



>> MAINTENANCE MODULE  
Version 6.0



## **Maintenance and Engineering Information System**

### **Objectives**

The *Maintenance information system* is a fully operational solution which aims at maintaining all sold or purchased products or equipment. The maintenance system has several aspects covering the medical sector, nature and specs of the product or equipment and how much it depends on it for daily operations.

Therefore through the *Maintenance module*, the user is able to define the criteria and parameters in order to automate, control and track the life cycle of every product or equipment.

### **Functionalities**

The system manages maintenance contracts, automates its issuing, provides a complete history for pricing and produces notifications about their maturities.

In addition, with a push of a button the authorized user will be to renew one or several contracts agreements and issue their respective invoices automatically.

The system will keep track of every visit done, every intervention call taken, and the technical and financial details related to any performed services.

Furthermore, the user will be able to monitor technicians and directly allocate them on the eventual jobs while tracking automatically their response time and their direct expenses. Their complete daily time sheet can be easily inputted into the system and exported to the *Human Resources management* if applicable for automatic payroll remuneration.

The system has also the ability to monitor the service vehicles and track their expenses in order to complete the maintenance cycle and to have the possibility to have a bird eye view on all the maintenance activities.

On the other hand, the *Maintenance management* will have an important role in monitoring the company's equipments life cycle and their corresponding maintenance agreements.

You will be able to track all the maintenance procedure if done in house or monitor online supplier's response.

Managing you maintenance plan or schedule is easily done by creating check points and their related annual or periodic schedule.

### **Master information Features:**

#### **a. Customer / Supplier information**

A detailed customer and supplier information database enables the tracking of any corresponding information. In addition, the authorized user will be to have the related contacts or key person's information related to any company the organization deals with.

**Third Party <V 1.0.0> Edit Mode**

**ID** 4133

**Name** American University of Beirut  Blocked

**Short Name** A.U.B  Supplier

**Title**   Customer

**AltName** Universite Americaine de Beyrouth  Employee

**AltShort Name** AUB  Sister Company

**SalesMan**  **Collector**  **Inventory Parameter**

**General** **Contacts**

**Country** Lebanon **Area** Beirut **Manual Reference**

**Address** Hamra, Bliss street main road

**Mail** info@aub.com **Site** www.aub.edu.lb

**Phone1** 01-998998 **Phone2** 01-999999 **Mobile** 03-999999

**P.O.Box** 12-12344 **Fax** 01-998997

**Contact Name** Mr. Ronald Smith

**Phone** 03-232333

**Mail** rsmith@aub.com

**VAT Registration Key**

**Notes**

**Activities**

Description
Education
Medical
Hospitality
Seminars

## b. Zone definition

To facilitate and organize the zones, it is easy to define Zones which can be divided into several sections and then divided into several cities. This option is highly used to organize the servicing area with the corresponding teams and provides an analytical statistics by zone.

## c. Contract types

Each maintenance contract has its options; the system will provide the parameters by which the user is able to categorize maintenance contracts and control them accordingly.

Contract Type <V 1.0.0> View Mode

Id: 3

Description: FULL CONTRACT

Allow Visit  
 Allow Spare Parts  
 Allow Repair

#### d. Products definition

Each product or equipment can have its specification and related information. Therefore, the user is oriented to a variety of categorizations taking into consideration, the equipment's type, brand, make, section, sector, and its related specs.

Offer

Id: 316    Revision Nb: 1    Description: New Project

Product

Line Order: 0    Product: Machine 1    Brand: 04

Specifications

Load (Kg): 800    Number of access: 1

Speed(m/s): 1    Door Width (mm): 800

Number Of Stops: 4    Door type: revolving

Notes:

Close

#### e. Vehicles

All the maintenance vehicles can be defined in the system in order to track their usage and eventually their expenses.

Vehicle <V 1.0.0> View Mode

Code: B123456

Brand: Renault

Model: Kangoo

Driver:

Acquisition Date: 01/01/2005

Km at Buy: 100

In Use

#### f. Technicians

The system provides the ability to define all the technicians in order to allocate them on the existing service jobs, register their time sheet and evaluate their running cost eventually.

Technician <V 1.0.0> New Mode

Employee: HNEIN JIHAD

Sector: 4

Estimated Cost: 10000

assistant

Active

All  Installation  Service

### g. Visit Plans

Several visits plans can be generated and directly linked to each maintenance contract. Within each visit plan several unlimited numbers of check points can be defined with their related annual schedule.

