USER MANUAL

vortexFSM

FIELD SERVICE MANAGEMENT

Contents

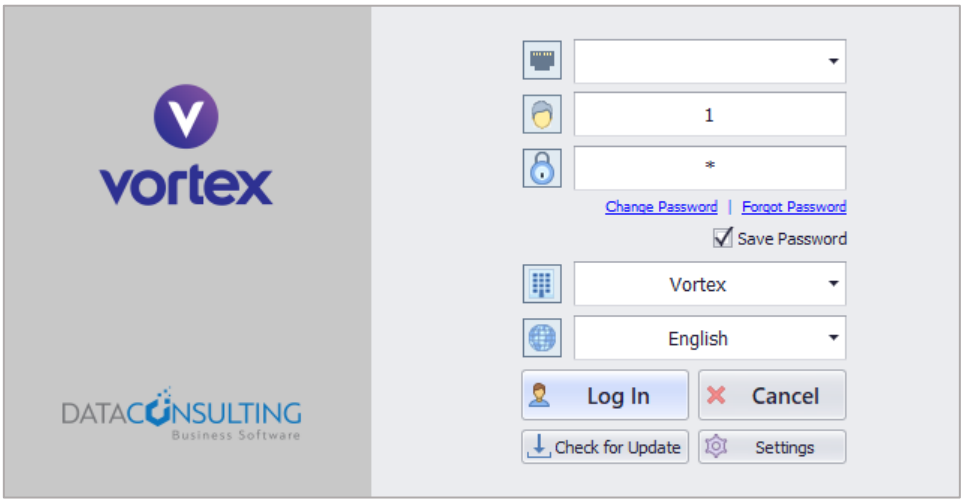
1. SIGNING IN TO THE APPLICATION 4
2. TRADERS 5
   2.1. SITE MANAGEMENT 5
   2.2 TRADERS 7
   2.3 CONTRACTS 18
   2.4 PROJECTS 21
   2.5 PROJECT STATUS 24
3 FSM ACTIONS 25
   3.1 WORKORDER CREATION: 25
   3.2 TECHNICIANS ACTIONS 29
   3.3 TECHNICIAN SERVICE REPORTS 35
   3.4 DAY VIEW 35
   3.5 TECHNICIANS CALENDAR 36
   3.6 EVENTS CALENDAR 39
   3.7 RELATED WORKORDERS 40
   3.8 SERVICE TIME ZONES 41
   3.9 SERVICE REPORT ACTIONS 41
   3.10 EXTRA TASKS 41
   3.11 PROCEDURES 42
   3.12 MAIL MANAGEMENT 44
   3.13 CREATE BULK WORKORDERS 44
   3.14 CONTRACT RENEWAL MANAGEMENT 46
   3.15 WORKORDER SORTING 47
4 WAREHOUSE 49
   4.1 PRODUCTS 49
   4.2 PRODUCT TYPES 49
   4.3 PRODUCT TEMPLATES 51
   4.4 ATTRIBUTES 52
   4.5 MANUFACTURERS 53
   4.6 MEASURABLE ATTRIBUTES 53
   4.7 SPARE PARTS 53
   4.8 SERVICES 54
   4.9 PRODUCT GROUPS 56
5 REPORTS 57
   5.1 PIVOT REPORT 57
   5.2 CRM PIVOT REPORT 57
   5.3 CM PIVOT REPORT 57
   5.4 UTILIZATION REPORT 57
   5.5 ROUTE CALCULATION 58
   5.6 SITES ON THE MAP 60
   5.7 RESPONSE TIME 60
   5.8 PROJECT PROFIT 61
   5.9 TRAVEL VS WORK DURATION 62
   5.10 CONTRACT LIST 63
   5.11 CONTRACT PROFIT 64
   5.12 TECHNICIANS EVALUATION 64

5.13 SERVICE REPORT PENDING ISSUES 65
5.14 TECHNICIANS ROUTE 65
5.15 TECHNICIANS LAST POSITION 66
5.16 SEND BULK SMS/ EMAILS 66
5.17 PRODUCTS AT SITES 67
5.18 TIME REPAIR COMPARISON 67
5.19 TIME BETWEEN SERVICE REPORT ACTIONS 68
5.20 GROUPED SERVICE REPORT 68
5.21 WORKORDERS WITH SPARE PARTS 69
5.22 PICKING LIST MASS PRINT 69
5.23 CUSTOMERS BALANCE 69
5.24 OUTGOING MAIL 69
5.25 SPARE PARTS TRANSACTIONS 69
5.26 CUSTOMER CONTACTS 69
6 RESOURCES 69
6.1 TECHNICIANS 69
6.2 SALESPERSONS 72
6.3 SUBCONTRACTORS 73
6.4 SKILLS 73
6.5 DEPARTMENTS 74
6.6 PERSONNEL LEAVE 74
7 SETTINGS 75
7.1 ROLES 75
7.2 USERS 75
7.3 BACKUPS 76

1. SIGNING IN TO THE APPLICATION

This User Manual is the intellectual property of DATACONSULTING. It is intended solely for the recipient to whom it is addressed and may not be disclosed or shared in part or in whole with any third party without the prior written approval of DATACONSULTING.

To sign in to the application, the administrator must enter his username and password, which are personal and have been created by the administrator himself.



Our tour begins with the basic navigation menu:

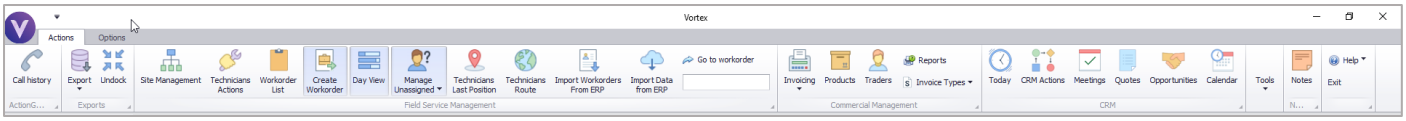
- Traders
- FSM Actions
- Resources
- Warehouse
- Reports
- Settings

The information displayed may be modified by right-clicking on **Customize Menu**, which opens a special tab that allows us to hide certain menu functions.

Each of the main options contains the corresponding action sub-menus.

The functions you will encounter when using the application will be explained in the following sections.

The navigation bar provides quick access to the most frequently used functions.



2. TRADERS

2.1. SITE MANAGEMENT

The Site Management page displays all the customer sites that have been created. The administrator may search for a specific site using a variety of filters such as customer ID, company name, city or project name, etc. (**Image 1.1.1**). The list allows us to perform a quick search for a specific site. For this reason, only the key fields are displayed as columns. A customer may be deleted only when there are no relevant entries, such as workorders, phone calls, etc.

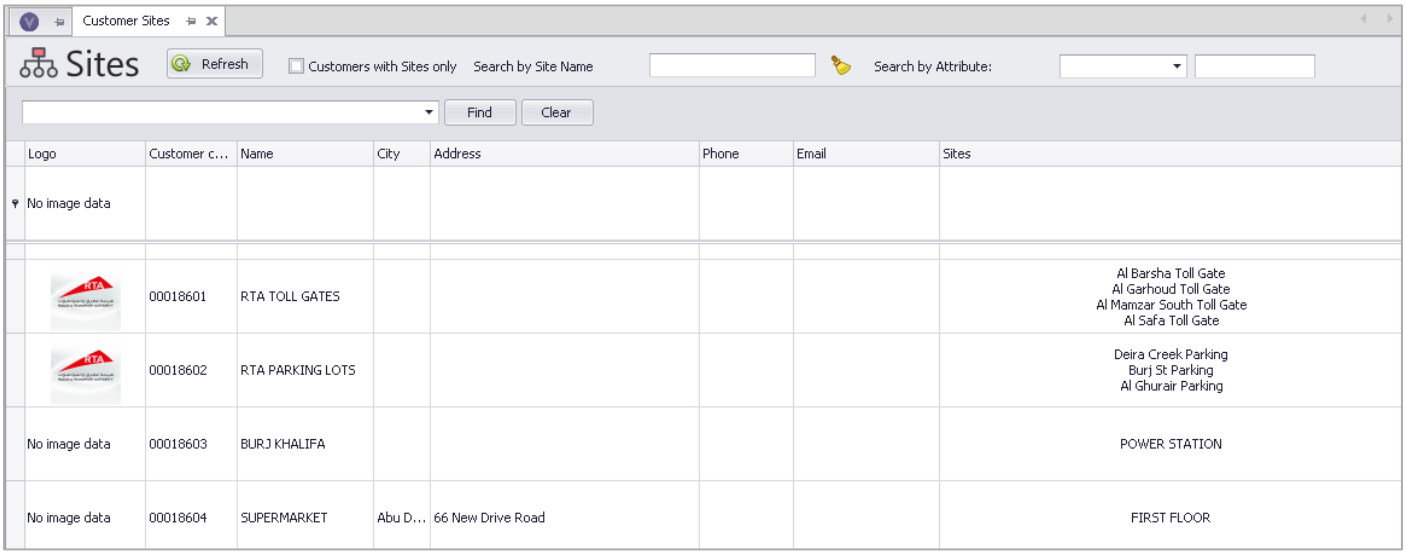


Image 1.1.1

Only customers with sites are displayed, and users may perform a customer search with the site's name (using keywords). **Image 1.1.2**

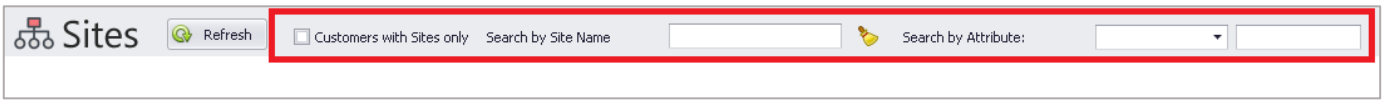


Image 1.1.2

A search may be performed using the product's attributes (i.e. Serial Number, Model). Customer sites open with a double click.

By right clicking on the site's description we can see all the available actions of the tab (**Image 1.1.3**):

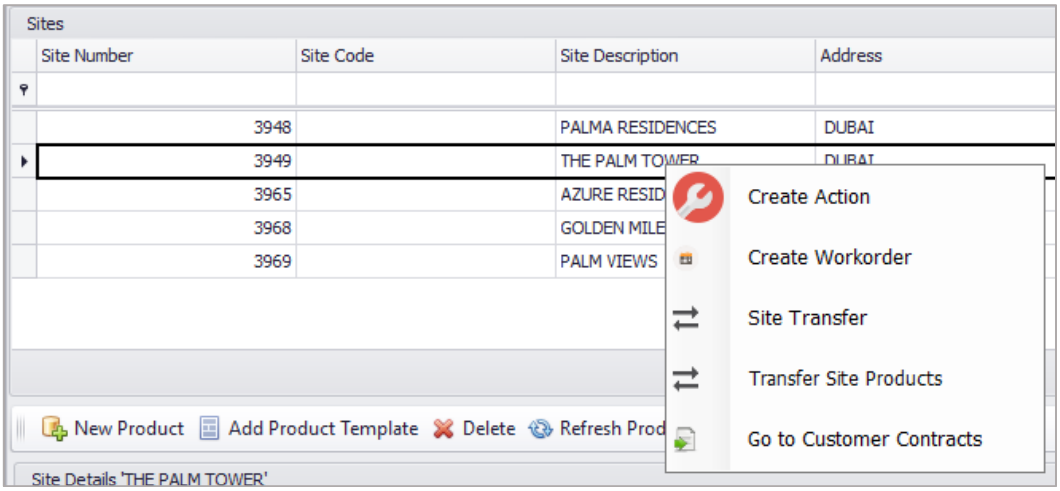


Image 1.1.3

Create Action (Technicians Actions): The steps to be taken will be described in another section.

Create Workorder: The steps to be taken will be described in another section.

Transfer Site: Allows a site to be transferred to another customer. This feature is useful when, for instance, a customer's site remains the same but we want to change its company name, VAT number, etc. and avoid having to create the site from scratch.

Transfer Product: Allows a product to be transferred to another customer site.

From this tab, we can open a new customer site by selecting the **New Site** option located in the top right corner **(Image 1.1.4).** The steps to be taken will be explained in the following section.

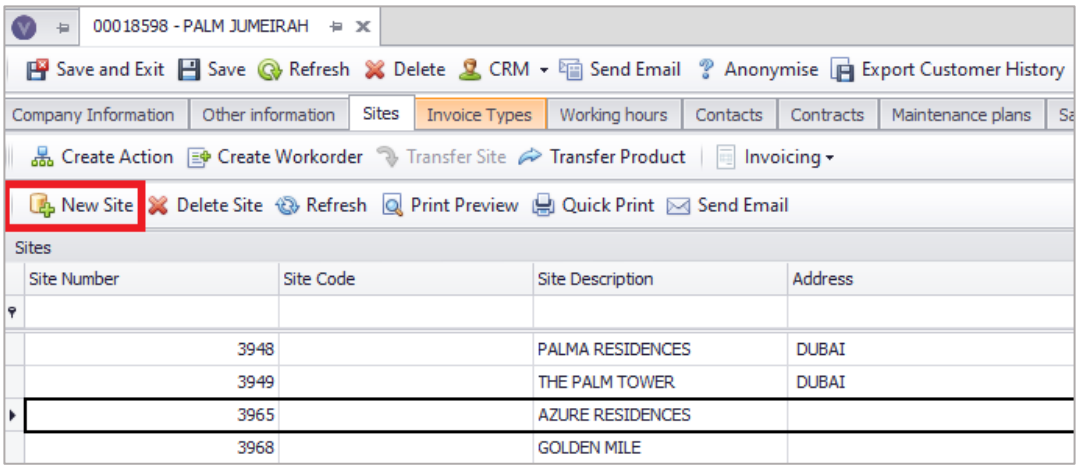


Image 1.1.4

Finally, by double-clicking on a site's description users can view all its information. (Image 1.1.5). This information will be discussed in detail in the next section (Traders).

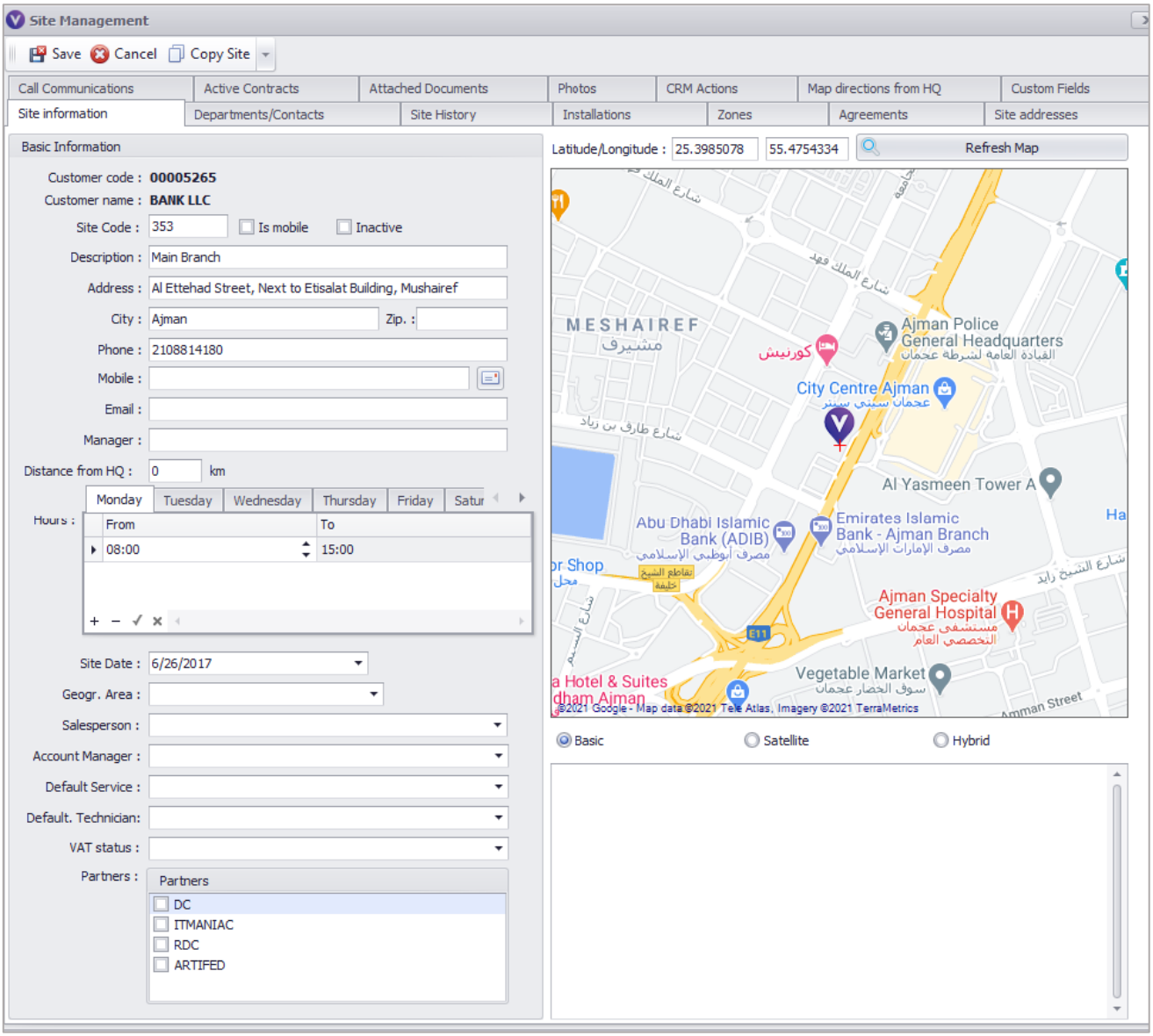


Image 1.1.5

2.2 TRADERS

This section shows all Traders (customers, collaborators, suppliers), their key information, transaction data (if the Vortex CM Module has been installed), CRM data (if the Vortex CRM Module has been installed).

To create a new Trader we click on the icon

.

All customer information is organised under the following tabs **Image 1.2.1**:

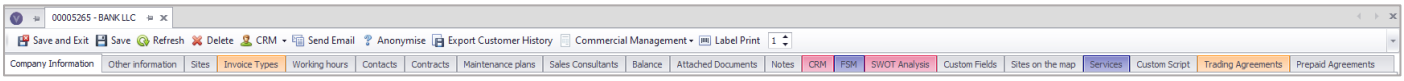


Image 1.2.1

Information: Displays all customer information (i.e. name/company name, VAT number, address, city, etc.). Providing an email address is recommended in order to keep customers informed about the progress of the work undertaken but also to send bulk emails, as and when necessary. The contact information contains a field called **One Site**. If we click on the check box, a site will be automatically created in the customer tab and will contain the customer's company name in the description. The transaction details are completed if the **CM Module has been activated** in the application. Further down, the CRM details are completed if the **CRM Module has been activated**.

Sites: Displays all customer sites. Double-clicking on a site's description will show all its information **(Image 1.2.2)**.

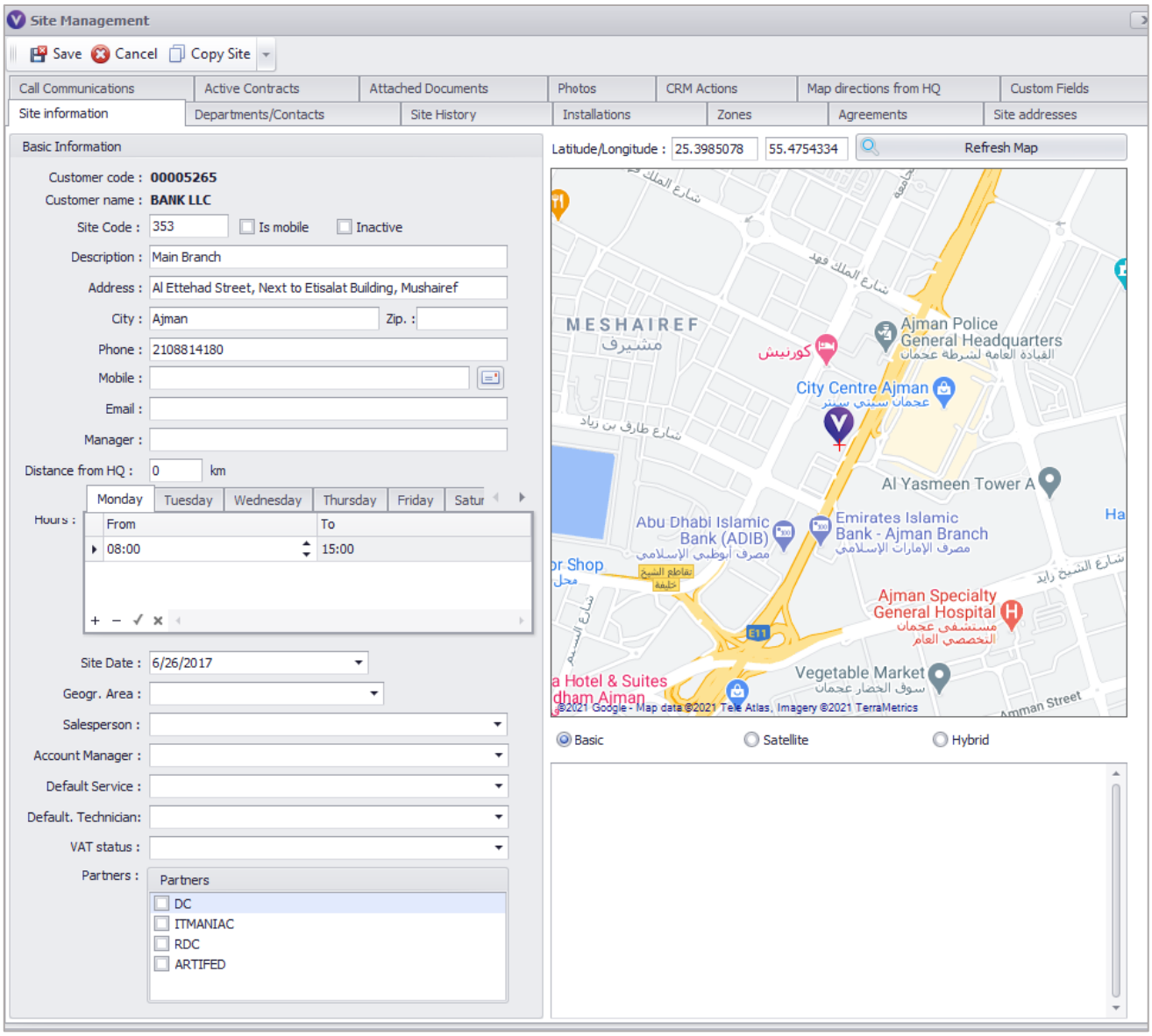


Image 1.2.2

Documents: CM Module

Business Hours: Displays the customer's business hours, so that workorders may be created during the appropriate timeframe.

Contacts: Displays all of the customer's contacts. Multiple contacts can be managed per customer, with a phone number and an email address provided for each contact.

Contracts: Displays the contracts for the site and its products.

Maintenance Plan: Displays the maintenance plans created from the customer's contracts. From this tab we cannot create a new plan. Maintenance plans are created only from the customer's contracts. The steps to be taken will be described in more detail later on.

Sales Consultants: Displays the salesperson responsible for a specific customer.

Balance: Displays all payments received and fees charged as entered by the technician on the mobile app.

Attached Documents: Displays the attached files (documents).

Notes: Displays various notes about the customer. For the note to appear in a pop-up window when creating a workorder, select ***Display in customer option*** **(Image 1.2.3)**

Image 1.2.3

CRM: CRM Module

FSM: Displays the Workorders and Service Reports pertaining to the customer.

SWOT Analysis: CM Module

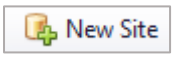
Custom Fields: Displays the new custom fields created by the user.

Site on the Map: The exact coordinates (latitude and longitude) of a site on the map.

Services: We pre-select **only** the services that we want to see as being available in the workorders -> Workorder Information -> Service. By saving the workorder the services are displayed in the **Services performed** field.

Trading Policies: CM Module

How do we open a new customer site?

On the top right corner of the site's tab, where the actions are listed, we press 

(Image 1.2.4). The following steps should be followed:

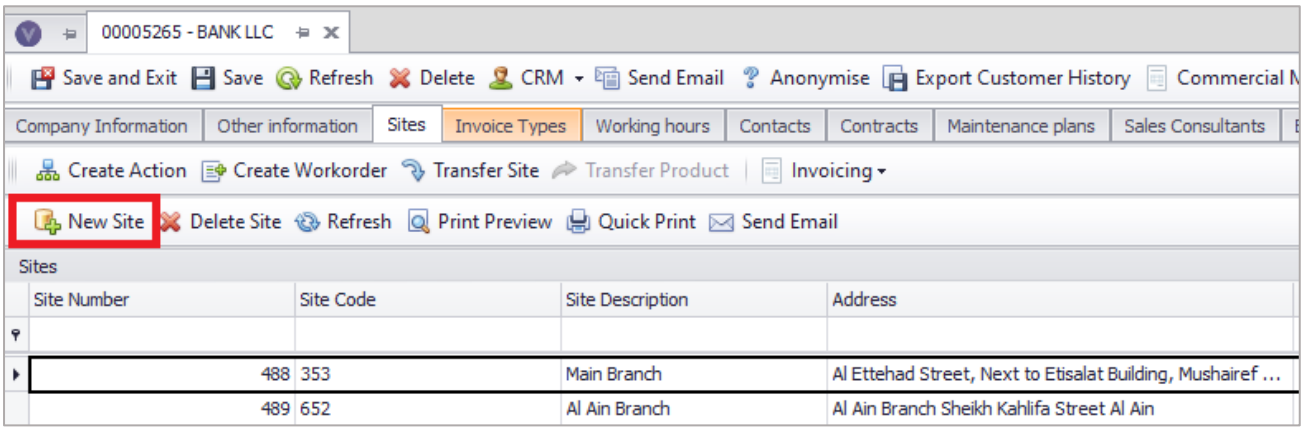


Image 1.2.4

We fill in all the necessary information about the site **(Image 1.2.5)**, such as name, address, city, etc. Providing an email address is recommended in order to keep customers informed about the progress of the work undertaken but also to send bulk emails, as and when necessary.

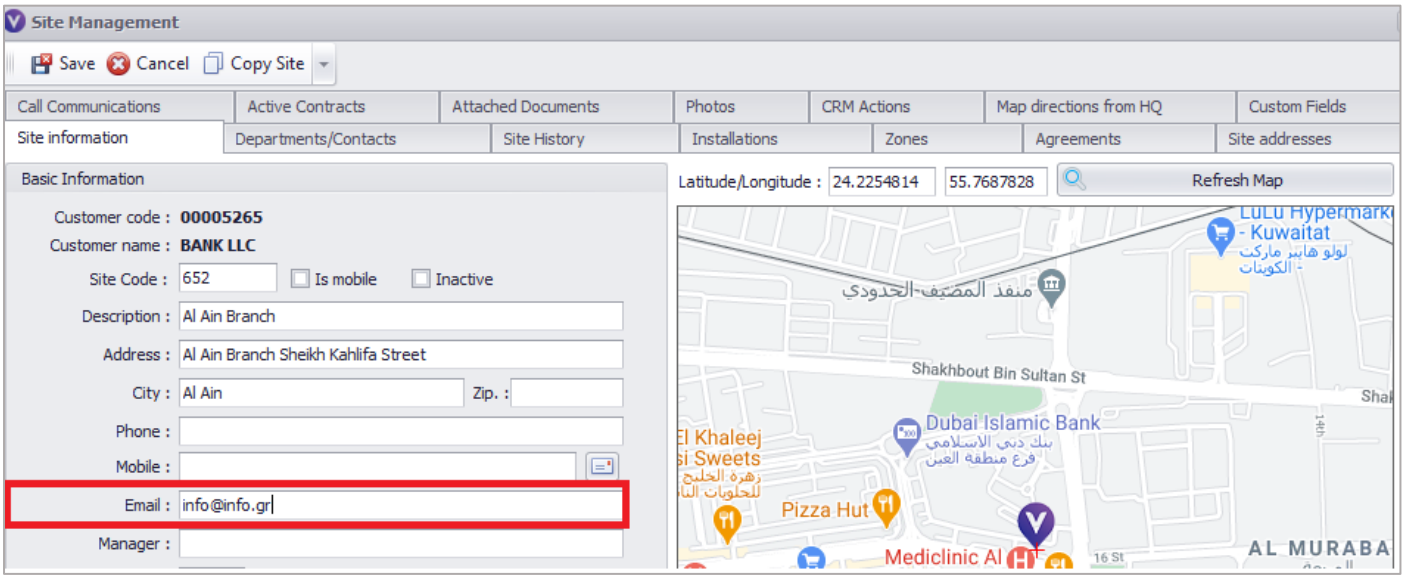


Image 1.2.5

By entering the address and the postcode of the site and pressing **Search** , the exact coordinates (latitude and longitude) are displayed on the map. This feature requires signing in with Google Maps API.

Business Hours: Displays the customer's weekly business hours. When creating a Workorder at the site, the Timeslot is updated according to the business hours specified for this site.

The **Default Service** is filled in when, for a specific site, every new task assignment is predefined and is always the same (e.g. machine maintenance). So, when we open the **Create Workorder** tab for this site, the Service field will **automatically** display the default service **(Image 1.2.6)**.

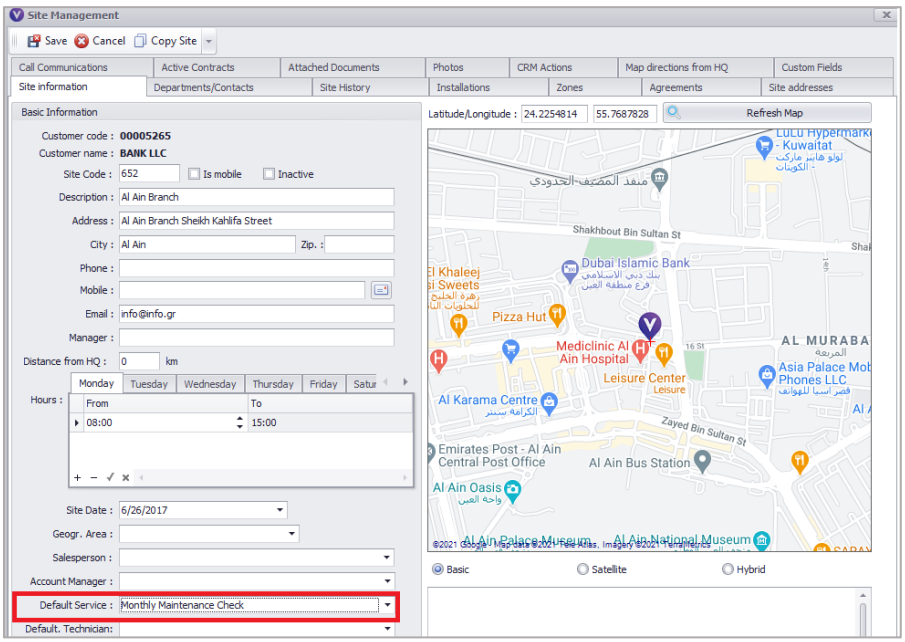


Image 1.2.6

In the **Subcontractors** field, we select the external collaborators/technicians teams whom we want to have access to the site. Those collaborators that have not been selected will not have access to or the right to manage the specific site.

The site's information is organised under the following tabs:

Contacts: Allows us to enter the site's contacts (staff) and their position in the company.

Site History: Displays all the Service Reports that have been created for the specific site. The **Column Chooser** allows us to add the **Photos** column so that we can see whether the Workorder contains a photo or not without having to open it.

Zones: The site's installations are demarcated and divided into distinct/defined areas (e.g. building A, B, C). Clicking on + will add a new Zone to the site.

Agreements: Displays the number of hours or technical support visits purchased in advance for a customer site. To create an Agreement, a contract is required for the site or for a site's product. Clicking on + allows us to fill in the details of our agreement (valid from-until, etc.) . Finally, to save our entries we click on ✓. Through the **Hour set-up** option we may add hours/visits to the agreement or remove them. In the Workorders History field, we see all the actions (add or remove hours/visits, and workorders) pertaining to the agreement. The hours/visits of the Service Reports that participate in an agreement (by checking the setting in the **Create Workorder** form) deduct the relative hours/visits from the respective agreement **(Image 1.2.7)**

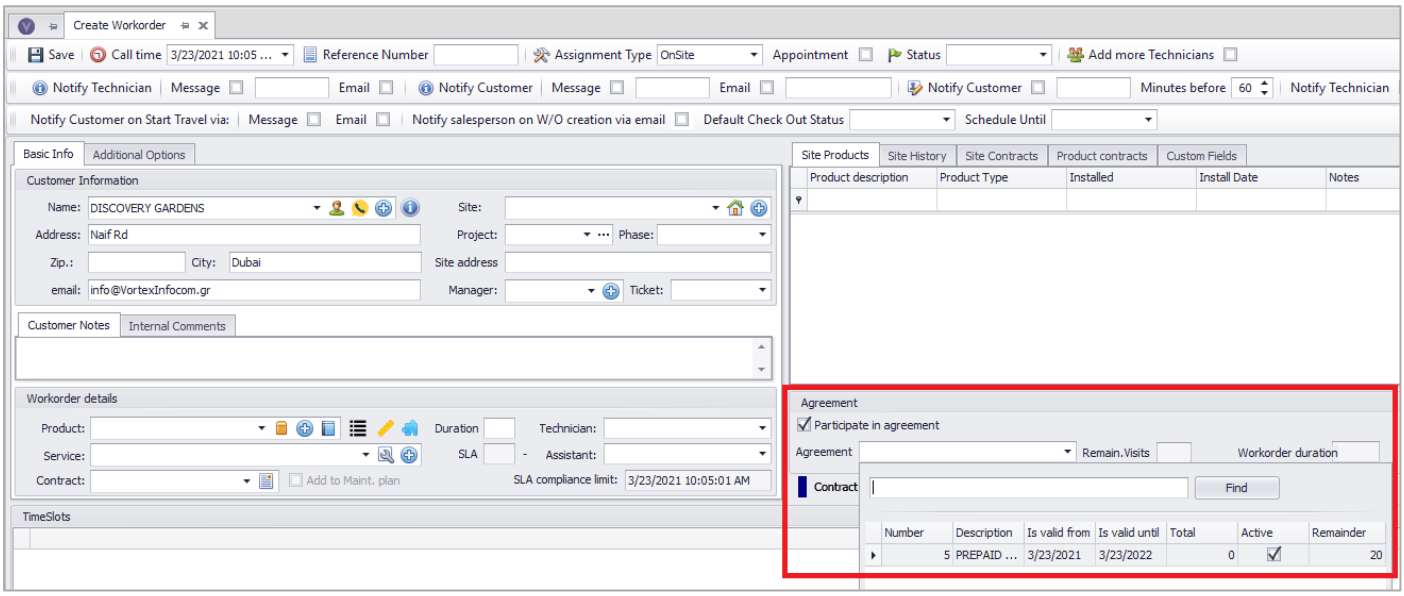


Image 1.2.7

Site Addresses: When the site is not a fixed location but a mobile facility, all addresses must be entered.

Call Log: Tracks the customer's call history with the company. This requires a call centre connection to the application.

Active Contracts: Displays the contracts that have been created on a specific site (active and non-active).

