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Cover image: Montevetro Residential Complex, London;  
Architects: Richard Rogers Partnership - Hurley Robertson & Associates

GRAPHISOFT®

# ARCHIFM

# VIEW

ARCHIFM MAINTENANCE

...TO OPTIMIZE THE VALUE OF  
YOUR ASSETS



PLAN AND MANAGE YOUR  
MAINTENANCE TASKS EASILY

TRACK INCOME AND  
EXPENSES EFFICIENTLY

OPTIMIZE YOUR MAINTENANCE  
PROCEDURES – SAVE TIME AND MONEY

## AN EFFECTIVE MAINTENANCE SYSTEM IS ESSENTIAL FOR PROTECTING THE VALUE OF YOUR FACILITIES AND EQUIPMENT



*Commercial  
building plan,  
Milan Golovic,  
Belgrade*

An up-to-date maintenance system supports your firm's operations, actively safeguards the value of your facilities and equipment, and consistently saves you money. Graphisoft ArchiFM® Maintenance offers all these advantages.

ArchiFM Maintenance conforms to your firm's management requirements, providing asset management for your technical systems and infrastructure, as well as comprehensive, cost-effective and modern facility management. ArchiFM Maintenance lets you optimize your scheduled procedures and achieve the results you want.

### HOW ARCHIFM MAINTENANCE CAN HELP YOU

ArchiFM Maintenance's wide range of functions supports the full maintenance process, from scheduling and tracking maintenance events to reporting and evaluation.

The program's integrated resource and supply management functions provide up-to-the-minute status overviews and ensure the optimum use of available human resources.

ArchiFM Maintenance software links your asset inventory information with data from buildings and facilities and the technical maintenance process in a single database. This way, relationships among the data are clear and viewable in graphical format, letting you quickly find the information you need.

Work order templates and task lists for maintenance events can be structured any way you like. You can modify their format even after work has begun. The resulting database produces information in the form of a comprehensive operational handbook accessible by all users. ArchiFM Maintenance helps you keep track of suppliers and subcontractors, and assists in planning for expenses connected to sub-contracts.

### ADVANTAGES OF ARCHIFM MAINTENANCE:

- Technical equipment and facilities can be used more efficiently as a result of regular maintenance, better supervision and technical checks

- Cost-effective planning of company workflow and procedures
- Work stoppages can be prevented or reduced, while occasional malfunctions can be quickly and effectively repaired
- Human resources can be organized faster and more flexibly, so your maintenance crew works more efficiently
- Improved workplace safety
- Lower inventory costs
- Current status reports can be generated at any time
- Clearer cost breakdowns for client-related and physical plant-related cost centers
- Data necessary for medium- and long-term planning can be accessed and processed directly

*Graphisoft Park*



# ADVANTAGES OF USING ARCHIFM MAINTENANCE

## PRIMARY USERS OF ARCHIFM MAINTENANCE

- Professional maintenance personnel, facility managers and their service providers
- Maintenance and controlling units of production and service firms
- Medical institutions, such as hospitals
- Educational institutions, such as universities
- Federal, state, county and local governments

## IMPROVED MAINTENANCE PROCEDURES

- Optimization of procedures
- Increased efficiency of technical systems and facilities
- Increased life span for equipment and facilities
- Better energy-efficiency; improved environmental protection

## IMPROVED FINANCIAL RESULTS

- Significantly lower maintenance expenses
- Lower inventory costs
- Better return on capital

## IMPROVED CUSTOMER SERVICE

- Meeting customer service deadlines
- Consistently excellent product quality
- Reliable delivery deadlines
- Improved communications with clients
- More satisfied customers

Comprehensive evaluation options support resource planning and provide an overview of the assignments and schedules of the various crews and individual employees.