	Code	Description	Jan	Feb	Mar	April	May	Jun	July	Aug	Sep	Oct	Nov	Dec
1	A01	Yearly Maintenance	✓						✓					✓
2	A02	Monthly Maintenance	✓	✓		✓		✓		✓		✓		✓
3	A03	Quarterly Maintenance	✓		✓		✓		✓		✓		✓	
4	A04	Regular Check ups	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	A05	Periodic changes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## Maintenance Operations

### a- Quotations

Send or receive quotations is a straight forward procedure within the system. Other than having the possibility to track these quotations electronically, you can easily transfer them to contracts and invoices automatically without redoing everything from the beginning.

### b- Contracts

This is the essence of the system whereas every equipment or product will be linked to its maintenance contract with all the related and historical details for further reviews, renewals and analysis.

The user is able to have an unlimited number of equipments included in one maintenance contract with an option to specify for each its contract type, details of its maintenance schedule and all its corresponding technical specs.

Associated with an option from the same screen to review all the interventions done on this equipment historically; the user can see the history of the renewals done on its initial contract with their respective invoices.

Furthermore, you have the possibility to modify or change any plan or specifications for specific equipment throughout the year without altering the other equipments included within the same contract agreement.

	Code	Date	Brand	Product	Type	Detail
1	A	15/02/2006	04	Machine 1	HYDRAULIQUE	
2	B	15/03/2006	03	Machine 1	In door	

**Sub Contract Detail**

Contract  
 Id 807 Code S06016 Description General maintenance Contract

Product  
 Code A Installation Nb A1234  Stopped Id 1957  
 Product Machine 1 Open Date 15/02/2006 Invoice Group A  
 Brand 04 GMV Sales Price 1200 Estimation 45.6  
 Type HYDRAULIQUE  
 Visit Plan Type A  
 Last Renew  
 Start 15/04/2006 End 15/04/2007  
 Not Invoiced 0

Description Annual Agreement From 15/04/2006  
 Notes N Till 15/04/2007

Invoicing Terms  
 Start Period  End Period Each (Months) 1 Renew Months 12 Renew  
 Initial Yearly 1200 Disc % 10 Royalty 0  
 Additional 200 Disc % 0  
 Additional Service Add A Contract Type FULL CONTRACT

Guarantee (Parts)  
 Has Guarantee Months 12 Start 15/02/2006 End 14/02/2007

Free Service  
 Applicable Months 12 Start 15/04/2006 End 15/04/2007  
 Apply Additional Service Add B Contract Type OUT CONTRACT

Close Save Renew History Invoice History Spec1 Spec2 Spec3  
 Interventions Spec4 Spec5

**Spec 1**

Contract  
 Id 331 Code S97040 Description ATCL

Sub Contract  
 Id 550 Code A Description MTF

Details  
 Constructeur: MTF Type: HYD  
 No Appareil: A  
 Mise en service: 04/02/1998 Reception SAV: 04/02/1998  
 Charge en Cabine(kg): 630 Nombre de Personnes: 0  
 Nombre de Niveaux: 3 Nombre d'Acces: 3  
 Designation De Niveaux: 0,1,2  
 Niveaux Principe: 0 Vitesse Normal (m/s): 0.5  
 Vitesse de Revision (m/s): 0 Course (m): 4.11  
 Nature de la gaine:  
 Machinerie: DOWN Situation: ASIDE  
 Acces:  
 Alimentation Force: 380 Alimentation Lumiere: 0  
 Nombre de Point Lumineux: 0  
 Marque du Treuil: Type:  
 Rapport: Poulie Traction:  
 Marque de la Central: GMV Type: 3010

Close

**Spec2**

Contract  
 Id 331 Code S97040 Description ATCL

Sub Contract  
 Id 550 Code A Description MTF

Details

Debit (l/m) 125 Pression Max (bar) 0

Regulation STAR DELTA Type MICRO BASI Option

Nb. de cables 3 D. des Cables (m/m) 12

Longueur (m) 20 Type LOCAL

D. Poulie de Renvoi Haute (m/m) 0 Marque

D. Poulie de Renvoi Base (m/m) 0 Marque

Marque du Pistone GMV Type 1008

Diameter de Piston 10 D. Poulie Deflexion (m/m) 410

Marque Moteur GMV Type MI-100/13

Tr/Min1 2750 Tr/Min2 0 KW 9.5 CV 12

Volts 400 Nb. de Phrase 3 Hz 50 D/H 0

Thermique Frein Type

Alimentation Frein (v) 0 AC/DC

Moteur de Ventilation Type

Alimentation Vent (v) 0 AC/DC

Marque du Tableau MTF Type Constructeur MICRO BASIC

Close

### c- Contracts Renewal

Designed for the possibility to renew one or a batch of contracts by a simple operation. Along with the possibility to choose one set of parameter for whole batch of renewals.