Documents: Allows documents to be attached using the + icon.

Photos: Allows photos to be attached using the + icon.

CRM actions: CRM Module.

Instructions from headquarters: Detailed instructions on how to reach the site.

Custom Fields: Custom fields that have been created at the site.

On every customer site, the following key actions are available at the top right corner of the screen:

Create a new customer site

Delete the entire site

Refresh content

Document preview: allows users to see what their document, with all the site information, will look like when they actually print it.

Print site and individual information

Send email to users

Right-clicking on the site description **(Image 1.2.8)**, will display the available actions:

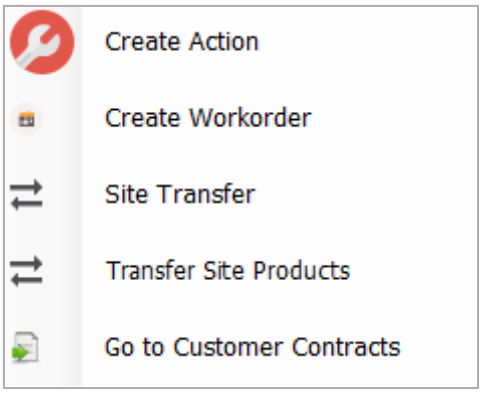


Image 1.2.8

Create action: creates a technicians action

Create workorder: creates a new workorder at the site

Transfer site: transfers the site's products to another customer

Go to customer contracts

At each site, we can view all the products we have installed. The specific attributes and the history of each product are displayed, i.e. all the Service Reports pertaining to the product as well as its contracts **(Image 1.2.9).**

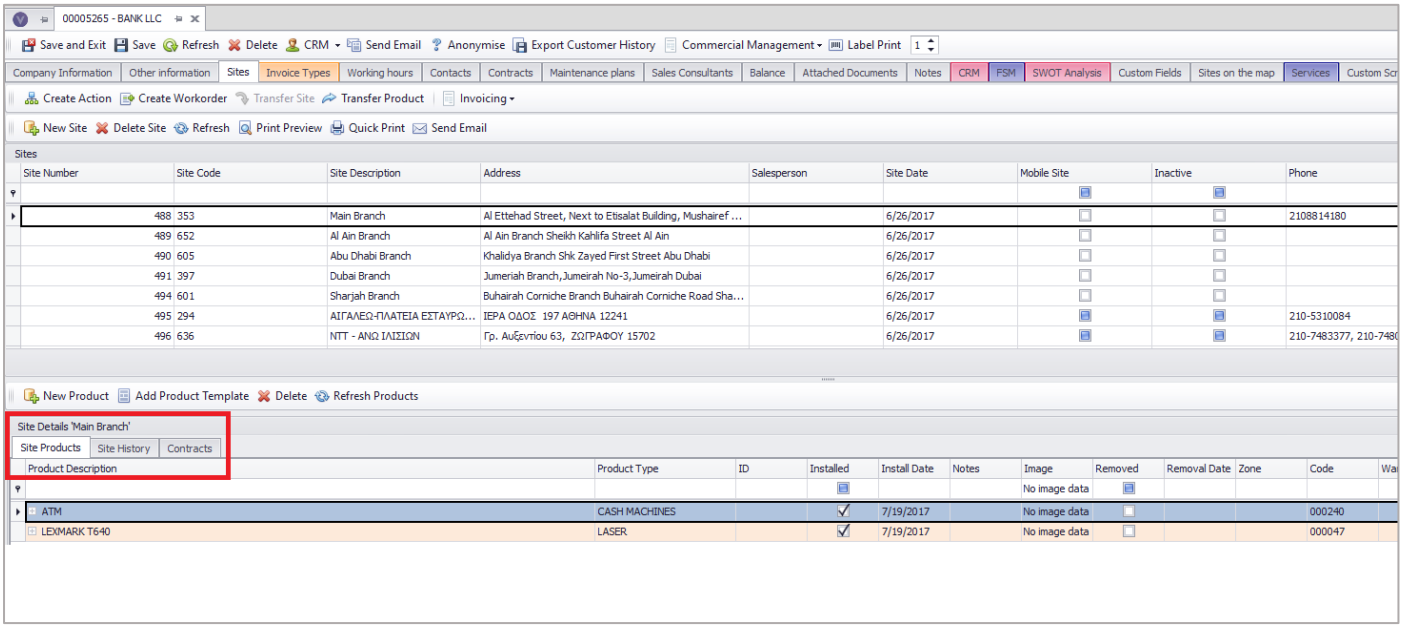
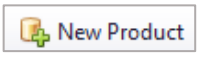


Image 1.2.9

How do we add a product to the* site*?

Click on the **New product** 

icon to display the following tab which must be filled in **(Image 1.2.10)**.

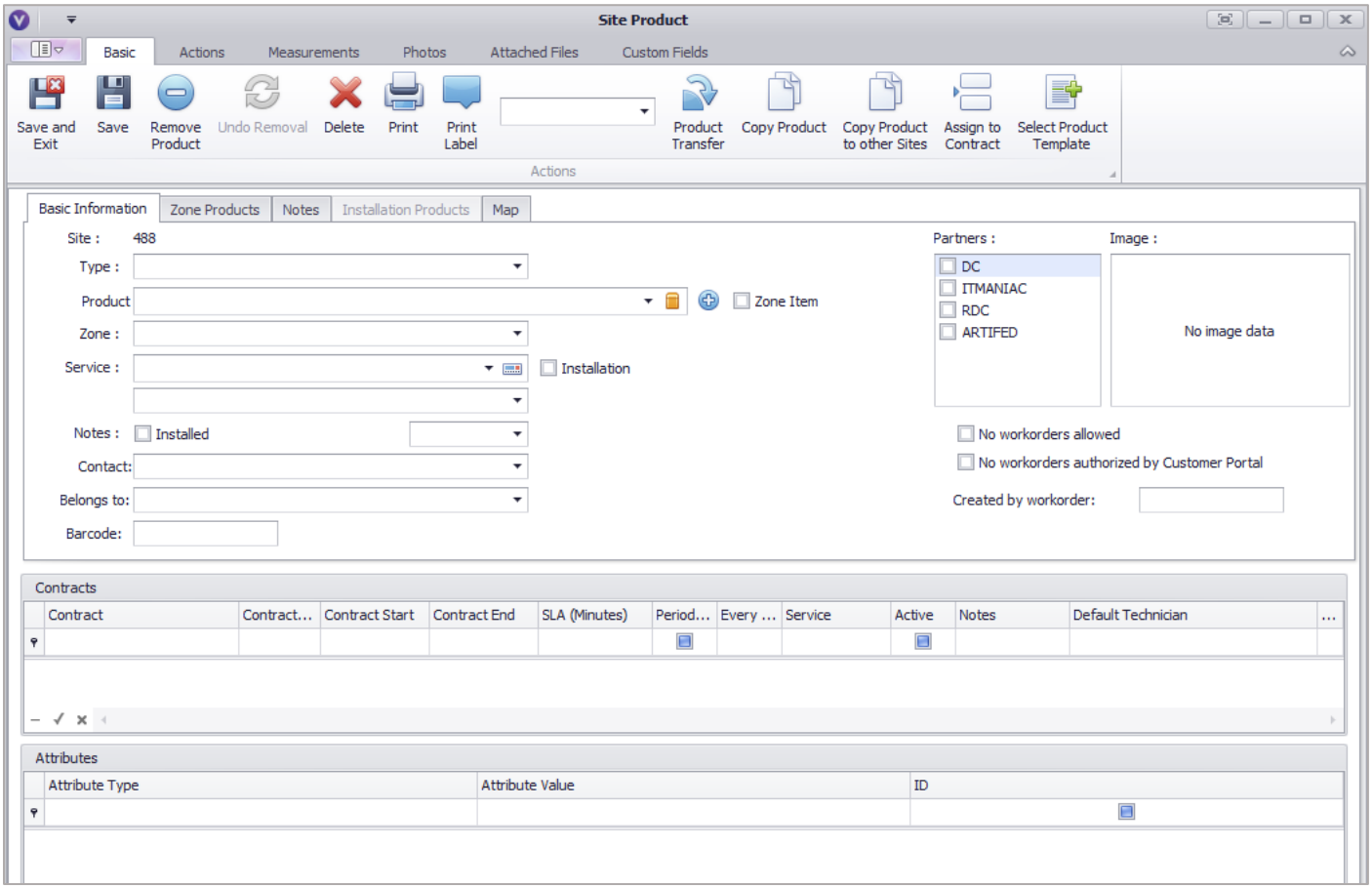


Image 1.2.10

As regards the basic product information, the administrator will need to fill in the mandatory fields such as: type, product, area (if the facility is divided into ***areas***), and installation date.

In the **Product** field, the icon will take us directly to the list with all of the company's products, in order to open a new product that is not yet available. The way we create a new product will be described in another section.

We can add a product using its Code, Description and Product Type by clicking on the icon and save the entry by clicking on .

We then select the **Subcontractors** for whom we want to grant access to the product information. Finally, the **Load** button **(Image 1.2.11)** will allow us to add a photo of the product.

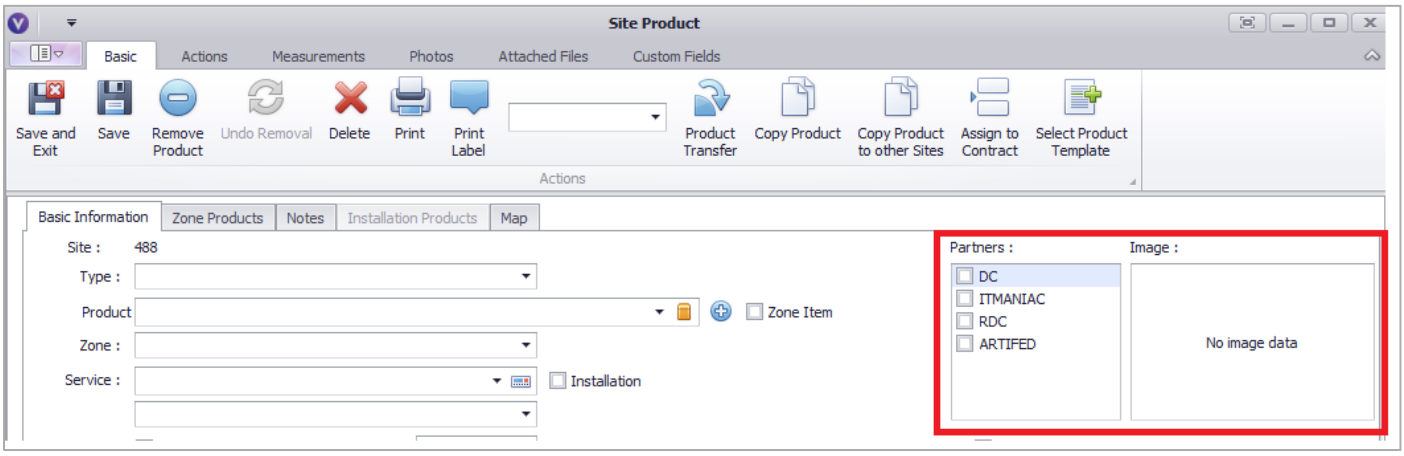


Image 1.2.11

Displayed below are the contracts that have been created for the specific product. Attention: Contracts are NOT created at this stage (this is discussed in detail in the next section).

The next step involves the creation of product attributes.

In **Attributes**, at the bottom left corner of the screen, we click on the Add special attribute icon, such as serial number, warranty, next service. (All attributes can be customized).

To save the entry, click on . To delete the current row following confirmation click on . To identify the specific attribute of a product click on the ID check box. **(Image 1.2.12)**

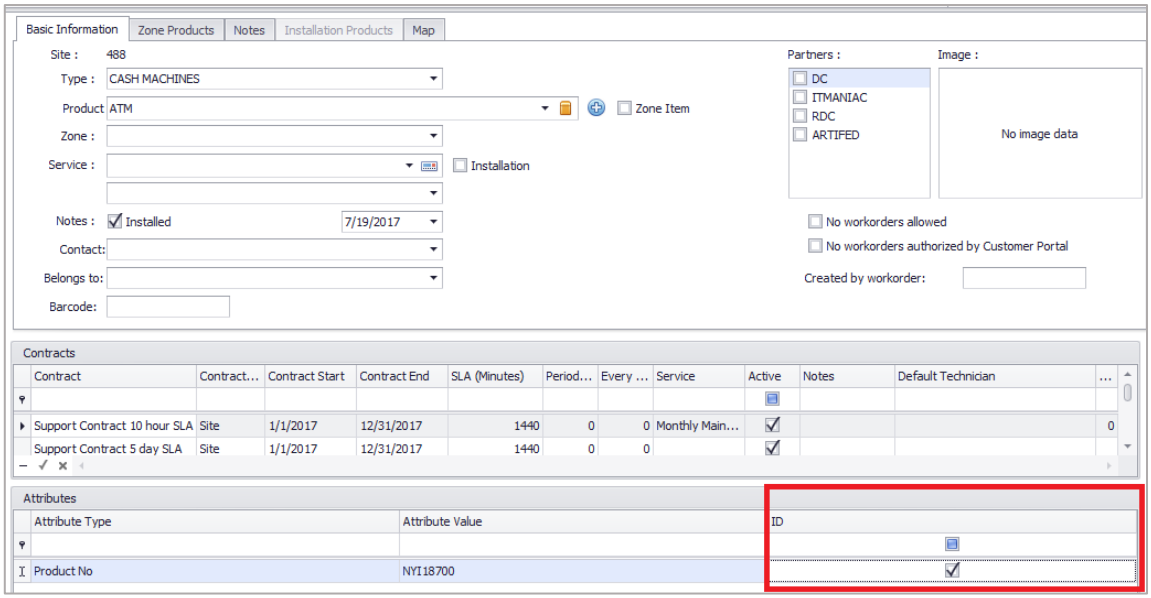
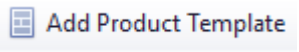


Image 1.2.12

What is a product template and how do I add it to a customer site?

A product template is a product with recommended product attributes (standard specifications) for shared and repeated use across many sites. It is essentially a model product for multiple sites. Click on 

to select the product template to be copied to the site. The way we can create a product template will be discussed in another section.

A toolbar with the following functions is placed on the tab of each product, at the top of the screen **(Image 1.2.13):**

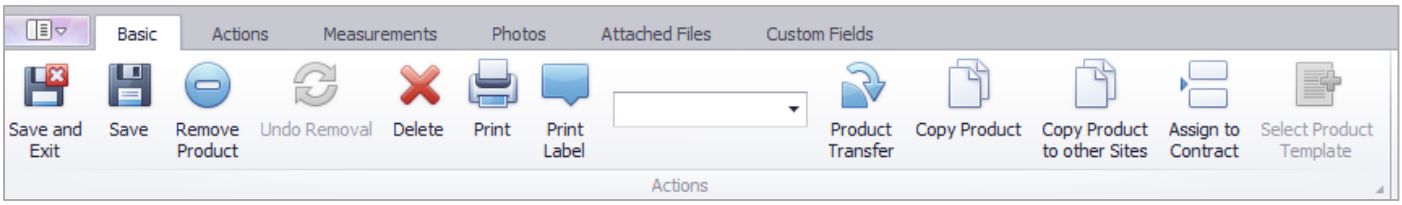


Image 1.2.13

Save product and close tab after confirmation

Save entry

Remove product from site. The product will remain inactive at the site (for logging purposes) **Image 1.2.14**

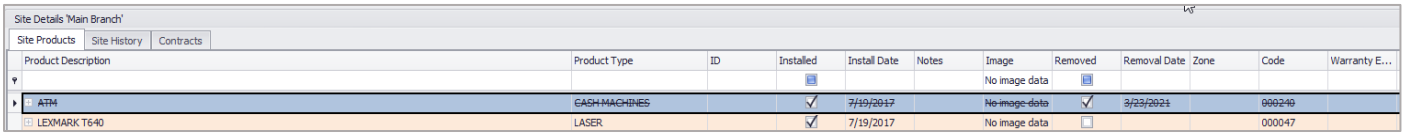
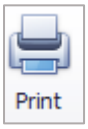
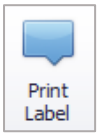


Image 1.2.14

Delete product

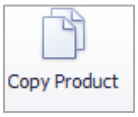


Print tab with product information



Print label with product information using the label printer

Transfer product (along with all its attributes) to another customer site



Copy product. Users define the number of copies they want **(Image 1.2.15)**

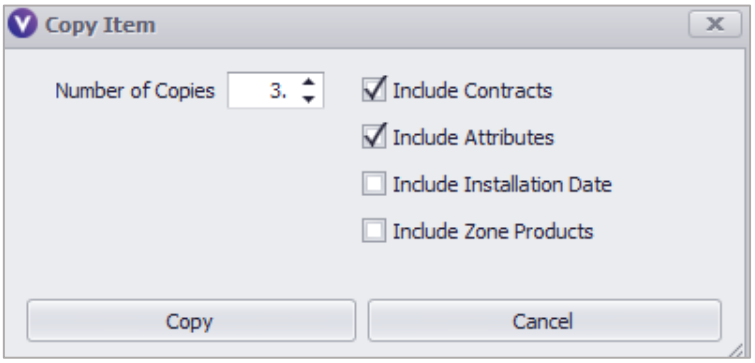
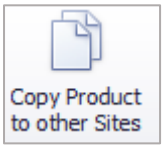
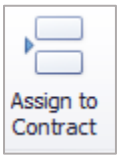


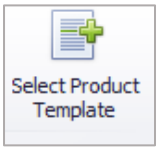
Image 1.2.15



Copy product to other sites: copies a product to other sites belonging to the same customer. Users may choose if they want to copy the contracts and product attributes.



Assign to contract: assigns a product to a site's contract.



Select product template: allows users to select a product template -> (provided that product templates have been created -> products with specific typical attributes). Product templates can be copied from here. **(Image 1.2.16)**

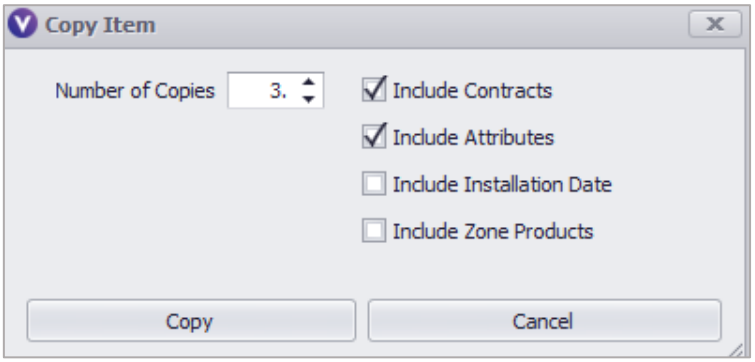


Image 1.2.16

Finally, in each product, the workorders related to the specific product, the workorder measurements, the photos and the custom fields are displayed.

To close a page, simply click with the middle mouse button on its tab.

2.3 CONTRACTS

To create a new type of Contract, click the add icon + in **Contracts** and fill out the fields below:

Contract number: Automatic numbering of contracts.

Contract description: Brief description of each contract.

SLA (in minutes): Default Service Level Agreement. Designates the response time to a customer request.

SLA limit: The acceptable time limit/time period for implementing the SLA defined above (the time until which the SLA limit may be set).

By double-clicking on the contract number we can view the custom fields that we have defined in the contract as well as the **Contract service hours (Image1.3.1)**.

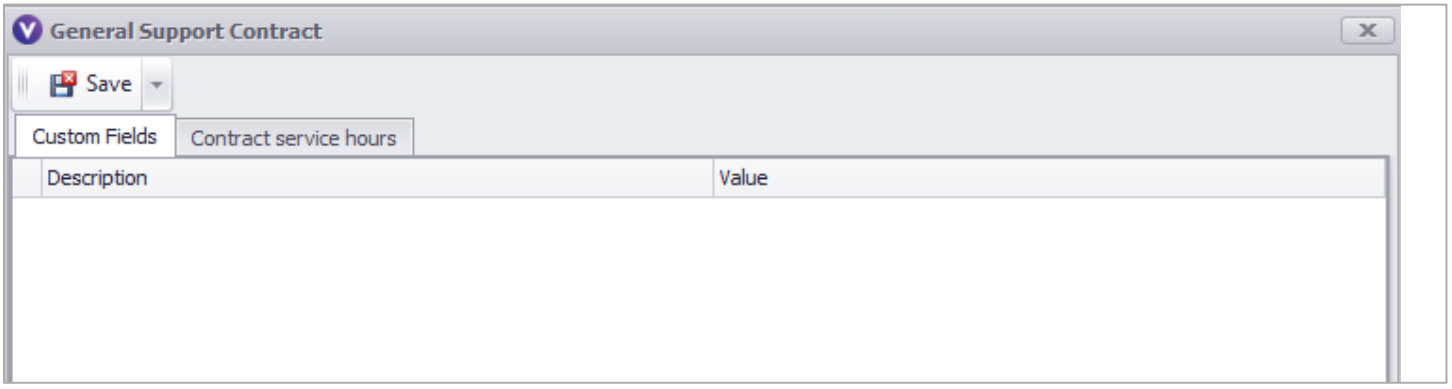


Image 1.3.1

Contract service hours: Workorder timeslots are updated according to the service hours defined in the contract. The following message will appear if the timeslot defined for the workorder is outside these hours: *"The time you have selected is before the current time. Do you want to proceed?"*

How to create a contract in a product or customer site

After creating a customer site with its products, we go to the **Contracts** tab and press + to open the basic contract creation form.
Contract: Type of contract.
Contract ID:
Remarks: Any information/specific conditions regarding the contract (optional).
Entry into force: Support contract start date.
Expiry: Support contract end date.

Active: We select the check box if the support contract is active.

Value: The cost of the support contract.
Service: This field is completed when creating a maintenance plan, and if the contract covers the particular service.
Recurrence: Allows users to determine the frequency of a recurring task for a specific time period (e.g. every ... days).
First workorder: Allows users to define the date on which the first workorder will be assigned for the maintenance plan.
Subcontractor: Optional field which can be used when the maintenance plan is implemented by an external collaborator.

By double-clicking on the contract (on the + icon) we have two more options:
Custom fields: Allows us to define custom fields in the customer contract. When we create a new customer contract, the following dialogue box appears: **"Do you want the values of the custom fields to be transferred from the …contract"**
Contract documents: allows us to attach related files (e.g. a signed contract) **Image 1.3.2**

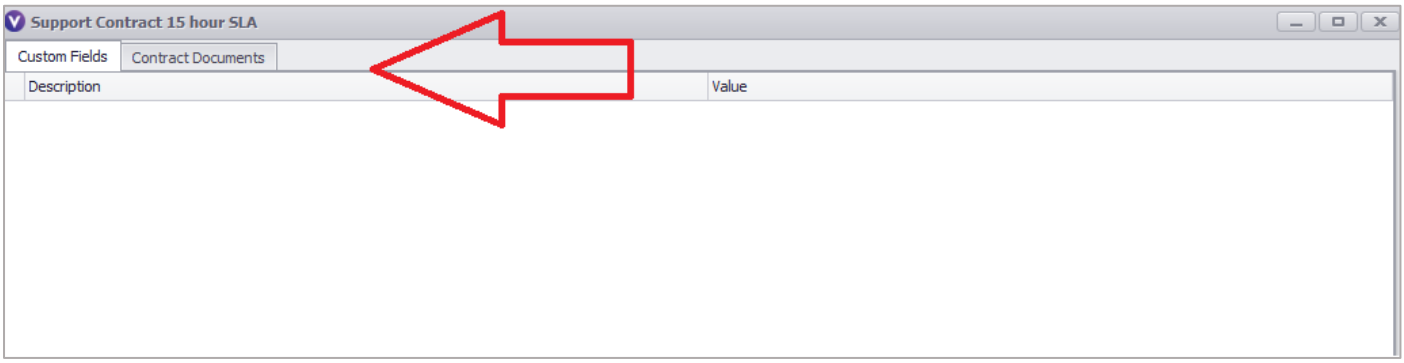


Image 1.3.2

By right-clicking on the contract that we have created the following available actions will be displayed (**Image 1.3.3)**:

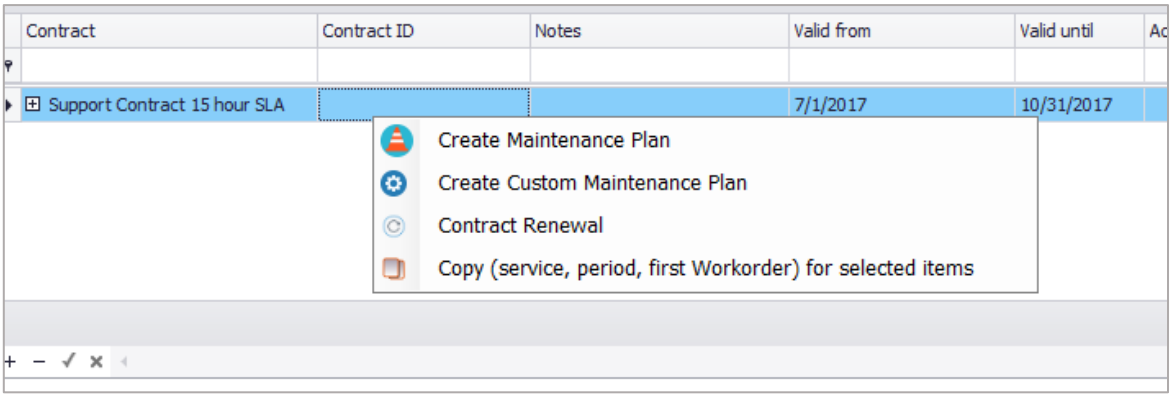
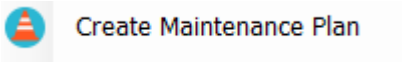


Image 1.3.3

Procedure for creating a maintenance/preventive maintenance plan (recurring tasks).



By right-clicking on the contract, we can automatically create recurring tasks. In order to create a plan, we must complete the following three (3) fields in the product contract:
Service/Recurrence/First Workorder. Workorders are therefore created automatically until the contract expires.
- A maintenance plan can be created in customer contracts using a **Picking List** (to add the consumables/spare parts that the technician needs) **Image 1.3.4**
- Workorder Ratings: Ratings are custom fields (explained in another section).
- Issue Description: When an issue description is included in the maintenance plan, then all workorders are automatically updated with this description.
- Internal Comments: The internal comments field is automatically updated in all workorders.

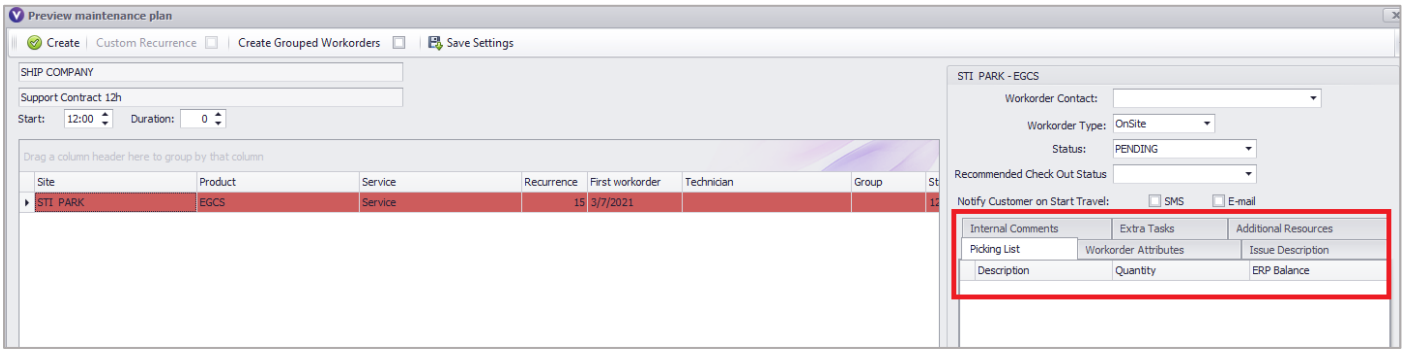
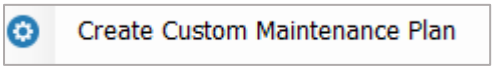


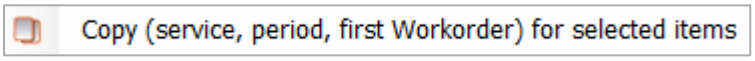
Image 1.3.4

A maintenance plan may be deleted by pressing the "-" button. However, if even just the first workorder has been completed under a plan it will not be possible to delete it.



Allows users to create recurring tasks/workorders on different dates chosen from the calendar.

Allows users to renew the contract and copy the custom fields. During the renewal process a dialogue box will appear asking **"Do you want to transfer the values of the custom fields from the contract ..."**.



Allows users to copy the Service, Recurrence and First Workorder fields in selected products.

2.4 PROJECTS

Projects involve monitoring and implementing a project, or a series of workorders-tasks to be carried out within a specified timeframe.

Key characteristics of an order:

- it contains one or more technician workorders
- it has a specific timetable
- it is completed in successive stages
- it has a pre-agreed value
-

For each new customer project, the following tab needs to be filled in (**Image 1.4.1**):

Project number: The entry's serial number. It is automatically filled in when a new entry is created.

Project code: Optional field.

Click on the check box *Do not allow overlapping dates in the sub-projects* if you do not want the administrator to open sub-projects with the same start and end date.

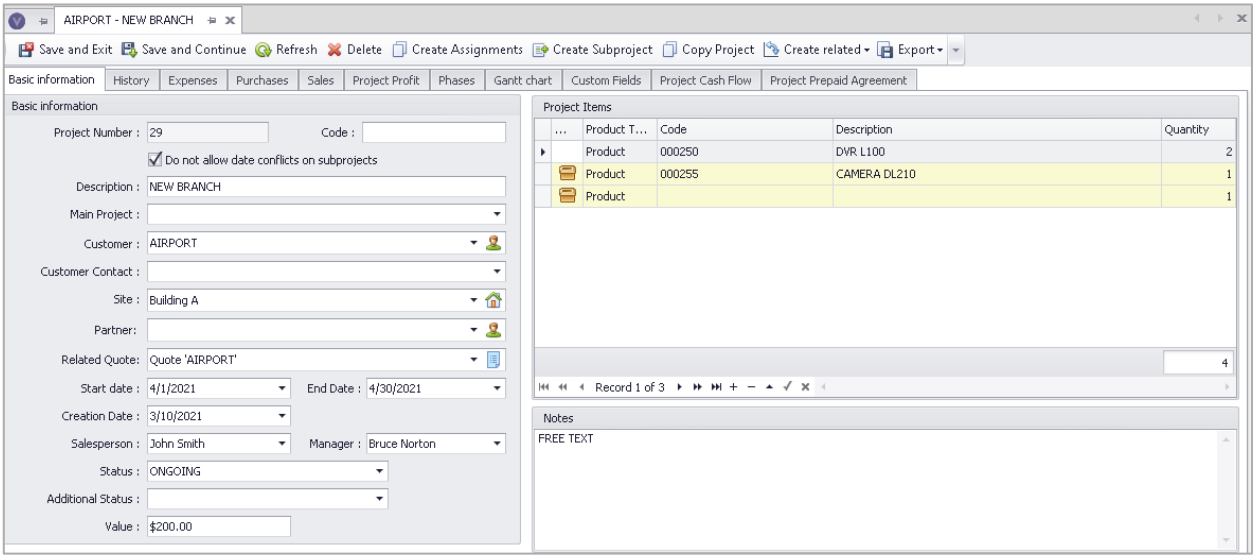


Image 1.4.1

Description: Short description/Project title

Belongs to project: Field to be completed if the project is considered a subproject of a master project

Customer: The customer for whom the order is intended

Customer contact: Person to be contacted for the project's implementation

Site: Customer's site

Quote: Attach price quote

Start date: Project start date

End Date: Project end date (date by which the tasks must be completed for the order to be finalised)

Salesperson: Optional field in which the salesperson may be added

Manager: The person responsible for organizing and monitoring the project

Status: The phases of the order up until its completion

Additional status: An additional project status allowing for a quick and easy search

Value: Project cost based on the quote submitted to the customer

The following information/options appear at the bottom of this tab (**Image 1.4.2**):

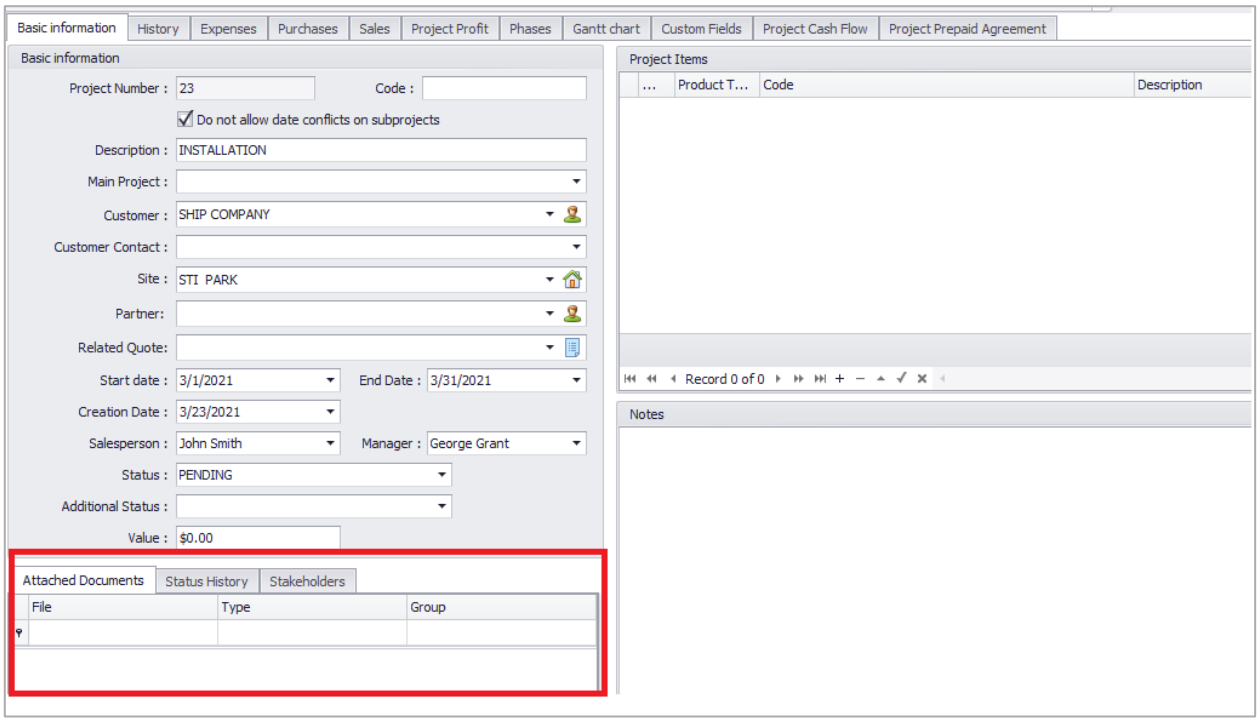


Image 1.4.2

Attached documents: Allows files to be attached. These files may then be opened and edited.
Status history: Automatic project status update. The system draws information from the project's modification date to change its status
Stakeholders: This field is completed only if another customer is also involved.