**Summary of Planned Revenue**  
Planning period: 2012-10-01 - 2012-12-31

**Task Services**

Task ID	Description	Unit	Quantity	Unit Price	Total Price	Start Date	End Date
00001	Oilchanging	LTR	1000	0.80	800.00	2012-10-01	2012-10-31
00002	Filterchanging	LTR	1000	0.80	800.00	2012-10-01	2012-10-31
00003	Oilchanging for special type	LTR	1000	1.00	1000.00	2012-10-01	2012-10-31
00004	Checking	LTR	1000	0.20	200.00	2012-10-01	2012-10-31
00005	Service/Repairing	LTR	1000	0.20	200.00	2012-10-01	2012-10-31
00006	Drinking	LTR	1000	0.20	200.00	2012-10-01	2012-10-31
<b>Service summary of tasks</b>				<b>0.00</b>	<b>0.00</b>		

**Material Services**

Material ID	Description	Unit	Quantity	Unit Price	Total Price	Start Date	End Date
00001	Oilchanging	LTR	1000	0.80	800.00	2012-10-01	2012-10-31
00002	Filterchanging	LTR	1000	0.80	800.00	2012-10-01	2012-10-31
00003	Oilchanging	LTR	1000	0.80	800.00	2012-10-01	2012-10-31
00004	Drinking	LTR	1000	0.20	200.00	2012-10-01	2012-10-31
<b>Service summary of materials</b>				<b>0.00</b>	<b>0.00</b>		

*In addition to providing a clear display of the equipment and facility structures that require maintenance, ArchiFM Maintenance functions ensure the efficient scheduling of maintenance events. Dialog boxes offer an overview of maintenance events and their status.*

The screenshot displays the ArchiFM Maintenance software interface. The main window shows a 'Maintenance Plan' with a grid of tasks scheduled across months from April 2012 to September 2012. The tasks are color-coded by status: red for planned, yellow for in progress, and green for completed. A detailed dialog box is open in the foreground, showing task details for 'Oilchanging' (Task ID: 00001) with a start date of 2012-10-01 and an end date of 2012-10-31. The dialog includes fields for 'Description', 'Status', and 'Priority', along with a Gantt chart visualization of the task schedule.

## MAIN FUNCTIONS OF ARCHIFM MAINTENANCE SOFTWARE



With ArchiFM Maintenance, you can complete all the maintenance procedures for technical systems, production equipment, buildings and building systems according to your client's needs.

### TECHNICAL DESCRIPTION

ArchiFM Maintenance is based on leading database servers such as Oracle® and Microsoft® SQL.

ArchiFM Maintenance is a genuine client-server solution: the module-based functions can be set up individually for each workstation.

With WebServer applications, such as HelpDesk, you can customize your ArchiFM Maintenance system with Internet or intranet functions.

The software's structure enables you to adjust your program to fit your specialized, individual needs.

### MAIN SOFTWARE FUNCTIONS

#### CLIENTS

Maintenance procedures can be grouped and queried by client.

#### CONTRACTS

The program manages all contracts with clients, suppliers and subcontractors, and calculates the related internal costs and external billing rates based on hourly rates, unit costs, service contract fees, and/or custom billing arrangements.

#### STANDARD DATA

Stores all the standard data necessary for planning, tracking and evaluating maintenance procedures: these include items like cost centers, maintenance codes, expense categories, asset-related data, manufacturer and warranty information, and scheduling priorities.

#### DOCUMENT MANAGEMENT

Stores, organizes and provides access to the equipment's user manuals, operating and maintenance instructions, general safety regulations and blueprints.

#### ASSETS AND FACILITIES

Displays the physical or logical elements of maintenance units and their technical status by using an editable tree structure. Facilities can also be mapped according to particular sets of requirements, such as local inspection standards.

#### MAINTENANCE EVENTS

Provides a detailed description of defined maintenance events, and provides a step-by-step breakdown of the process required for each maintenance event.

#### INVENTORY MANAGEMENT

Keeps track of the materials and tools used during a given maintenance event, including data such as manufacturer, location, price, storage cost, packaging unit, and other warehouse location information.

Automatically sends out a notice whenever the inventory quantity falls below a predefined minimum.

