BlockManager 2.0

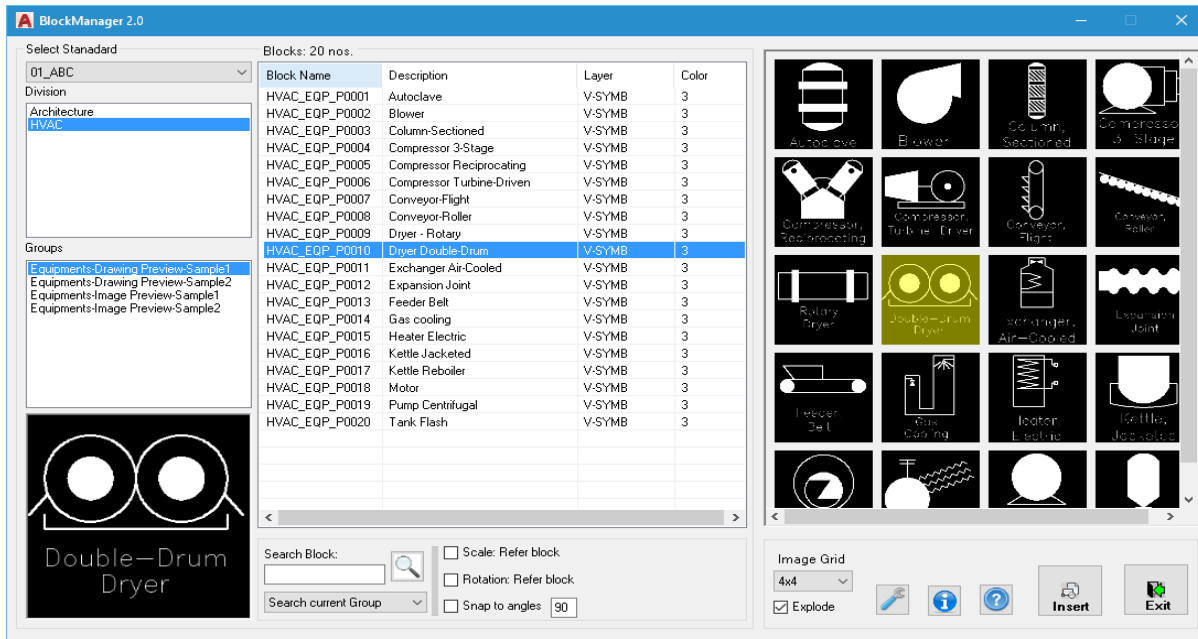*Tool to manage Block Library for AutoCAD and Verticals*

Compatible with AutoCAD 2012 to 2017

Introduction:

The BlockManager is a powerful and easy to use tool to manage Block library for AutoCAD. It comes from years of experience in AutoCAD and it is one of the AutoCAD productivity tools developed by CADMmanagerTools.com.

It is compatible with 32-bit and 64-bit AutoCAD and Vertical versions from 2012 to 2017.

Installation:

The installer that ran when you downloaded this plug-in from Autodesk Exchange has already installed the plug-in. You may need to restart AutoCAD to activate the plug-in. The command for command line is "CMT_BKM".

For the first time set the Block library location in the settings dialog box and click save to register the path and close the BlockManager and re-launch BlockManager, select the Division from available names in the drop down list and select the listed folder name that will list all available blocks in the selected folder.

Setting up Block library directory structure:

