

WiselImage FM

WiselImage FM[®]

PlanTracer technology meets
WiselImage's raster and CAD
functionality

Advanced tools for working with
legacy drawings

Create floor plan models directly
from both 2D-CAD drawings
and raster images

Improved turnaround of floor
plan data extraction

Advanced drawing and editing
tools

API for access to internal data
structures of floor plan models

Solution for Facilities Management

WiselImage FM is an application based on the unique CSoft raster-vector technology. It is designed to be a graphical front-end to Facilities Management solutions. WiselImage FM represents floor plans as parametric models consisting of intelligent objects.

A 'must have' for Facilities Management

The integration of existing drawing archives with computer-aided Facilities Management systems requires an efficient technology to convert and capture FM-related data from the original building floor plans. The need to keep FM data up-to-date through a simple process has motivated the WiselImage FM development. WiselImage FM focuses on efficiency and usability. WiselImage FM delivers advanced tools for floor plan drawing and editing. Its unique tool set also includes automatic and semi-automatic conversion of data such as 2D or raster floor and building-plan drawings into intelligent models. WiselImage FM will recognize a floor plan, extract FM data and create "Intelligent Objects" from vectors or from raster drawings. These objects will contain all the necessary data for your FM solution. WiselImage FM provides an open programming interface for easy integration with Facilities Management applications, databases and MS Office. A Facilities Management solution can access all objects on the floor plan models using WiselImage FM.

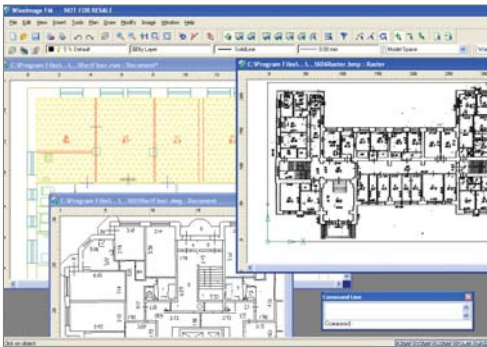
One step to BIM

Using WiselImage FM to convert legacy drawings to models is the shortest way from paper to IFC models and BIM systems. Imagine your requirements for the future and gauge the scope of work involved to enable your existing building mass in your FM system. With WiselImage FM the time-consuming and mundane tasks of converting legacy data for future needs are automated. WiselImage FM provides interactive raster to vector conversion on all kinds of images. Automatic conversion of scanned drawings or 2D CAD floor plans to parametric floor plan models is another area where it shines. WiselImage FM includes native support for most wide-format scanners. Efficient post-processing is necessary for scanned drawings and WiselImage FM does this well. It is possible to crop images, change their resolution, scale, adjust brightness, change the contrast, deskew and calibrate any image.

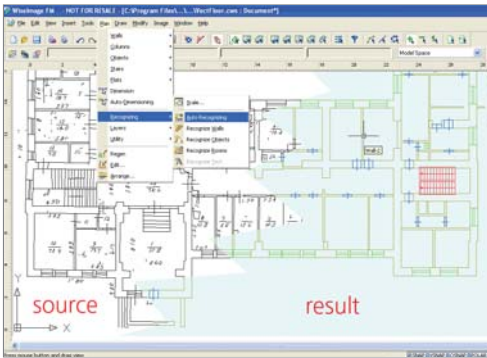
Floor plan creation

WiselImage FM provides tools for fast and easy floor plan drawing - automatic and semi-automatic room definition and dimensioning as well as automatic floor space calculation. WiselImage FM can accurately reproduce traditional floor plans. It takes into account on-site measurements and uses them in a parametric model to speed up floor plan drawing as well as the dimensioning and floor space calculation. Three modes of floor plan creation are available:

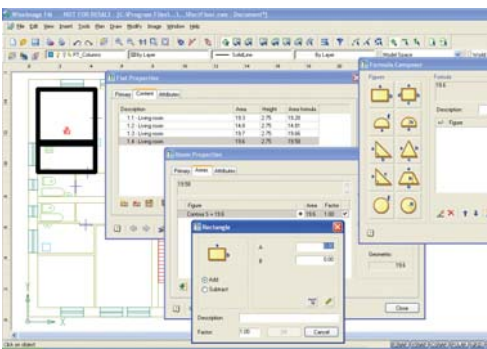
CSoft



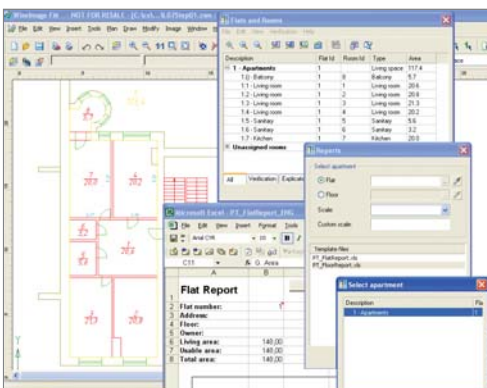
WiselImage FM works with raster, CAD and R2V files