#### MAINTENANCE

ArchiFM Maintenance provides an easy-to-read, user-friendly interface with wizards and tools to assist the process of reporting breakdowns and managing planned maintenance events. All types of maintenance activities and assets can be displayed in a variety of calendar-based formats for planning and scheduling purposes. Occasional

malfunctions are recorded through the dispatcher center using the Breakdown Wizard, or they can be reported via the Internet or intranet using the HelpDesk module.

Using predefined task and planner templates, the necessary actions can be quickly determined. The maintenance scheduler need only choose the appropriate task template, to which additional tasks can be added if necessary.

## FUNCTIONALITY

### RESOURCE PLANNING

You can assign employees and maintenance crew to particular maintenance events. Scheduling displays and diagrams help you keep track of the workloads of individuals and crews.

### WORK ORDERS

The Printing Wizard helps you print out groups of work orders at a predetermined time. Several maintenance events can be printed on a single work order to reflect grouped tasks and to reduce paper waste.

### WORK ORDER PROCESSING

The Report Wizard ensures that completed maintenance events are reported and the job closed. Tasks that were not completed can be forwarded to another event or team.

### REPORT CREATION

Using built-in report creation software, ArchiFM Maintenance supports the generation of reports and analyses. With a single keystroke, you can compare budgeted costs with actual costs, print out a summary of maintenance required by a particular item or system, or schedule assignments for your maintenance personnel.

### SPECIAL FUNCTIONS – WORKFLOW FUNCTIONS

When a maintenance request arrives, the program uses its workflow function to automatically send a notice to the affected personnel (by email or by SMS). In addition to sending reminder notices, the program can be set to automatically schedule maintenance events. Working together with building management systems, the program can generate maintenance requests based on an equipment's current condition: for example, whenever the furnace quits, or when the expected life of a ventilation system or motor is set to expire.

## TECHNICAL INFORMATION

### System Requirements

#### SERVER:

When installing the server, data requirements and hard-disk storage capacity must meet the specifications of the Microsoft® SQL server™ or the Oracle® database server.

#### CLIENT:

Today's computer configurations generally conform to the requirements of client-based workstations, which run either the Windows 2000 or Windows XP operating system.

#### NETWORK:

Any Windows-compatible network card.

#### CONNECTION POINTS:

Off-line data exchange with the SAP® system can be achieved using Batch Import.

Online connection with the database (SQL, ODBC, etc.) is possible from your system interface or ArchiFM's API interface using standard procedures.

Graphisoft ArchiFM Maintenance is perfectly compatible with the other components of the ArchiFM family, including those which run with ArchiCAD. This way, authorized users have unlimited access to all the data generated from these programs, since every component of the ArchiFM Maintenance system refers to the same single database.

#### DATA EXPORT:

A variety of data formats are available for processing of reports and schedules in other applications; the most common file formats are PDF, CSV (text data format), XLS, HTML, TXT, RTF, DOC.

#### STANDARD DATA:

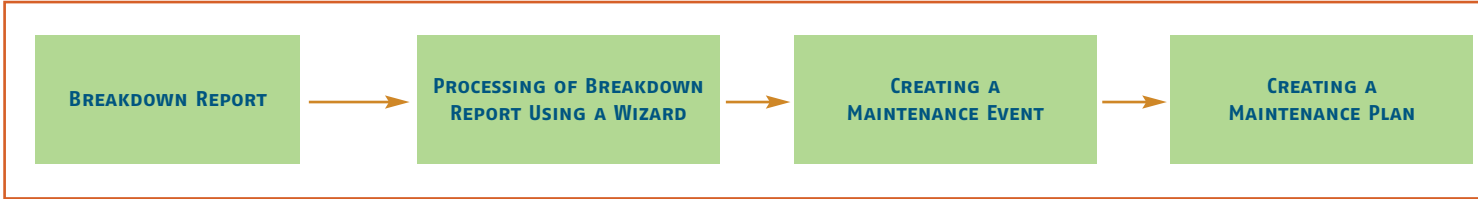
To make our software solutions even more useful, we have provided complete descriptions of standard maintenance events as defined by our suppliers. This way you avoid time-consuming data entry, and can start right in on management tasks. You can always add to these data with custom-defined, specialized information.