The project types are automatically updated when a price quote is automatically converted to a project (CRM Module).
Image 1.4.3

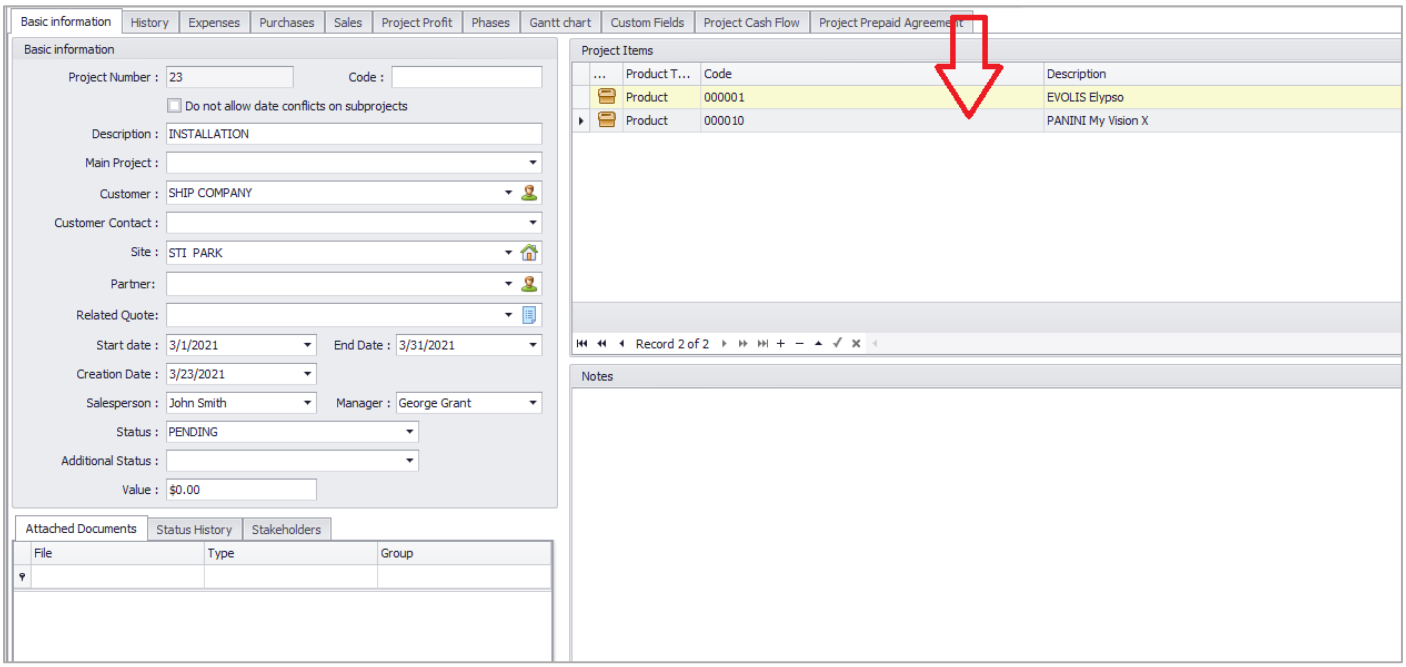


Image 1.4.3

In the **Notes** pane users may add notes (e.g. technical specifications, design, design details).
History: Displays all workorders (pending or in progress) that are relevant to the project **(Image 1.4.4).**

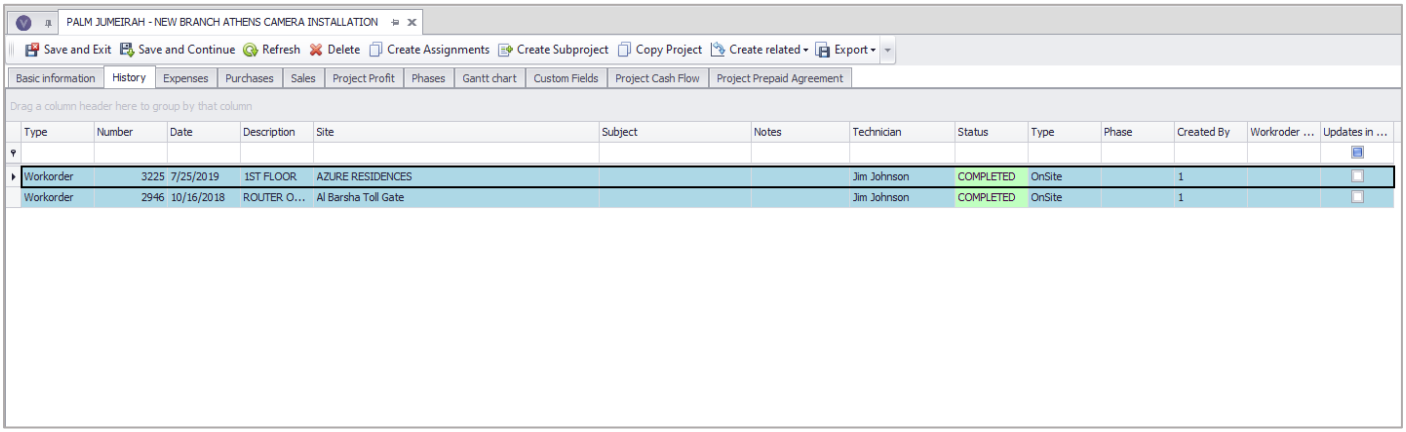


Image 1.4.4

Expenses: The general expenses of a project (technicians' travel expenses, operational expenses, etc.)
Project Profit: PM Module
Phases: PM Module
Gantt chart: PM Module
Custom Fields: Displays all the custom fields of a project as defined in Settings.

2.5 PROJECT STATUS

With the icon we can update the status/progress of a project. Finally, to save our entries we click on . These are customizable fields which allow us to keep track of our projects **(Image 1.5.1)**

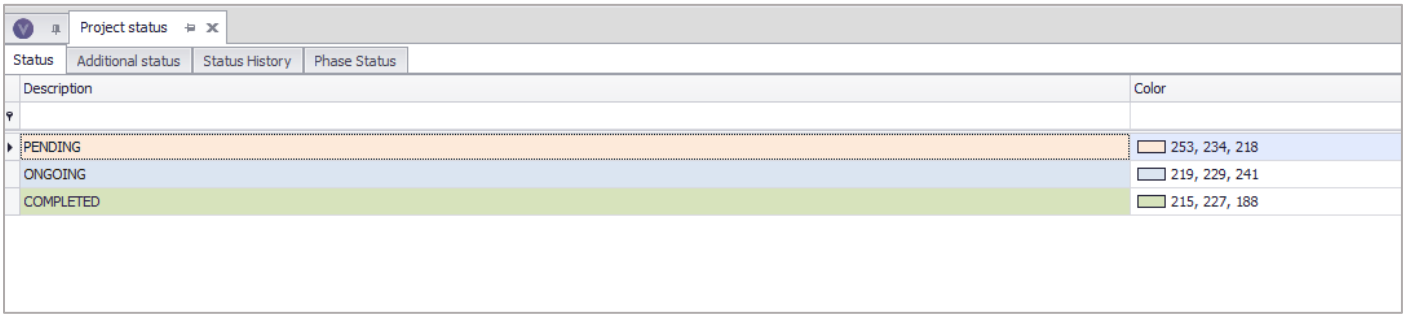


Image 1.5.1

The following fields are also provided: Additional Status, Status History and Phase Status **(PM Module). Image 1.5.2**

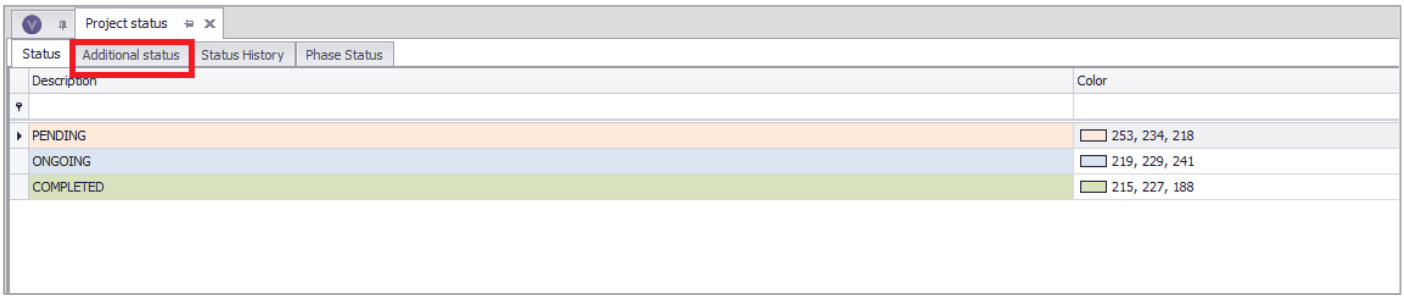


Image 1.5.2

Additional status: An additional status that allows us to track the progress of a project

Status history: Acts as a reminder for the delivery of the project. The project's status history is updated using the respective icon, based on the project end date

Status history appears on the project grid.

Phase status: PM Module

3 FSM ACTIONS

3.1 WORKORDER CREATION:

The administrator assigns tasks to the technicians, filling in all the information that appears in the Edit tab **(Image 2.1.1)**

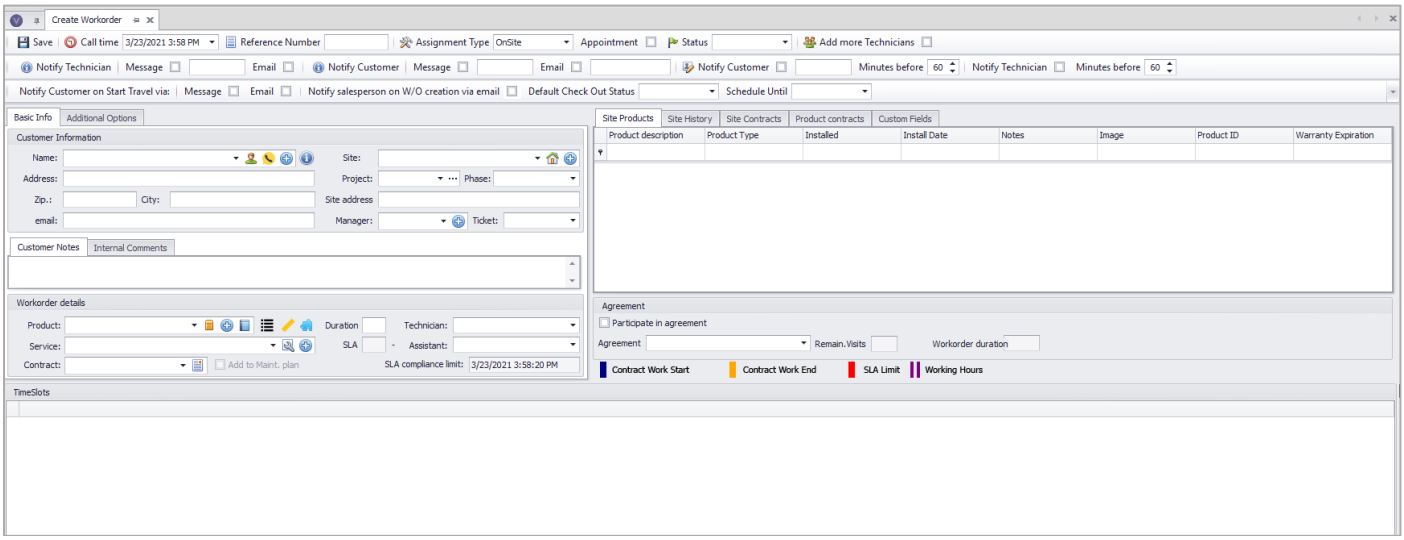


Image 2.1.1

More specifically, a workorder contains the following basic information:

Company name: Once the customer's company name has been entered, the customer's exact information will be displayed, such as Address, Postcode, City. With the icon we can create a new customer.

Site: Here we can select the workorder's site. With the icon we can create a new customer site. The icon displays all the information about the site.

Project: Information about the relevant project, if any, is filled in.

Site address: The address of the site that is selected above is automatically filled in.

Manager: The project manager.

Ticket: Allows us to select a Ticket (related workorder), if there is one.

Issue description: A comment added by the administrator to help the technician better understand the issue at hand and speed up the customer response time. Optional field.

Workorder Information

Product: The product/device for which the visit has been scheduled. The icon will display all product information (attributes, product contracts, etc.). By clicking on , we can select more products belonging to a site. The icon will take us directly to the list with all of the company's products, in order to open a new product that

is not yet available. By clicking on the icon, the administrator opening the workorder can enter the latest product measurement (optional field), prior to the technician's the visit **(Image 2.1.2).** With the icon we can select the consumables or spare parts that the technician must carry with him.

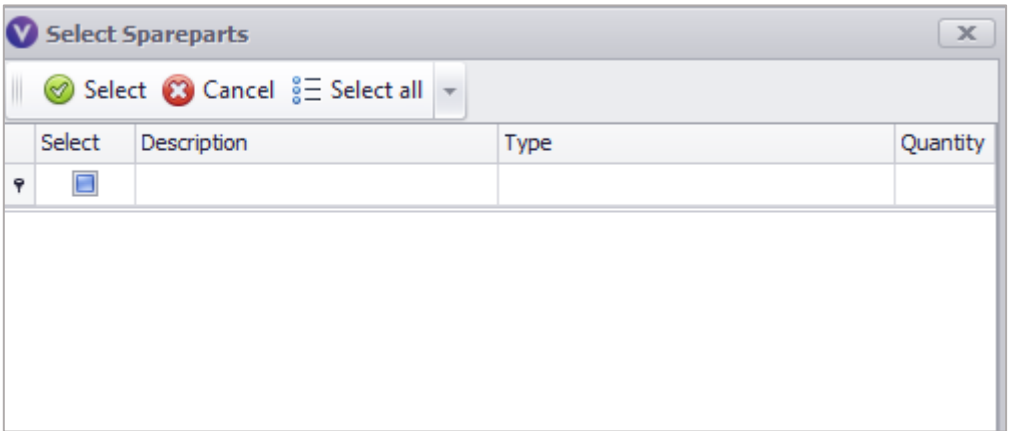


Image 2.1.2

Service: Service/task to be performed. The icon will take us to the information of the selected service. The icon will take us directly to the list with all of the company's services, in order to open a new service that is not yet available.
Duration: Estimated time needed to complete the task. The duration is based on the service that we have chosen (for each service an estimated duration is defined).
Contract: Allows us to choose a customer contract.
SLA **(Service Agreement Level)**: Guaranteed service level agreement (SLA) between the company and the customer. For example, an SLA may refer to the response and resolution time when an issue has been reported. The SLA is defined in the product or customer contract. The SLA is always defined in **minutes**. If the date or time chosen exceeds the SLA limits, as shown in Timeslots, the software will display a notification (SLA Confirmation). **Image 2.1.3**

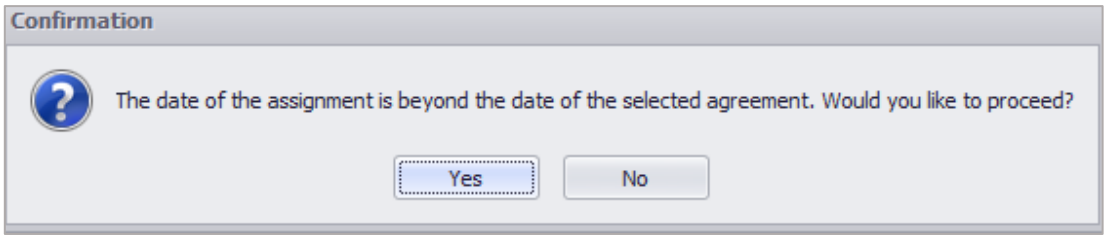


Image 2.1.3

Technician: A specific technician is assigned to the job on the scheduled date and time.

Technician Assistant: This field is completed when a second technician is assigned to the site.

The schedule (**Timeslots**) of the technician we have chosen appears at the bottom of the tab. Timeslots may last half an hour or one hour. This is a parameter that is defined by us, as explained later on (**Settings -> Parameters -> Company Settings**). The assistants available on the same day and hour are displayed once the time of the visit has been selected. **(Image 2.1.4)**

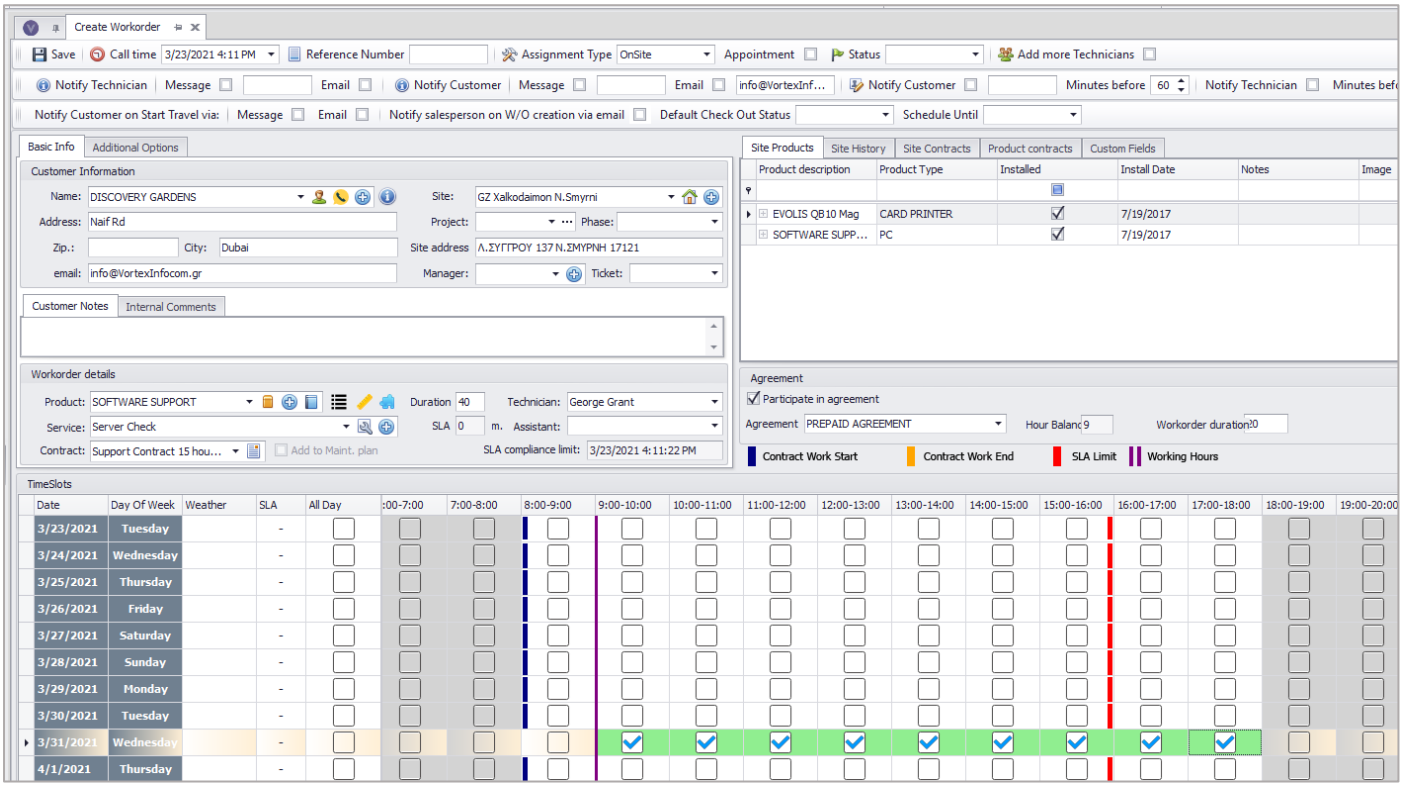
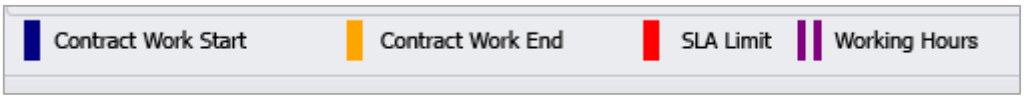


Image 2.1.4

For a more efficient use of the slots, the working hours of the technicians are divided into the following categories:



Contract Work Start: Shows us when the contract service hours begin once we choose a contract in the workorder. We can fill in the service hours in the **Contracts** section (as seen above)
Contract Work End: Informs us on when the contract service hours end
SLA Limit: Displays the SLA limit that has been defined for the contract
Working Hours: Displays the technician's working hours

Additional options (Image 2.1.5)

The following fields are optional.

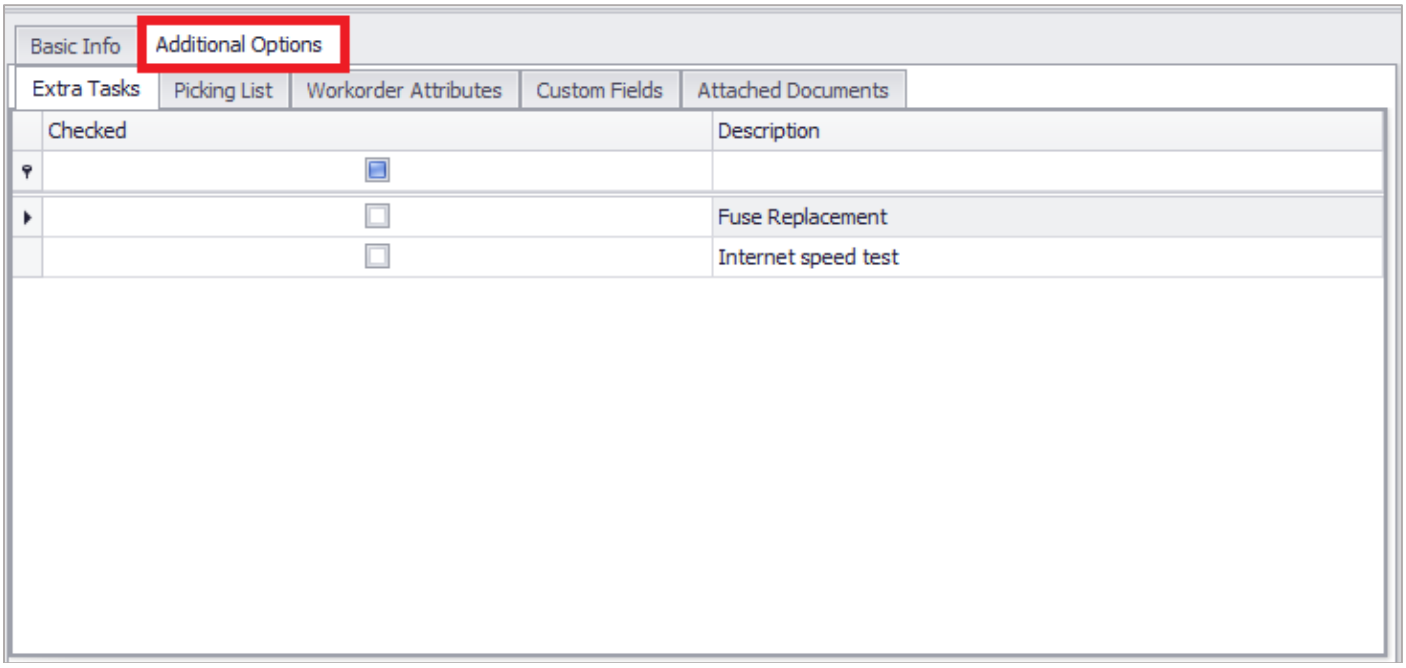


Image 2.1.5

Extra tasks: Here we enter any additional actions that we want the technicians to carry out while on their visit to the customer (e.g. receive payment for the work completed). The extra steps are customizable and created by us (as will be discussed later on). So when a workorder contains additional steps, the technician can NOT finalize the Service Report if these extra tasks have not been completed/ performed.
Picking list: Allows us to add any consumables or spare parts along with the recommended quantity that the technician should have with him. We fill in the quantity and, if the software is connected with an updated ERP, the warehouse inventory is also updated – provided that the technician uses a picking list (and that spare parts are used during the appointment).
Workorder ratings: Allows us to define ratings to better control workorders internally. These ratings may be created in **Settings** ->**Workorder Parameters**.
Custom fields: Workorder custom fields that we have created in the Settings.
Attached documents: Allows files to be attached by the administrator.

Agreement -> *Participation of a workorder in an agreement*. Allows us to define whether we want to deduct hours/visits from the agreement for a specific job (usually refers to pre-purchased support hours or on-site visits). If we do not want to deduct hours from this workorder we do not select the check box **Participation of a workorder in an agreement (Image 2.1.6).**

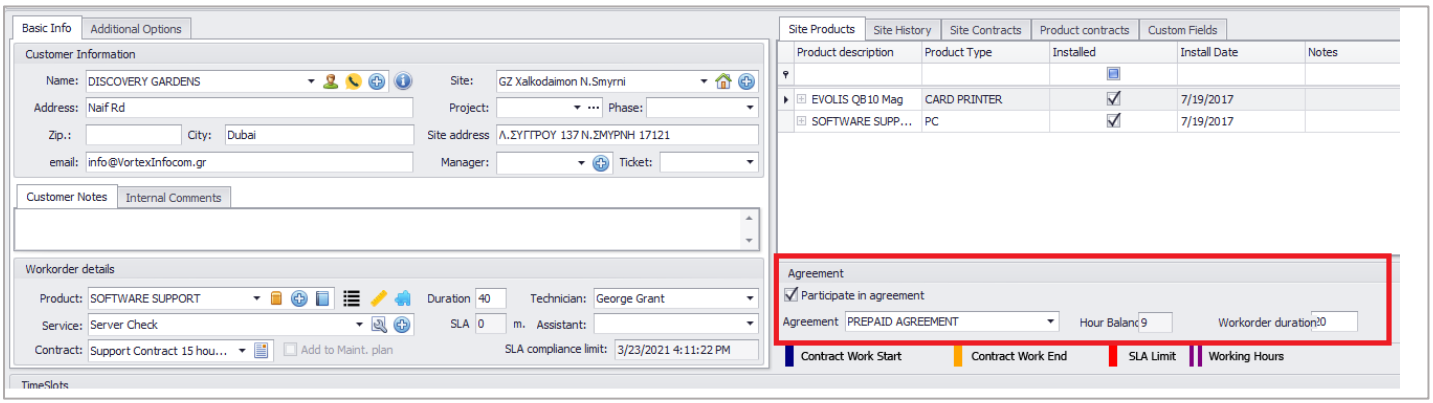


Image 2.1.6

A menu at the top right corner of the page displays information about the site of the Service Report **(Image 2.1.7).**

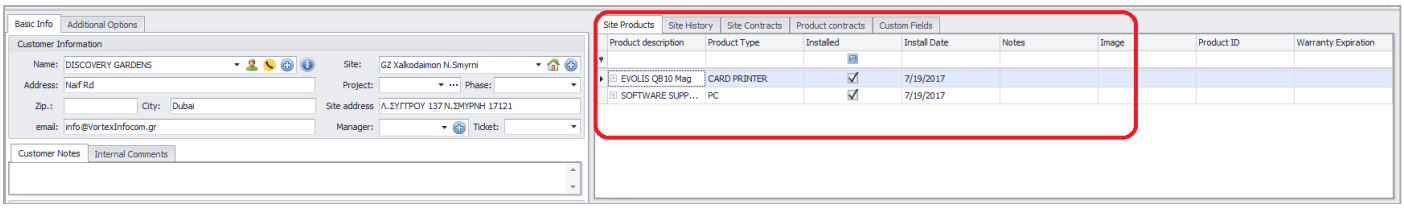


Image 2.1.7

Site Products/ Site History/ Contracts/ Product Contracts

Once all the necessary fields of the workorder have been completed, the following actions will become available: ***(Image 2.1.8)***

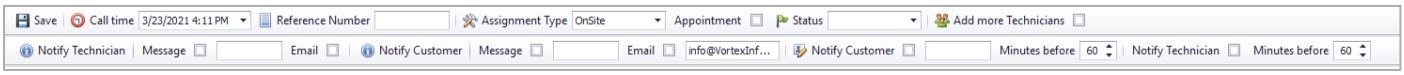


Image 2.1.8

Save: Saves the workorder.
Add more technicians: This field should be filled in when we want to assign the same work to more than one technician. In this case, each technician has his own workorder. The **Technicians Calendar** will contain two different appointments for that day and time.

Notify technician: Notifies technicians about their new workorder by SMS or email (both options may be selected).
Notify customer: Notifies customers about their appointment by SMS or email (both options may be selected).
In the **Additional settings** menu, we can ask for a reminder to be sent by SMS to both the technician and the customer about their appointment. The minutes prior to which the technician and the customer will be notified are defined by us.

3.2 TECHNICIANS ACTIONS

These are digital Service Reports which are completed by technicians when they finish their work.

A technician reports all the information concerning the work undertaken:
§ Basic customer information. The system allows users to select a customer from the existing customer base or to create a new customer using the icon . Clicking the icon takes us to the customer's information. The icon displays the site's phone numbers. *Attention:* Only the phone numbers of the site are displayed and not its contacts.
The icon allows us to send an SMS to the customer (max. 150 characters). To do so, it is necessary to have purchased credits from YUBOTO.

- Project: The customer project (if there is an open project) which the Service Report refers to.
- Phase: PM Module
- Ticket: Allows users to select the Ticket (related workorder), if any.
- Contract: Automatically updates the field with the site's contract (if any).
- Date/ Start Time/ End Time: Allows users to enter the date and time of the scheduled visit.
- Service: The service which the Service Report refers to.
- Product: The product/device which the Service Report refers to. The icon will create a new product within the site. The icon will add products within the same workorder. In this case, two technician workorders are automatically created, one for each product.
- Display and selection of spare parts that have been linked to the workorder product. The way products are linked to the spare parts will be explained later on (Warehouse > Products).
- The details of the technician to whom the job has been assigned.
- Status: The status of the job, tracked according to its progress and outcome.
- Type: In-house/ Remote technical support/ On-site support with the presence of a technician at the customer site, etc.
- Participation in an agreement: The check box is activated if the customer has bought prepaid hours of technical support for the specific project. If the customer has a prepaid agreement, the hours are automatically deducted from the agreement at the end of the visit.

Timestamps: Reflects the exact time that the actions were undertaken in the Service Report **(Image 2.2.1)**

Timestamps

...	Action	Action Time	Address	...
	CallTime	11/20/2020 1:34 PM		
	DateTimeCreated	11/20/2020 12:34 PM		
	AcceptedTime			
	StartTravel			
	CheckIn			
	StartWork			
	CheckOut			
	ReturnToBase			

Image 2.2.1

- Call Time: The moment when the administrator opens the Workorder/Service Report
- Start Travel: The technician's departure time for the site of the damage
- Check In: The technician's arrival time at the site of the damage
- Check Out: The technician's departure time from the customer site

The following information is provided below ***(Image 2.2.2)***:

Image 2.2.2

BASIC INFORMATION OF A SERVICE REPORT

- Detailed description of the issue.
- Actions taken to address the issue.
- *If the issue involves on-site work, which means that the technician fills in his Service Report from his cell phone, the form is completed and signed both by the Technician and the Customer using a digital signature.*
-

Here, we can add more information on a Service Report in addition to its basic information **(Image 2.2.3)**

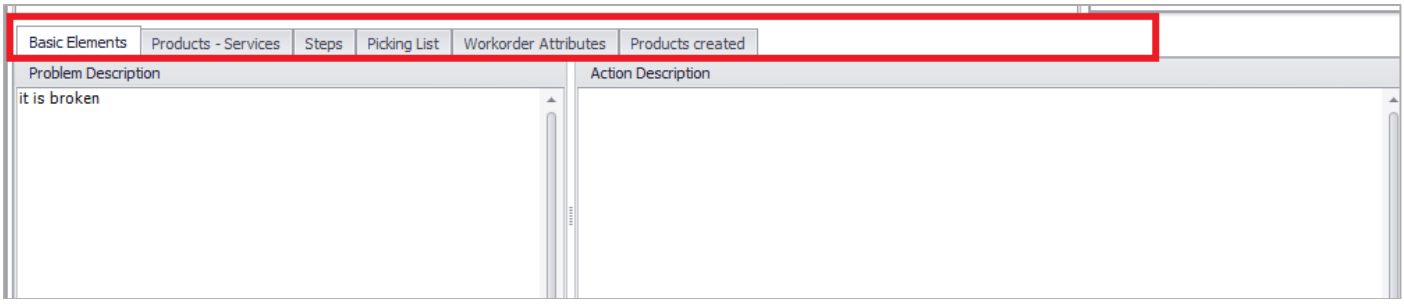


Image 2.2.3

- Products-Services: Any material used (spare parts and fixed assets). Services performed, as confirmed by the technician once his visit to the customer has been completed. **(Image 2.2.4)**

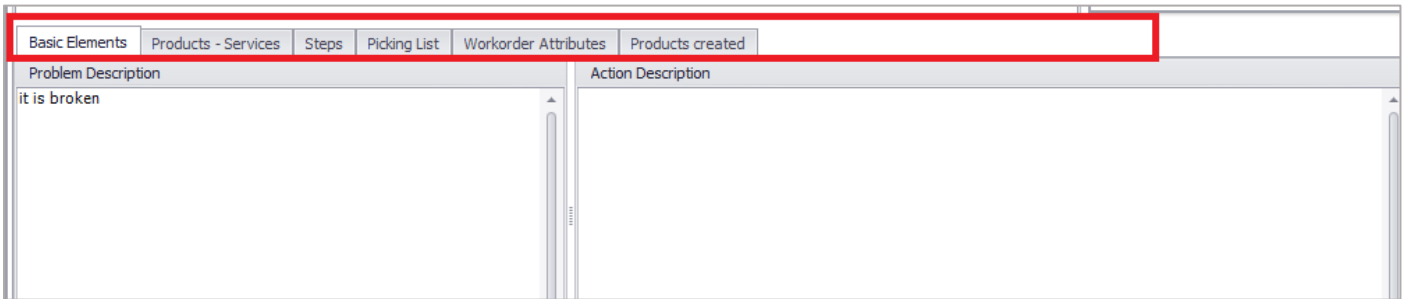


Image 2.2.4

- Steps – Mandatory Service Checklist: Optional field, in case there is a checklist to be used by the technician during a service. The mandatory checklist is defined on the service. Extra tasks: Displays the extra tasks that must be performed by the technician. This field is defined by the administrator during the creation of the workorder (as we have seen in the previous section).

- Picking List – Workorder Ratings, Custom Fields: These fields were analysed in the previous section (Workorder Creation-> More Options).

