

Would-be PDM

Howto use



software release 0.0.0.6

2016/02/18

Would-be PDM - remind

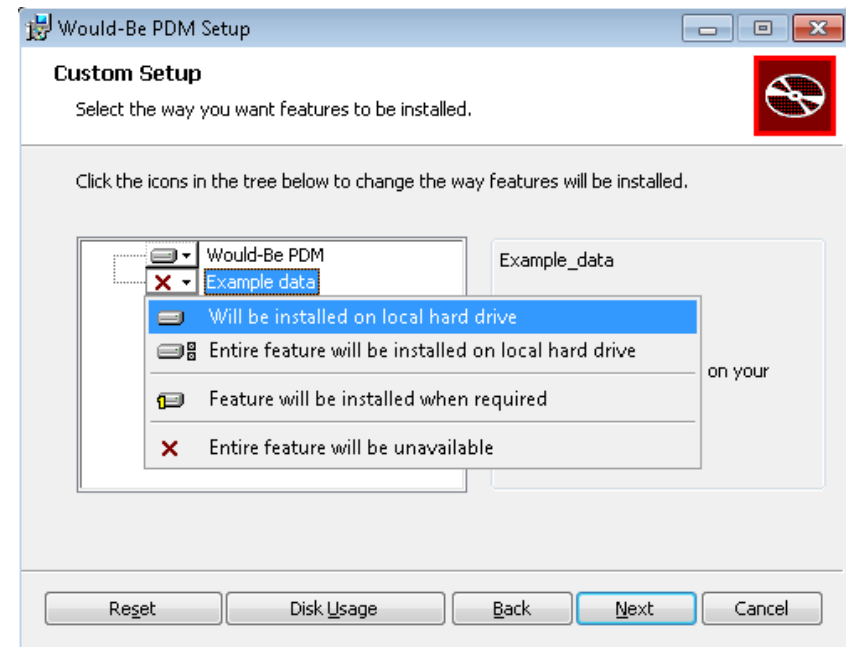


- This software was born to create a tool to manage CAD files and to join CAD with SVN technology
- SVN is used to manage the version and the history of the files
- The SVN tool choosed for Would-be PDM is tortoiseSVN (<https://tortoisesvn.net>)
- For installation instructions please read «Would-be PDM_instructions_r0006.pdf»

Would-be PDM - remind



- To practice use «Would-be PDM» you need some data in it. In this document we assume you installed the data through the full installation



Would-be PDM - usage



- If everything's gone OK (I'm still surprised when it happens; computers are really amazing, aren't they?) you should get this:

Would-be PDM - usage



- In Would-be PDM the files are organized in a gerarchic way:

1. Families
2. Projects
3. Products
4. Components (parts)

The screenshot shows the 'Would-be PDM' web application interface. The title bar indicates the URL is <https://github.com/robertobartola/WouldBePDM>. The interface is divided into several sections:

- Top Navigation:** 'PDM' and 'Config' tabs.
- Left Panel:** 'Family' section with a 'Select a Family' dropdown, 'Status' and 'ID' input fields, 'Modify' and 'Add' buttons, and 'Open dir' buttons for 'CAD dir', 'STEP dir', 'PDF dir', and 'Main dir'. Below this is 'Would-Be PDM Info V 0.0.0.6' with 'Info', 'Webpage', and 'Thanks' buttons.
- Project Section:** 'List all PRJs' checkbox, 'Project' dropdown, 'Status' and 'ID' input fields, 'Customer Name' and 'Customer Code' input fields, 'Project Code' input field, and 'Project Manager' input field. 'Modify' and 'Add' buttons are at the bottom.
- Product Section:** 'List all PROD's' checkbox, 'Product' dropdown, 'Status' and 'ID' input fields, 'Drawing' and 'Car-platform' input fields, 'Drawing Rev' and 'Drawing Date' input fields, 'Drawing filename' input field, and 'Open 2D' button. 'Modify' and 'Add' buttons are at the bottom.
- Component Section:** 'List all PRT's' checkbox, 'Component' dropdown, 'Select a Component' dropdown, and 'Launch CAD' buttons for 'CATIA TOP', 'CATIA LOW', 'UG TOP', and 'UG LOW'.
- Component Attributes Table:** A table with columns: CODE, Name, Status, Rev, Date, Designer, Weight, Material, Termal Treatment, Coating, Supplier. The 'Where Used' button is located below the table.
- File Management:** Four sections for file management: '3D - CAD file', '2D - CAD file', '3D - STEP file', and '2D - PDF file'. Each section has an 'OpenFile' button, a 'CheckOut' button (with '3D', '2D', 'Step', or 'pdf' suffix), and a 'Where Used' or 'Generate' button.
- Right Panel:** A 'picture' placeholder box with 'Add' and 'Modify' buttons.