*Montevetro Residential Complex, London*  
Architects: *Richard Rogers Partnership –*  
*Hurley Robertson & Associates*



**PROCEDURE:**  
*Breakdown Report*

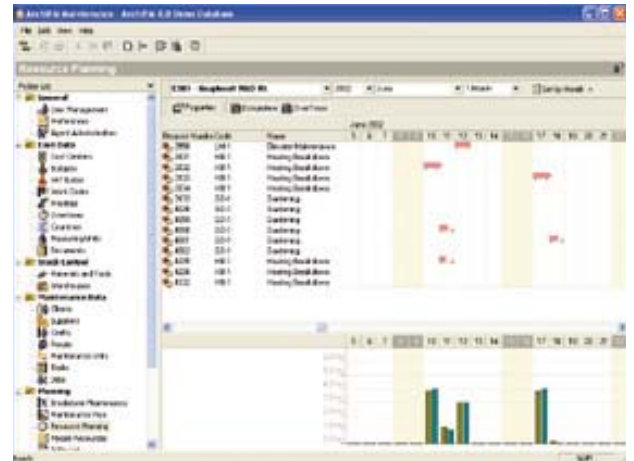
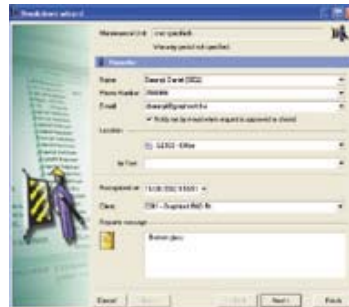
# ARCHIFM MAINTENANCE PROCEDURES



The Breakdown Wizard provides comprehensive support for reporting malfunctions and planning the necessary repair event.

The resource planning module offers an overview of the schedules of each employee and crew. This way you can prevent over-scheduling and the resulting overtime, and also avoid underutilizing your workforce.

In case of a one-time malfunction, any person who notices a problem can report it directly with the web-based HelpDesk, using the company's intranet or the Internet. The program's built-in Breakdown Wizard can be used as part of an independent dispatcher center.

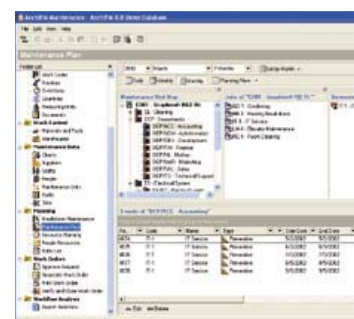
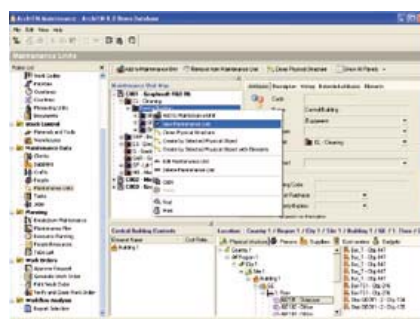


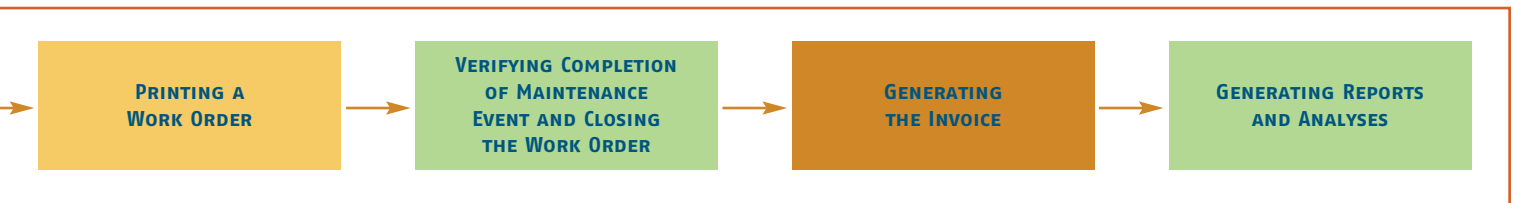
**PROCEDURE:**  
*Scheduled Maintenance*



The system stores all standard data pertaining to individuals, suppliers, teams, equipment, facilities, maintenance tasks, expenses, and costs, and compiles them into a standard maintenance documentation.