The fields at the bottom of the Service Report show us information about the cost of the work performed **(Image 2.2.5)**

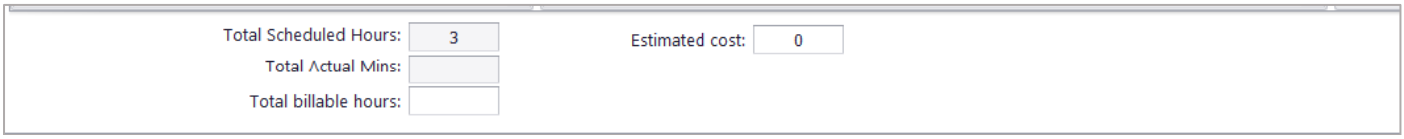


Image 2.2.5

In more detail:

- Total Scheduled Hours: The hours are automatically calculated according to the Start/End Time fields we have filled in above.
- Total Actual Minutes: The minutes are automatically calculated according to the technician's Check In-Check Out time from the customer site.
- Total Billable Hours: Optional field. The user indicates the number of hours the customer will actually be billed.
- Estimated Cost: The cost of the work performed.
- Cost Estimation: If the software is connected with a business management program, this field is automatically updated with the cost of the services provided and the spare parts used (based on the prices that we have defined in the ERP software).

Action Bar: The action bar is found at the top of the Service Report and includes the following actions: **Image 2.2.6**

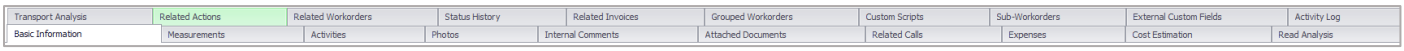


Image 2.2.6

Measurements: Displays the measurements made by the technician during his visit to the customer. The attributes of the measurement are custom fields and are created in the **Measurable Attributes** section that we will see below.
Activities: Allows users to enter any activity undertaken by the technicians, in addition to their main work.
Photos: Allows photos to be attached. Displays the photos taken by technicians on their mobile.
Internal Comments: Any important information that the technician may want to add regarding the visit. Information that is NOT seen by the customer and is not transferred to the Service Report when it is sent to the customer.
Attached Documents: Allows files to be attached.
Related Calls: If the Workorder/Service Report has been created by the Call History, the call details are displayed. **(Image 2.2.7)**

Image 2.2.7

Expenses: The general expenses of a Service Report (i.e. travel expenses)

Pricing: Information that is filled in by technicians on their mobile
Read Receipts: Shows the names of the technicians and the moment the Service Report was opened on their mobile
Transfers with Other Means: Not used
Related Actions: CRM actions (CRM Module)
Related Workorders: Tickets (described in more detail later on)
Status History: Logs all changes in terms of status
Related Invoice: CM Module

Save Saves the Service Report along with all the information completed **EXCEPT** for the Internal Comments. When a workorder is saved, a dialogue box appears with the following options **(Image 2.2.8)**

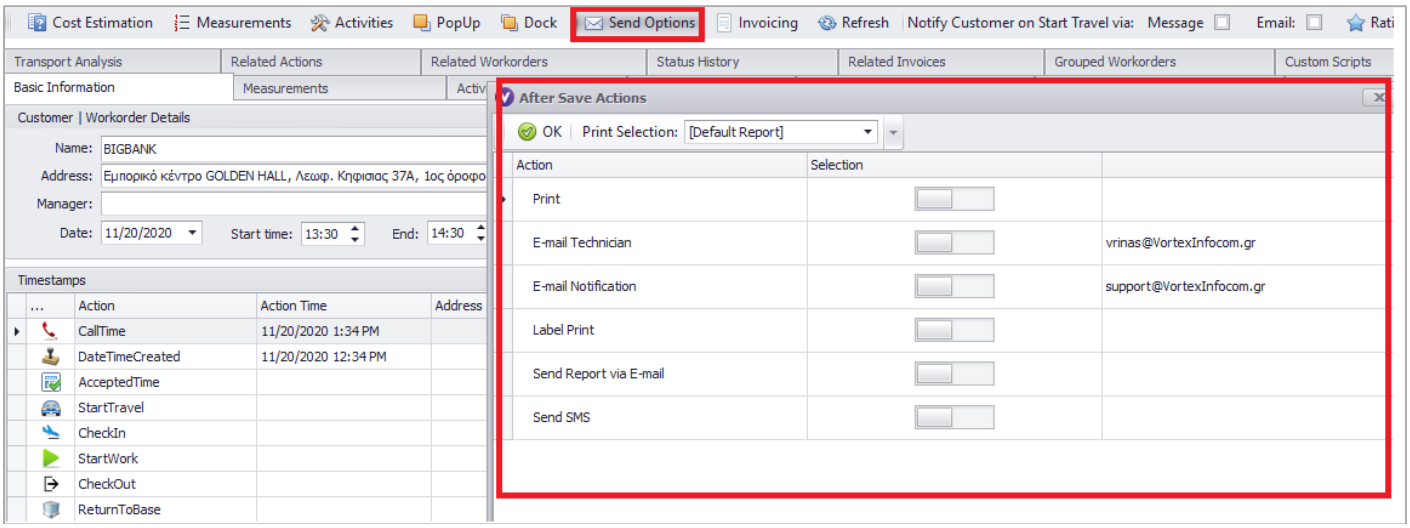


Image 2.2.8

Print: Prints the information of a Service Report
Select Form: Allows users to select a different workorder form than the default one
Email to Technician: Sends an email to the technician with the Service Report as an attachment
Email to Customer: Sends an email to the customer (i.e. *Dear Mr. ....., the technician will be at your site at 3 pm.”*. In the Settings we can create the text will be used
Print Label: By connecting a barcode printer to the program we can print a label for each technician action. The information displayed on the label is fully customizable. When the label’s barcode is scanned, the relevant Service Report appears. By clicking on **Settings -> Workorder Custom Fields**, we can choose if we also want a label to be printed when saving the workorder
Send Service Report by Email: Sends the Service Report’s information by email
Send SMS: Sends the Service Report’s information by SMS

The following options are available at the top of the Service Report **(Image 2.2.9)**

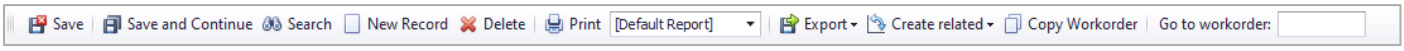


Image 2.2.9

Save: Saves the Service Report
Save and Continue: Saves entries and allows users to remain in the Service Report page in order to make any additions or corrections
Search: Searches in the Service Report list
New Entry: Creates a new Service Report
Delete: Deletes the Service Report
Print: Prints the Service Report (also prints the Attributes, Latest Measurements and Mandatory Checklist)
Export: Exports the Service Report in PDF/Excel/Word
Related Workorder: Creates a new related workorder (ticket). Displays a form with the fields to be copied to the new workorder. **(Image 2.2.10)**

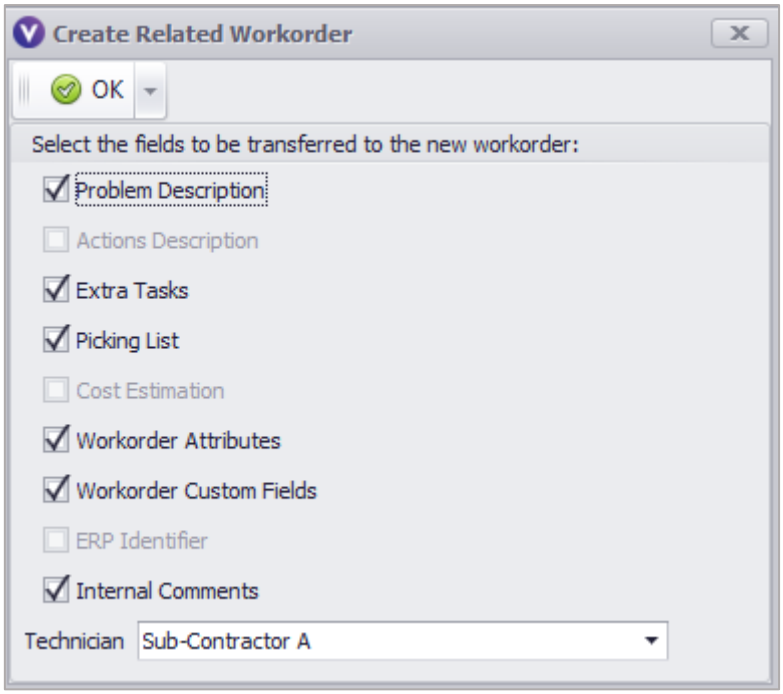


Image 2.2.10

Copy Workorder: Copies a workorder, along with any information on the additional technician
Go to Workorder: Searches for a workorder using its ID
Cost Estimation: Allows users to manage the cost estimation save function for every Service Report separately and make any changes they deem necessary
Measurements: Measurements made by the technician
Activities: Allows technicians to enter an activity in the Service Report. **Service Report Activities** will be discussed later on
Pop-up: Service Report pop-up window
Dock: Reset button. Closes the pop-up window
Send Options: The following send and print options are made available to the administrator once he has filled out the Service Report **(Image 2.2.11)**

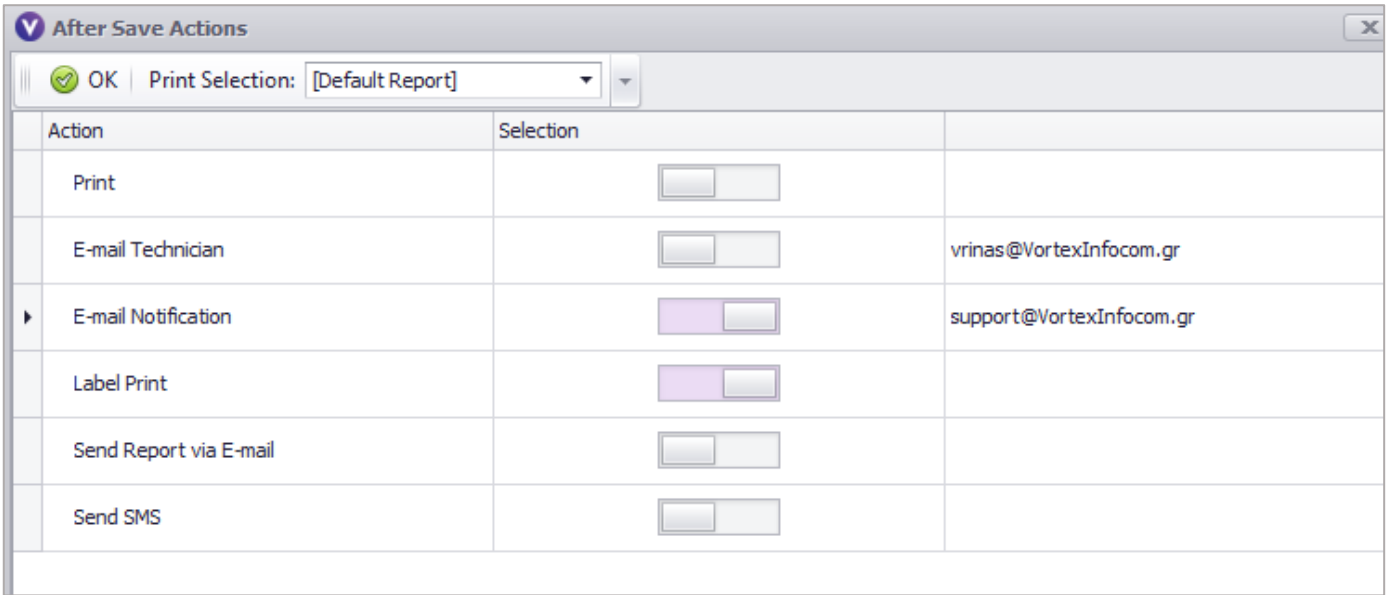
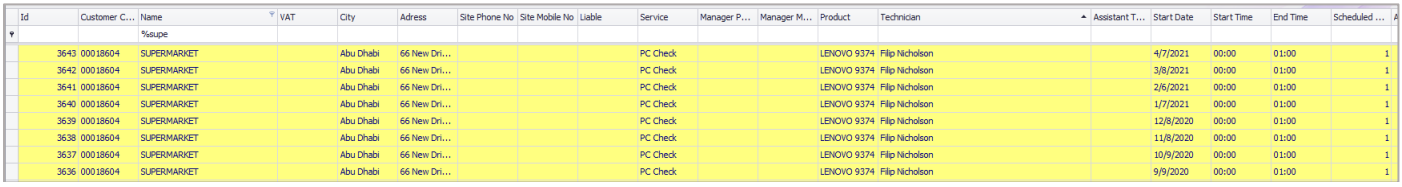


Image 2.2.11

3.3 TECHNICIAN SERVICE REPORTS

Users may search for a Service Report using a variety of filters. The search filters allow users to refine their search and make it easier for them to find the Service Report they are looking for **(Image 2.3.1)**. The search can be easily performed using the **%** or ***** symbol while typing part of the word.
Lower-case or upper-case letters may both be used for the search without affecting the results.

*Use the % or the * symbol to perform a search anywhere the search box appears in the program*.



Id	Customer C...	Name	VAT	City	Adress	Site Phone No	Site Mobile No	Liable	Service	Manager P...	Manager M...	Product	Technician	Assistant T...	Start Date	Start Time	End Time	Scheduled ...
		%supe																
3643	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		4/7/2021	00:00	01:00	1
3642	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		3/8/2021	00:00	01:00	1
3641	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		2/6/2021	00:00	01:00	1
3640	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		1/7/2021	00:00	01:00	1
3639	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		12/8/2020	00:00	01:00	1
3638	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		11/8/2020	00:00	01:00	1
3637	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		10/9/2020	00:00	01:00	1
3636	00018604	SUPERMARKET		Abu Dhabi	66 New Dri...				PC Check			LENOVO 9374	Filip Nicholson		9/9/2020	00:00	01:00	1

Image 2.3.1

3.4 DAY VIEW

The **Workorders** tab provides an overview of all scheduled appointments per day per technician and displays all the sites on a map. In order to transfer a workorder to a different time or to a different technician, we can use the **Drag & Drop** function **(Image 2.4.1)**

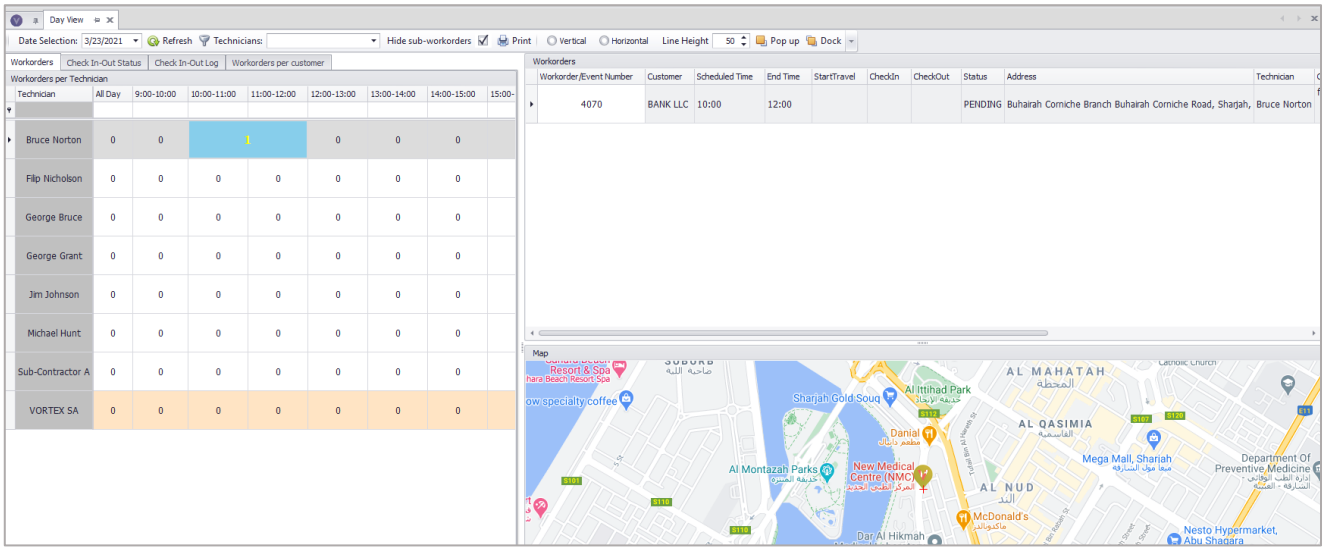


Image 2.4.1

The **CheckIn-Out Status** gives us an overview of the actual arrival time (CheckIn) and departure time (CheckOut) of the technician from the customer site. **(Image 2.4.2)**

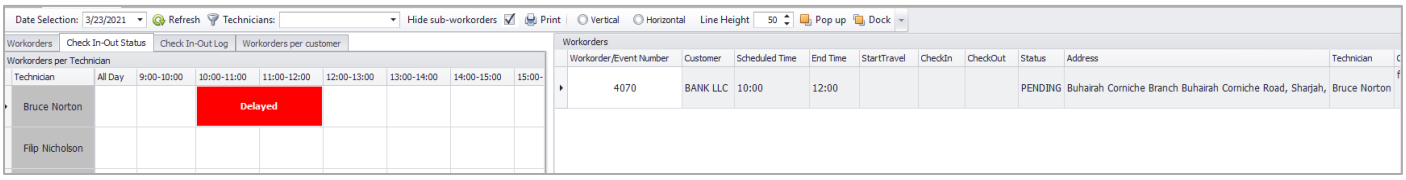


Image 2.4.2

The **CheckIn-Out Log** uses a real-time map to show the technician's actual start time for the customer premises (Start Travel), his arrival time (CheckIn) and his departure time from the customer site (CheckOut).

The **Workorders per Customer** field shows all the workorders for each customer on a specific day.

3.5 TECHNICIANS CALENDAR

Displays tasks and allows users to manage them using a flexible calendar.
The Technicians Calendar shows the scheduled tasks and their duration. Calendar entries can be dynamically edited. The **Drag & Drop** function allows us to change the day or time of an entry. Also, with a double-click we can open the Service Report and make any modifications we want **(Image 2.5.1)**

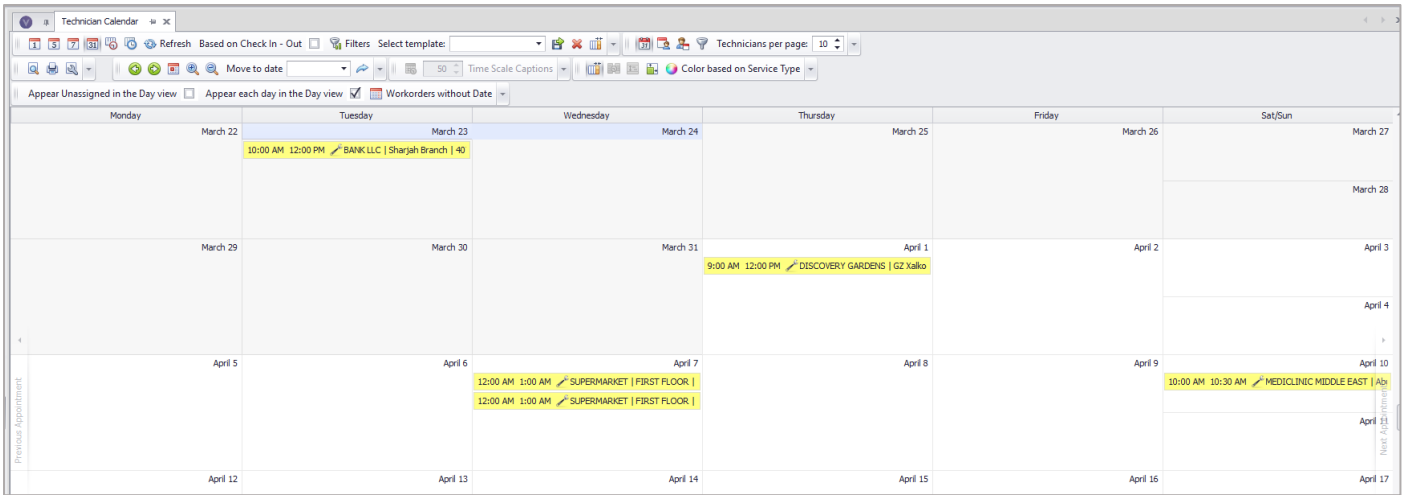


Image 2.5.1

Toolbar

Displays calendar in day, week and month view

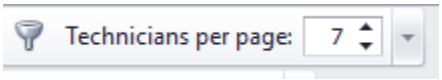
Displays calendar per user

Displays tasks on a timeline

Print preview

Print calendar

Navigation that enables us to move to the previous/next month/week/day (depending on the view chosen - see above)



Technicians per Page: allows users to define the number of technicians whose schedule will be displayed on the page

Filters: Allow users to filter calendar entries. The returned search results will be limited to only those items matching the filters **(Image 2.5.2)**

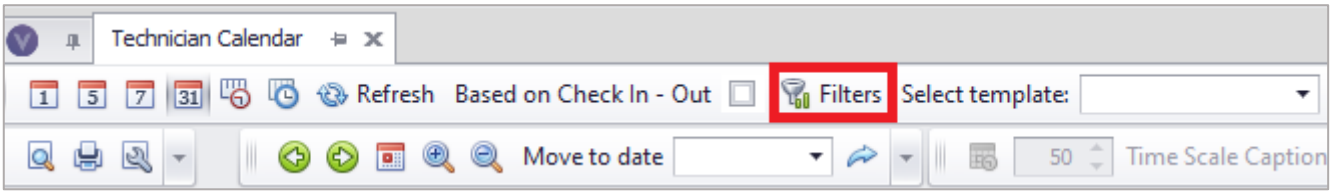


Image 2.5.2

The following search filters have been added to the Technicians Calendar so that users can quickly find the workorders they are looking for:

- Customer
- Site
- Status
- Service
- Workorder Type
- Project

Finally, with a right click, a new workorder or event can also be created from the Calendar **(Image 2.5.3)**.

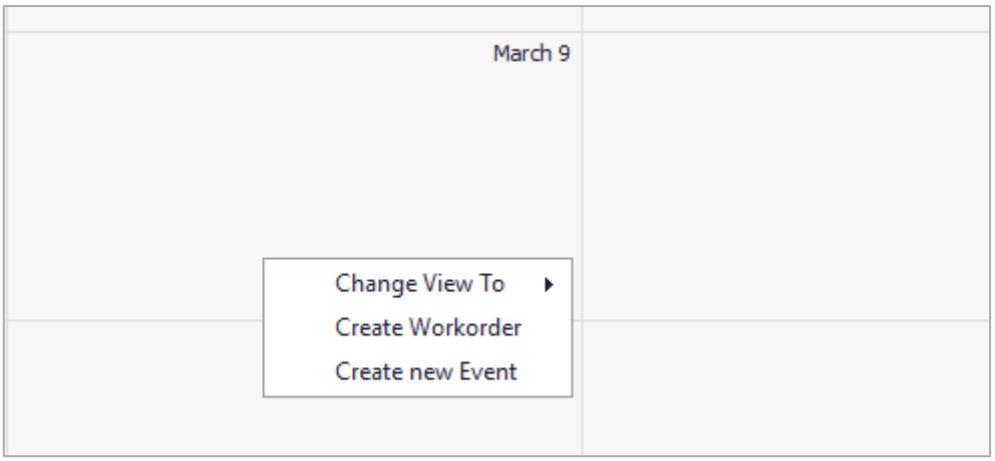


Image 2.5.3

A pop-up balloon containing the basic information of a customer/site (custom fields) will appear on the Technicians Calendar when we move the mouse over a workorder **Image 2.5.4**

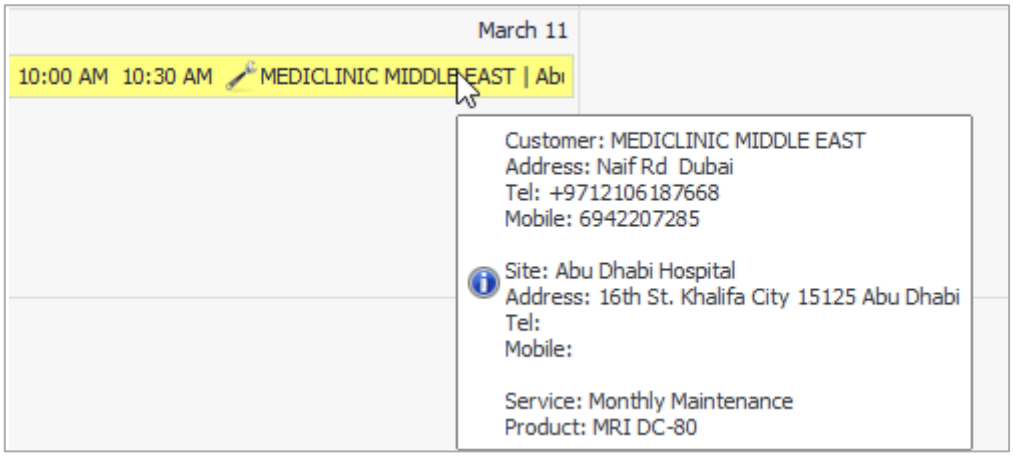
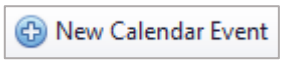


Image 2.5.4

3.6 EVENTS CALENDAR

In the **Events Calendar** we enter all the activities undertaken by technicians/employees that do not involve technical tasks, without filling in a Service Report. We enter and manage all their other obligations/activities (e.g. meetings, appointments with prospective clients to determine their needs, salespersons support on technical matters).
This way we can easily monitor all their tasks and know their availability at all times of the day.

How do we create a calendar event?

We click on 

to open a window which allows us to create a new calendar event **(Image 2.6.1)**:

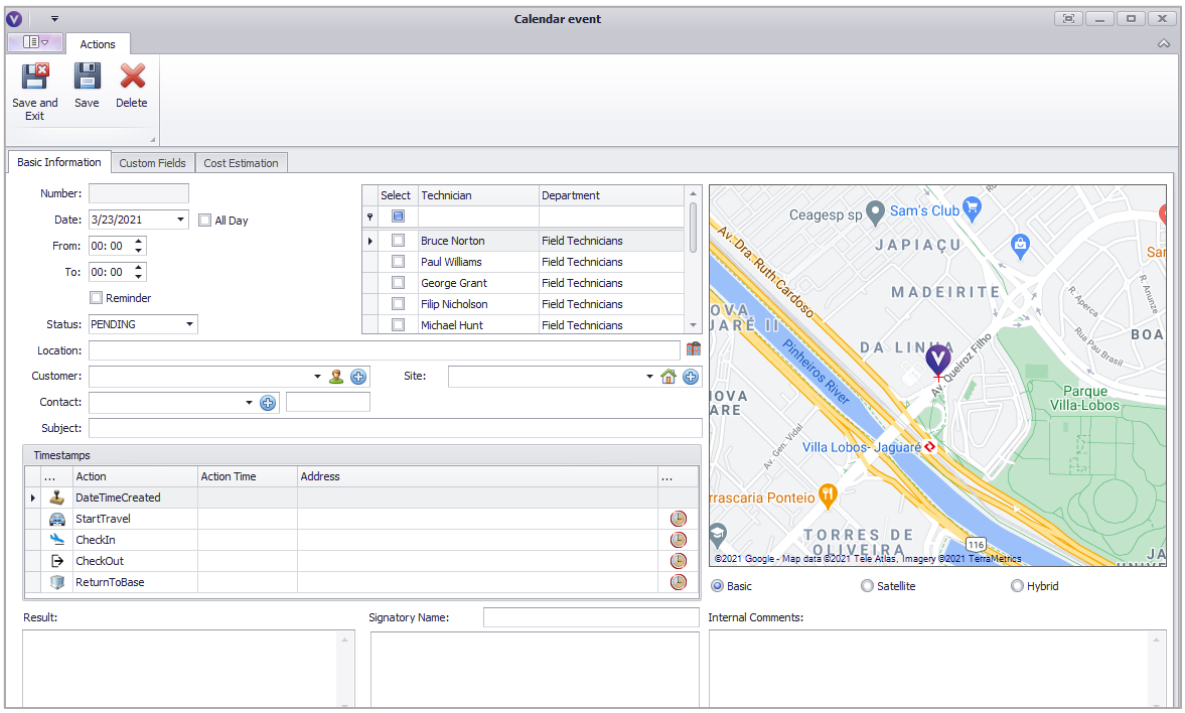


Image 2.6.1

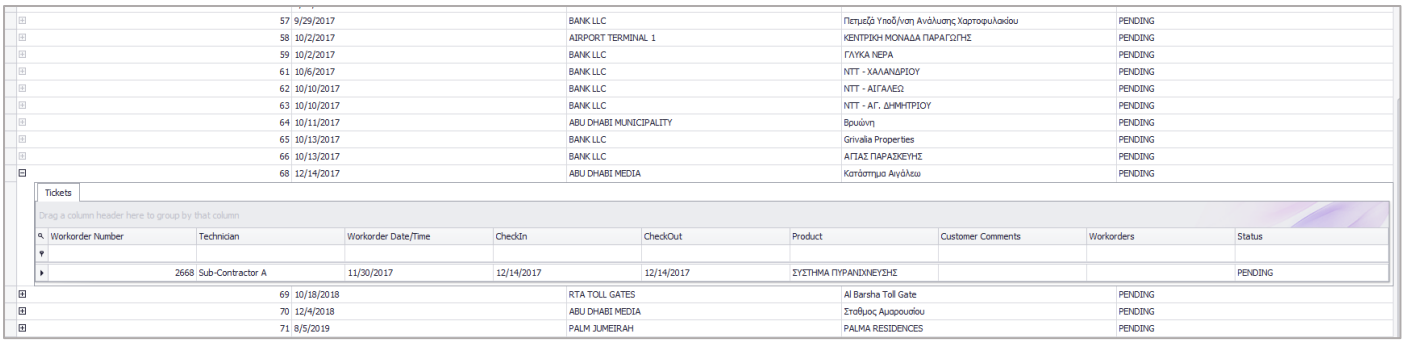
We enter the relevant information (date & time, customer, site, title). We select the All Day checkbox at the top if the event is scheduled to last all day. We can also add a number of participants to the event. In this case, the events created are as many as the people attending. Each subcontractor has their own event in their calendar.

The event will appear on the **Technicians Calendar** and on the **Day View** tab.

The **Pricing** tab displays billing and collection information added by the technician to the event from his mobile phone.

3.7 RELATED WORKORDERS

Tickets: When we create a new workorder based on an existing Service Report, the program **automatically** creates a Ticket, in order to link these two forms (Related Workorders). This allows us to create a set of two or more tasks. Clicking on the + icon will open the ticket and show us the Workorders/Service Reports that have been linked **(Image 2.7.1).**



57	9/29/2017	BANK LLC	Πεπμεζά Υποδ/νση Ανάλυσης Χαρτοφυλακίου	PENDING
58	10/2/2017	AIRPORT TERMINAL 1	ΚΕΝΤΡΙΚΗ ΜΟΝΑΔΑ ΠΑΡΑΓΩΓΗΣ	PENDING
59	10/2/2017	BANK LLC	ΓΛΥΚΑ ΝΕΡΑ	PENDING
61	10/6/2017	BANK LLC	NTT - ΧΑΛΑΝΔΡΙΟΥ	PENDING
62	10/10/2017	BANK LLC	NTT - ΑΙΓΑΛΕΩ	PENDING
63	10/10/2017	BANK LLC	NTT - ΑΓ. ΔΗΜΗΤΡΙΟΥ	PENDING
64	10/11/2017	ABU DHABI MUNICIPALITY	Βρυώνη	PENDING
65	10/13/2017	BANK LLC	Grivalia Properties	PENDING
66	10/13/2017	BANK LLC	ΑΓΙΑΣ ΠΑΡΑΣΚΕΥΗΣ	PENDING
68	12/14/2017	ABU DHABI MEDIA	Κατάστημα Αιγάλεω	PENDING

Tickets

Drag a column header here to group by that column

Workorder Number	Technician	Workorder Date/Time	CheckIn	CheckOut	Product	Customer Comments	Workorders	Status
2668	Sub-Contractor A	11/30/2017	12/14/2017	12/14/2017	ΣΥΣΤΗΜΑ ΠΥΡΑΝΙΧΝΕΥΣΗΣ			PENDING

69	10/18/2018	RTA TOLL GATES	Al Barsha Toll Gate	PENDING
70	12/4/2018	ABU DHABI MEDIA	Σταθμος Αμαρουσίου	PENDING
71	8/5/2019	PALM JUMEIRAH	PALMA RESIDENCES	PENDING

Image 2.7.1

3.8 SERVICE TIME ZONES

Users may divide services into zones/service hours (services with a **different cost/price** per zone). Services are usually divided into zones when working hours are prolonged and there is a pricelist differentiation **(Image 2.8.1). The cost of the various service zones is completed in the Services section** (as will be explained later on).

Service time zones

From	To
09:00	17:00
17:01	19:00
19:01	21:00

Image 2.8.1

3.9 SERVICE REPORT ACTIONS

Service Report actions are filled in by the technicians when they want to add one or more transactions/ actions in the Service Report.

For example, Service Report actions may be used after an appointment to monitor workflows more efficiently.

The **Add** icon at the bottom left of the form allows us to add descriptions to those Service Report actions that we can open (for example, follow-up or creation of a price quote); actions which are usually associated with the quality of work and customer service **(Image 2.9.1)**.

Workorder Actions

Find Clear

Code	Description	Active
000001	Outbound Customer Call	☑
000002	Supplier Order	☑

Image 2.9.1

3.10 EXTRA TASKS

The **Add** button at the bottom left of the form allows us to add any Extra Tasks (Steps) **(Image 2.10.1)**.

Mandatory Measurement is an optional field for when we want to specify that in order to complete an extra task there must also be a mandatory measurement. Mandatory measurements are created in the **Warehouse** tab -> Measurable attributes **(Image 2.10.1)**.

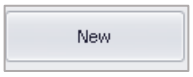
Extra Tasks

Description	Mandatory Measurement
Fuse Replacement	Yes/No
Internet speed test	Download

Image 2.10.1

3.11 PROCEDURES

Allows users to enter the technical instruction manuals to which technicians also have access from their device, allowing for a swift and efficient on-site resolution of the issue.

To create a new procedure, click on 

and select **Blank Document (Image 2.11.1)**.

