



FM WORKS MOBILE™

General Overview Features and Capabilities

V 2.16

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INTRODUCTION

FM Works Mobile™

FM Works Mobile is a handheld application that extends the power, innovation and productivity of the ARCHIBUS platform as well as the FM Works CMMS system to mobile PDA devices.

Use of the FM Works CMMS is optional. FM Works™ is a powerful, easy-to-use computerized maintenance management system (CMMS) that is fully compatible and integrated with ARCHIBUS®. By providing a modern and very user-friendly interface, combined with substantial, additional functionality, FM Works significantly enhances the power and productivity of ARCHIBUS systems for operations and maintenance management, while also saving money on system software

FM Works Mobile is designed to work directly from ARCHIBUS using any of the following user interfaces:

- ARCHIBUS Windows Building Operations Module
- ARCHIBUS Web Central™
- Your own Custom and Compatible ARCHIBUS interface

Since both applications (ARCHIBUS and FM Works) use the same database, data from either application is synchronized to a local database installed to the handheld device via the FM Works Server application. Once the database is synchronized, the handheld is used "offline" to review, enter and update information. FM Works Server manages the flow of data and work order calculations as well as provides automated e-mail notification to interested parties regarding status changes for work requests.

FM Works Mobile will run on PDAs with Pocket PC 2003 and Windows Mobile 5.0, 6.0 to 6.5. Data communication can be via hard-wired "cradle sync", IEEE 802.11b/g wireless LAN and/or broadband (cellular) wireless WAN. Refer to the FM Works Mobile Specification Sheet for more details.

Mobile Work Express™ -- allows maintenance workers, using their own login ID, to access a focused screen that displays only their own work orders (and/or unassigned requests in their trade) and allows them to make updates with an easy to use interface.

This powerful capability enables maintenance workers to access and update their work orders from their own handheld device anywhere the worker has wireless or cradled access to the server.

Mobile Parts Manager™ -- enables effective management of parts and supplies inventory using a handheld device. You can add new parts as they are discovered in the parts crib. It functions similarly to the Windows Parts Manager that tracks parts inventory and supplies.

Mobile Asset Surveys™ -- enables you to download your inventory assets such as equipment, rooms, etc., to the handheld so they can be field verified, updated, etc. Users can add new asset items as items are discovered in the field. The Filtering tool enables inventory assets to be filtered as they are scanned and allows any default filter data to be added to new assets.

With the tap of a button, the user can toggle between these different asset types. The grids and screens will change based on the asset type. Different asset types can be activated or deactivated.

The “Bean Counting” feature allows you to quickly count and survey inventory assets by scanning the barcode without using an entry screen. The Bean Counting “Location” mode also quickly updates the current location of asset items without using an entry screen.

This is handy in helping you to identify any equipment or rooms that are unaccounted for during a survey, without leaving the screen.

HOW DOES FM WORKS MOBILE WORK?

FM Works Mobile is fully compatible and integrated with ARCHIBUS and uses the same database projects via the FM Works Server. By using a combination of database triggers, tables and configuration settings, the FM Works Server program will only transfer to and from the handhelds as needed.

FM Works Server is an application that runs in the background on a server. It connects to the ARCHIBUS project database as well as to a small work database that is stored on the server and synchronized to all of the handhelds.

FM Works Mobile works seamlessly, thereby eliminating the need for transfer tables. If work is assigned to a craftsperson, all the user has to do is make the labor assignments and FM Works Server will determine if the request goes to the handheld.

SOME SAMPLE ISSUES RESOLVED BY FM WORKS MOBILE

FM Works Mobile provides solutions to several issues that have been raised by users over the years

“Our equipment often gets moved around the facility without our knowledge. How can we quickly survey the equipment and identify its current location?”

The “Bean Counting” feature allows you to quickly count and survey equipment simply by scanning the barcode without using an entry screen. The Bean Counting “Location” mode also quickly updates the current location of the equipment item without using an entry screen.

“We have a parts store crib/room that has all of the parts bar-coded. Craftspeople come by all of the time to get parts that have been assigned to their work requests.”