The software can be used to estimate the expenses, necessary materials, tools and labor for a maintenance plan. In addition,



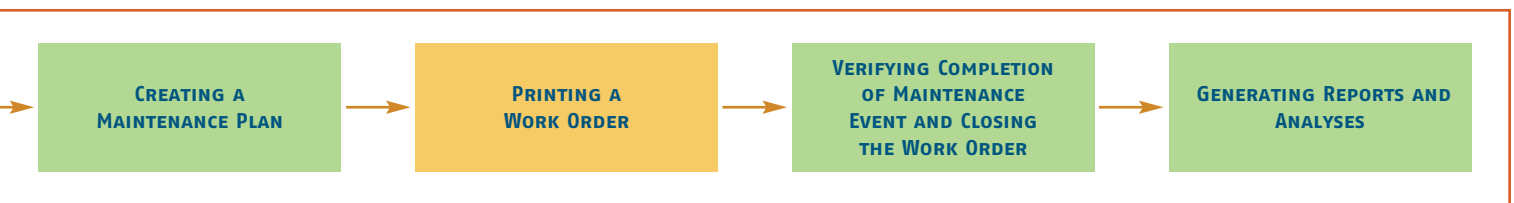


Additional tools support the printing of work orders, which can be sent either in paper form or by email to the appropriate employee or subcontractor. The system supports the printing of multiple, numbered work orders, allowing you to print separate copies for the client and subcontractor.

When the maintenance task is completed, the data from the filled-out work order are entered using the Reporting Wizard. In some cases, the breakdown cannot be completely repaired and will require additional work: the maintenance event remains uncompleted. In such cases, the Reporting Wizard lets you forward and/or reschedule the job.

When all tasks have been completed and verified and the associated costs entered, the event can be closed and forwarded for invoicing.

A comprehensive analysis and evaluation function provides data and reports on equipment, facilities, cost centers, employees, completed jobs, expenses, income, etc.



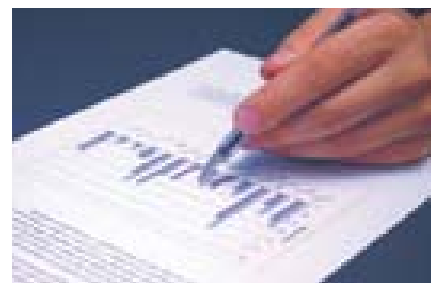
schedule future maintenance expenses and compile a list of human resources, and to set up a budget, the program provides an overview of all planned and current maintenance tasks and their costs and expected income.



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## WHAT SOLUTIONS DO WE OFFER?

### BUILDING A SOLUTION THAT WORKS FOR YOU

Individual firms often have very different expectations of what maintenance software should provide. To ensure that we meet your needs as closely as possible, every Graphisoft solution is seamlessly interconnected. We can build a customized package containing the elements you need. Individuals as well as whole project teams can work on a given project. Each individual user can access data in accordance with his or her level of authorization through customized user interfaces. Graphisoft products can be combined in a variety of configurations with other software solutions: you can build our products onto your existing software packages, integrating and managing your existing data, drawings, plans and lists using Graphisoft programs, and continue processing them in other programs if necessary. You can access many Graphisoft products using technology such as your Internet browser. We offer the following software modules:

### ARCHICAD – ARCHITECTURAL PLANNING SOFTWARE

With ArchiCAD, you can work with the blueprints of your equipment and production and service machines, including \*.pln, \*.dwg, and \*.dxf file formats. You can create a three-dimensional digital building model or asset model almost instantly, and use it as the basis for further design and processing. With the help of the program's continuous data update function, your currently valid plans, blueprints, sections, perspective images and materials lists are always on hand.