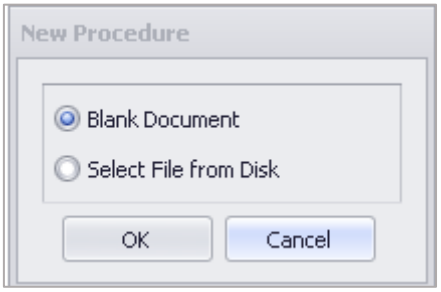


Image 2.11.1

This opens an Edit tab with the following options ***(Image 2.11.2)***:

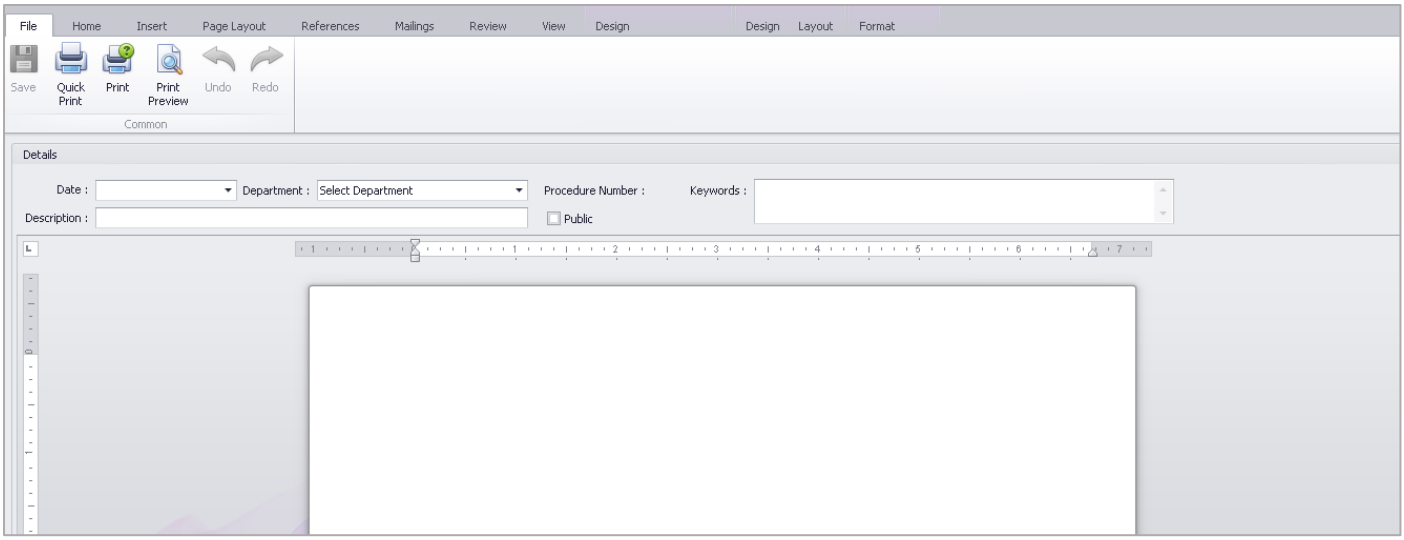


Image 2.11.2

Date: The date on which the procedure is published

Department: The department to which the procedure belongs or applies

Description: The title of the procedure

Keywords: The words or phrases that are representative of the procedure. This allows users to quickly identify the necessary procedure by entering the right keywords in the search box **(Image 2.11.3)**.

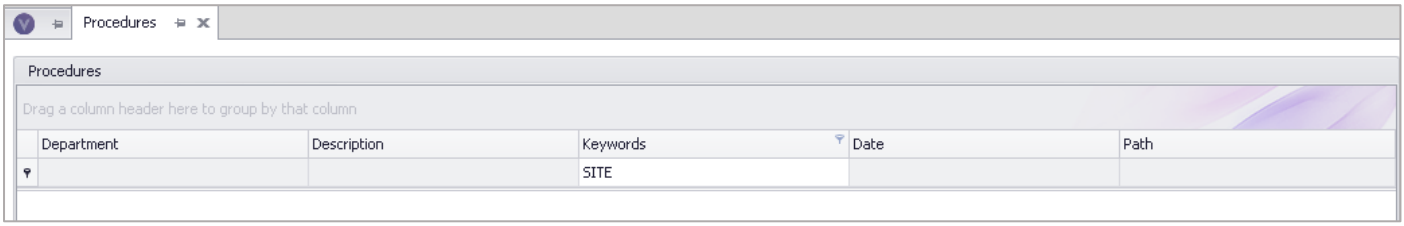


Image 2.11.3

Double-clicking allows users to open the procedure and to print the relevant file **(Image 2.11.4)**.

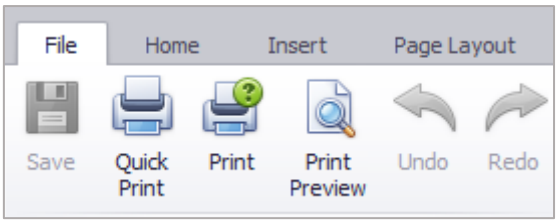


Image 2.11.4

We can also upload a file from a shared folder on the network (sharing documents with other computers) **Image 2.11.5**

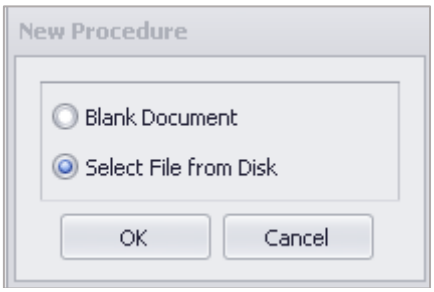


Image 2.11.5

From the Edit tab that has been opened, select **File upload** in the File field. A new window will open containing your computer's files-folders so that you can select and upload the file you want to use. (**Image 2.11.6)**

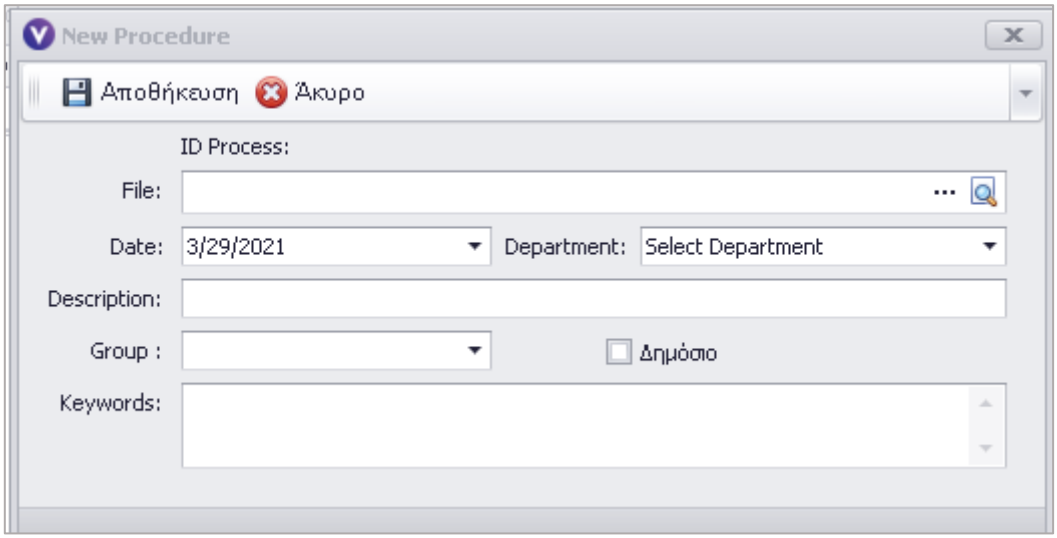


Image 2.11.6

3.12 MAIL MANAGEMENT

Mail Management allows users to **archive** and **manage** all incoming emails sent to the Technical Department **(Image 2.12.1)**.

The administrator defines which emails need to be archived by the application and managed by the Technical Department.

After processing the email, the technician marks the task as **Completed** by double-clicking on the respective column. This applies a **green** colour coding to the email while the username of the technician is automatically filled in so that the administrator and the rest of the department know who completed the task.

If a task is not completed in due time, it will be marked as pending and displayed in **red** to underline that it has not been processed within the specified time period.

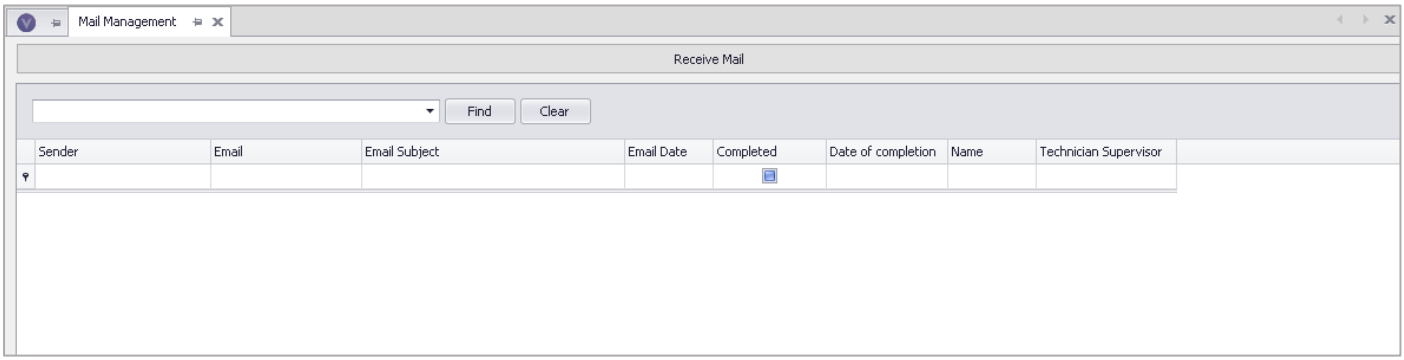


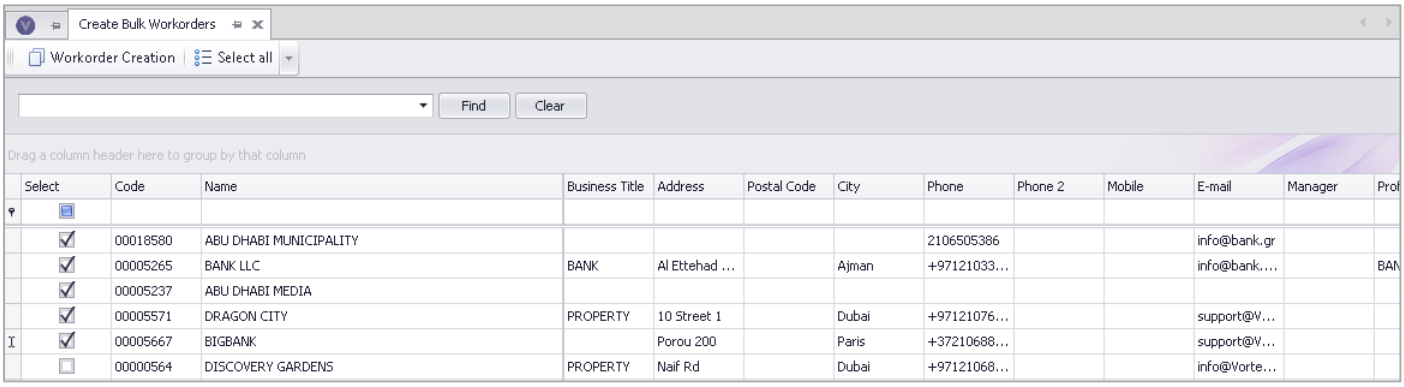
Image 2.12.1

3.13 CREATE BULK WORKORDERS

The <Create Bulk Workorders> menu allows us to simultaneously create workorders with common criteria in multiple customer sites.

How do we create bulk workorders?

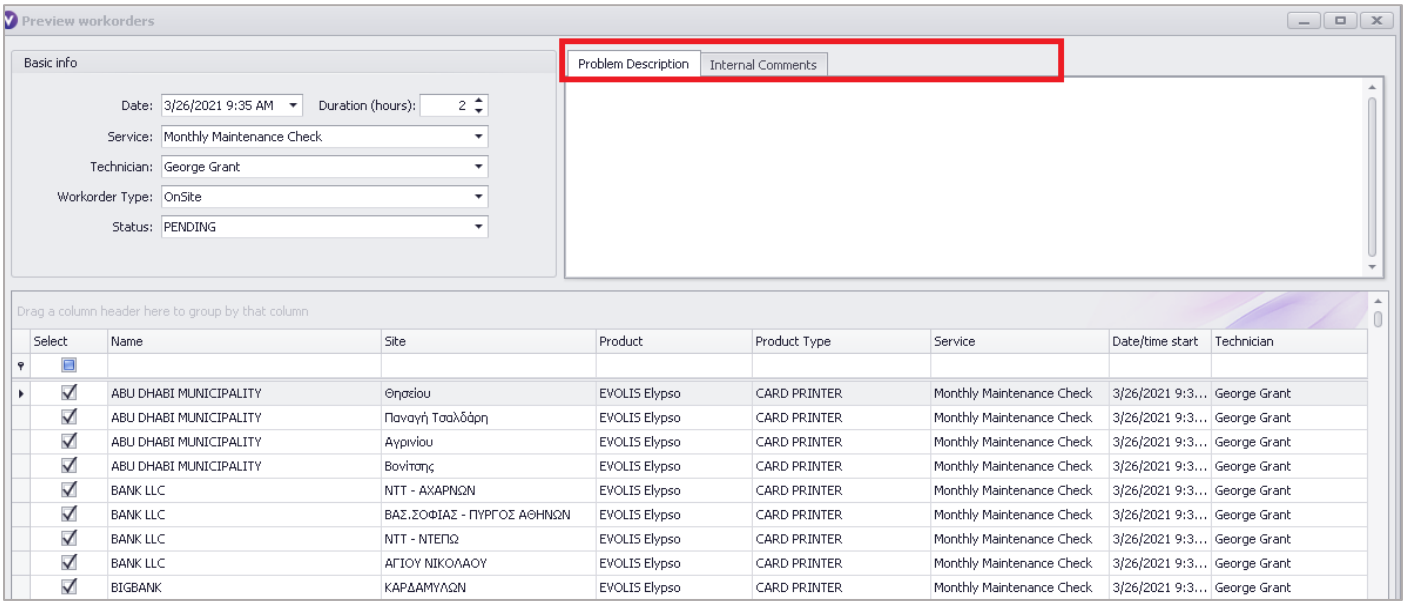
We select the customer sites and the products for which we want to create a workorder. **Image 2.13.1**



Select	Code	Name	Business Title	Address	Postal Code	City	Phone	Phone 2	Mobile	E-mail	Manager	Prof
☑	00018580	ABU DHABI MUNICIPALITY					2106505386			info@bank.gr		
☑	00005265	BANK LLC	BANK	Al Ettehad ...		Ajman	+97121033...			info@bank....		BAN
☑	00005237	ABU DHABI MEDIA										
☑	00005571	DRAGON CITY	PROPERTY	10 Street 1		Dubai	+97121076...			support@V...		
☑	00005667	BIGBANK		Porou 200		Paris	+37210688...			support@V...		
☐	00000564	DISCOVERY GARDENS	PROPERTY	Naif Rd		Dubai	+97121068...			info@Vorte...		

Image 2.13.1

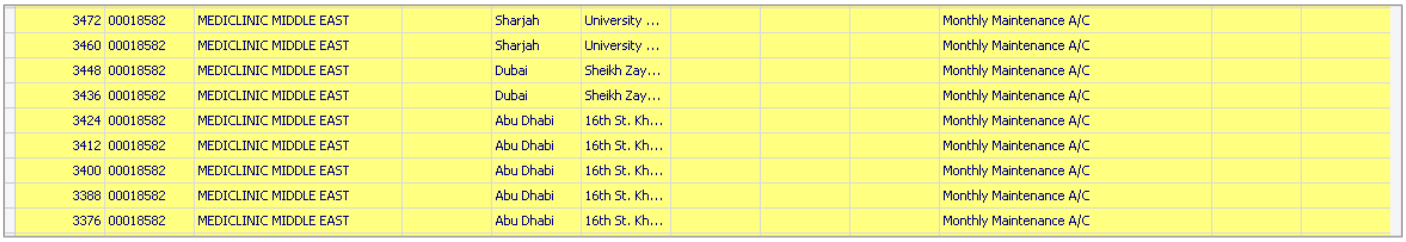
We fill in the attributes of the workorders (Service, Technician, Status, etc.), and press **Create Image 2.13.2.**



Select	Name	Site	Product	Product Type	Service	Date/time start	Technician
☑	ABU DHABI MUNICIPALITY	Θησείου	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	ABU DHABI MUNICIPALITY	Παναγή Τσαλδάρη	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	ABU DHABI MUNICIPALITY	Αγρινίου	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	ABU DHABI MUNICIPALITY	Βονίτσης	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	BANK LLC	ΝΤΤ - ΑΧΑΡΝΩΝ	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	BANK LLC	ΒΑΣ.ΣΟΦΙΑΣ - ΠΥΡΓΟΣ ΑΘΗΝΩΝ	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	BANK LLC	ΝΤΤ - ΝΤΕΠΩ	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	BANK LLC	ΑΓΙΟΥ ΝΙΚΟΛΑΟΥ	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant
☑	BIGBANK	ΚΑΡΔΑΜΥΛΩΝ	EVOLIS Elypso	CARD PRINTER	Monthly Maintenance Check	3/26/2021 9:3...	George Grant

Image 2.13.2

This automatically generates all the Service Reports which have common attributes **Image 2.13.3**



3472	00018582	MEDICLINIC MIDDLE EAST		Sharjah	University ...				Monthly Maintenance A/C			
3460	00018582	MEDICLINIC MIDDLE EAST		Sharjah	University ...				Monthly Maintenance A/C			
3448	00018582	MEDICLINIC MIDDLE EAST		Dubai	Sheikh Zay...				Monthly Maintenance A/C			
3436	00018582	MEDICLINIC MIDDLE EAST		Dubai	Sheikh Zay...				Monthly Maintenance A/C			
3424	00018582	MEDICLINIC MIDDLE EAST		Abu Dhabi	16th St. Kh...				Monthly Maintenance A/C			
3412	00018582	MEDICLINIC MIDDLE EAST		Abu Dhabi	16th St. Kh...				Monthly Maintenance A/C			
3400	00018582	MEDICLINIC MIDDLE EAST		Abu Dhabi	16th St. Kh...				Monthly Maintenance A/C			
3388	00018582	MEDICLINIC MIDDLE EAST		Abu Dhabi	16th St. Kh...				Monthly Maintenance A/C			
3376	00018582	MEDICLINIC MIDDLE EAST		Abu Dhabi	16th St. Kh...				Monthly Maintenance A/C			

Image 2.13.3

3.14 CONTRACT RENEWAL MANAGEMENT

How do we bulk renew customer contracts?

We select the contracts that we want to renew and click on **Renew Selected** **Image 2.14.1**

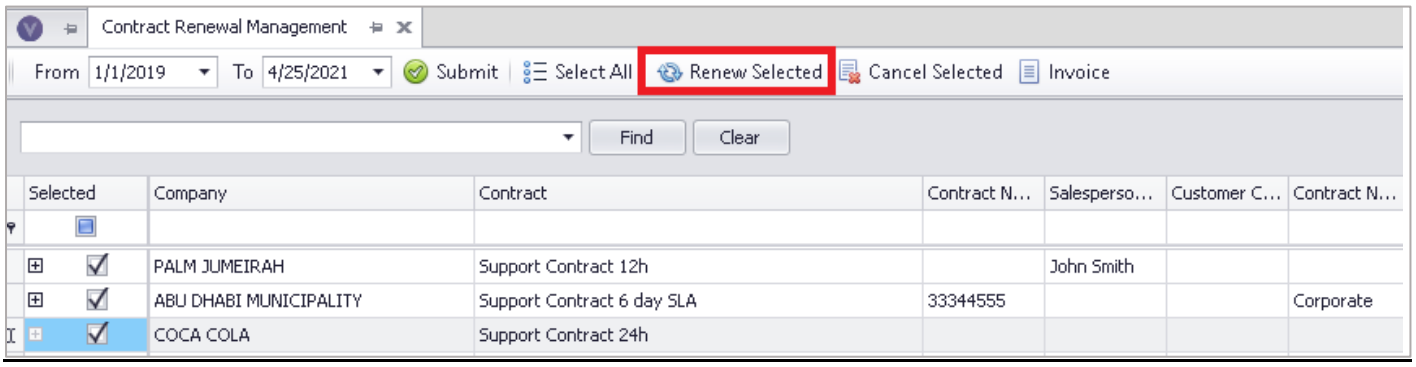


Image 2.14.1

We select the fields that we want to bulk copy to the new contracts (Custom fields, Saved settings, Maintenance plan renewal) and press OK. **Image 2.14.2**

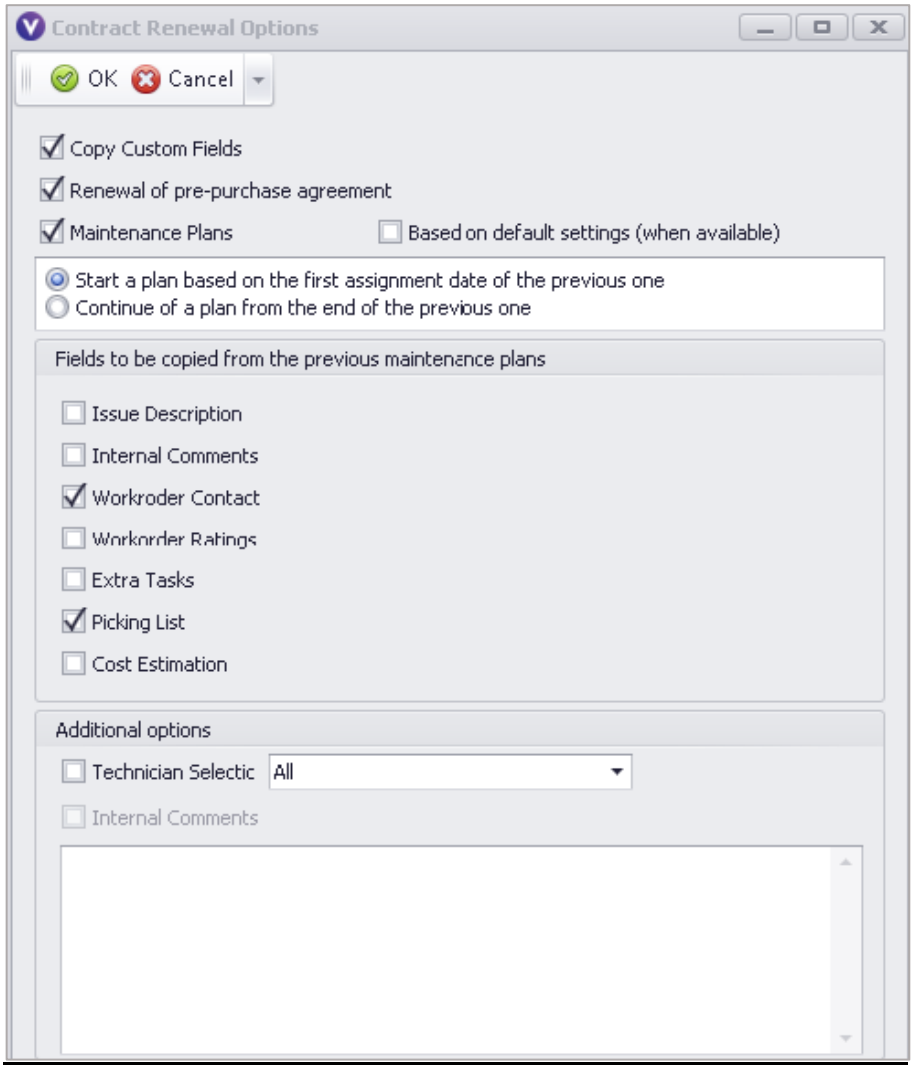


Image 2.14.2

The procedure is completed successfully.

3.15 WORKORDER SORTING

If a Technician is allocated two or more workorders simultaneously (to be completed **at the same time** or **All Day** Workorders), the upcoming workorders can be sorted in order to prioritize those that need to be completed first, second, etc.
This can be done from the **Day View** or the **Workorder Sorting** tabs.

Sorting from the **Day View** tab **Image 2.15.1, 2.15.2**

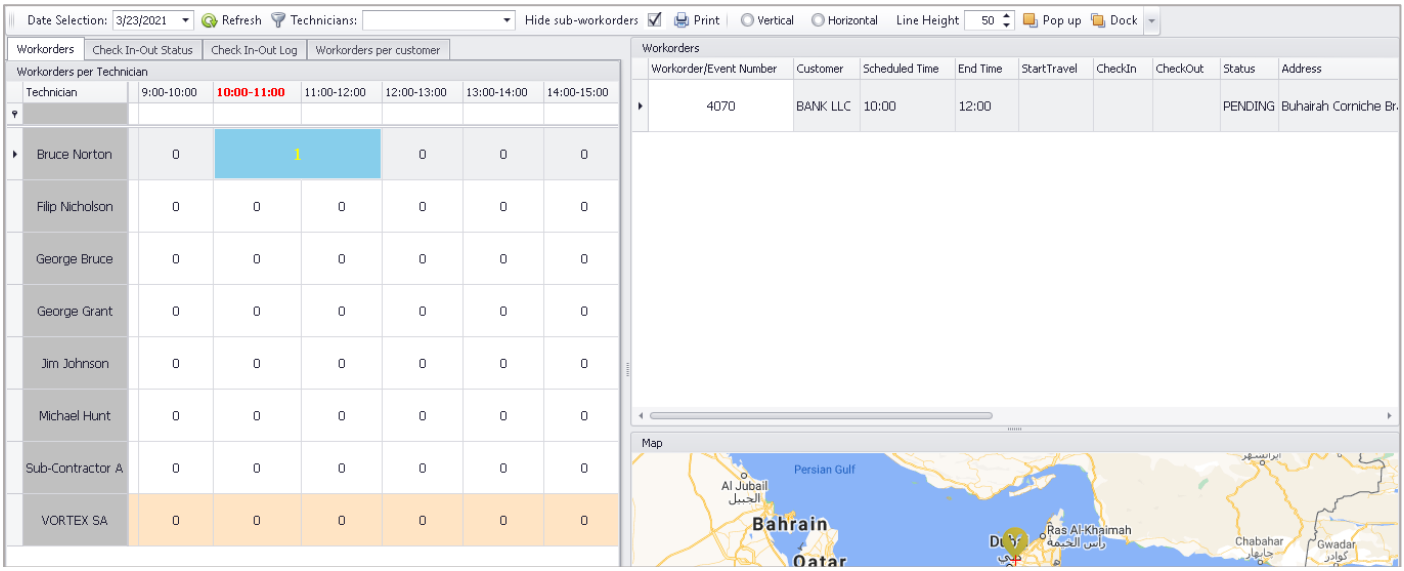


Image 2.15.1

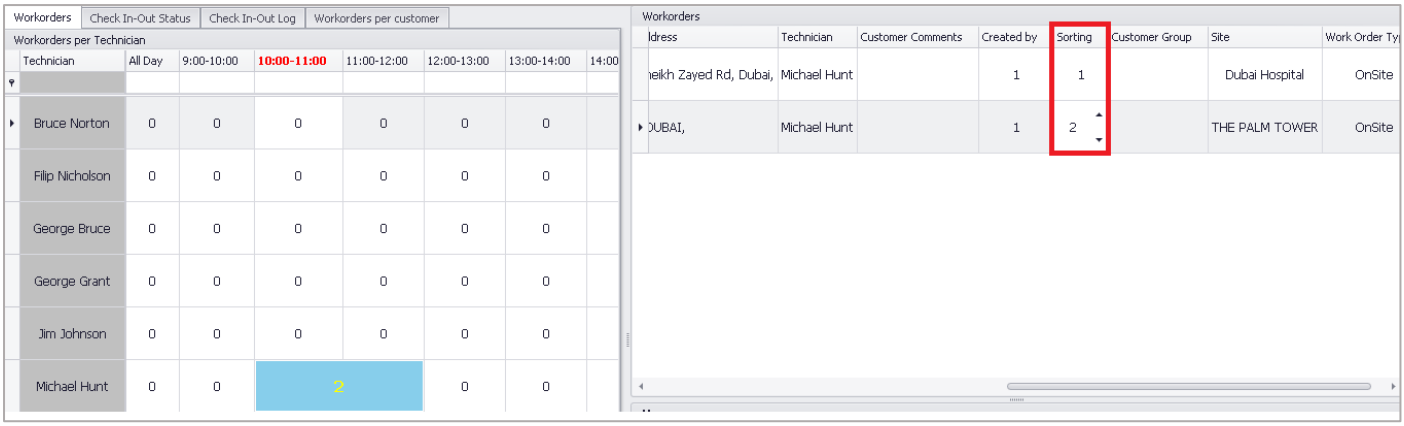


Image 2.15.2

We number the workorders and press **Refresh**. We can also rearrange the workorders by changing their numbering.

<u>Sorting from the **Workorder Sorting**</u> tab **Image 2.15.3**

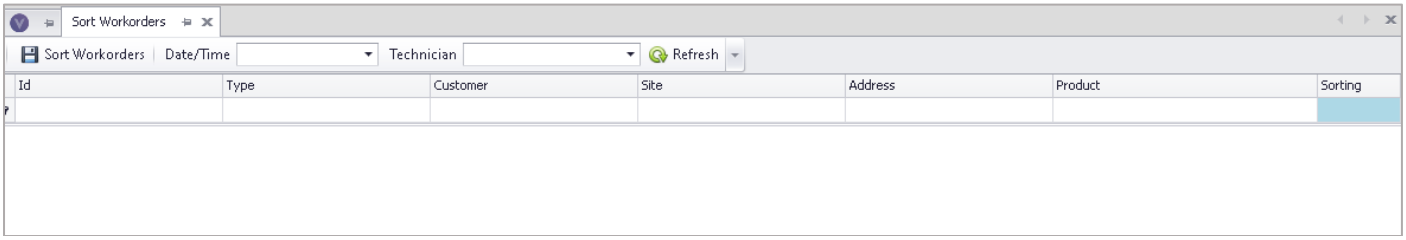


Image 2.15.3

4 WAREHOUSE

4.1 PRODUCTS

In the Products tab, the administrator adds each product by clicking on New Product. The product information is filled in and the entry is saved by clicking on Save. (**Image 3.1.1**)

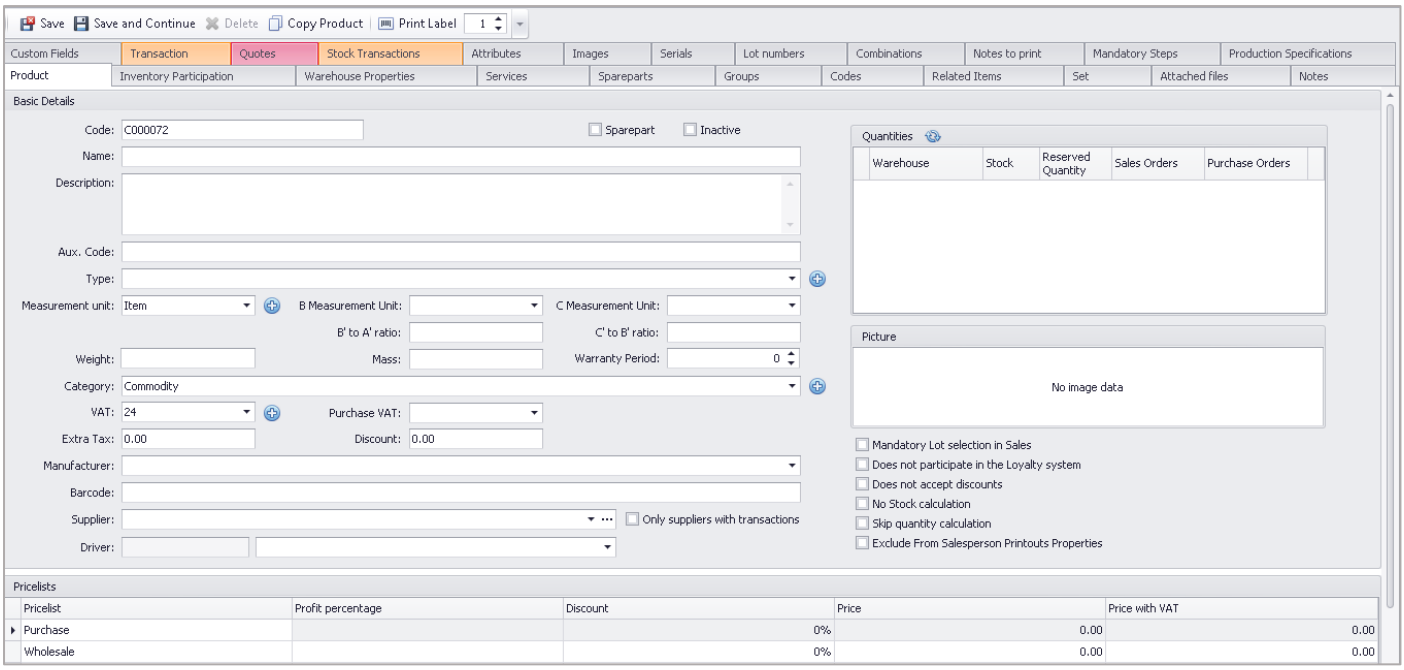


Image 3.1.1

4.2 PRODUCT TYPES

This tab contains a list of all the categories/types of products **(Image 3.1.2).** The administrator adds the product category using the add icon +. The entry is saved by clicking on ✓. A different colour coding is used per product type.

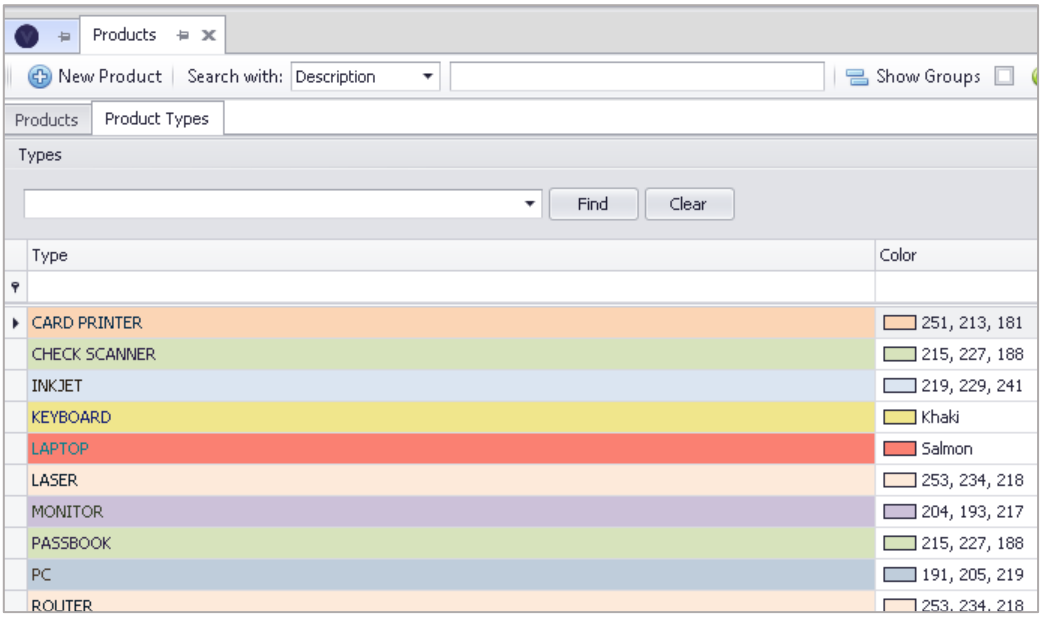


Image 3.1.2

Double-clicking on the product will open the main Edit tab. Each product consists of various tabs with different functions **(Image 3.1.3)**.