FM Works Mobile Parts Manager can read the bar-codes on the parts bins and pull-up the inventory information as well as allow the user to receive, adjust and dispense parts. Parts can be assigned directly to a work request from the handheld. All transactions are logged into the standard ARCHIBUS inventory tables.

“We have two labor shifts... I don't want to double the number of PDAs we own!”

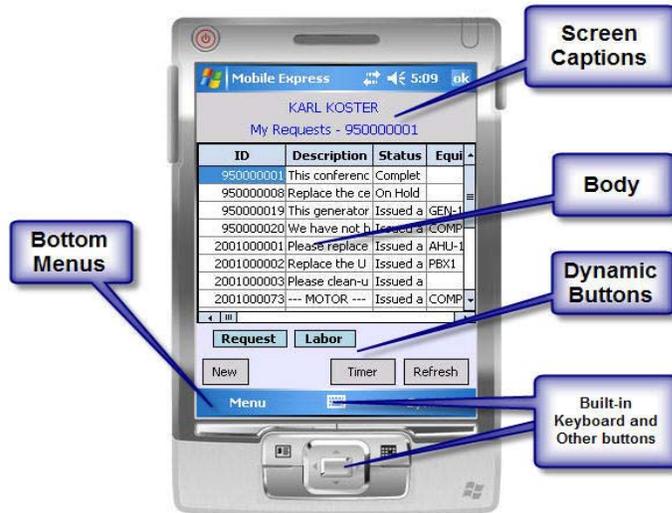
In FM Works Mobile, craftspeople are not assigned to a specific handheld but instead, handhelds are assigned to a PDA group. As long as they keep the handheld synced, they can pick up any handheld within their PDA group, login and get their current data.

“Our workers who work on the weekend need to see unassigned work so they can assign themselves and go get it done without the helpdesk assigning it.”

FM Works Mobile can be easily configured to allow the craftspeople to see unassigned work. Once they select an unassigned Work Request, they can then assign it to themselves and complete the request.

FM WORKS MOBILE OVERVIEW

Designed for Ease-of-Use -- The FM Works Mobile screen is designed for ease of use on a PDA/mobile device. As shown below, there are several important components to the basic screen design, with a focus on user friendliness and ease of use.



Both Portrait and Landscape Orientations – As part of this design for ease-of-use, FM Works Mobile is also designed to be used in either a traditional “portrait” (vertical) orientation as well as a “landscape” (horizontal) orientation as shown below. The orientation can be changed dynamically while the program is running so the user can select the orientation that best suits his needs.



Wireless Signal Strength Indicator -- If the user is working wirelessly, it's important to make sure you have a good wireless network connection to the server. When the PDA is in wireless mode, a WiFi indicator will automatically show in the screen captions to indicate the strength of the signal using various shades of red to green.



Mobile Work Express

Work Request Grid -- Using Mobile Work Express, a craftsperson can see all work requests where he or she has been assigned, view the detail, change the status, log his time, allocate parts and do all the functions necessary to see what needs to be done and report on its status and the resources used. The fields and their order in this grid may be changed by the system administrator.



The list of work requests will initially be sorted in descending order based on the Work Request Number. This puts the most recent Work Requests at the top of the list.

The user can easily re-sort the list on any column by simply tapping on the column header. The first tap sorts the list in ascending order based on the contents of the column. Tapping again reverses the sort order – i.e., if the list is currently in ascending order, tapping again on the same column reverses the list to descending order on that column.

This is very useful for organizing the work and being able to look at it in various ways. For example, by sorting the list on Equipment ID, you will see all work for each equipment item grouped together. Or, if you sort on Building, you will see all assigned work grouped together by building.

Unassigned Work can be configured to display in the **My Requests** screen along with requests assigned to you. There are various combinations of options that limit the unassigned feature to just show unassigned for your trade only or to see all of the unassigned requests.

There is also an option to see all of the requests for a given trade, regardless of whom it's assigned to. Work can also be filtered per user by building, etc. This is handy in the case of a building manager needing to see work for a given building.