Would-be PDM - usage



- Selecting the family

Family
Select a Family
First Family
Second Family
Third Family
Forth Family
Fifth Family

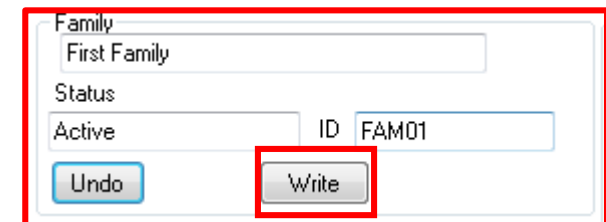
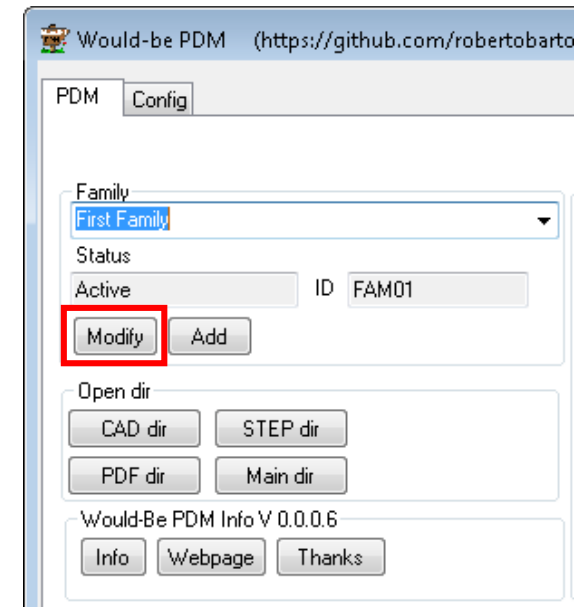
- Now the «Project» box will be enabled

Project
Select a Project
Status
ID
Customer Name
Customer Code
Project Code
Project Manager
Modify Add

Would-be PDM - usage



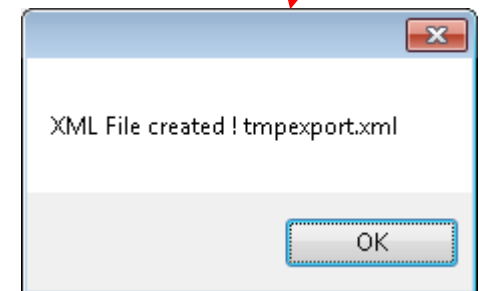
- Selecting the family you get the «Status» and the «ID» of the selected family
- If you want to modify some information (add a family) you can click on the «modify» («add») button
- The button changes in «undo» and the «write» button appears



Would-be PDM - usage



- If you click «write» would-be pdm asks you the file to export in your new xml.
- If you want to make the modify to be permanent you can overwrite «WouldBeXML.xml» file, otherwise just choose a different filename.
- If you click the «cancel» button a temporary file will be created

A screenshot of a software form titled 'Family'. It contains a text field for 'First Family', a 'Status' dropdown menu set to 'Active', and an 'ID' text field containing 'FAM01'. At the bottom, there are two buttons: 'Undo' and 'Write'. The 'Write' button is highlighted with a red rectangle.

Would-be PDM - usage



- Once selected the family you can go on selecting the project, then the product, then the component
- When you select a «parent» field, its «children» becomes enabled and you can go on selecting it
- Once selected a field Would-be PDM shows its attributes (status, ID, customer, drawing...)