### ARCHIFM: FOR ASSET INVENTORY AND BUILDING MANAGEMENT

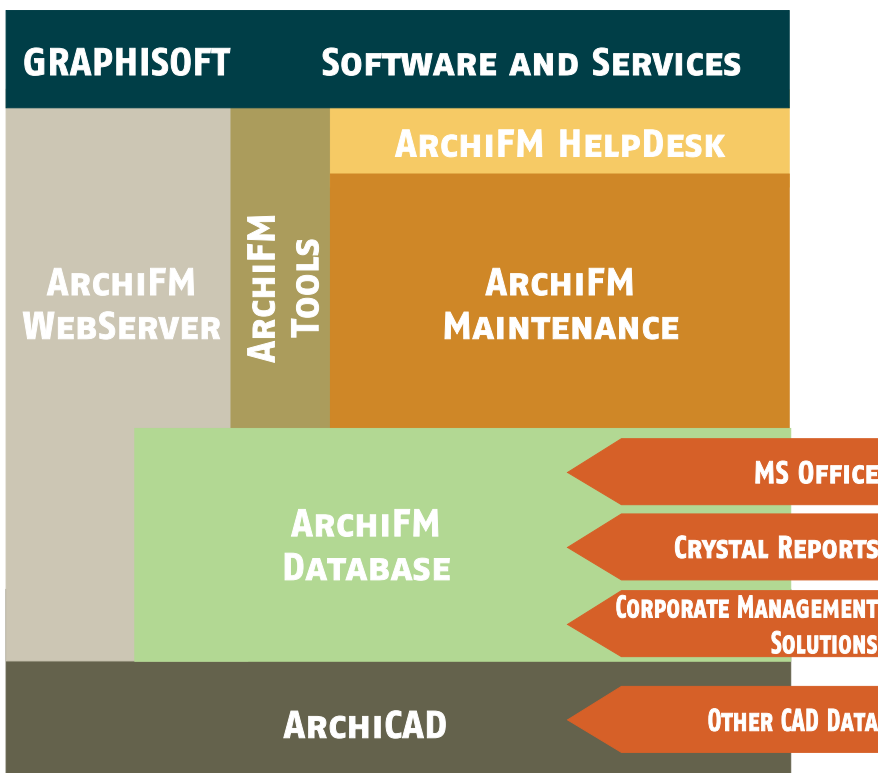
ArchiFM's database enables you to manage both the financial and technical aspects of your asset inventory and building facilities. Thanks to ArchiFM's modular structure, you can opt either to store your property and asset data in the alphanumeric database, or to assign them a graphical representation to link them with the graphical plans managed by ArchiCAD.

### ARCHIFM WEBSERVER: FOR REMOTE ACCESS

If the user needs to access the data, plans and reports stored in ArchiFM from a remote location, then ArchiFM WebServer is the answer. To access the data from a remote location, the user requires only a computer equipped with an Internet web browser.

### ARCHIFM MAINTENANCE: FOR MANAGING SCHEDULED, STATUS-CONTINGENT, AND ONE-TIME REPAIRS

ArchiFM Maintenance ensures that your equipment, facilities and buildings are always in good repair and working condition. At any time, you can get a detailed overview of the status of all current maintenance and repair tasks, and of the crew members or service providers assigned to them.



**ARCHIFM HELPDESK: FOR TRACKING MAINTENANCE REQUESTS**

ArchiFM Maintenance HelpDesk enables any employee to report a malfunction to maintenance personnel from his or her own workstation, using a web browser. Using the HelpDesk interface, you can keep track of the maintenance event, or request an automatic email update of its progress, so you know when the repair job is begun, assigned, and completed. Automatic status reports provide a continuous source of up-to-date information for staff and managers.