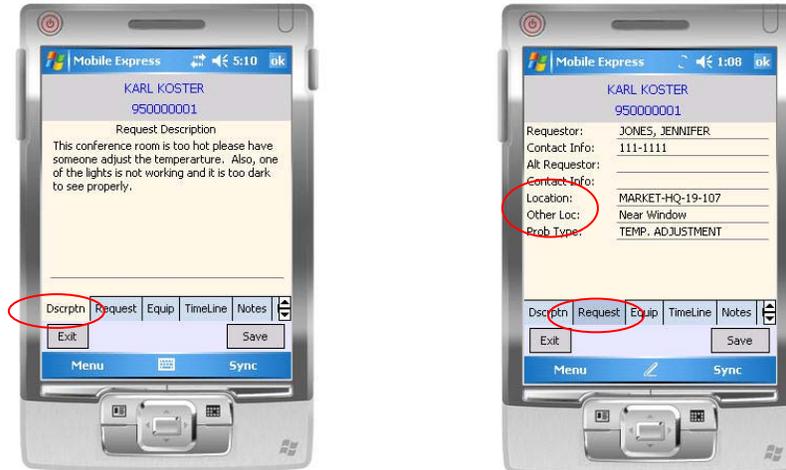
The columns shown in the grid are a customization created by editing an XML template for the Work Order Express and the Asset Surveys.

You can also filter the requests on an asset tag or id, a serial number, a request number, or status code. By choosing Filter and either entering in the item or scanning the barcode, you can find the item you are searching for.



The filter simultaneously scans the Asset ID, Tag Number, Serial Number, Work Request or a status code. The grid is then filtered by the results of the search processed after the scan.

Work Request Details -- After selecting a Work Request in the grid, the user can drill down and see the details of the request in a tabbed interface similar to the Request in the Windows Works Manager and Work Order Express modules.



Work Timer -- The Work Timer screen allows the user to set up a stopwatch timer to track how long it takes to complete a task. The timer can be stopped and restarted as often as needed. The timer can track hours for today; and, if it is left to run, it will track time over any number of days.



If the timer is active, the screen may be closed and the timer will keep running. As a matter of fact, the timer will remain running even if you reboot the PDA, replace or change the battery, start and stop the program, etc. It will be interrupted if the program is uninstalled completely and reinstalled.

The Work Timer has an **automatic mode** that starts and stops the timer depending on the status code selected by the user. As the user goes into the work request details and changes the status code, the timer will start, stop, restart and complete based on the status codes designated for this feature. The system maintains a separate automatic timer for each work request, so multiple work requests can be in progress; and the time is tracked for each one separately.

For example, changing the status to "Working On" starts (or restarts) the timer; changing the status to "On Hold" would stop the timer.



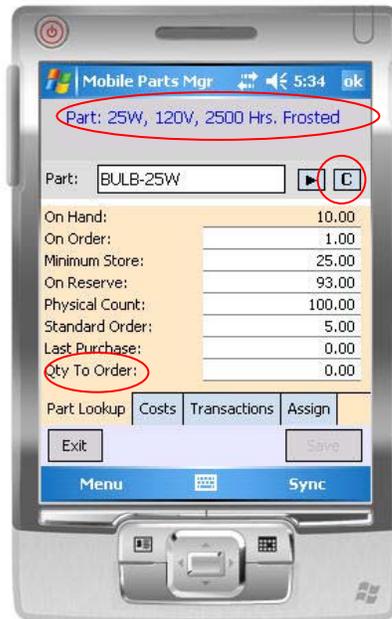
When the status code is changed to "Complete," the total time will also be copied to the Labor entry as regular hours.



Labor (Craftspeople), Parts and Other resources can be managed on the handheld by tapping **Resources** from the main menu. This allows users to add craftspeople, parts and other expenses to the request at anytime while in the field. All of these options are configurable so if a certain resource is not needed, it will not show on the handheld.

Mobile Parts Manager

The FM Mobile Parts Manager allows you to effectively manage your spare parts and supplies in your parts inventory using a handheld device.