The screenshot shows the 'Would-be PDM' web application interface. The browser address bar displays 'https://github.com/robertobartola/WouldBePDM'. The interface has a 'PDM' tab and a 'Config' button. It is divided into four main sections, each with a 'List all' checkbox and a selection dropdown:

- Family:** The 'Family' dropdown is selected, showing 'First Family'. Below it are fields for 'Status' (Active), 'ID' (FAM01), and buttons for 'Modify' and 'Add'.
- Project:** The 'Project' dropdown is selected, showing 'Select a Project'. Below it are fields for 'Status', 'ID', 'Customer Name', 'Customer Code', and 'Project Code'.
- Product:** The 'Product' dropdown is selected, showing 'Select a Product'. Below it are fields for 'Status', 'ID', 'Drawing', 'Car-platform', 'Drawing Rev', 'Drawing Date', and an 'Open 2D' button.
- Component:** The 'Component' dropdown is selected, showing 'Select a Component'. Below it is a 'Launch CAD' button.

Red arrows indicate the selection flow: from 'Family' to 'Project', from 'Project' to 'Product', and from 'Product' to 'Component'. A red box highlights the 'CheckOut PRL' button next to the 'Product' dropdown.

Would-be PDM - usage



- For each filed you can modify (add) the item by clicking on the «modify» («add») button with the same functions described for the family (pages 7-8)

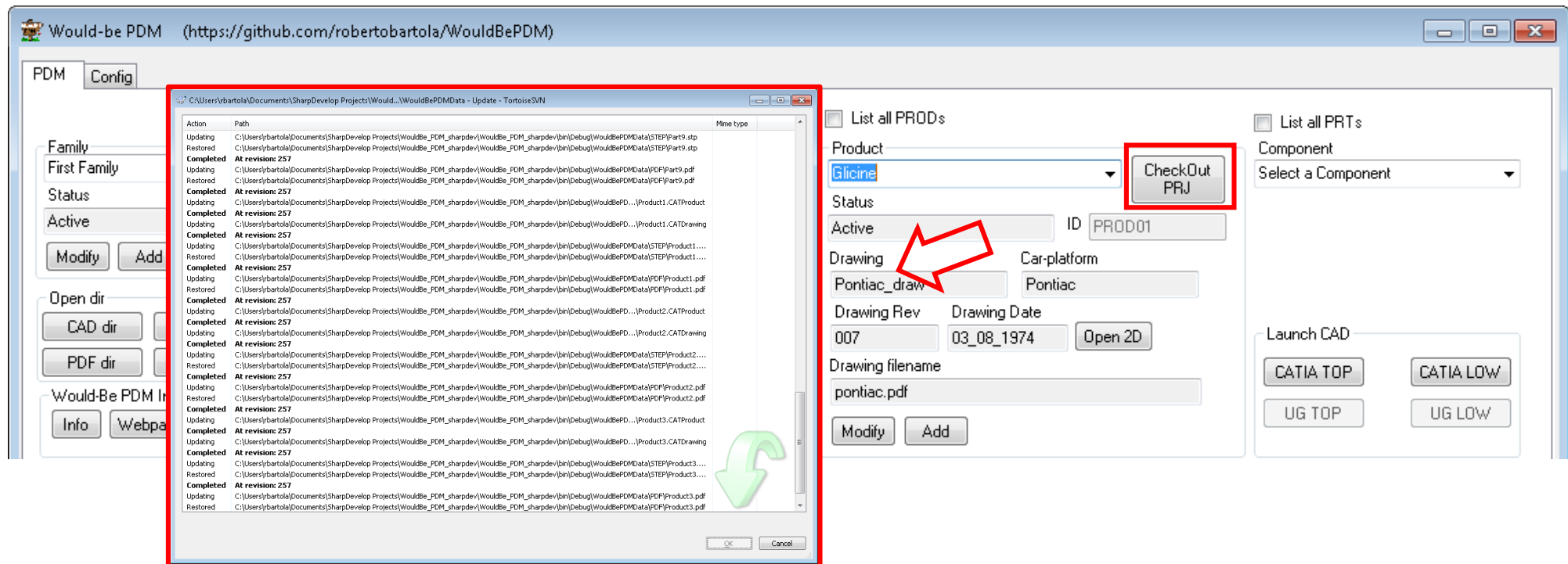
The screenshot shows the 'Would-be PDM' web application interface. The browser address bar displays 'Would-be PDM (https://github.com/robertobartola/WouldBePDM)'. The interface is divided into several sections:

- Family Section:** Includes a dropdown menu for 'Family' (currently showing 'First Family'), a 'Status' dropdown (set to 'Active'), an 'ID' field (containing 'FAM01'), and 'Modify' and 'Add' buttons.
- Project Section:** Includes a 'List all PRJs' checkbox, a 'Select a Project' dropdown, 'Status' and 'ID' fields, 'Customer Name' and 'Customer Code' fields, 'Project Code' and 'Project Manager' fields, and 'Modify' and 'Add' buttons. The 'Modify' button is highlighted with a red box.
- Product Section:** Includes a 'List all PRODs' checkbox, a 'Select a Product' dropdown, a 'CheckOut PRJ' button, 'Status' and 'ID' fields, 'Drawing' and 'Car-platform' fields, 'Drawing Rev' and 'Drawing Date' fields with an 'Open 2D' button, and a 'Drawing filename' field. The 'Modify' button is highlighted with a red box.
- Component Section:** Includes a 'List all PRTs' checkbox, a 'Select a Component' dropdown, and 'Launch CAD' buttons for 'CATIA TOP', 'CATIA LOW', 'UG TOP', and 'UG LOW'.
- Component attributes Table:** A table with columns: CODE, Name, Status, Rev, Date, Designer, Where Used, Weight, Material, Thermal Treatment, Coating, and Supplier. The table is currently empty.
- 3D - CAD file and 2D - CAD file:** Two input fields for file uploads, each with an 'Add' and 'Modify' button. The 'Modify' button for the 2D file is highlighted with a red box.

Would-be PDM - usage



- Once selected the product you can see that the button «CheckOut PRJ» becomes clickable
- Click on it and Would-be PDM will download all the files (2D+3D+pdf+step, for jpg please await next release) linked to all the components



Would-be PDM - usage



- If you click the «Open 2D» button, Would-be PDM opens the pdf. To correctly open you should have installed a default application for the pdf

Would-be PDM (https://github.com/robertobartola/WouldBePDM)

PDM Config

☐ List all PRJs

Family: First Family
Status: Active ID: FAM01
Buttons: Modify, Add

Open dir:
CAD dir, STEP dir, PDF dir, Main dir

Would-Be PDM Info V 0.0.0.6
Buttons: Info, Webpage, Thanks

☐ List all PRJs

Project: Project big
Status: Active ID: PRJ01
Customer Name: Small blue Customer Code: CUS01
Project Code: BIGBANG
Project Manager: Bartola
Buttons: Modify, Add

☐ List all PRODs

Product: Glicine
Status: Active ID: PROD01
Drawing: Pontiac_draw Car-platform: Pontiac
Drawing Rev: 007 Drawing Date: 03_08_1974
Drawing filename: pontiac.pdf
Buttons: Modify, Add

☐ List all PRTs

Component: Select a Component

Launch CAD:
Buttons: CATIA TOP, CATIA LOW, UG TOP, UG LOW

Open 2D

Would-be PDM - usage



- Now you can select the component
- Would-be PDM fills all the fields and (if present) shows a preview of the part

Would-be PDM (https://github.com/robertobartola/WouldBePDM)

PDM Config

☐ List all PRJs

Family: First Family
Status: Active ID: FAM01
Buttons: Modify Add

Open dir:
CAD dir STEP dir
PDF dir Main dir

Would-Be PDM Info V 0.0.0.6
Buttons: Info Webpage Thanks

☐ List all PRODs

Project: Project big
Status: Active ID: PRJ01
Customer Name: Small blue Customer Code: CUS01
Project Code: BIGBANG
Project Manager: Bartola
Buttons: Modify Add

☐ List all PRTs

Product: Glicine
Status: Active ID: PROD01
Drawing: Pontiac_draw Car-platform: Pontiac
Drawing Rev: 007 Drawing Date: 03_08_1974 Open 2D
Drawing filename: pontiac.pdf
Buttons: Modify Add

Component: PRT04_04_A
List:
PRT01_01_A
PRT02_01_C1
PRT03_02_B
PRT04_04_A
PRT05_01_R
PRT06_00_D4
PRT07_01_B6
PRT08_04_C2
PRT09_05_C0
ASS01_07_A
ASS02_00_B
ASS03_01_A
Buttons: UG TOP UG LOW

Component attributes

CODE	Name	Status	Rev	Date	Designer
PRT04_04_A	Buzzcocks	Work In Progress	076	03_07_1976	CBGB

Where Used

Weight	Material	Termal Treatment	Coating	Supplier
65gr	C45	mechanical heat treatment		