With little effort user can setup the directory structure which suites his/her company wide requirements, the sample is given below to arrange the discipline specific blocks in folders.
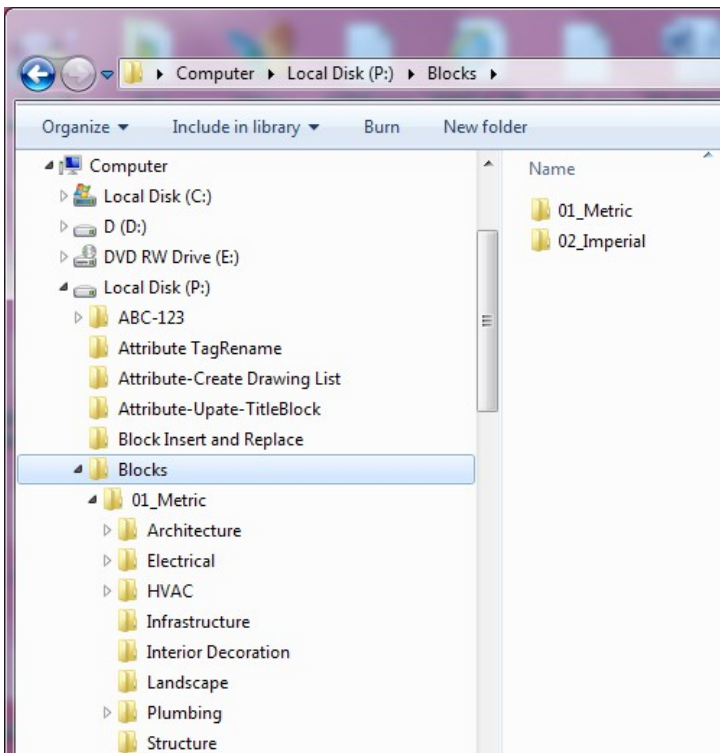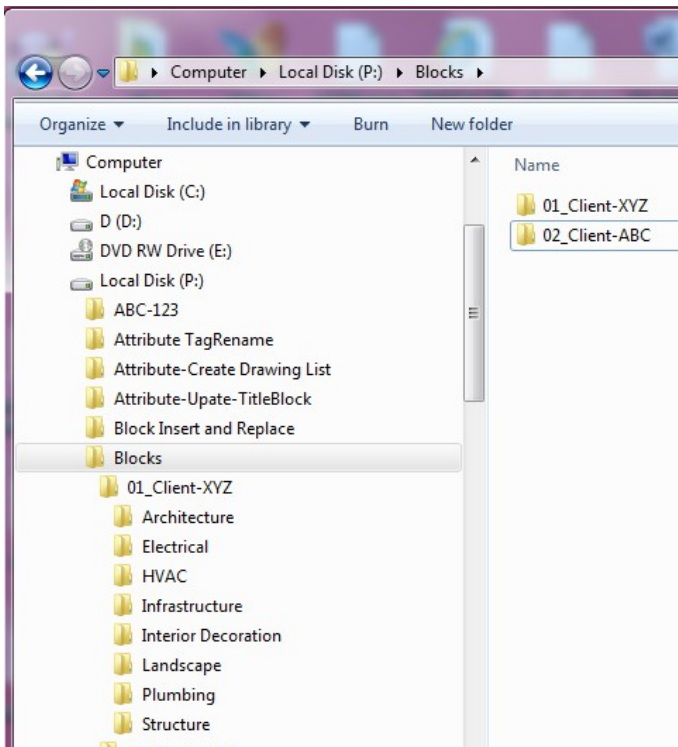
The main block manager folder structure should be organized as below image

Arrange your blocks block library based on Metric/Imperial or client specific CAD standards, in most cases the block symbols and layers differs from client to client.

Name the Main block library folder of your choice; for example "BLOCKS" or "BLOCK LIBRARY" etc…