Placing the cursor in the “Part” field will enable you to either tap in the part code or scan it in if your handheld has a bar code scanner. Tapping the Blue go “>” button will check the entry against the parts database to see if the part exists. If the part exists, then the parts detail will be presented.

There is a separate tab that enables the user to perform parts inventory transactions manually just as in the Parts Manager module.

The only difference is that these transactions will not be reflected in the main database until the PDA has been synchronized, the transactions processed, and the results updated to the PDA on the subsequent synchronizations.

The Transactions screen allows you to manually change/update current inventory in the Mobile Parts Manager. The Manual Parts Inventory Transactions screen allows you to manually update physical inventory. A part code can be selected and you may indicate a quantity that may have been added or newly received, disbursed manually, or returned back unused.

By tapping on the Assign tab, the user can also enter or scan a work request number and assign this part to a work request. Again, the transaction has to be synced and processed before the inventory and work request database is updated.

The user can indicate the quantity picked and/or actually used.

All changes to the data made in the Mobile Parts Manager can be reviewed on the PDA and deleted before the data is synced back to the server for processing.

Mobile Asset Surveys

The Asset Survey module allows you to download your equipment, rooms, inventory or other asset types to the handheld so it can be field verified, updated, etc. You can also add new assets as it is discovered in the field.

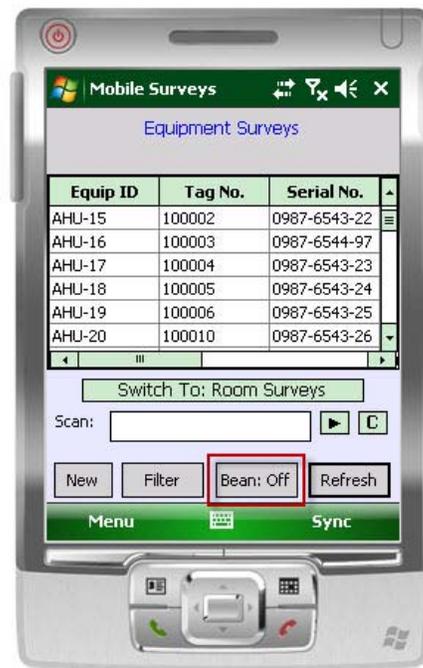


Once the asset is entered or updated and synchronized, the Handheld will transfer the information back to the ARCHIBUS database. The screen used to edit the asset details is customizable by an XML template.

The Filtering tool enables the asset to be filtered as it is scanned and allows default data to be added for new asset.

For example in an equipment survey, this allows for repetitive information, such as the building that the surveyor is working in or the equipment type, to be automatically copied into the new equipment item.

An asset item can be duplicated with a new asset ID by using the "Save As" function.



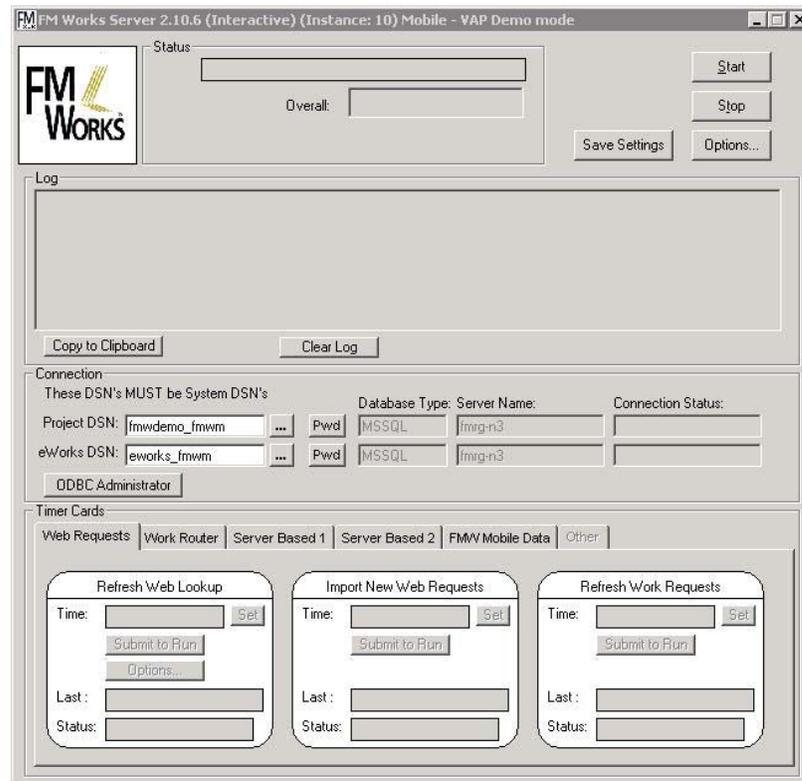
“Bean Counting” allows you to quickly survey and count asset items in the Asset Survey module by simply scanning barcodes. The asset records in the database will then show the date and time saved without the handheld user needing to even open an entry screen.