**Renew <V 1.0.0> View Mode**

**Renew Operations** | Renew Batch

Id: 2093    Date: 15/02/2006    Currency: USD     Canceled  
 Invoiced

Contract: S06016    807    General maintenance Contract

Sub Contract Code: A    1957    Annual Agreement

Customer: ATCL

Start Date: 15/04/2006    End Date: 15/04/2007

Invoicing Terms:  
 Start Period     End Period    Each (Months): 0

Total Period Fees: 0    Disc %: 0

Total Period Additional: 0    Disc %: 0    Royalty: 0

Additional Service: Add B    Contract Type: OUT CONTRACT

Notes:

**Renew <V 1.0.0> View Mode**

**Renew Operations** | Renew Batch

Criteria:  
Customer:    From: 26/10/2005    Get  
Contract:    Till: 26/10/2005    Save

Sel	Type	Project	Des	Sub	Prod	Start	End	Contract	Typ	Ser	Cur	Year Initial	/Initial	New	/New	Year	/Ad	New	/New	Total
1	Renew	S03045	ABIL	A	MTB	08/12/2004	07/12/2005	GUARANTIE	NO		USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	Renew	S03045	ABIL	B	PG	08/12/2004	07/12/2005	GUARANTIE	NO		USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	Renew	S03045	ABIL	C	PG	08/12/2004	07/12/2005	GUARANTIE	NO		USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	Renew	S00002	ABDI	A	MTF	01/01/2003	31/12/2003	OUT CONTF	NO		USD	665.000	0.000	665.000	0.000	0.000	0.000	0.000	0.000	0.000
5	Normal	S99009	AKIL	C	MTF	15/04/2006	14/04/2007	NORMAL CC	NO		USD	626.000	0.000	626.000	0.000	0.000	0.000	0.000	0.000	0.000
6	Renew	S03025	AL Z	A	MTF	14/06/2005	13/06/2006	OUT BY COM	NO		USD	653.000	0.000	653.000	0.000	0.000	0.000	0.000	0.000	0.000
7	Free Service	S99993	ASSI	A	MTF	15/04/2006	14/04/2007			Not	USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	Renew	S02041	BA4	A	PG	19/08/2003	18/08/2004	OUT FOR N	NO		USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	Normal	S98064	BAD	B	MTF	15/04/2006	14/04/2007	PENDING			USD	600.000	0.000	600.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Renew	S02025	RAS	A	MTR	27/05/2003	26/05/2004	HND			USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

### d- Interventions

Online interventions tracking and follow up, the system provides what is necessary to log in any problem, dispatch the

corresponding technician and check the final result whether the problem is solved or requires an additional intervention or service.

**Intervention <V 1.0.0> New Mode**

ID  Date 15/02/2006 10:40:00 AM  Work Contract Type NORMAL CONTRACT

Contract S97040 ATCL 331 Sub A Service Type NO A1

Trapped Name  Phone  Reason

Caller Hanane Phone 234244 In Charge Mr. Haddad Phone

Reparation 15/02/2006 12:00:00 AM Technician   Revised

Result  
Arrival Time 12:00:00 AM  End End Date 15/02/2006 Time 12:00:00 AM  Is Running

Remark Urgent Request Reference RF1244

**Active List** Detail

Reconcile Last History

	Flag	Callid	Date	Time	Contract	Su	Desc	Cou	Reason
1	<input type="checkbox"/>	37428	13/03/2006	08:08	S04062	E	UNIVERSITE LA SAGESSE	7	LASC EN PANNE
2	<input type="checkbox"/>	35870	03/01/2006	11:11	S01050	C	VIRGIN MEGASTORES	17	LASC EN ARRET

**Active List** Detail

Running  Yes  No

Reset ?  Yes  No

Lighting Problem ?  Yes  No

Leveling Problem ?  Yes  No

Abnormal Noise ?  Yes  No

Indication On Indicator

Trapping Floor

In Level ?  Yes  No

	Section	Part	Cause	Made	Responsibility	Notes
1	LOCAL MACHINERIE	FREIN	USE	ACL	Installation	
2						

**e- Visits**

Ability to log in technicians visits according to the scheduled visit plan specified in the maintenance contract

**f- Stock Issuing**

In case of a service and the need to change a part, the user can generate a stock issue voucher for the stock keeper in case the stock management is not linked directly to the Maintenance system.

**g- Technicians time sheet**

To monitor technicians, the Maintenance Management system provides a time sheet input screen whereas the user can check the time spent on every job on a daily basis in order to evaluate the cost of every maintenance contract and the productivity of the Maintenance Department.

**Reports and Statistics**

The system provides a variety of reports, online queries and printout having lots of specifications criteria.

With an ability to view on screen, the user prints directly to the preferred printer, export to Excel, Word, Acrobat and other platforms;

the system provides the possibility to automatically send the report as attachment via personal mail.

***Support***

The system supports defining several Maintenance departments, i.e. Medical Maintenance, IT Maintenance, or Building Maintenance...