3D - CAD file
Part4.CATPart
Buttons: OpenFile CheckOut 3D Where Used

2D - CAD file
Part4.CATDrawing
Buttons: OpenFile CheckOut 2D Where Used

3D - STEP file
Part4.stp
Buttons: OpenFile CheckOut Step Generate

2D - PDF file
Part4.pdf
Buttons: OpenFile CheckOut pdf Generate

picture

Would-be PDM - usage



- As usual you can see the attributes of the selected part (name, status, rev...)
- You can checkout (download) the last revision of the 2D, 3D, step, pdf (by clicking on the «CheckOut ...» button)
- If present you can open the 2D, 3D, step, pdf (by clicking on the «OpenFile» button)
- As per the product note (see above), to correctly open the files, you need the correct application to be installed
- For CAD files, I suggest to open the current CAD before clicking to open the CAD file

(see below)

The screenshot displays the 'Component attributes' window in the Would-be PDM software. It features a table with the following data:

CODE	Name	Status	Rev	Date	Designer
PRT04_04_A	Buzzcocks	Work In Progress	076	03_07_1976	CBGB

Below the table, there are fields for 'Where Used', 'Weight' (65gr), 'Material' (C45), 'Termal Treatment' (mechanical heat treatment), 'Coating', and 'Supplier'. To the right of these fields are 'Add' and 'Modify' buttons.

The interface is divided into four quadrants for file management:

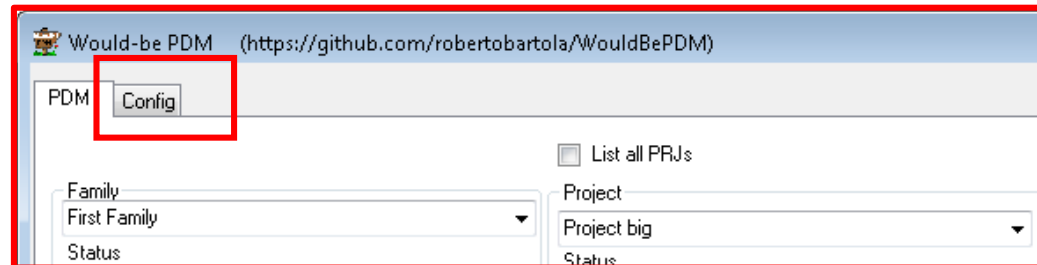
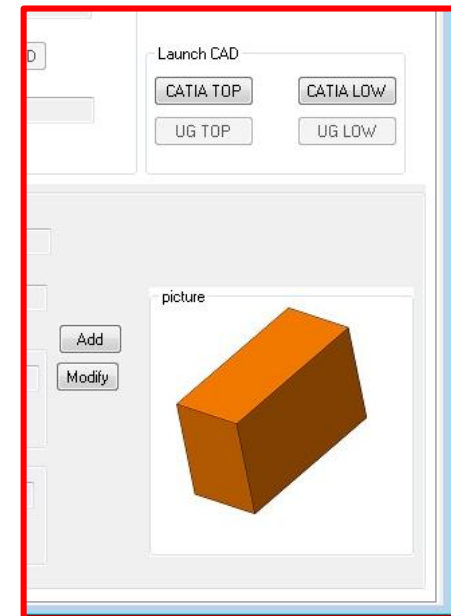
- 3D - CAD file:** Contains a text field with 'Part4.CATPart', an 'OpenFile' button, a 'CheckOut 3D' button, and a 'Where Used' button.
- 2D - CAD file:** Contains a text field with 'Part4.CATDrawing', an 'OpenFile' button, a 'CheckOut 2D' button, and a 'Where Used' button.
- 3D - STEP file:** Contains a text field with 'Part4.stp', an 'OpenFile' button, a 'CheckOut Step' button, and a 'Generate' button.
- 2D - PDF file:** Contains a text field with 'Part4.pdf', an 'OpenFile' button, a 'CheckOut pdf' button, and a 'Generate' button.

On the far right, there is a 'picture' section showing a 3D isometric model of a rectangular block with a blue top face and orange side faces.