The Bean Count feature with the location enabled allows for the location info found in the filter to be updated on the fly when the item is bean counted without the need to select Edit to add the location information. The location info is ignored as search criteria when searching in this mode. It is activated by clicking on the **Bean** button.

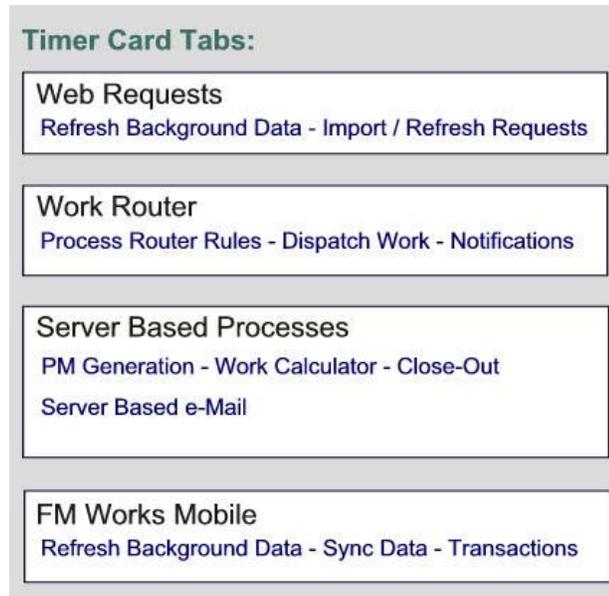
WORKS SERVER – THE "MIDDLEWARE" THAT PULLS IT ALL TOGETHER

FM Works Server is a powerful interface program that transfers data to and from the web to the FM Works/ARCHIBUS database. Since the data for e-Works resides in a separate database on the web server, the data must be transferred or synchronized. This doesn't apply to the Web-based Work Order Express as it connects directly to the ARCHIBUS database.

NOTE: FM Works Server is a software program that synchronizes and controls various aspects of the FM Works system. It is NOT necessary for FM Works Server to have its own physical server. It can easily run on the same server as the database or any available application server in the customer's Information Technology infrastructure.



By setting the Timer Cards, FM Works Server allows you to set the time intervals to process the server based functions. These are grouped on various tabs containing the various Timer Cards:



The FM Works Server can reside on a variety of hardware platforms: Microsoft Windows 2003 or 2008 Server. There can be multiple instances of FM Works Server to spread "the load" over multiple PDA groups.

FM Works Server has the ability by default to run in the background as a Windows Server Service or interactively (for administrator use) as shown in the above screen. The server contains special features that allow errors to be logged to the Windows Server Application log and is generally auto-restartable in the Service Manager.

UPGRADING YOUR ARCHIBUS DATABASE FOR FM WORKS

Upgrading your ARCHIBUS database for FM Works is an easy automated process.

FM Works supports all of the database platforms deployed with the current version of ARCHIBUS.

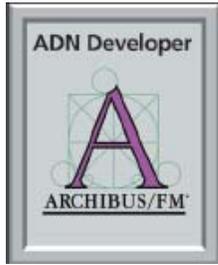
Because of all the innovative features in FM Works, we have added some tables and fields to the ARCHIBUS database.