1. Create Client specific CAD standards folders under main block library folder.
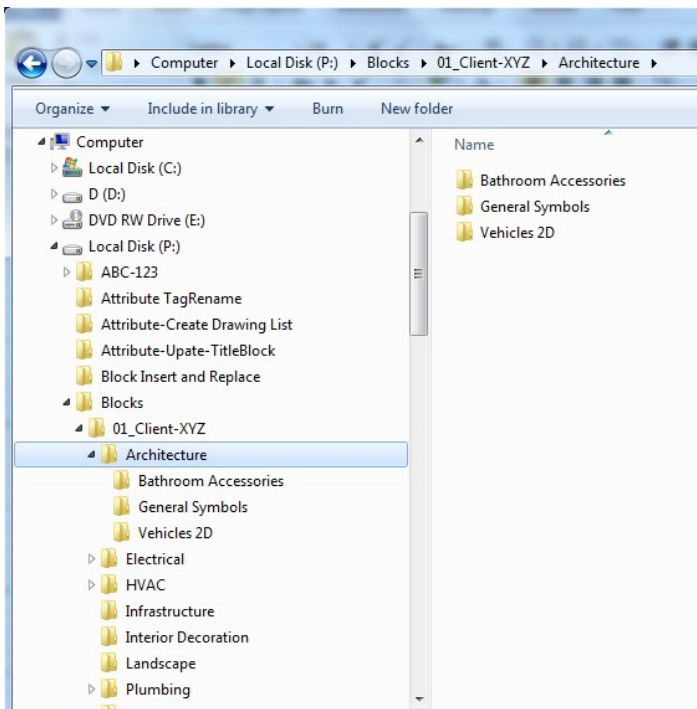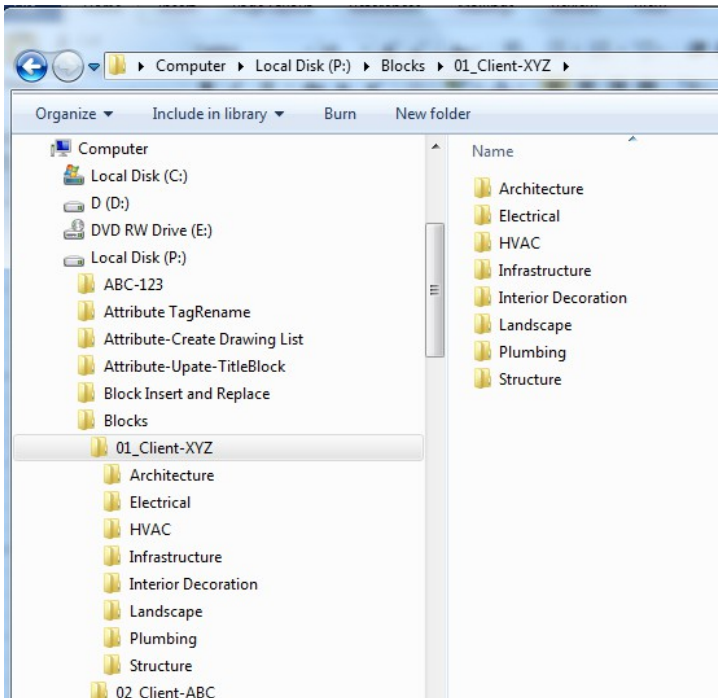
2. Create Division wise folders under the client specific CAD standards folder.

3. Create individual group folders under each Division folders.

4. Arrange blocks within each group folder with proper naming convention as described below.

Setting up Block naming convention:

The block file name is combined with Block name, description, layer name and color and this is the format the Block Manager application recognizes the file names, the intention is to make this application simple and transparent to end user to manage and organize the block library rather than implementing hard coded database method for storing block description, layer and color information.

User can setup their block file naming either by the above mentioned default convention or user can skip the description, layer and color fields but the split character should remain in that place holder and the default is set up as "~"(Tilde symbol); User can assign their choice of split character in the Settings dialog.

<u>Valid File names:</u>

HVAC-EQP-P0001~Autoclave~V-SYMP~3.dwg

HVAC-EQP-P0001~~V-SYMP~3.dwg (No description)

Block will be inserted on the assigned layer name without changing the current layer name, Layer name will be created, if the layer does not exist in the drawing

HVAC-EQP-P0001~~ V-SYMP ~.dwg (No description and Color number)

Block will be inserted on the assigned layer name without changing the current layer name, Layer name will be created, if the layer does not exist in the drawing,

Layer will be created with color number 7 (white), if no color is assigned in the block file name

HVAC-EQP-P0001~~~.dwg (No description, layer name and Color number)

If there is no layer name is assigned in the block file name then block will be inserted on current layer

Sample set is available with the installation

Sample-1 Preview from Drawing with block name, description, layer and Color number

C:\Users\USERNAME\AppData\Roaming\Autodesk\ApplicationPlugins\CADManagerTools BlockManager.bundle\Contents\Blocks\01_ABC\HVAC\ Equipments-Drawing Preview-Sample1