Conversion to parametric model



Formula Composer for room area calculation



Report in external application (MS Excel)

1. Automatic conversion of original floor plans made by measuring rooms and converting them to a parametric model (parametric mode)
 2. Traditional floor plan drawing using parametric library objects (library mode)
 3. Floor plan creation from measured outer and inner contours of the building (contour mode).
- All modes allow for the use of precise drawing tools: object snapping, relative object insertion, dynamic dimensioning, and more.

Rooms and Object (Templates) Library

The basic construction element in a parametric floor plan model is the Room object. WiselImage FM provides commands for semi-automatic room, apartment and floor plan creation. Once all rooms are defined - WiselImage FM can perform automatic floor space calculations. To finalize a floor plan drawing it is necessary to add dimensions to it. WiselImage FM can do this in an automatic or semi-automatic mode. If there is any modification in room dimensions, WiselImage FM automatically recalculates affected floor spaces. Besides rooms there are other objects in floor space parametric models, such as Walls, Windows, Doors, Columns, and Stairs etc. They are stored in the Object (Templates) Library. Users can manage the Template Library contents. A library can be loaded/unloaded at will. Library objects can be created from AutoCAD blocks or sets of entities. It is also possible to create groups from several library objects and to assemble floor plans from sets of groups. Any object can be equipped with additional attributes. The list of attributes is stored in an editable external XML-file.

Creating exact contours of the room

In most cases - FM user creates contours for rooms according to the results from measurements. The measurements represented by a set of interconnected data values. WiselImage FM provides engineers with a highly efficient drawing technology. The method allows for the creation of contours dividing them into sets of elementary geometrical figures such as triangle, rectangle, arc, etc. This feature provides users with the ability to obtain exact values from floor spaces and the corresponding formulas to calculate the floor spaces. Furthermore, users, having changed any dimensions in a room, will automatically obtain the following: the reconstructed room, its new floor space value, and a new formula. Even more, WiselImage FM provides the tool for creating the formula for any existing contours. Actually the process of formula creating is the same as the procedure for room's measurement. The main difference from drawing with exact contours is that the users do not draw the contours but rather inputs virtual figures and dimensions.

Floor plan recognition and conversion

To achieve maximum efficiency; WiselImage FM has automatic and semi-automatic conversion of floor and building-plans into intelligent models. WiselImage FM recognizes and converts these plans into parametric models from:

- Raster (bi-tonal) images. Can be pre-processed with advanced WiselImage raster tools
- 2D non-parametric drawings made in AutoCAD or from other CAD software. WiselImage FM also converts results of raster-to-vector conversion

Special tools for Facility Management engineers

Unlike general CAD software WiselImage FM is focused on delivering the most convenient drawing tools for re-drawing and modifying existing floor plans. That is why WiselImage FM has a large set of floor plan correction and editing tools. Rearranging floor spaces are simple with special 'Walls correction' set of commands, such as adjoining, trimming, extending, line-to-curved wall conversion, etc. Also modifications can be done directly on the parametric floor plan models by changing room dimensions. WiselImage FM provides automatic dimensioning of all selected rooms without duplicating any dimensions. User specify some parameters and WiselImage FM creates a set of required dimensions without duplication.

Classifiers and data exchange

WiselImage FM has an application-independent data structure that allows users to maintain proper facility standards. The multi-level structure of classifiers provides users with any number of possibilities to create a proprietary system of definitions and relations between objects (Apartment consist of Living Rooms, Kitchen, Balcony, etc.).

Floor plan model should be available to external application to integrate WiselImage FM with Facilities Management solution. It can be done with built in COM API. WiselImage FM can also import data from an external database and use this to change the plan or model (e.g. the floor space). WiselImage FM creates graphics for reports by exchanging the requested data using WMF objects. Another way for data exchange is to use XML-files.

Your local partner is:



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