In addition, the distribution CD for the FM Works software also contains an updated ARCHIBUS test database (the "HQ" project) that has been modified with the FM Works schema changes without the need to run the FM Works Remote Schema Tool.

This database allows users to evaluate the FM Works system without touching their own database. There are example databases for Sybase and Microsoft SQL Server provided on the CD.

To make your ARCHIBUS database compatible with FM Works, FMRG has developed a special utility called Remote Schema Tool. This handy utility updates your ARCHIBUS or e-Works physical database, and updates the Table of Tables, and Table of Fields with necessary schema changes.

A Strong and Enduring Commitment to the ARCHIBUS Platform



The Facilities Management Resource Group (FMRG), the developer of FM Works, has been an ARCHIBUS business partner since 1997 and a proud member of the ARCHIBUS DEVELOPERS NETWORK (ADN) since its inception. FMRG is a founding member of the ADN and is a member of the ADN Advisory Council.

FM Works is listed by ARCHIBUS® as an ADN product, and FMRG was awarded the ADN Developer and Customer Support of the Year awards for FM Works.

In designing FM Works, we have maintained compatibility with ARCHIBUS; and we have continuously updated and maintained FM Works across all versions of ARCHIBUS starting with Version 11.

THE FUTURE OF FM WORKS AND FM WORKS MOBILE

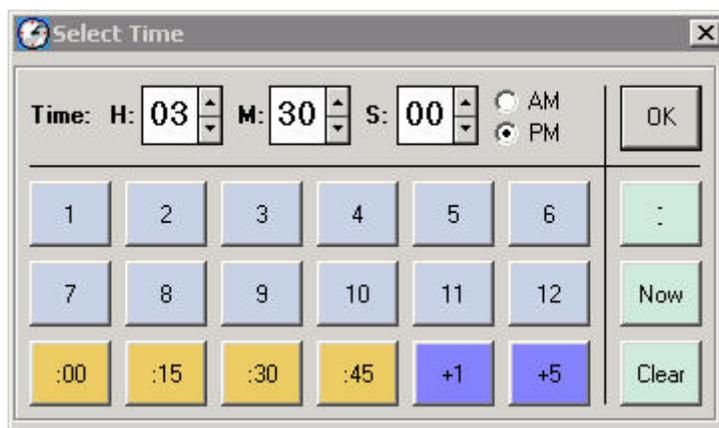
FM Works and FM Works Mobile have been continuously upgraded, expanded and improved since their introduction. Most new features have been suggested by our customers, and we have listened. Our overall vision for FM Works is for it to become an even more powerful, fully-featured, stand-alone Computerized Maintenance Management System (CMMS) but still operating completely seamlessly with ARCHIBUS.

By choosing the FM Works system today, you not only implement the most powerful CMMS system, you also establish a platform for continued upgrade and improvement as new features and capabilities are added to FM Works and FM Works Mobile in the future. FM Works is a sound investment in the best technology available today; and it also assures that your future CMMS capabilities will always be the most modern, efficient, and productive. And all this at a cost that is less than any other solution available.

I HAVE AN IDEA!

FMRG has its “ears” to its customers -- listening for ways to make this innovative product even better. We plan to continue to maintain this close relationship in order to constantly make FM Works a better product. We always welcome suggestions and comments (good and bad).

As an example, in many Windows programs, entering time values is often a difficult and frustrating keyboard and mouse gymnastics exercise. To solve this problem, we've created a simple pop-up window that allows the user to easily and quickly click in the time, based on a “PDA Like” screen.



We are always looking for ways to make the program even easier to use!

Either call us toll free at (800) 942-8293 or send e-mail to support@fmworks.com

WHERE CAN I LEARN MORE?

The www.fmworks.com and support.fmworks.com web sites provide news and information, downloads, patches, etc. for end-users, prospective end-users and resellers. Access to the support website content is limited by maintenance agreements, reseller coverage, etc.

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