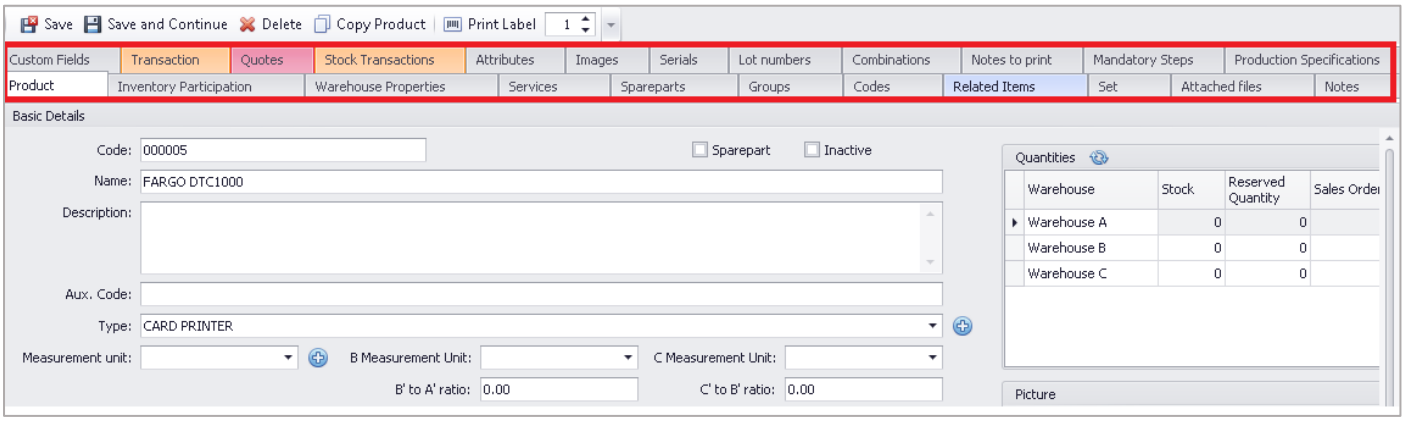


Image 3.1.3

These tabs are:

Inventory Participation: ***CM Module***

Warehouse Properties: ***CM Module***

Services: Allows users to link a product with specific services. Right clicking on the **Select** checkbox will select/deselect all services. The same applies to the list of spare parts shown below. By choosing a product while creating a workorder **only** those services that have been selected will be displayed.

Spare parts: Allows users to link a product with specific services. By choosing a product while creating a workorder only those services that have been selected will be displayed.

Groups : *CM Module*

Codes: *CM Module*

Relevant Items: *CM Module*

Attached Files: Allows users to attach files

Notes: General product information

Custom Fields: Displays the custom fields of the products created in Settings -> Custom Fields

Documents : *CM Module*

Quotes : *CRM Module.*

Balance Transactions : *CM Module*

Attribues: *CM Module*

Images: Image upload

Serials: *CM Module*

Lots: *CM Module*

4.3 PRODUCT TEMPLATES

In Product Templates we specify the attributes/specifications (i.e. model, manufacturer warranty, connectivity) that will accompany a product wherever it is opened from. We can also define default values for the attributes.

How do we open a product template?

We select

to open the product template tab and edit it **(Image 3.2.1):**

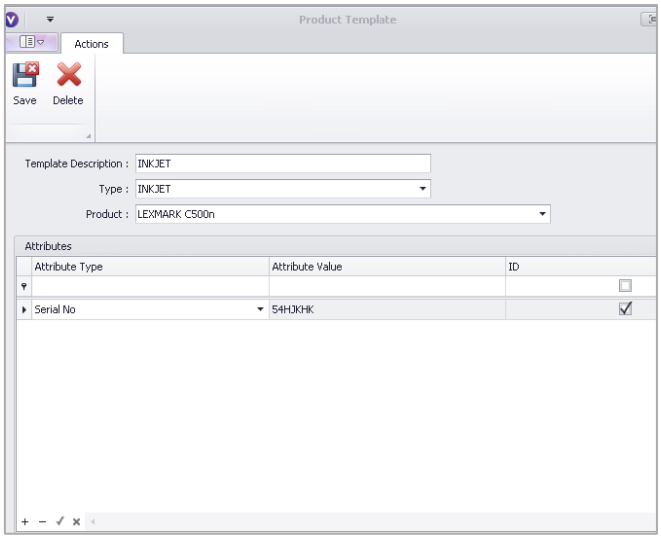


Image 3.2.1

Description of product template: We provide a general description for the product template
Type: We select the product template type/category

Product: We enter the product name

Below, we add all the attributes that will be associated with the product template. To illustrate this, and using the following image as an example, if we open the above product template in one site, a product with the attributes 'Serial No', 'Origin' and 'Attribute Value' will be automatically created. Then, if we want to create the following template in a site, the product will be automatically created with the specific attributes **(Image 3.2.2).**

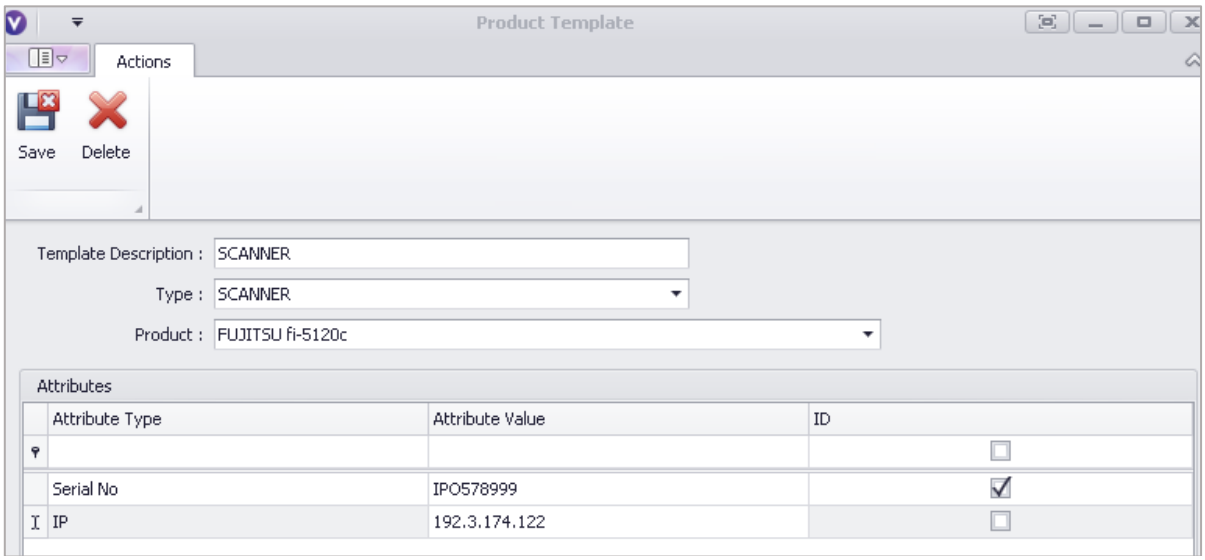


Image 3.2.2

4.4 ATTRIBUTES

The **Add** icon at the bottom left of the form allows us to add the attributes of the products **(Image 3.3.1)**.

Depending on the user's permissions (rights granted in Settings -> Roles), we authorize or restrict the access to data (attribute values) that has been qualified as sensitive data. If we click the corresponding check box the user will have access to the attributes' sensitive data.

Field -> Mandatory during invoicing: Requires the **CM Module**.

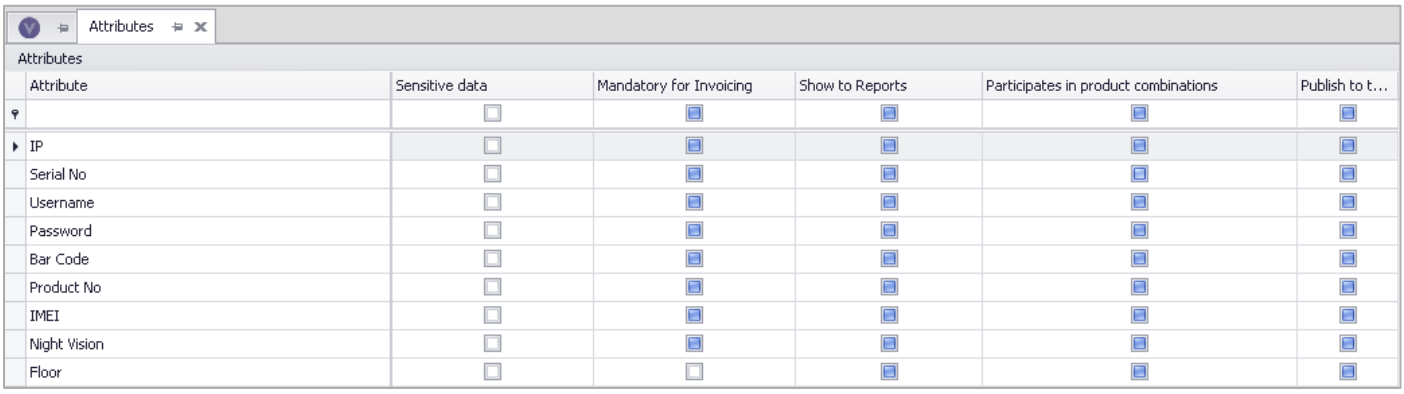


Image 3.3.1

4.5 MANUFACTURERS

The **Add** icon at the bottom left of the form allows us to add the manufacturers of the products. **(Image 3.4.1)**

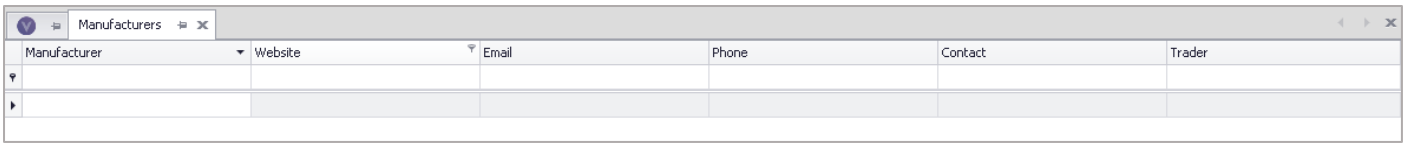


Image 3.4.1

4.6 MEASURABLE ATTRIBUTES

The **Add** icon at the bottom left of the form allows us to add the measurable attributes **(Image 3.5.1)**

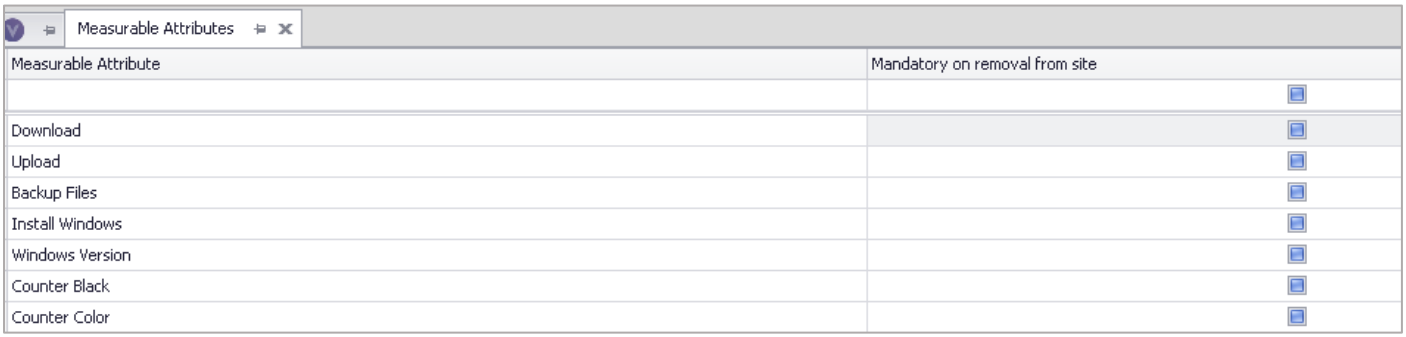


Image 3.5.1

4.7 SPARE PARTS

The **New Sparepart** icon at the top left of the form allows us to add any new spare parts used by the company **(Image 3.6.1)**. We will need to fill in the fields of the tab that opens up, which is identical to the product tab described above.

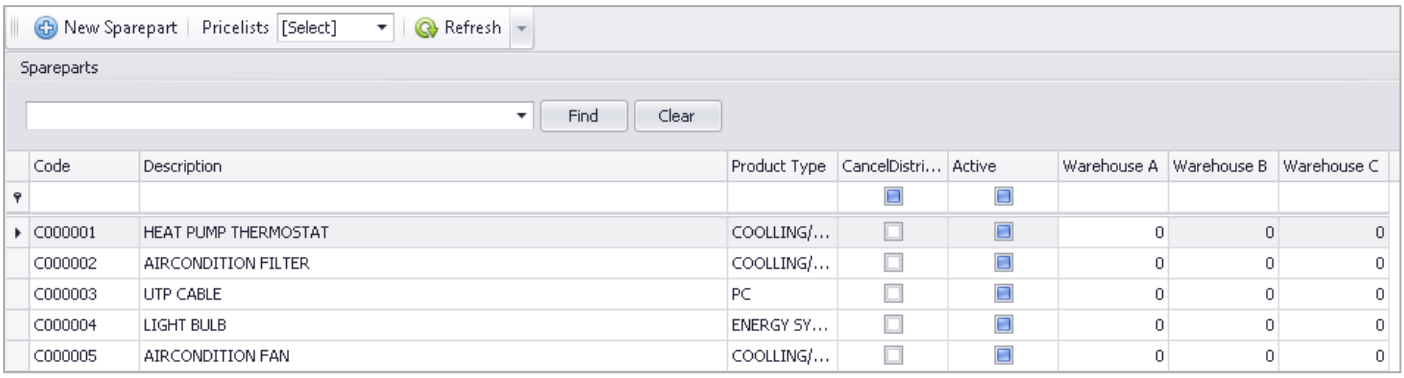
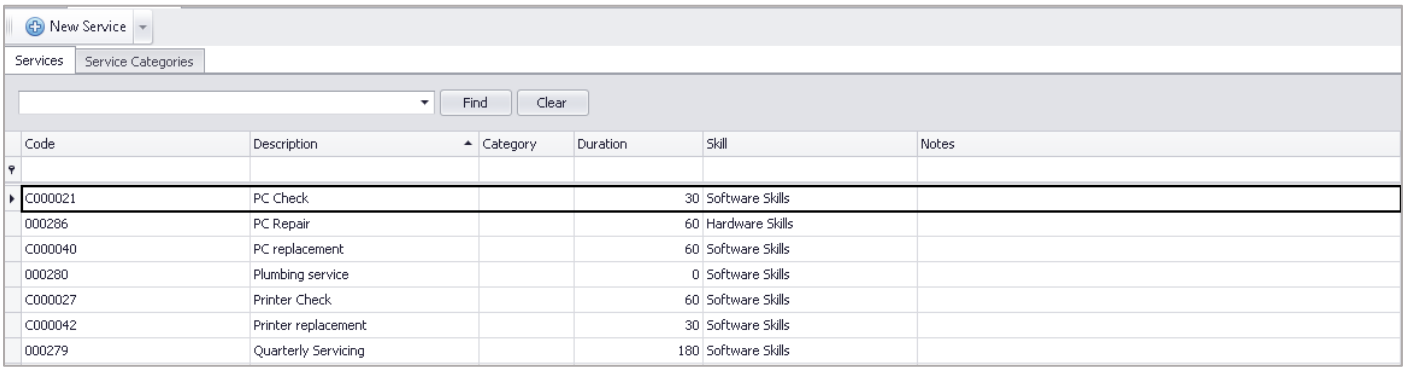


Image 3.6.1

4.8 SERVICES

Here we create the services provided by the company to its customers, the typical working hours for each service and the skills/expertise required to perform the service **(Image 3.7.1)**.



Code	Description	Category	Duration	Skill	Notes
C000021	PC Check		30	Software Skills	
000286	PC Repair		60	Hardware Skills	
C000040	PC replacement		60	Software Skills	
000280	Plumbing service		0	Software Skills	
C000027	Printer Check		60	Software Skills	
C000042	Printer replacement		30	Software Skills	
000279	Quarterly Servicing		180	Software Skills	

Image 3.7.1

The icon

opens the edit tab in which we can create a new service **(Image 3.7.2)**.

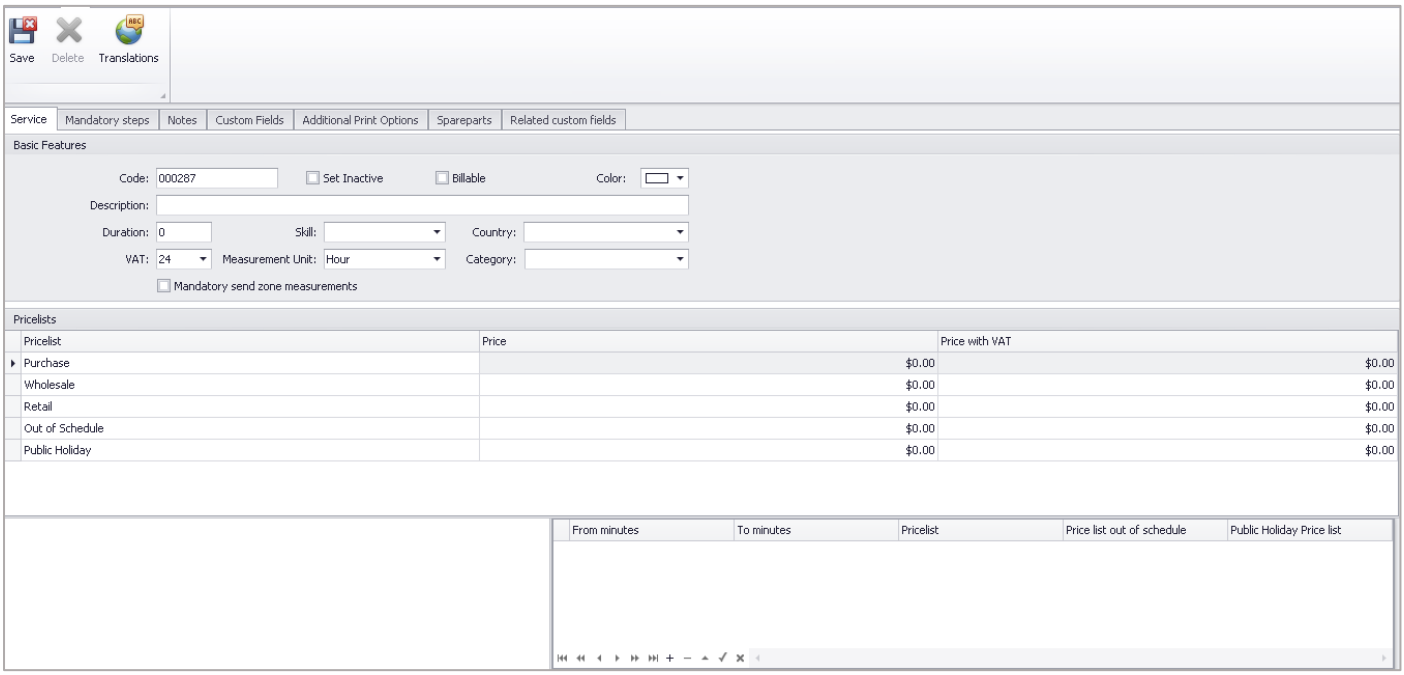


Image 3.7.2

Code: Automatic numbering of the entry.

Description: Description of the service.

Duration: The estimated number of working hours required by the technician to perform the service. The slots that correspond to the duration defined here will be filled in when we create a workorder.

Skill: The skills/expertise required to perform the service.

Measurement Unit: The unit used to measure a service.

Category: The category to which the service belongs.

VAT: The VAT that is applied to the service.

Pricelists: The pricelists that we have added.

Cost: The cost for the different service time zones.

The tab also contains two check boxes:

Cancel Distribution: By clicking on this option the service becomes unavailable to users.
Billed: CM Module

Miscellaneous tabs **(Image 3.7.3)**

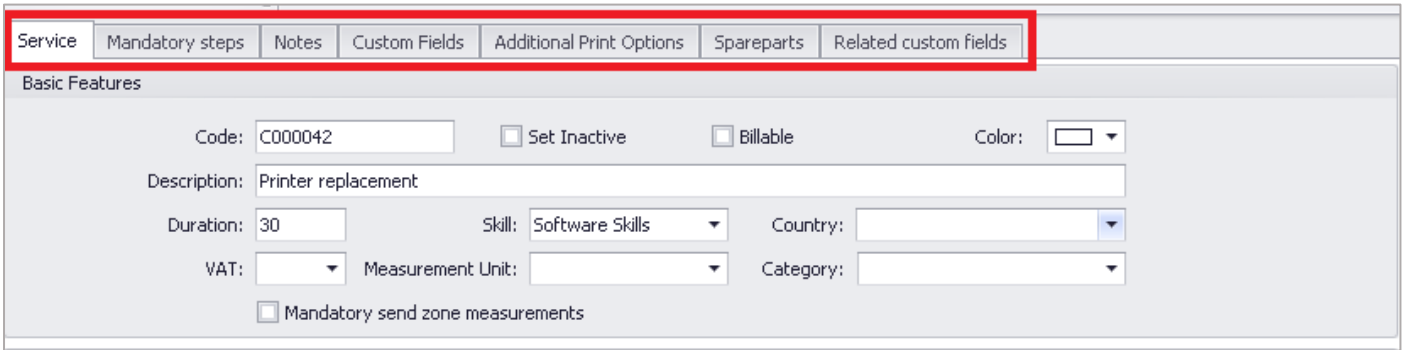


Image 3.7.3

Mandatory steps: Additional mandatory work to be completed while the technician performs a specific service. In the Service Report, this information is displayed in **Steps** ->**Mandatory Service Checklist**. The technician can NOT close the Service Report if this information/mandatory step is not filled in
Notes: General notes about the service
Custom Fields: Service custom fields
Additional print options **(Image 3.7.4):** Allows users to select a different workorder form than the default one

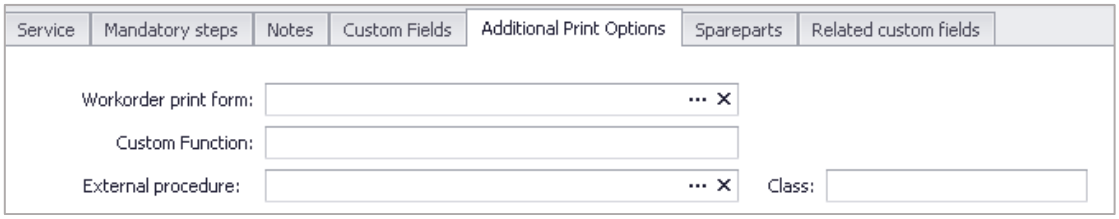


Image 3.7.4

In the service categories, the administrator enters the category of each service by clicking on the add icon . This is an optional field. The entry is saved by clicking on . A different colour coding should be applied to every service category. **Image 3.7.5**

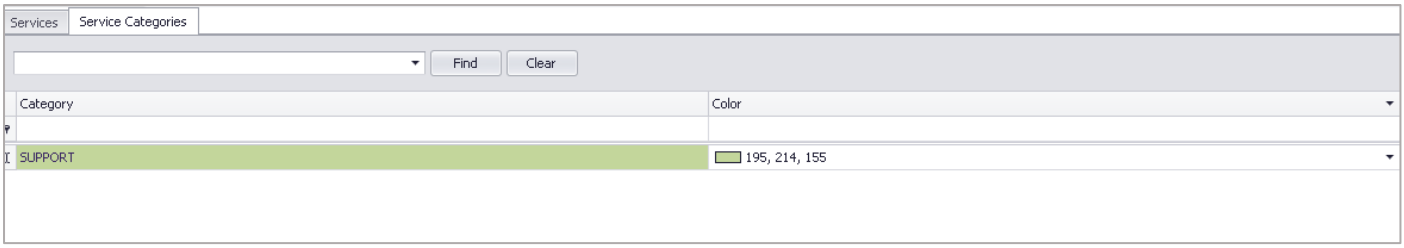


Image 3.7.5

4.9 PRODUCT GROUPS

Requires the Vortex CM Module.

5 REPORTS

5.1 PIVOT REPORT

Allows users to create pivot reports in which data is easily and automatically placed in columns and rows in the tables and charts that are created. This is an excellent data analysis tool for your business.

5.2 CRM PIVOT REPORT

Requires the Vortex CRM Module.

5.3 CM PIVOT REPORT

Requires the Vortex CM Module.

5.4 UTILIZATION REPORT

The following report calculates the actual hours over a specific time period during which the technicians worked (working hours from Service Reports & Calendar Events). The **Total Hours** field corresponds to their normal work hours. This allows us to determine how many working hours correspond to actual hours worked. If no working hours are added to a technician (as explained later on), then the default values of the company's working hours will be used **(Image 4.1.1)**.

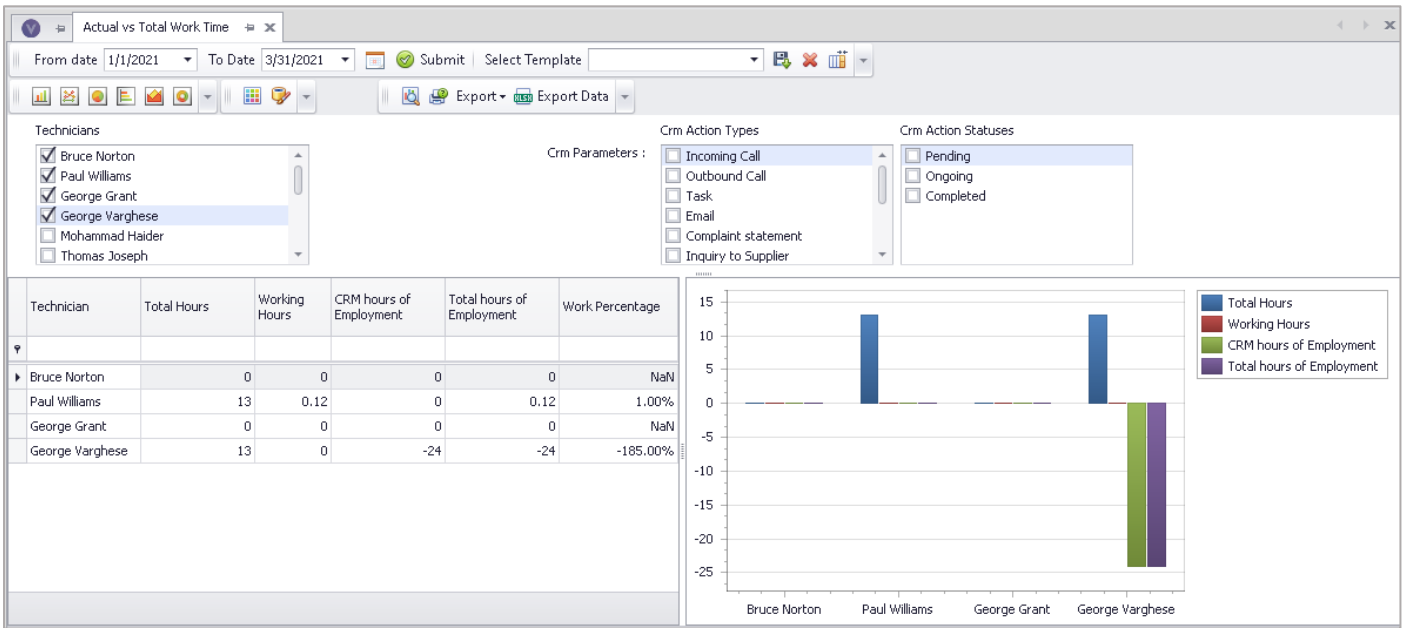


Image 4.1.1

5.5 ROUTE CALCULATION

Calculates the mileage covered by a technician (StartTravel) over a specific period **(Image 4.2.1)**

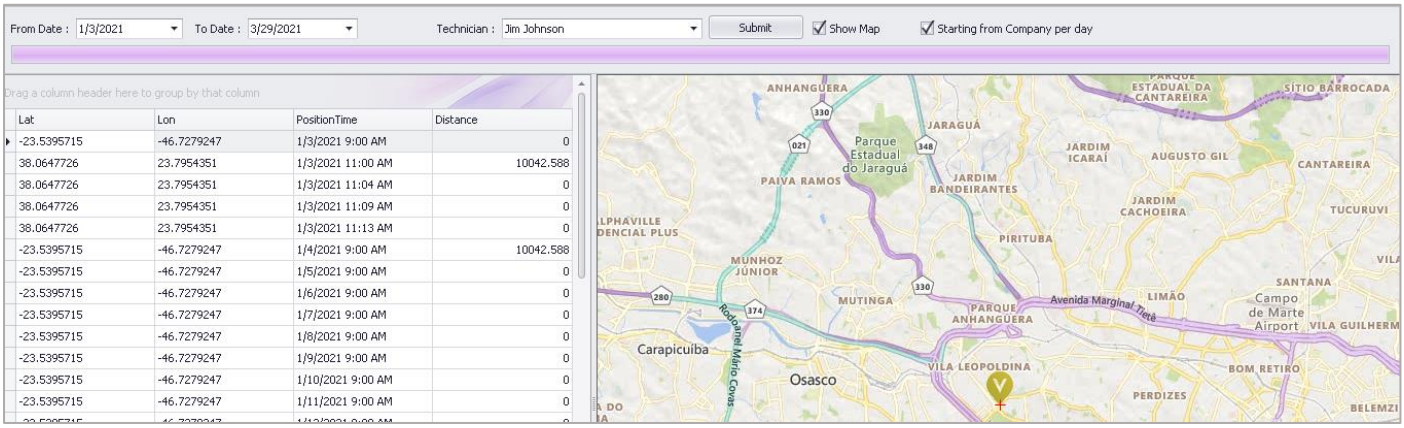
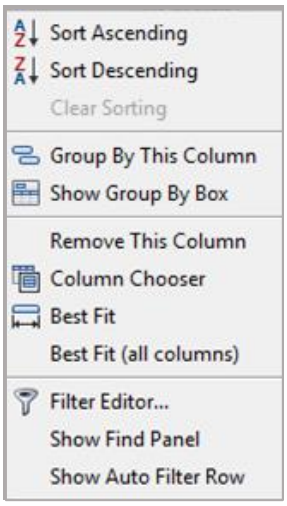


Image 4.2.1



By right-clicking in any of the columns we can view all the sorting options **(Image 4.2.2)**

Image 4.2.2

Sort Ascending: all entries are displayed in ascending order

Sort Descending: all entries are displayed in descending order

Group By This Column: data is grouped according to the column selected

Show Group By Box: a box is activated above the columns and users can drag the mouse to the column or columns that they want to group

Remove This Column: the selected column is automatically removed from the table

Column Chooser: users define the columns they want to include or hide from the table by dragging them under the data. To restore them, they must again select this option. Also, users can view all the fields of each grid, so that they can adjust the information displayed as they deem fit

Best Fit: the column is automatically adjusted to the margins of the largest entry

Best Fit All Columns: all columns are automatically adjusted to the size of the entry

Filter Editor: filter management tool

Show Find Panel: displays filter panel

Note: *The same functions as the ones described above are applied to all the grids that have sort and search features.*

5.6 SITES ON THE MAP

Displays all sites on a map **(Image 4.3.1)**

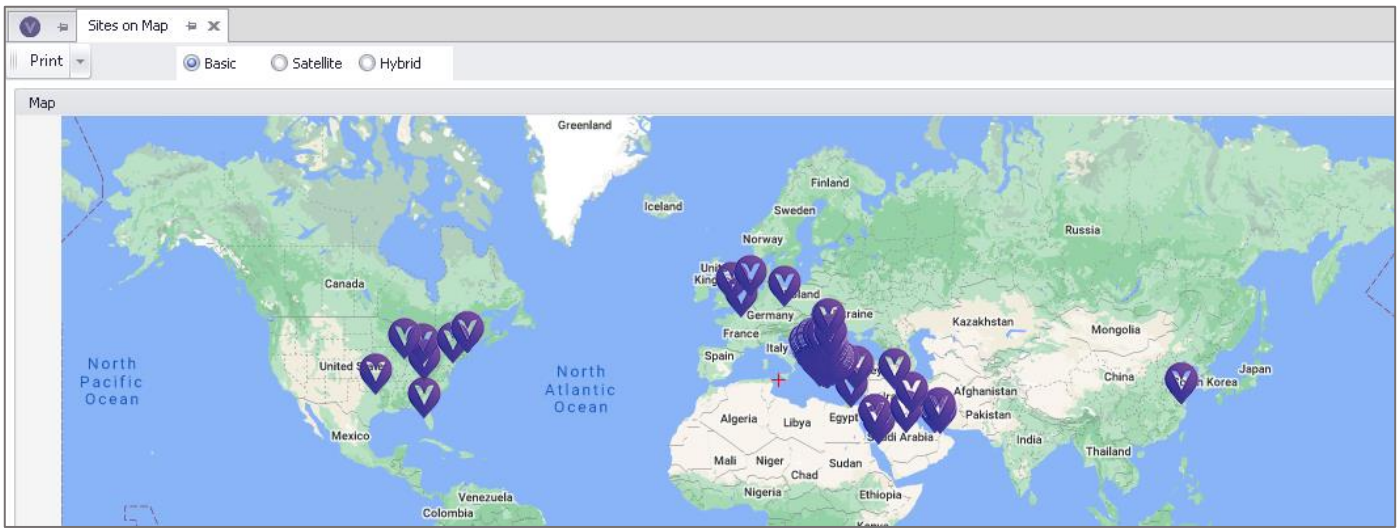
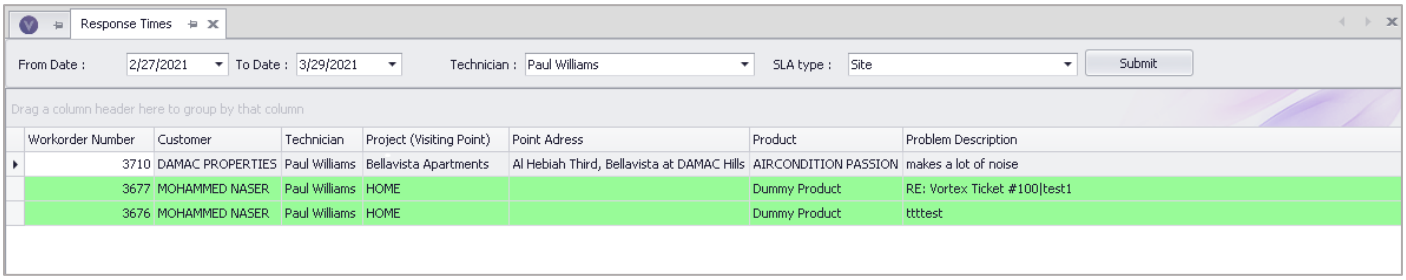


Image 4.3.1

5.7 RESPONSE TIME

Detailed report with the response and repair times **(Image 4.4.1)**



Workorder Number	Customer	Technician	Project (Visiting Point)	Point Adress	Product	Problem Description
3710	DAMAC PROPERTIES	Paul Williams	Bellavista Apartments	Al Hebiah Third, Bellavista at DAMAC Hills	AIRCONDITION PASSION	makes a lot of noise
3677	MOHAMMED NASER	Paul Williams	HOME		Dummy Product	RE: Vortex Ticket #100|test1
3676	MOHAMMED NASER	Paul Williams	HOME		Dummy Product	ttttest

Image 4.4.1

More specifically, the report provides the following information:

Workorder no.: The workorder's ID

Customer: The customer's company name

Technician: The technician who visited the site

Project (site of the visit): The project to which the visit refers

Product: The product to which the visit refers

SLA (Minutes): The SLA response time to the issue raised

Scheduled Date/Time: Date and time on which the workorder has been assigned

CallTime: Information provided if the program has been connected to a call centre

StartTravel: The technician's departure time for the site of the damage

CheckIn: The technician's arrival time at the site of the damage

Checkout: The technician's departure time from the customer site

Appointment Time from Call (minutes): The time between Call Time and Start Time (scheduled time)

Technician Response Time (minutes): The time between Call Time and CheckIn

Time Spent by Technician (minutes): The time between CheckIn and CheckOut

Repair Time from Call (minutes): The time between Call Time and CheckOut

SLA Minute Result (Check In): Automatic notification in case the SLA is violated

SLA Minute Result (Check Out): Automatic notification in case the SLA is violated

Arrival Result: Automatic notification in case certain limits are violated

Departure Result: Automatic notification in case certain limits are violated

Travel Time: The total Travel Time (time between Start Travel and CheckIn)

Working Hours: The total working hours (time between CheckIn and CheckOut)

Repair Time from Call (days): Field is updated if the repair time, i.e. the time between Call Time and CheckOut, lasts more than 24 hours.