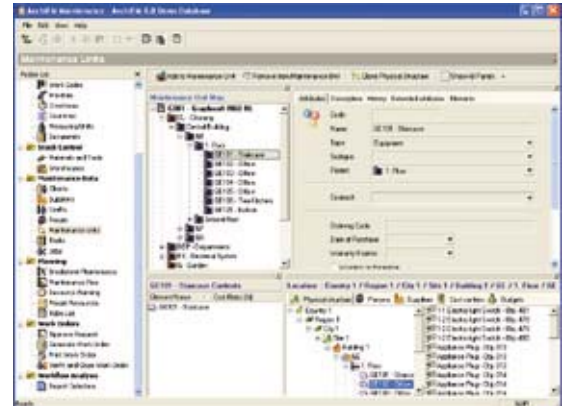


*Use ArchiFM Maintenance to protect the value of your equipment and facilities and reduce your losses stemming from breakdowns*

*With ArchiFM WebServer, data processing from remote locations is assured*

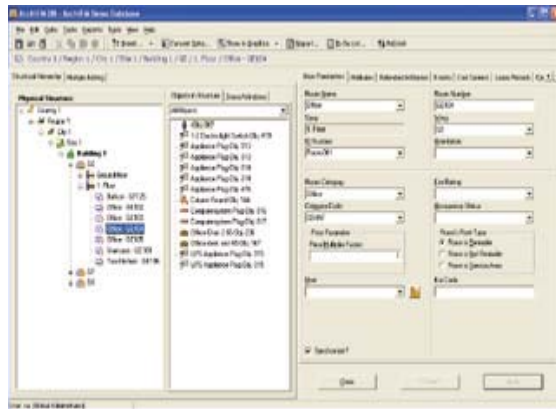
**ADDITIONAL TOOLS**

Other tools are available to make data management easier: for example, the bar-code reader that is customizable to your specific needs, and which can load data directly into the ArchiFM system. Based on our successful experience with other companies, Graphisoft will tailor the bar-code software to create a system customized to your needs. Ask for a custom solution from Graphisoft.



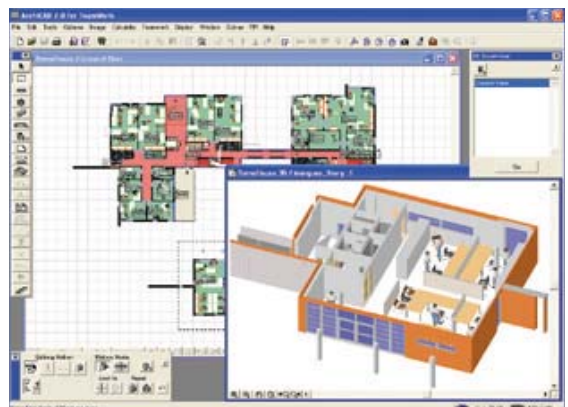
**FLEXIBLE DATA EXCHANGE WITH OTHER SOFTWARE PACKAGES**

You will often need to exchange data or collaborate online with other software programs used by your company. Graphisoft products enable flexible and wide-ranging data exchange with other financial, management, and building automation software, such as Microsoft Office® products, Crystal Reports®, SAP R/3®, Oracle Financials®, AutoCAD®, and Microstation®.



*Use ArchiCAD to manage your planning documentation, and take advantage of its extensive graphical display options*

*Take advantage of ArchiFM's centralized data management opportunity, and use it to increase your profit*



## OUR COMMITMENT TO SERVICE AND CUSTOMER SUPPORT: WHAT YOU NEED TO KNOW



### *About Our Services and Support*

#### SERVICE

In addition to software products, Graphisoft and its partners offer high quality software support services. In addition to receiving telephone and online support and special deals on software upgrades, Graphisoft customers are eligible to subscribe to our Software Maintenance Agreement, which gives them the latest version of the purchased software for free and access to extra support. Thanks to the way Graphisoft structures its licensing and support programs, your Total Cost of Ownership is easy to calculate and relatively low. While Graphisoft is well-known for its intuitive user interfaces and remarkable ease of use, we also emphasize our training programs for our users. Together with our distributors, we hold training workshops to give users the knowledge they need to use the program effectively and get their system up and running as soon as possible.