Would-be PDM - usage



- Would-be PDM expects two different installations (TOP e LOW) for each CAD (still only CATIA and UG NX... see «would-be roadmap»)
- The CAD details can be customized in the «Config» tab and a button appears if the configured installation exists



Would-be PDM - usage



- The «Config» tab allows you to select the directories and the executable files to launch

Would-be PDM (https://github.com/robertobartola/WouldBePDM)

Config

Directories

CAD files dir
WouldBePDMData

PDF files dir
PDF

STEP files dir
STEP

JPG files dir
JPG

Product (customer) drawing dir

Note:
I assume that PDF dir,
STEP dir and JPG dir
are subdir of CAD dir.
Thank you

UG NX

UG NX TOP (i.e. V8)
EXE
C:\Program Files\Siemens\NX 10.0\UGII\ugraf.exe

UG NX LOW (i.e. V4)
C:\swbase\plmsw\vx85\UGII\ugraf.exe

CATIA config

CATIA TOP (i.e. V5.24)
EXE dir
C:\Program Files\Dassault Systemes\B24\win_b64\code\bin
ENV
CATIA.V5-6R2014.B24_RB.txt

ENV folder
C:\ProgramData\DassaultSystemes\CATEnv

CATIA LOW (i.e. V5.19)
EXE dir
C:\Program Files\Dassault Systemes\B19\win_b64\code\bin
ENV
CATIA.V5R19.B19.txt

ENV folder
C:\ProgramData\DassaultSystemes\CATEnv

Would-be PDM - usage



- If you need to summarize all the projects, the products or the parts, you can click the «List all ...» flag

Would-be PDM (https://github.com/robertobartola/WouldBePDM)

PDM Config

☐ List all PRJs

☐ List all PRODs

☐ List all PRTs

Family

First Family

Status

Active ID FAM01

Modify Add

Open dir

CAD dir STEP dir

PDF dir Main dir

Would-Be PDM Info V 0.0.0.6

Info Webpage Thanks

Project

Project big

Status

Active ID PRJ01

Customer Name Customer Code

Small blue CUS01

Project Code

BIGBANG

Project Manager

Bartola

Modify Add

Product

Glicine

Status

Active ID PROD01

Drawing Car-platform

Pontiac_draw Pontiac

Drawing Rev Drawing Date

007 03_08_1974 Open 2D

Drawing filename

pontiac.pdf

Modify Add

CheckOut PRJ

Component

Select a Component

Launch CAD

CATIA TOP CATIA LOW

UG TOP UG LOW

Component attributes

CODE	Name	Status	Rev	Date	Designer

Where Used

Weight	Material	Thermal Treatment	Coating	Supplier

3D - CAD file

2D - CAD file

Add

Modify

OpenFile CheckOut 3D Where Used

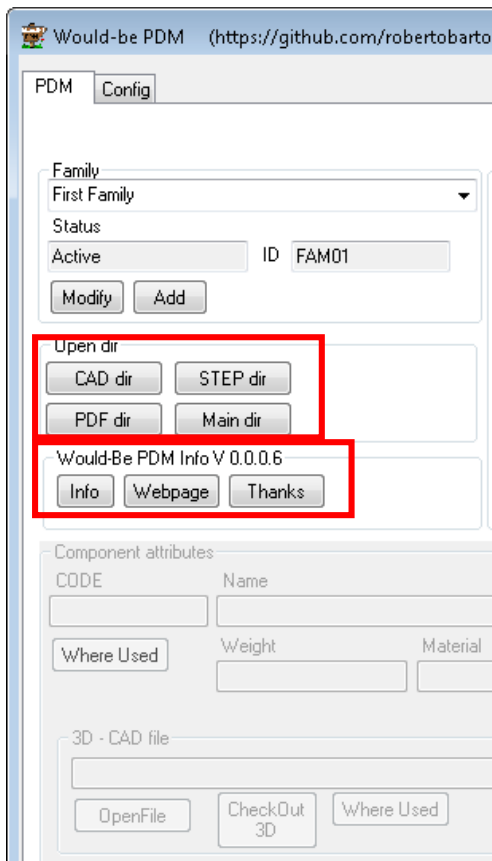
OpenFile CheckOut 2D Where Used

picture

Would-be PDM - usage



- You can open the directories containing the CAD, step, step files bu clicking on the «Open dir» buttons
- For more informations click «Info», «Webpage» or «Thanks» button



Would-be PDM – the software



That's all....

Thank you and
Enjoy while using

Would-be PDM

Roberto