This report is created per technician or in an aggregated form for all technicians.

5.8 PROJECT PROFIT

Vortex CM Module **(Image 4.5.1)**

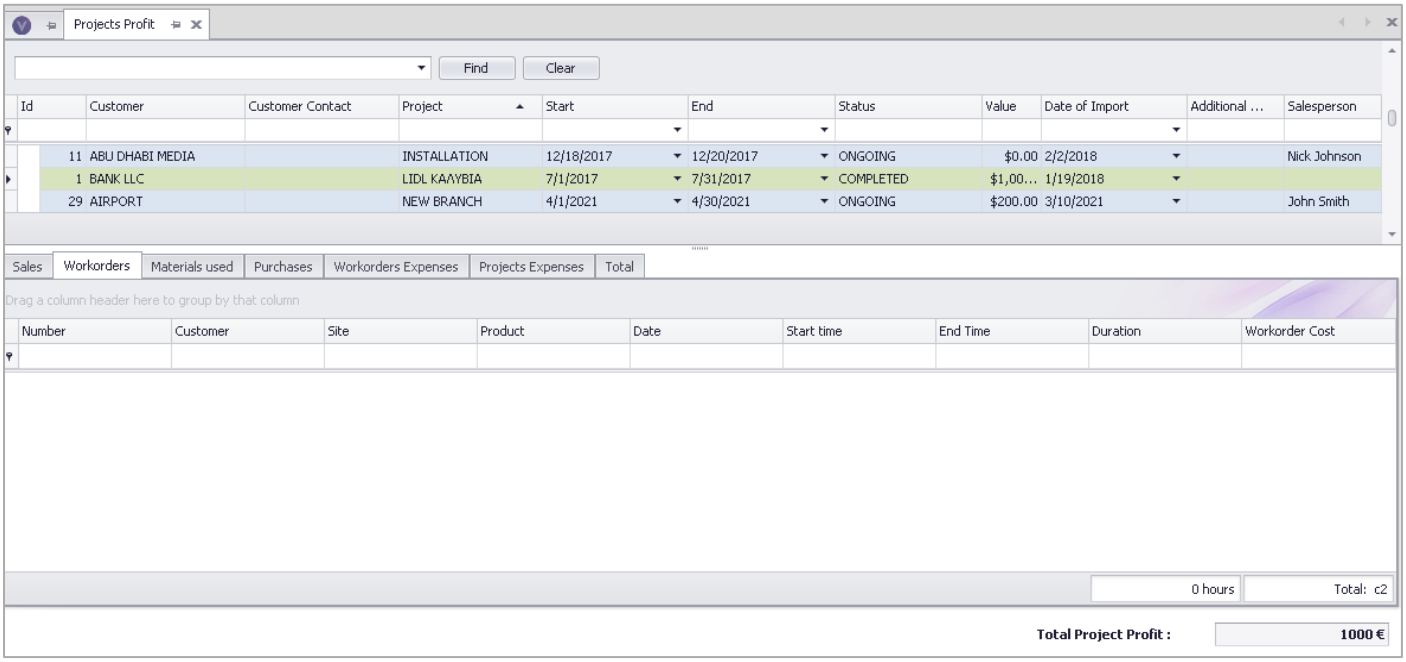


Image 4.5.1

5.9 TRAVEL VS WORK DURATION

The correlation between the technician's total travel time and his actual working hours at the customer site. This report is particularly useful for technicians working off-site, and for companies that pay travel expenses. In addition to the pivot tables, the data can also be depicted on charts **(Image 4.6.1)**.

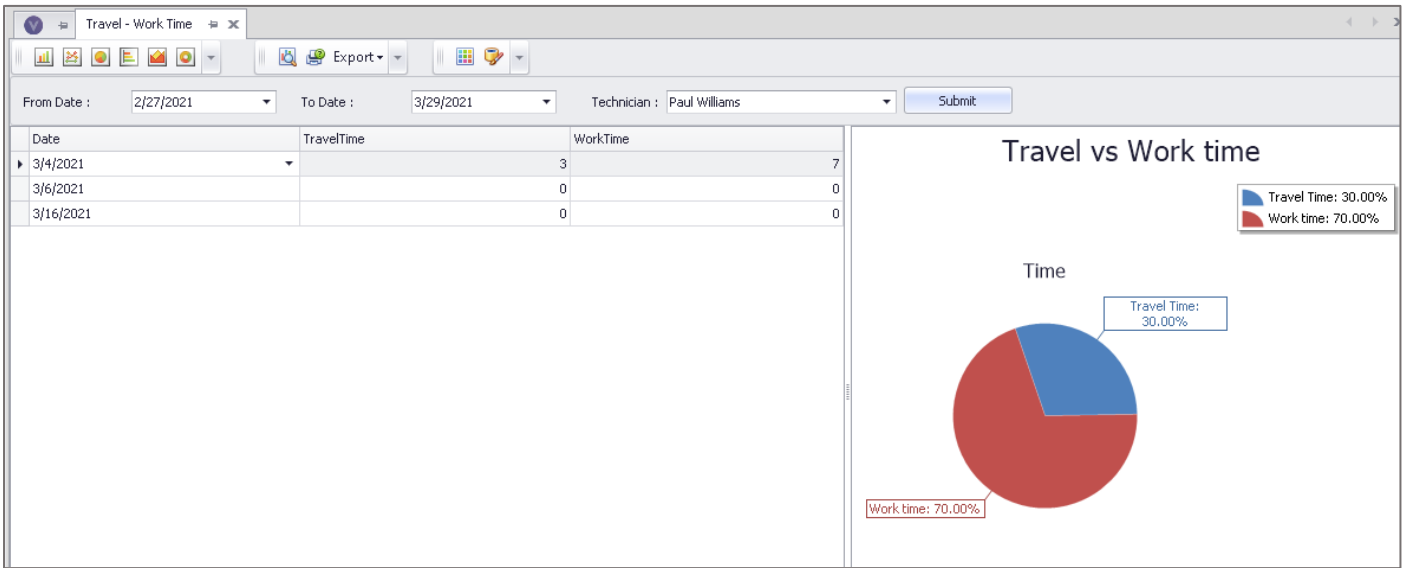


Image 4.6.1

For the graphical representation of data, users can choose among the following types of charts:

Column charts

Line charts

Pie charts

Bar charts

Area charts

Ring charts

5.10 CONTRACT LIST

A list of all customer contracts **(Image 4.7.1)**

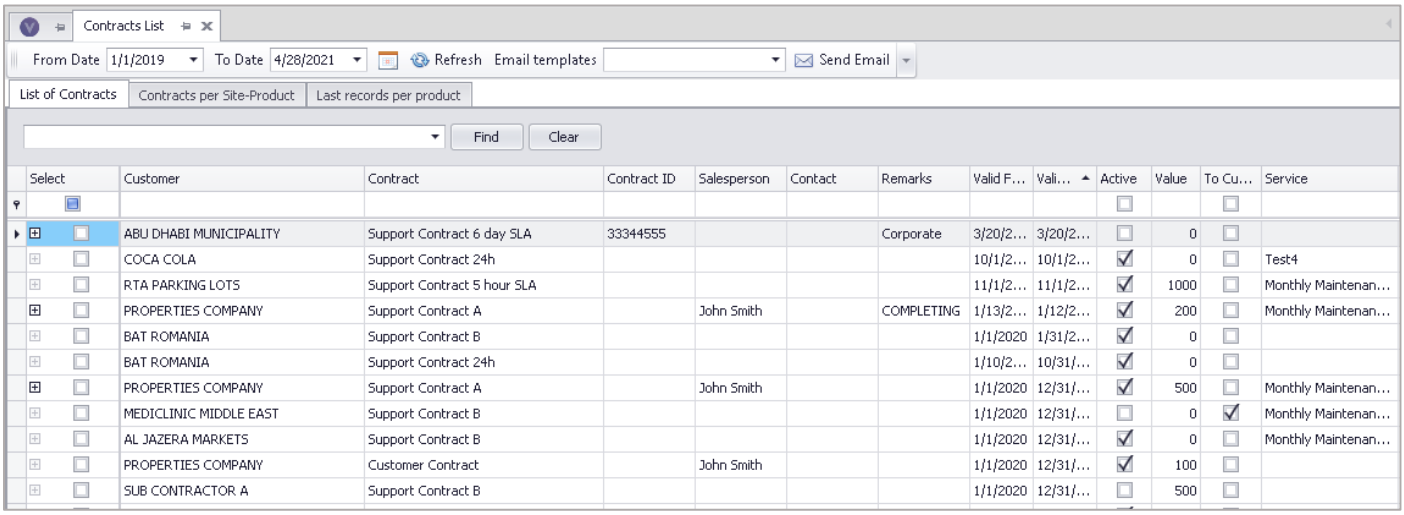
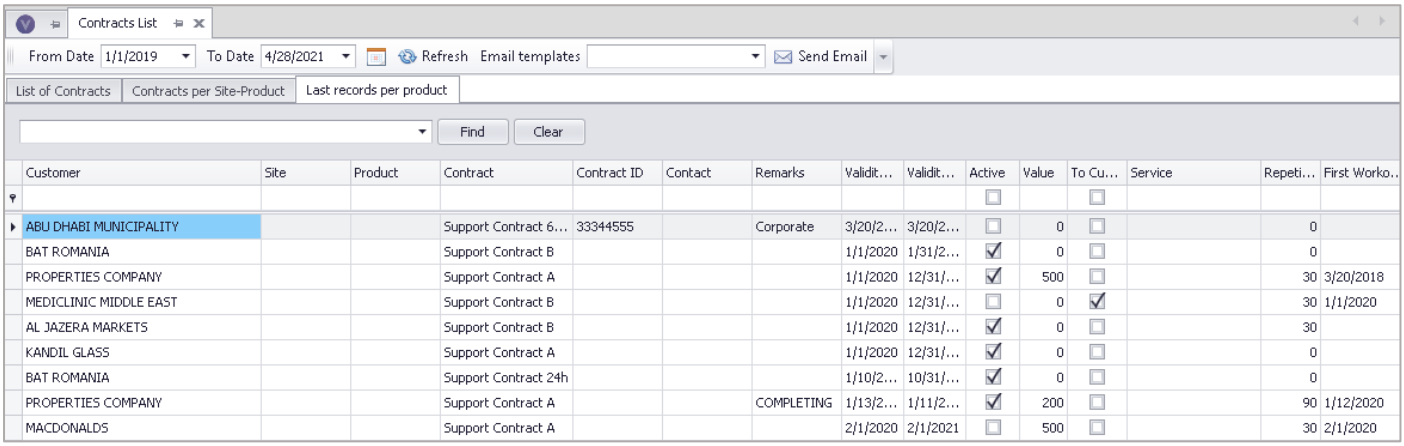


Image 4.7.1

Contract per site-product: All contracts are shown per customer site and product **(Image 4.7.2)**

Image 4.7.2

Users may also choose to display only the last contract renewal for each product, whether active or not **(Image 4.7.3)**

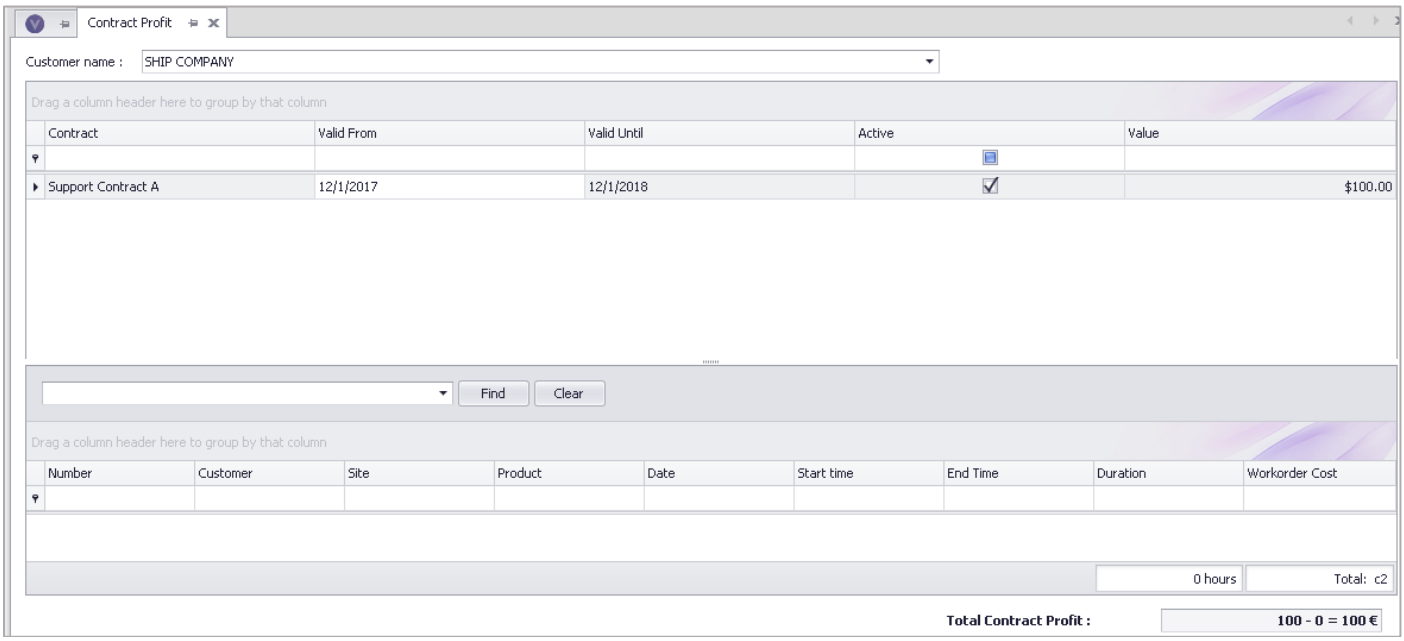


Customer	Site	Product	Contract	Contract ID	Contact	Remarks	Validit...	Validit...	Active	Value	To Cu...	Service	Repeti...	First Worko...
ABU DHABI MUNICIPALITY			Support Contract 6...	33344555		Corporate	3/20/2...	3/20/2...	☐	0	☐		0	
BAT ROMANIA			Support Contract B				1/1/2020	1/31/2...	☑	0	☐		0	
PROPERTIES COMPANY			Support Contract A				1/1/2020	12/31/...	☑	500	☐		30	3/20/2018
MEDICLINIC MIDDLE EAST			Support Contract B				1/1/2020	12/31/...	☐	0	☑		30	1/1/2020
AL JAZERA MARKETS			Support Contract B				1/1/2020	12/31/...	☑	0	☐		30	
KANDIL GLASS			Support Contract A				1/1/2020	12/31/...	☑	0	☐		0	
BAT ROMANIA			Support Contract 24h				1/10/2...	10/31/...	☑	0	☐		0	
PROPERTIES COMPANY			Support Contract A			COMPLETING	1/13/2...	1/11/2...	☑	200	☐		90	1/12/2020
MACDONALDS			Support Contract A				2/1/2020	2/1/2021	☐	500	☐		30	2/1/2020

Image 4.7.3

5.11 CONTRACT PROFIT

Users can select a Trader to view all their contracts and respective workorders. Contract Profit results from the relationship between the contract cost and the respective volume of workorders. The workorder cost can be defined in **Settings** -> **Workorder Custom Fields** -> **Hourly rate (Image 4.8.1).**



Contract	Valid From	Valid Until	Active	Value
Support Contract A	12/1/2017	12/1/2018	☑	$100.00

Number	Customer	Site	Product	Date	Start time	End Time	Duration	Workorder Cost

Image 4.8.1

5.12 TECHNICIANS EVALUATION

Performance evaluation for technicians. The rating scale ranges from 1 to 5 (5 stars being the highest and 1 being the lowest) **Image 4.9.1**

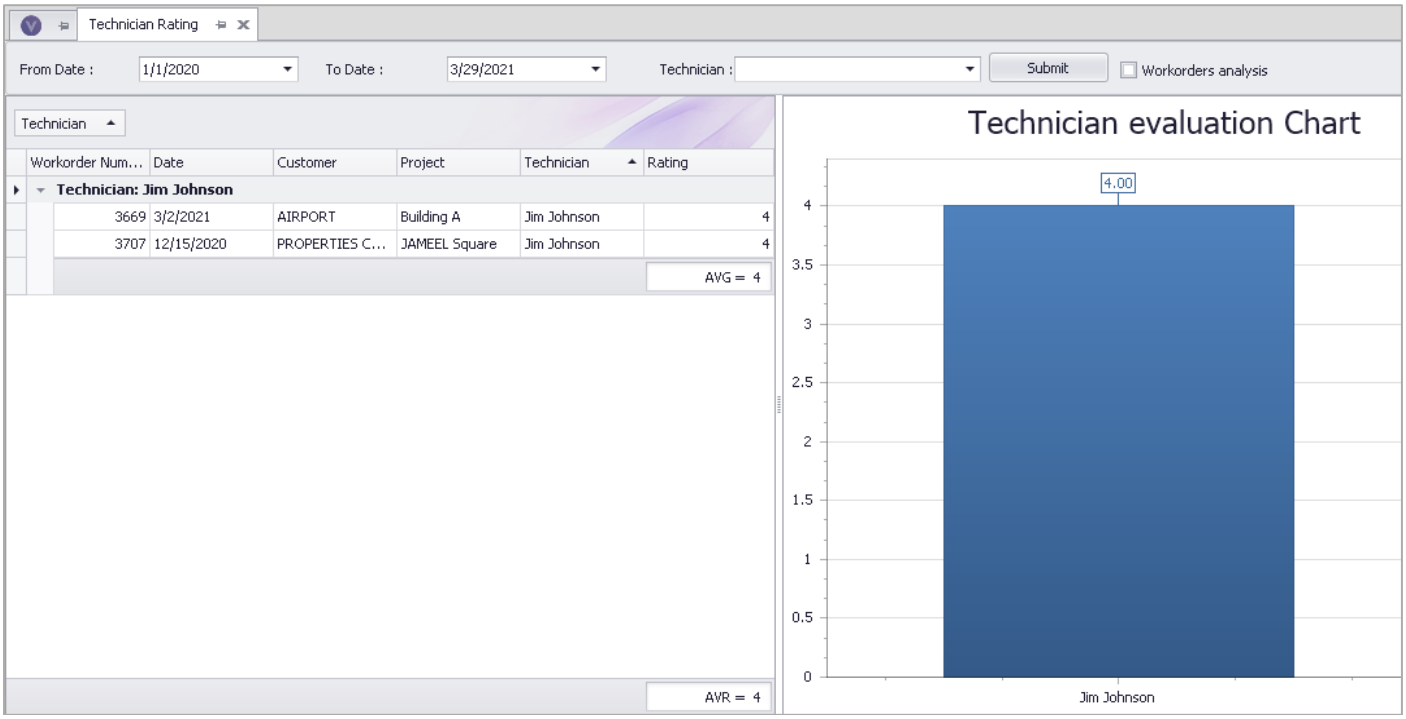


Image 4.9.1

5.13 SERVICE REPORT PENDING ISSUES

Service Reports in which technicians had to use spare parts whose quantities exceeded those available **(Image 4.10.1)**.

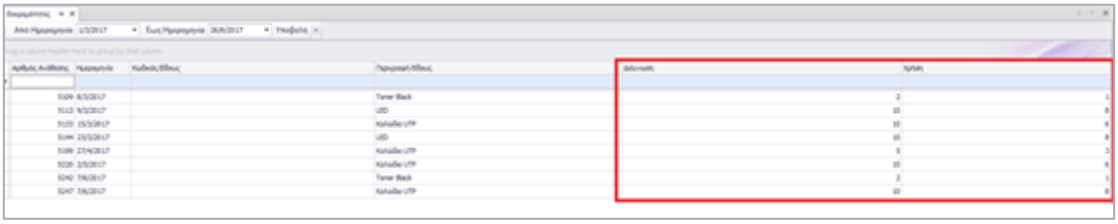


Image 4.10.1

5.14 TECHNICIANS ROUTE

This map allows users to track the route and location of technicians in real time (Site, Customer, Start Travel, CheckIn, CheckOut) **Image 4.11.1**

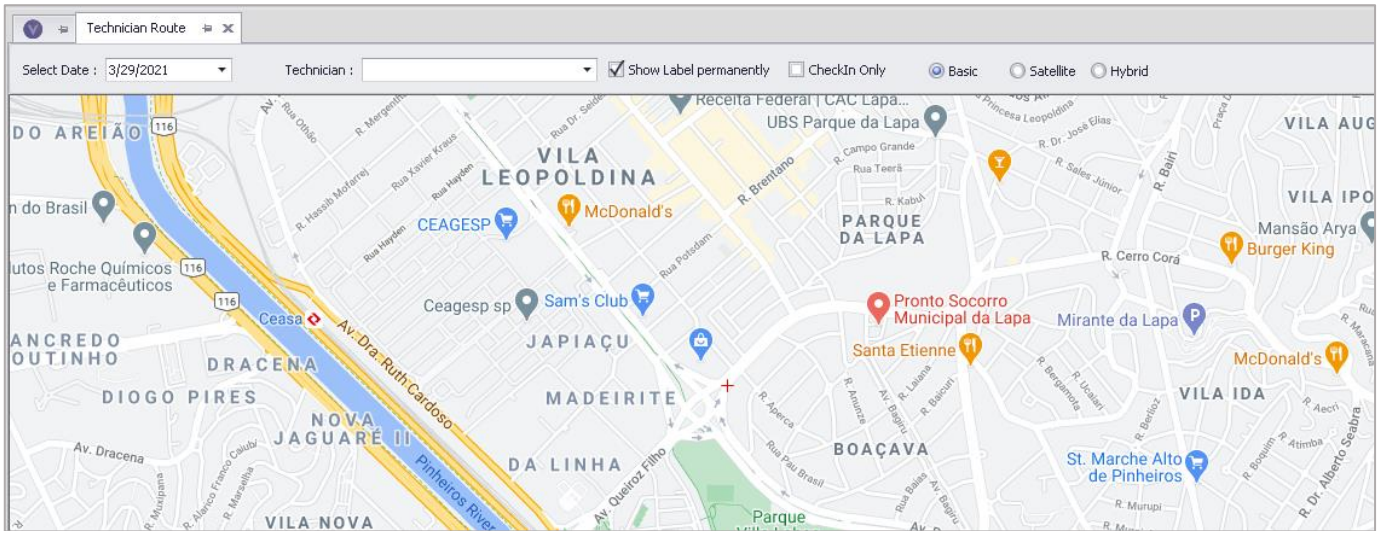


Image 4.11.1

5.15 TECHNICIANS LAST POSITION

Displays the last position/location of any technician on the map

5.16 SEND BULK SMS/ EMAILS

Allows users to send bulk SMS or Emails to customers **(Image 4.12.1)**. For the SMS facility the user must have Yoboto credits.

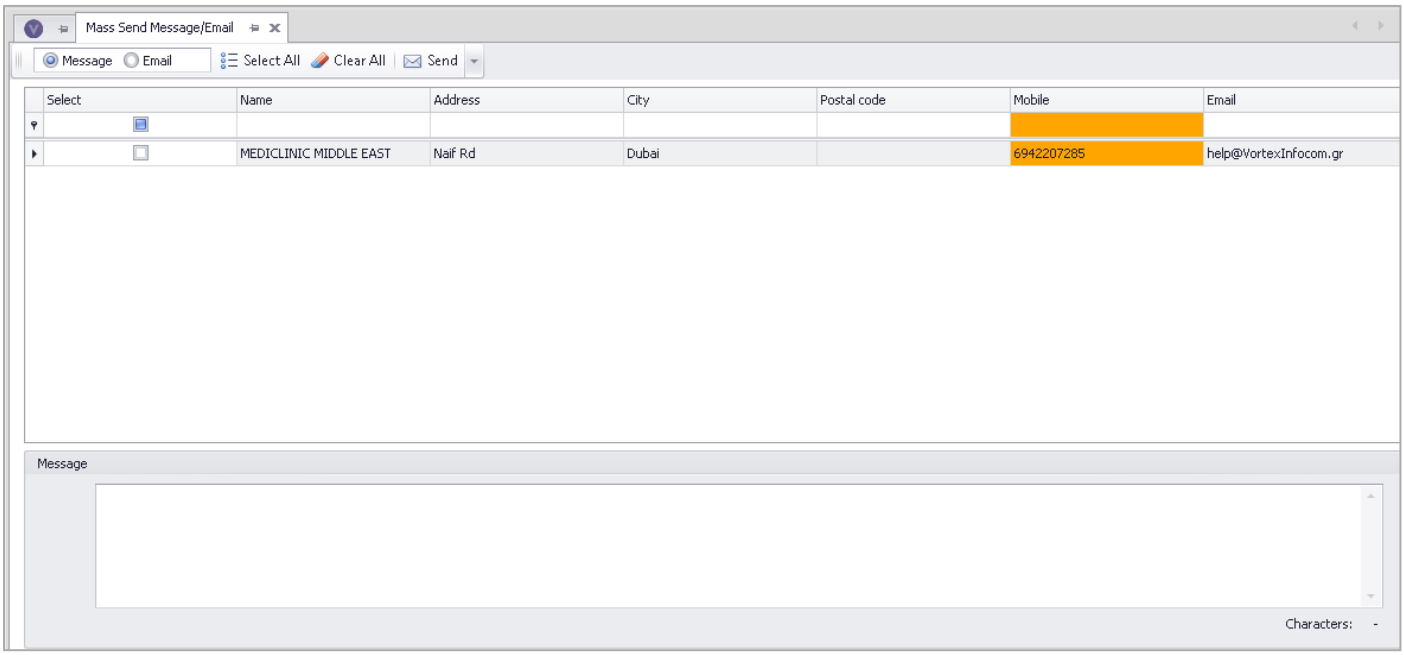


Image 4.12.1

5.17 PRODUCTS AT SITES

A list containing all the products that have been installed in the context of customer projects. Users can perform an advanced search by using various filters **(Image 4.13.1)**

Site Products Inventory

Select Template

Records

Find Clear

Product Code	Product Description	Type	Site Produc...	Site ID	Sites	Number	Post Code	Point Adress	Date	Trader Code	Trader Name	Attribute	Feature Price
000223	HEAT PUMP CARRIER	COOLLING/...	3	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	Power	24KWA
000223	HEAT PUMP CARRIER	COOLLING/...	3	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	Place of origin	Japan
000223	HEAT PUMP CARRIER	COOLLING/...	3	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	End of War...	31/12/2018
000223	HEAT PUMP CARRIER	COOLLING/...	3	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	Color	White
000223	HEAT PUMP CARRIER	COOLLING/...	3	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	Serial No	3333444
000220	AIRCONDITION LIFE	COOLLING/...	3823	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...		
000218	AIRCURTAIN K47	COOLLING/...	7644	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...	Serial No	12344
000219	AIRCONDITION PASSI...	COOLLING/...	779	1	Σοφοκλέους	2106505386	10235	Σοφοκλέου...	6/26/2017	00018580	ABU DHABI ...		
000085	HP Probook L1740 17"	LAPTOP	4	2	Κεντρικό Κα...	2106505386	10252	Σταδίου 40	6/26/2017	00018580	ABU DHABI ...		
000153	SAMSUNG SYNC943	MONITOR	3824	2	Κεντρικό Κα...	2106505386	10252	Σταδίου 40	6/26/2017	00018580	ABU DHABI ...		

Image 4.13.1

5.18 TIME REPAIR COMPARISON

Allows users to compare, over a specific period of time, if the technician's actual working hours (duration of appointment at customer site – Check In-Check Out) coincides with the typical working hours that are initially defined for this service (Start Time-End Time). **Image 4.14.1**

Repair Time Comparison

From Date 01/01/2021 To Date 3/29/2021 Threshold 10 Show Results

Drag a column header here to group by that column

Det Id	Resourc...	Service	Product	Date Start	Date End	Check In	Check Out	Minutes ...	Real Time	Dif	Result
3617	Jim John...	Bathroo...	STORE	1/4/2021	1/4/2021	11/12/2...		-150			
3668	Mohamm...	Bathroo...	STORE	3/6/2021	3/6/2021	11/4/2020	11/4/2020	120	6	-114	Early
3669	Jim John...	Router c...	ROUTER...	3/2/2021	3/2/2021	11/5/2020	11/5/2020	60	6	-54	Early
3671	Jim John...	Yearly M...	FIRE EX...	3/6/2021	3/6/2021	11/5/2020	11/5/2020	60	1	-59	Early
3699	Jim John...	Monthly ...	AIRCON...	3/18/2021	3/18/2021	12/2/2020		60			
3710	Paul Willi...	PPM	AIRCON...	3/4/2021	3/4/2021	12/27/2...	12/27/2...	60	7	-53	Early
3769	Jim John...	PPM	AIRCON...	1/3/2021	1/3/2021	1/3/2021	1/3/2021	60	4	-56	Early
3770	Jim John...	PPM	AIRCON...	1/3/2021	1/3/2021	1/3/2021	1/3/2021	60	4	-56	Early
3775	George ...	PPM	TOSHIB...	3/10/2021	3/10/2021	1/13/2021	1/13/2021	60	0	-60	Early
3804	Jim John...	Battery ...	CAMERA...	3/4/2021	3/4/2021	3/4/2021	3/4/2021	60	1	-59	Early
3805	Jim John...	Router c...	ROUTER...	3/4/2021	3/4/2021	3/4/2021	3/4/2021	60	3	-57	Early
3807	Jim John...	Router c...	ROUTER...	3/10/2021	3/10/2021	3/10/2021	3/10/2021	60	3	-57	Early

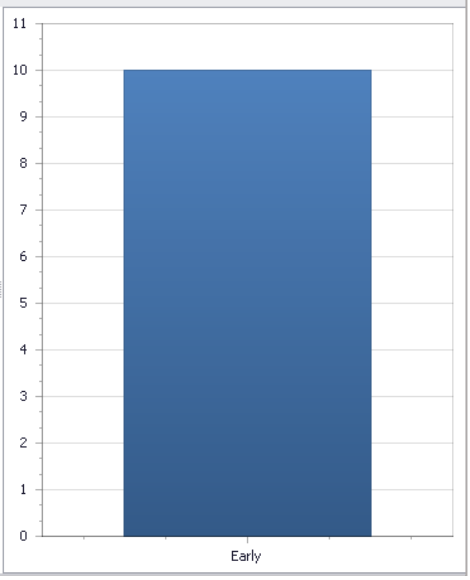


Image 4.14.1

5.19 TIME BETWEEN SERVICE REPORT ACTIONS

A report that shows the time elapsed between Service Report actions. **(Image 4.15.1)**

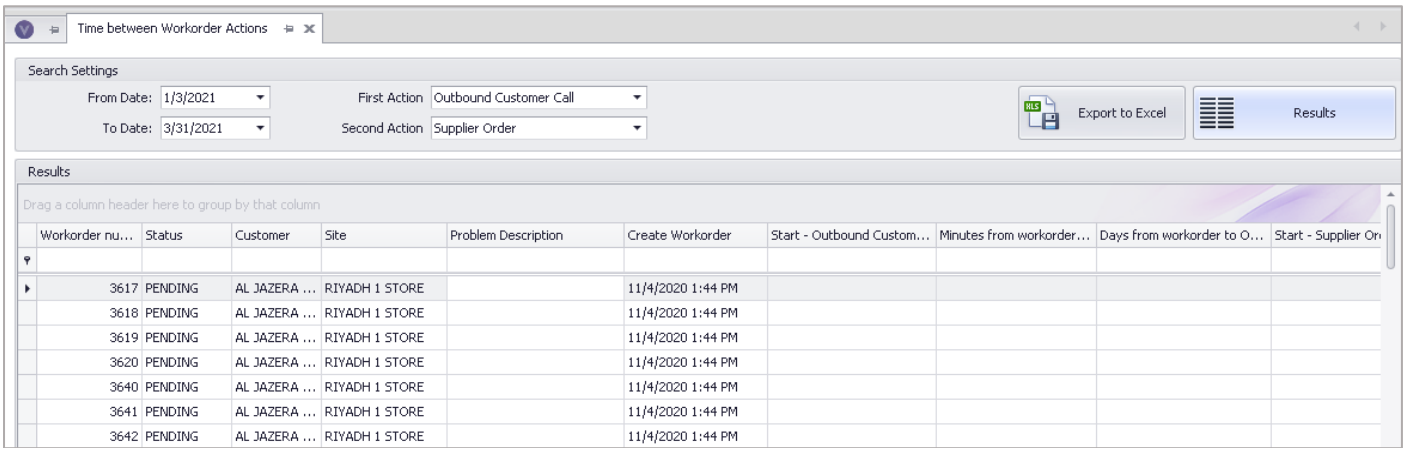
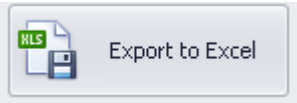


Image 4.15.1

The user can also export the data to an Excel worksheet by pressing on 

.

