities using smartphones, tablets or other gadgets. Moreover, LegalDesk offers reports and managerial dashboards that require invoicing information from SIGAPFS.

## 4. Scope

The purpose of this integration is to make it possible for the LegalDesk system to access the registers and other information required by its modules, updating the SIGAPFS in situations involving the creation or handling of records.

All validations are performed last in Microsiga Protheus®, thus all information, even if previously validated in LegalDesk, is validated again in Microsiga Protheus®.

LegalDesk, is revalidated in Microsiga Protheus®.

To this end, we offer the synchronization queue, which controls changes and makes it easier to send information to the LegalDesk system.

For Microsiga Protheus® users, nothing changes in the routine that maintains the synchronized information.

## 5. Installation/deployment/utilization requirements

Find below a list of requirements for using the Microsiga

Protheus 12 integration:  
Proforma Invoicing of Services - SIGAPFS  
module; Enabled REST server;

The customer who needs this integration must contract the LegalDesk product.

### 5.1. Microsiga Protheus®

Microsiga Protheus® offers the synchronization queue, responsible for integrating the data. Through it LegalDesk knows what to update in you database and manages to solve conflicts.

For the synchronization queue to work, set parameter MV\_JFSINC=1.

## 6. Installation/Update

You must activate REST in the Microsiga Protheus® Application Server so LegalDesk can connect to the system and achieve the integration.

To activate REST in Microsiga Protheus®, edit the, appserver.ini configuration file with the content below. To avoid conflict, pay attention to the communication ports in use:

```
[HTTPV11]
Enable=1
AddressFamily=1
Sockets=HTTPREST
TimeOut=120
```

```
[HTTPREST]
Port=8889
IPsBind=
MaxQueue=10
URIs=HTTPURI
SECURITY=0
```

```
[HTTPURI]
URL=/
```

```
PrepareIn=99,01
OnStart=REST_START
OnConnect=REST_CONNECT
OnExit=REST_EXIT
Instances=1,10
```

```
[ONSTART]
jobs=HTTPJOB
```

```
[HTTPJOB]
MAIN=HTTP_START
ENVIRONMENT=P12
```

You also need to add item MAXSTRINGSIZE=10 in [General] and FWFRAME\_TRACELOG=0 in the environment block.

The above configuration follows Microsiga Protheus® REST defaults; hence, no changes are needed if the resource is already enabled.

We can use HTTP Basic authentication or Auth 1.0a.

To do this, edit item SECURITY [HTTPREST] to 1 or remove it.

For further information on how REST works, access <http://tdn.totvs.com/display/tec/REST>.

## 7. Version Control

The TOTVS group, represented by its brands, administrates the layout evolution demands and other adjustments, negotiating with requesters the deadline for the release.

All programmed evolutions must be discussed and approved by the brands, before development starts, and are only developed in case of consensus among brands and alignment with directives, as defined by the TOTVS Integration Committee.

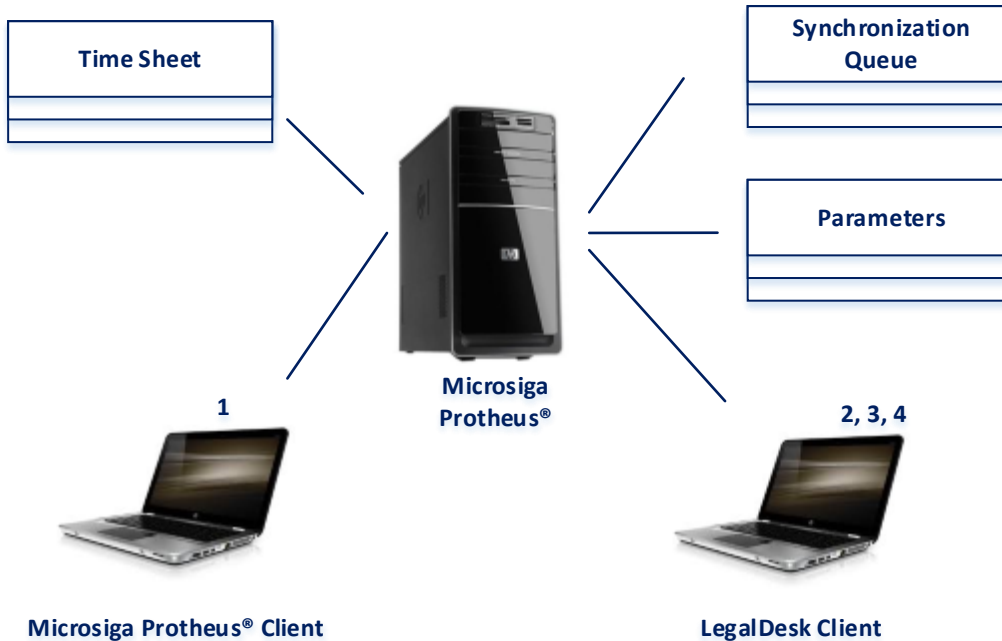
## 8. Support

All lines are responsible for providing support to Integration resources; thus, the RM Conector and Microsiga Protheus® BackOffice product support teams are prepared to perform the first analysis and, when needed, convey it to the most suitable team for each case.

Note: This support model is being reviewed by TOTVS.

## 9. Transactions/Entities/Single Messages

Below is an example of information exchange between systems.



### 1 Adding Time Sheet: via SIGAPFS:

- The Time Sheet is added to and validated in Microsiga Protheus®;
- After the addition process is complete, the synchronization queue receives the information that the Time Sheet at issue has been added/edited.

### 2 - Adding Time Sheet via LegalDesk:

- The Time Sheet is added to Legal Desk
- LegalDesk executes procedure '3', of synchronization queue.
- LegalDesk does the validations needed and continues adding the Time Sheet in Microsiga Protheus® or cancels the operation.
- Microsiga Protheus® validates the information received and returns OK if the edition is successful or error if the edition has failed.

### 3 – Reading the Synchronization Queue

- LegalDesk requests Microsiga Protheus® for the synchronization queue.
  - Microsiga Protheus® returns the complete list.\*
  - For each item received, Legal Desk must start a new request to Microsiga Protheus®, to change field NYS\_STATUS to '2'.
- \*Perhaps Legal Desk may receive itens with status equal to '2' that must be ignored.

### 4- Reading Parameters.

- LegalDesk requests Microsiga Protheus® for the list of available parameters.
- Microsiga Protheus® returns the complete list of parameters, with its name, description and content.

## 10. Information Flow

This integration offers the information processed inside Microsiga Protheus® in the synchronization queue, which LegalDesk must read and update.

### 10.1. Registers

The data from LegalDesk are saved directly in the Microsiga Protheus® model.

The information registered by Microsiga Protheus® is saved, then the system activates the synchronization queue, So Legal Desk knows of the change.

## 11. Information Flow

The system saves the changes made with Microsiga Protheus® in the synchronization queue; LegalDesk connects to the synchronization queue and obtains a list of information it must update. If needed, LegalDesk can obtain some parameter values to perform a prior validation.

## 12. How to do it

The steps to make the integration feasible are:

In Microsiga Protheus®, set parameter MV\_JFSINC, which enables the synchronization queue.

In Microsiga Protheus®, access Miscellaneous / Configurations / LegalDesk Synchronized Parameters to check the parameters being synchronized.

## 13. Application support checklist

Verification Checklist:

Validate activation for synchronization queue.

Validate activation for the Microsiga Protheus® REST.