#### SUPPORT

To answer ordinary questions that come up during the day's work, Graphisoft has teamed up with your local ArchiFM partner to operate a hotline service. For particularly complex questions – such as those related to server functions – specially trained ArchiFM consultants are available to solve your problem, even on site. In addition to the service hotline available during working hours, ArchiFM users can submit questions by email, giving you access to quality support services even after business hours.

#### CURRENT ARCHIFM VERSIONS

ArchiFM customers receive free software updates of a particular version number. Whenever a new version number is released, our customers receive the new version at a reduced price, while subscribers to our Software Maintenance Agreement receive the new version at no cost.

#### WWW.GRAPHISOFT.COM

Use this web site for current information on Graphisoft and Graphisoft products.

#### CONSULTING SERVICES

At your request, we provide support in transferring your existing data stores, preparing software installation at your firm, and providing customized training for your employees. This way, the fast, smooth launch of your Graphisoft program is guaranteed. For other consulting services, ask us directly or consult your local ArchiFM distributor.

#### CUSTOM SOLUTIONS

Every company has a unique approach to facility management. Our standard software programs can be adapted to fit most of these approaches. In addition, we are ready to help you develop a customized concept to meet your needs and find the right ArchiFM solution to match.



## ABOUT GRAPHISOFT

### A WORLD LEADER IN ARCHITECTURAL AND BUILDING MANAGEMENT SOFTWARE

Graphisoft is one of the world's leading producers of architectural and building management software. With the new ArchiFM Maintenance package, Graphisoft offers another integrated solution for facility management.

The company was established in 1982 in Hungary. Graphisoft develops a leading architectural software program, ArchiCAD, and an integrated facility management system that manages technical, financial and infrastructure information, ArchiFM. The ArchiFM product family includes ArchiFM Maintenance software, a professional solution for managing scheduled and status-contingent maintenance, as well as breakdowns. All of our products are closely interconnected, so that all data – regardless of which module was used to generate it – are directly accessible from any of the modules for further processing.

### 20 YEARS OF SOFTWARE DEVELOPMENT EXPERIENCE

For 20 years, Graphisoft has been at the forefront in developing technically top-notch, intelligent solutions. Over 300 employees work at the company's headquarters and its subsidiaries in the U.S., Japan and throughout Europe.

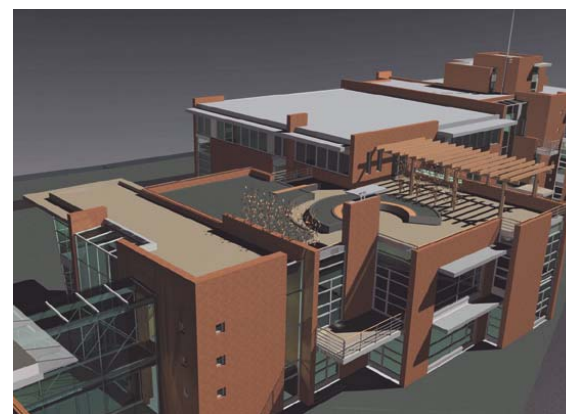
### GRAPHISOFT PARK: PROTOTYPE FOR A EUROPEAN "SILICON VALLEY"

Graphisoft's headquarters and software development center are located at the company's own office park in Budapest. Graphisoft's development team, with more than 100 employees, constitutes one of the leading developers in the AEC sector. In July 1998, Graphisoft moved into Graphisoft Park, the company's own office park on the banks of the Danube River, designed with ArchiCAD and managed with ArchiFM.



*The seven hectares of Graphisoft Park are located on the Danube River within the city limits of Budapest*

*ArchiFM Maintenance's HelpDesk feature is operating successfully at Graphisoft Park to solve maintenance problems*



*The ArchiFM Team at Graphisoft Headquarters*