5.20 GROUPED SERVICE REPORT

A report containing all Service Reports (both In House and OnSite) and a calculation of the time spent by technicians at customer sites. **(Image 4.17.1)**

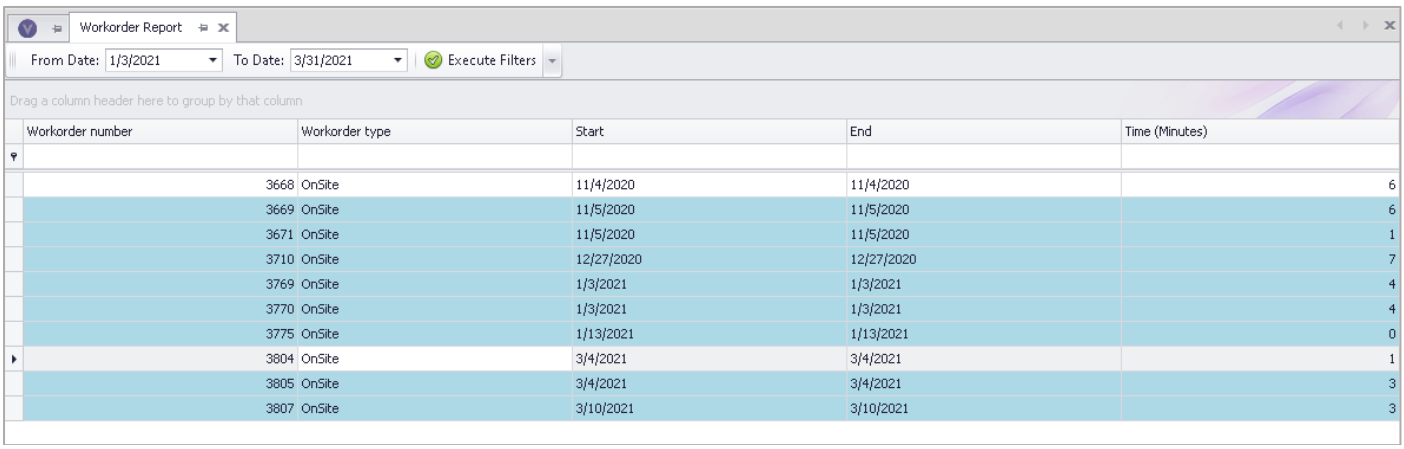


Image 4.17.1

5.21 WORKORDERS WITH SPARE PARTS

A list of all the workorders in which spare parts are used. Displays the spare parts along with their quantities (**Image 4.18.1)**

3rd Party Reports

Print | Send Email | Representative code: | Select to print | Select for Email

From: 1/1/2020 To: 3/29/2021 Submit

Select	Partner	Reference ...	Workorder Number	Service	Customer	Technician	Site	Date
	Select Partner form		3813	Installation & Commi...		Jim Johnson	Building A	3/11/2021
	Select Partner form		3812	Installation & Commi...		Jim Johnson	Building A	3/14/2021
	Select Partner form		3811	Installation & Commi...		Jim Johnson	Building A	3/13/2021
	Select Partner form		3810	Installation & Commi...		Jim Johnson	Building A	3/12/2021
	Select Partner form		3809	Installation & Commi...		Jim Johnson	Building A	3/11/2021
	Select Partner form		3808	Router check		Jim Johnson	Building A	3/10/2021
	Select Partner form		3807	Router check		Jim Johnson	Building A	3/10/2021
	Select Partner form		3806	New Request		Thomas Joseph	Building A	3/10/2021
	Select Partner form		3805	Router check		Jim Johnson	Bellavista Apartments	3/4/2021
	Select Partner form		3804	Battery check		Jim Johnson	Bellavista Apartments	3/4/2021

Image 4.18.1

5.22 PICKING LIST MASS PRINT

Users may run a search over a specific period (from-to) and select the technician in order to display all spare parts, their quantities, in which workorders they were used, for which customer, as well as the final cost.

5.23 CUSTOMERS BALANCE

A Vortex CM Module report.

5.24 OUTGOING MAIL

Displays the outgoing Emails sent by all the users through the application.

5.25 SPARE PARTS TRANSACTIONS

A report with the spare parts quantities used in customer projects.

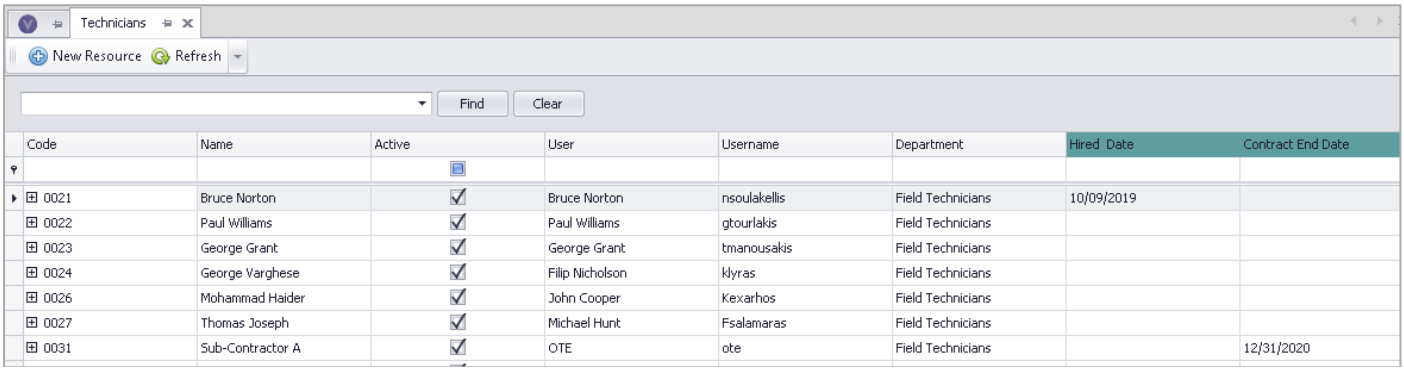
5.26 CUSTOMER CONTACTS

A list containing the contacts of all Traders.

6 RESOURCES

6.1 TECHNICIANS

The next step is creating the company's technicians. By clicking on the **New Entry** icon at the bottom left of the form we can add a new technician **(Image 5.1.1)**



Code	Name	Active	User	Username	Department	Hired Date	Contract End Date
0021	Bruce Norton	☑	Bruce Norton	nsoulakellis	Field Technicians	10/09/2019	
0022	Paul Williams	☑	Paul Williams	gtourlakis	Field Technicians		
0023	George Grant	☑	George Grant	tmanousakis	Field Technicians		
0024	George Varghese	☑	Filip Nicholson	klyras	Field Technicians		
0026	Mohammad Haider	☑	John Cooper	Kexarhos	Field Technicians		
0027	Thomas Joseph	☑	Michael Hunt	Fsalamaras	Field Technicians		
0031	Sub-Contractor A	☑	OTE	ote	Field Technicians		12/31/2020

Image 5.1.1

The information about each new user can be filled out in the form below **(Image 5.1.2)**

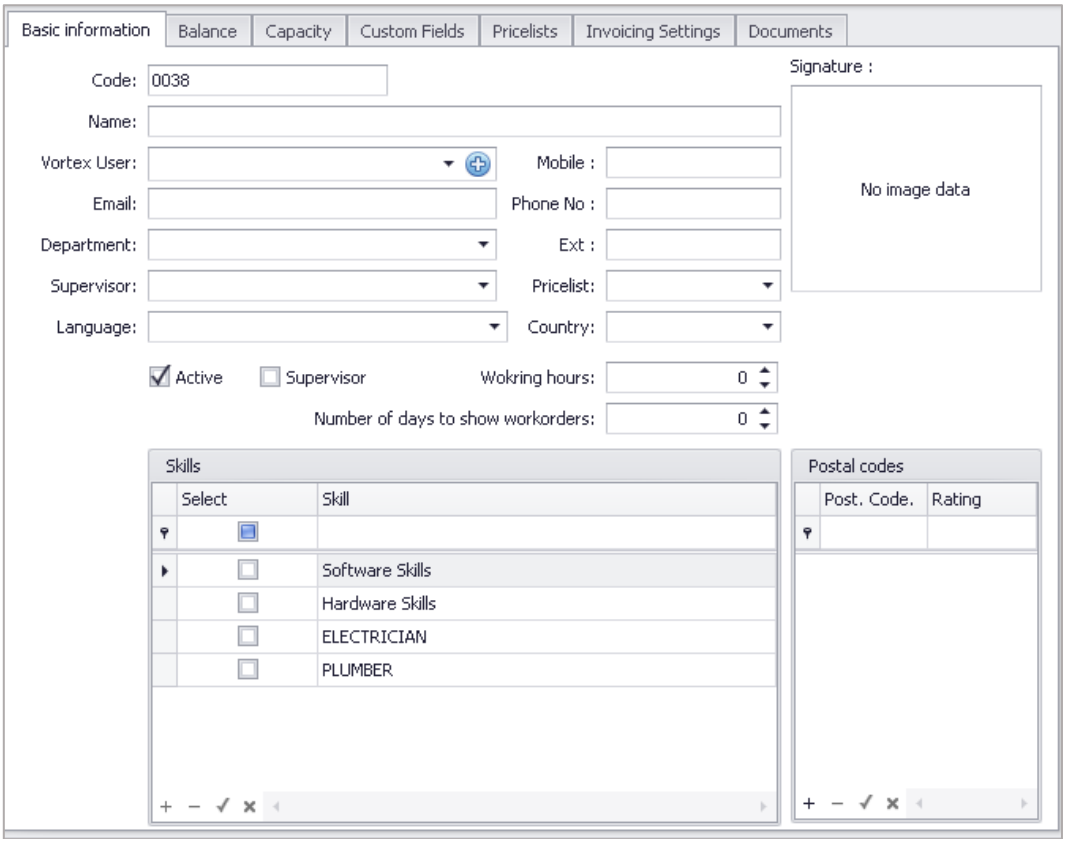


Image 5.1.2

Code: The entry's serial number, created automatically
Name: The technician's first and last name
Vortex User: The desired user name
E-mail: The user's email address
Mobile: The user's cell phone number
Department: The user's department
Manager: The name of the technician's manager
Pricelist: The pricelist that the technician wants to view in the Service Report's cost estimation **(Image 5.1.3)**

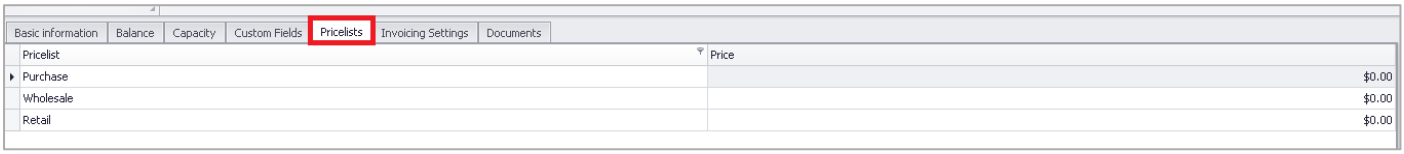


Image 5.1.3

Working hours: The technician's working hours
Workorders per number of days: Workorders per day for the next X days
Active: Check box used to determine whether a user is active or not
Skills: The technician's skills are selected, so that when the administrator creates a workorder, **only** users who have the necessary expertise to carry out the specific task are shown.
Zip Codes: The zip codes of the sites served by each technician. This way, when a workorder is created, only the technicians that serve the particular zip code will appear as available. In the Rating field the zip codes may be ranked according to the areas served by each technician. The rating follows a descending order (from highest to lowest, e.g. 10 zip codes with a rating from 10 to 1, where the zip code that is first served by a technician will be the one with a rating of 10 and the last one with a rating of 1). For example, for the zip code 11142, Technician A has a rating of 10, Technician B has a rating of 9 and Technician C has a rating of 5. When creating a workorder for zip code 11142 only the three technicians (A, B and C) will appear as available, in an order commensurate to their ratings (first A, then B and lastly C, being the technician with the lowest rating).
Signature: The technician's signature

Balance:
Capacity: Allows users to define the maximum number of workorders per day and per skill for each technician **(Image 5.1.4)**.

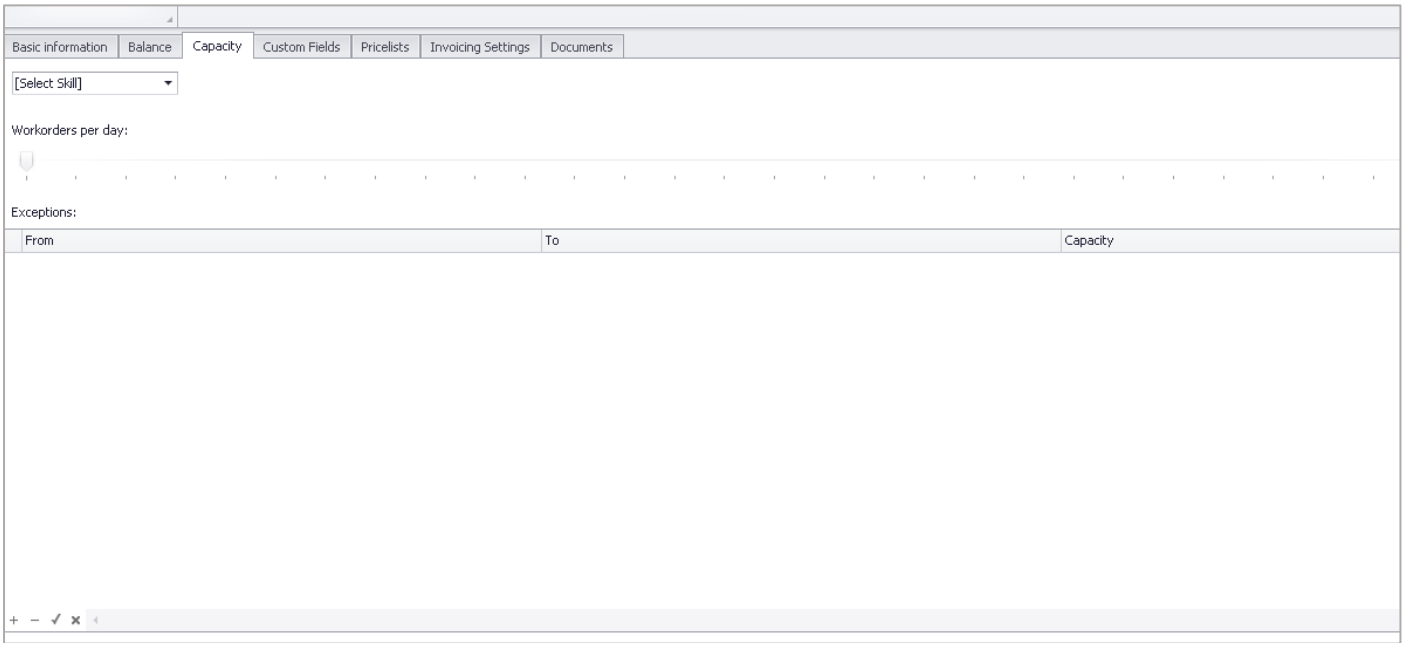


Image 5.1.4

Custom Fields: Technician custom fields that are created in the Settings
Pricelists: Displays all company price lists

6.2 SALESPERSONS

Salespersons: Here we enter the company's salespersons **(Image 5.2.1)** by clicking on the **New Salesperson** icon

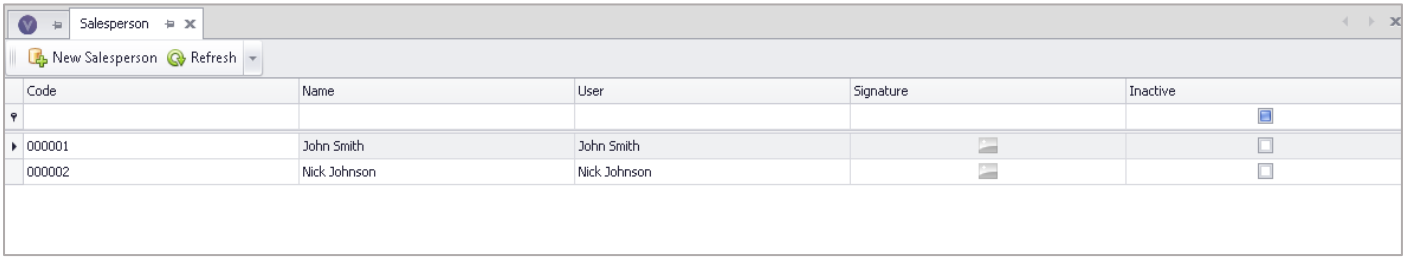


Image 5.2.1

and then we complete the salesperson's tab **(Image 5.2.2)**

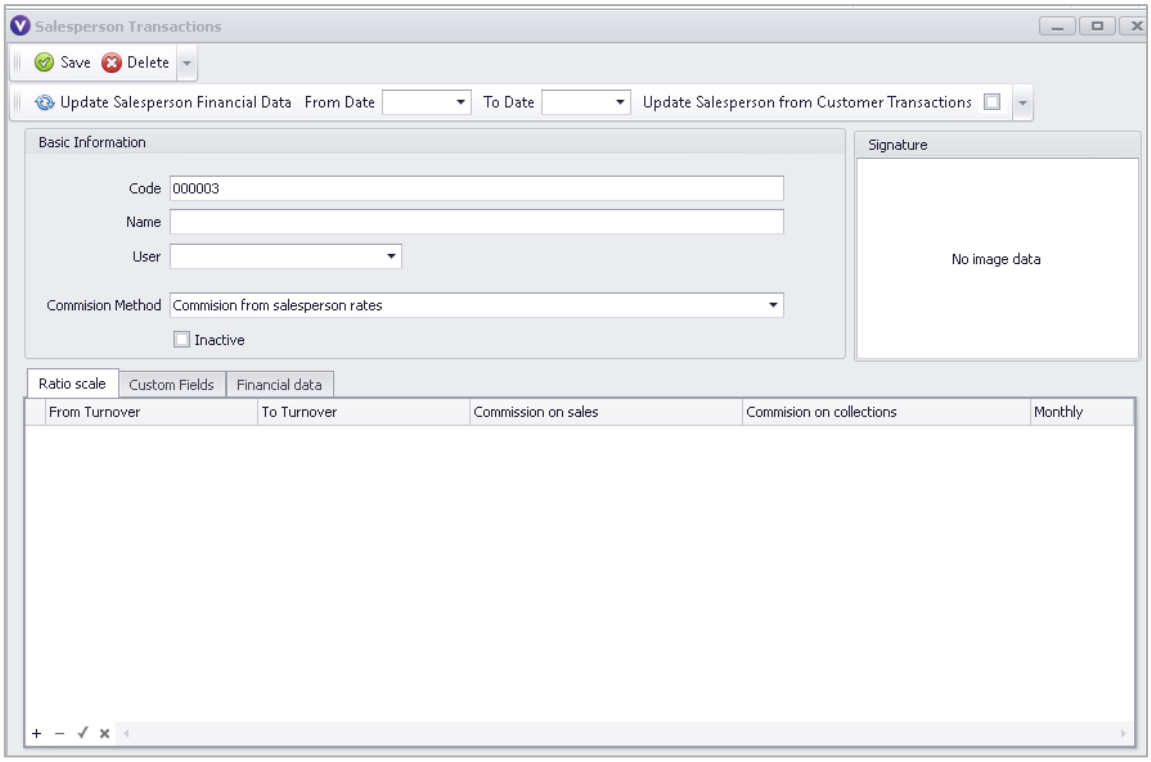
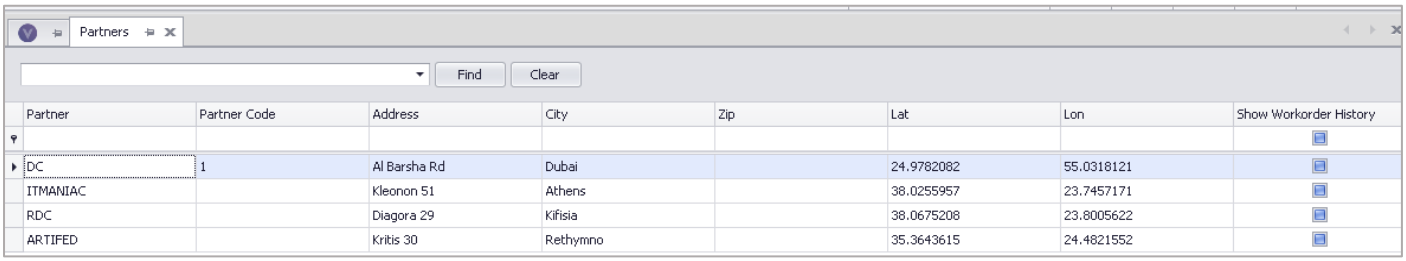


Image 5.2.2

Code: The salesperson's serial number. Filled in automatically when the entry is created.
Name: The salesperson's first and last name.
User: Vortex user
Commission method: This information is filled in when the salespersons work on commission. It is automatically calculated with a fixed or progressive rate based on the sales volume or the collections value.
To delete a salesperson, we press **Delete.**

6.3 SUBCONTRACTORS

Here we enter the external collaborators/technicians teams who are granted access to various sites by the administrator **(Image 5.3.1)** by filling in the **Show Workorder History** field.

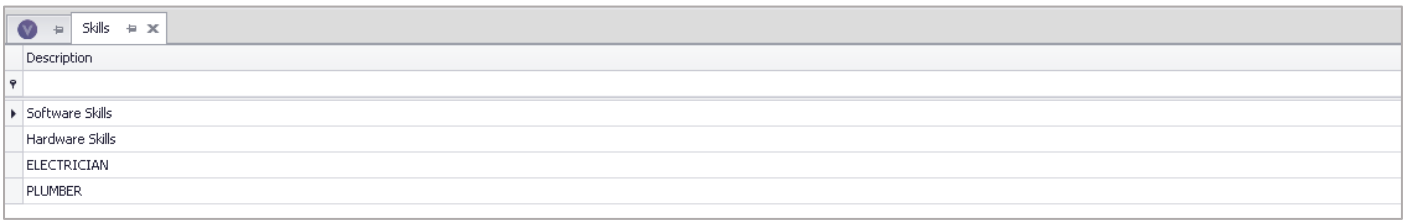


Partner	Partner Code	Address	City	Zip	Lat	Lon	Show Workorder History
DC	1	Al Barsha Rd	Dubai		24.9782082	55.0318121	
ITMANIAC		Kleonon 51	Athens		38.0255957	23.7457171	
RDC		Diagora 29	Kifisia		38.0675208	23.8005622	
ARTIFED		Kritis 30	Rethymno		35.3643615	24.4821552	

Image 5.3.1

6.4 SKILLS

The **Add** icon at the bottom left of the form allows us to add their skills **(Image 5.4.1).**



Description
Software Skills
Hardware Skills
ELECTRICIAN
PLUMBER

Image 5.4.1

6.5 DEPARTMENTS

Allows users to create the company's departments. A new department is added by clicking on the add icon + at the bottom of the screen **(Image 5.5.1)**.

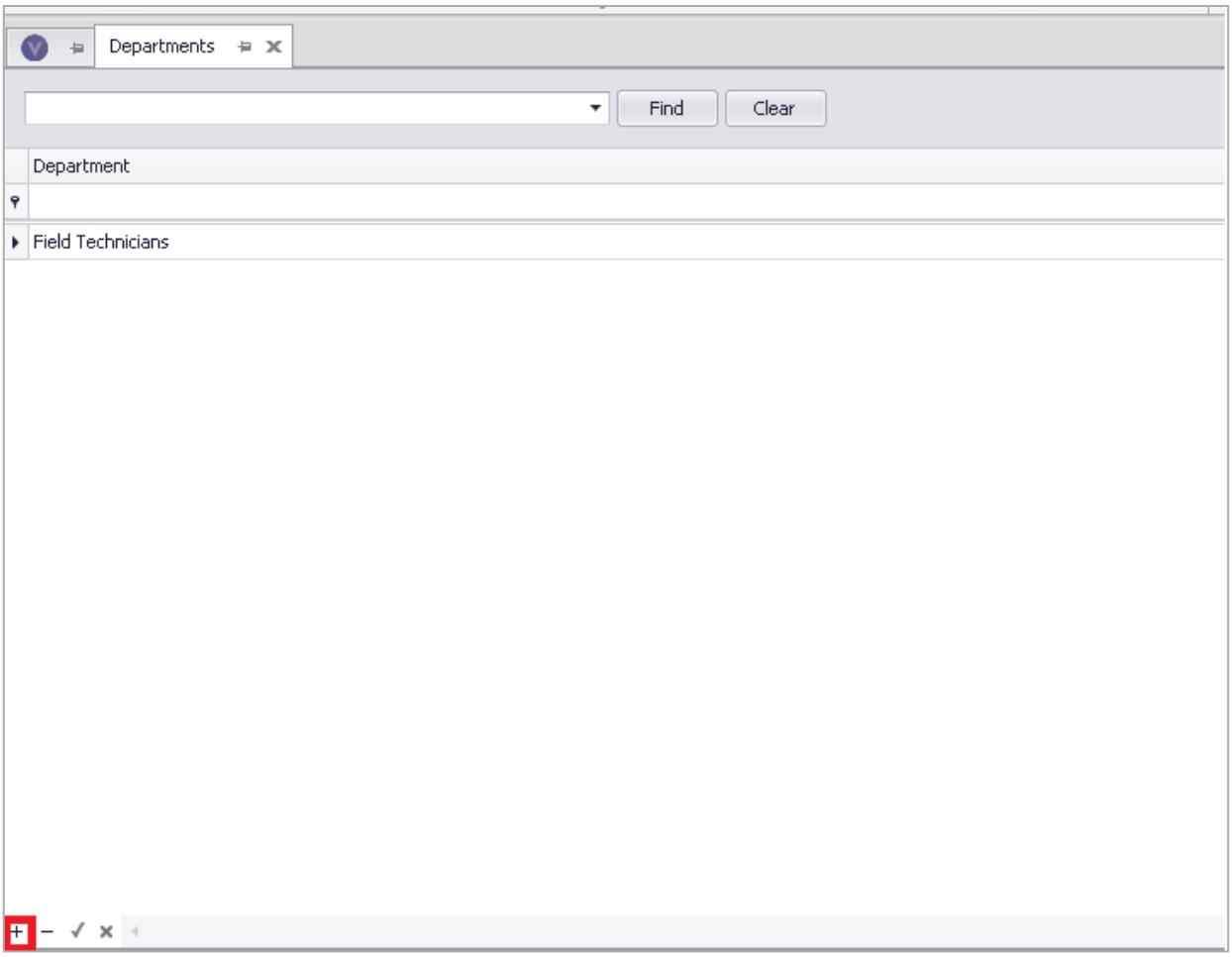


Image 5.5.1

6.6 PERSONNEL LEAVE

Allows users to fully manage personnel leaves. The time period, the number of days absent and the type of leave are defined for each leave **(Image 5.6.1).**

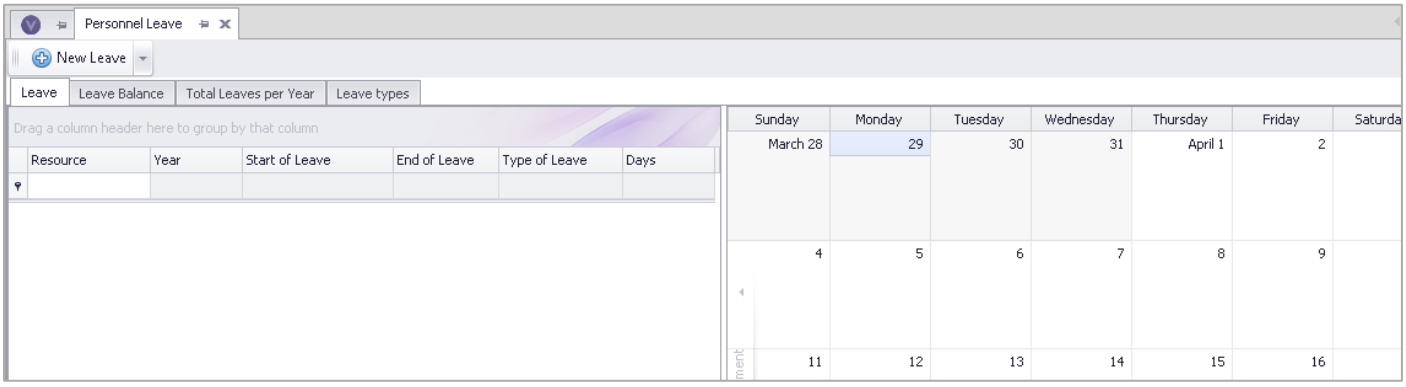


Image 5.6.1

Leaves: Automatically shows the number of leave days employees are entitled to (for the specific type of leave), and the number of leave days they have already taken.

Remaining Leave Days: Shows the remaining number of leave days (per type of leave for each technician).

Total Annual Leave Days: Allows us to enter the number of leave days that each technician is **entitled to** (per type of leave e.g. normal/sick/parental).

Types of Leave: Allows us to enter every type of leave.

7 SETTINGS

7.1 ROLES

Allows us to create and manage different work roles, so that each role is granted separate rights to perform tasks in Vortex. Each user may have one or more roles, inheriting the respective rights.

A new role is added by clicking on + at the bottom of the screen. **(Image 6.1.1)**

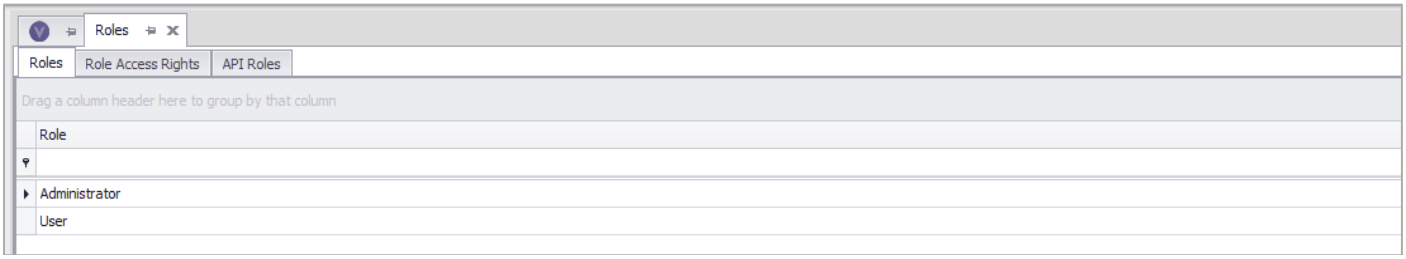


Image 6.1.1

Then, we define the rights of each role. The right to view, modify or delete is granted to users for specific categories or other content **(Image 6.1.2)**

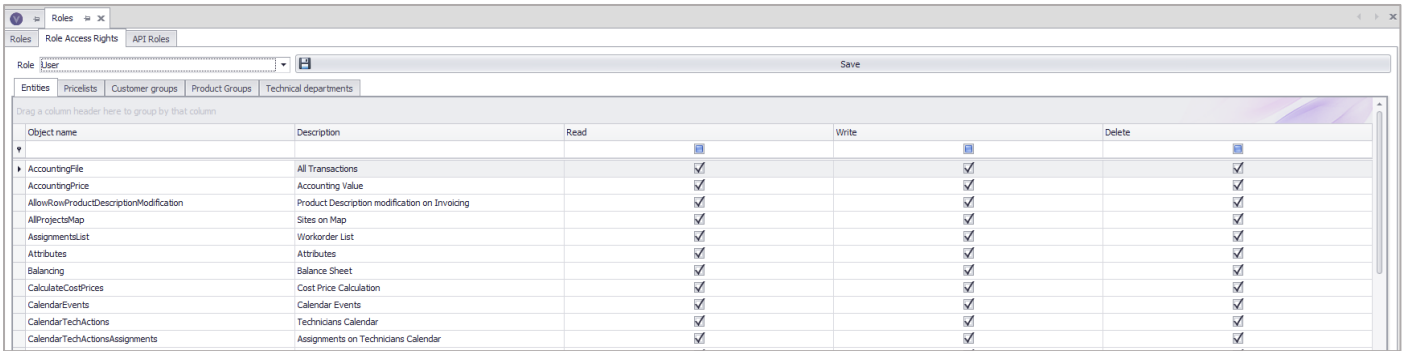


Image 6.1.2

7.2 USERS

User rights are defined ONLY by the system administrator, for whom all the rights in all application forms have been

enabled. Each user has a Username and Password, and belongs to one role. Depending on their role, they are allowed to perform specific actions. A new user is added by clicking on + at the bottom of the screen **(Image 6.2.1)**.

Users

Locked Acc...	UserId	Full name	UserName	Password	E-mail	Email Account	Partner	IsActive	RoleId	External User	Customer	Site	Login failed...	Change Pa...	Working days	Save filters...
	20	Bill Jordan	ngkavanozis	*	vnikiforos@VortexInfocom.gr		DC	☐	User	☐			0	☐		☐
	21	Bruce Norton	nsoulakellis	*	ksalatellis@VortexInfocom.gr		DC	☐	User	☐			0	☐		☐
	22	Paul Williams	gtourlakis	*	kefthimiopoulos@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	23	George Grant	tmanousakis	*	skapelouzos@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	24	Filip Nicholson	klyras	*	fgazas@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	26	John Cooper	Kexarhos	*	jaggelakis@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	27	Michael Hunt	Fsalamaras	*	spavlou@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	36	John Smith	VTegos	*	tantonopoulos@VortexInfocom.gr		DC	☑	User	☐			0	☐		☐
	38	Nick Johnson	Nrigatos	*	njohnson@vortexinfo.com		DC	☑	User	☐			0	☐		☐
	55	George Bruce	PTriantis	*	gbruce@vortexinfo.vom		ITMANIAC	☑	User	☐			0	☐		☐
	58	demo	demo	****	demo		DC	☑	User	☐				☐		☐
	59	1	1	*	gkouris@dcis.gr		DC	☑	Administrator	☐			0	☐		☐
	60	OTE	ote	***	ote@dcis.gr		ITMANIAC	☑	Administrator	☐			0	☐		☐
	61	Customer	cus	*	cus@dcis.gr			☑	User	☐	PALM JUMEIRAH	PALMA RES...	0	☐		☐
	62	Mike Smith	MSmith	****	Mike@dc.gr		DC	☑	User	☐			0	☐		☐
	63	rtretr	sefs	***	dfs@fsdfsd		DC	☑	User	☐			0	☐		☐

Image 6.2.1

7.3 BACKUPS

Allows users to create backups of the database. The backup that we have created may be used in the future if we need to restore our database.
The backup may or may not contain photos. **(Image 5.4.1)**

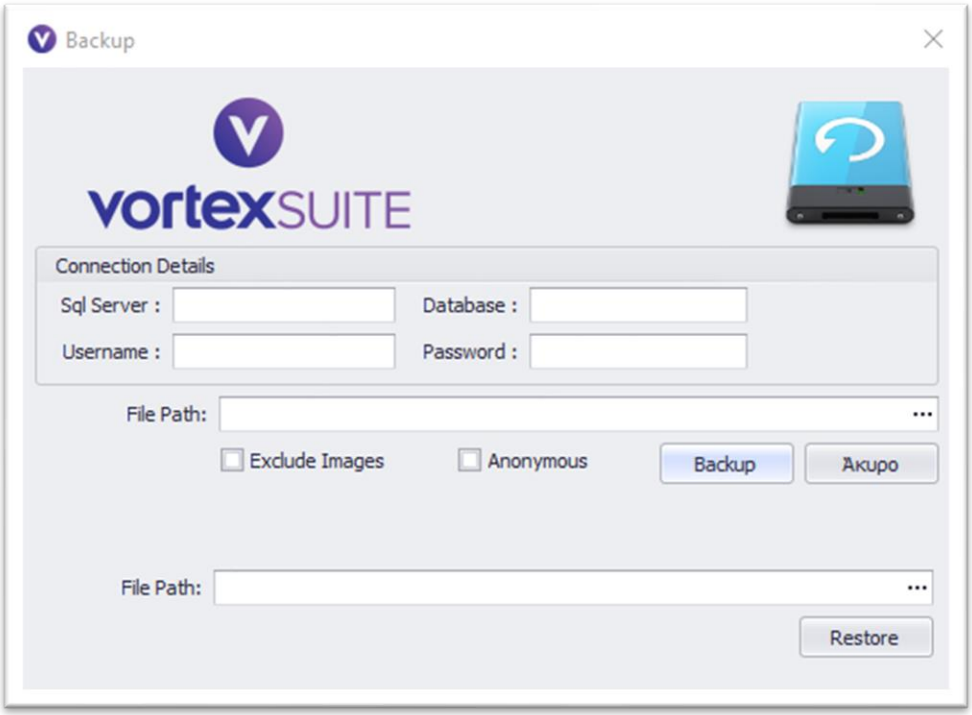


Image 5.4.1