Sample-2 Preview from Drawing with block name, layer and Color number

C:\Users\USERNAME\AppData\Roaming\Autodesk\ApplicationPlugins\CADManagerTools BlockManager.bundle\Contents\Blocks\01_ABC\HVAC\ Equipments-Drawing Preview-Sample2

Sample-1 Preview from Image with block name, description, layer and Color number

C:\Users\USERNAME\AppData\Roaming\Autodesk\ApplicationPlugins\CADManagerTools BlockManager.bundle\Contents\Blocks\01_ABC\HVAC\ Equipments-Image Preview-Sample1

Sample-2 Preview from Imagewith block name, layer and Color number

C:\Users\USERNAME\AppData\Roaming\Autodesk\ApplicationPlugins\CADManagerTools
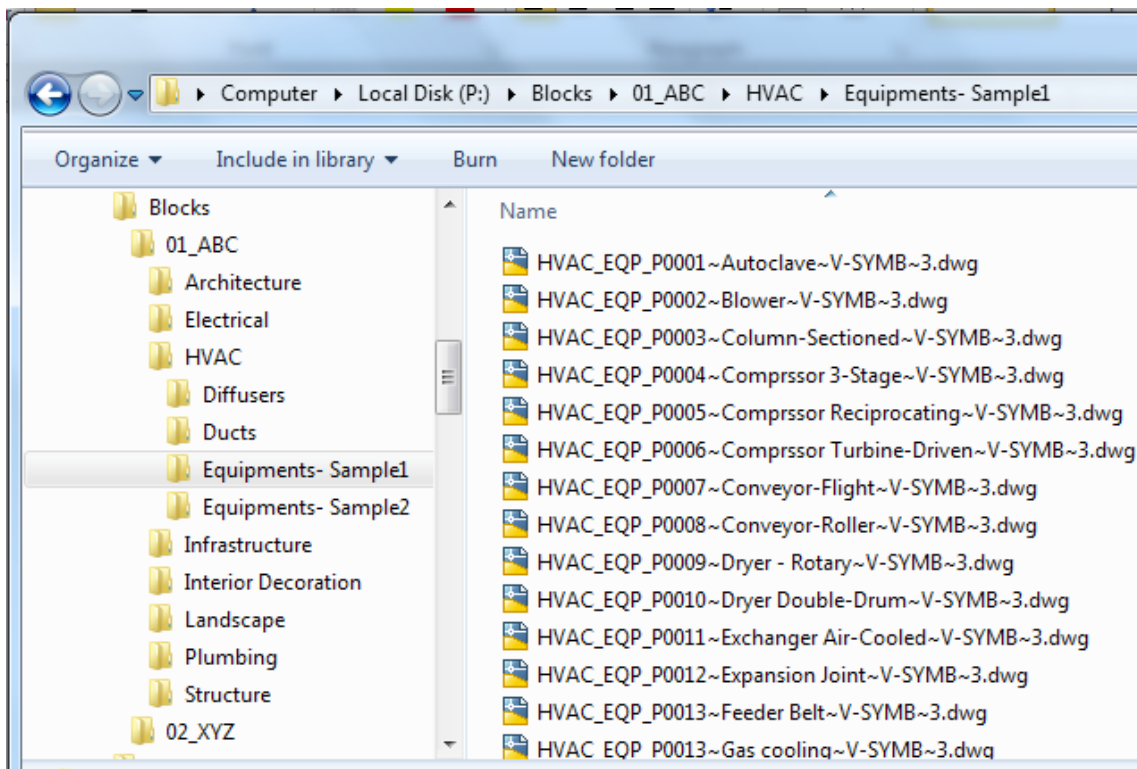BlockManager.bundle\Contents\Blocks\01_ABC\HVAC\ Equipments-Image Preview-Sample2

Block types:

There are four types of file names available to choose, user can set any one of them as preferred in the setting dialog box in which he/she sets up the file name convention to work with this application

- jpg

- bmp

- png

- dwg

User can set this application to work directly with drawing thumbnail preview which is stored in drawing file; alternatively user can choose image (jpg, bmp and png) as a preview option

The default image type is "dwg", using the drawing file for block preview, block name, description, layer and color number as shown below.
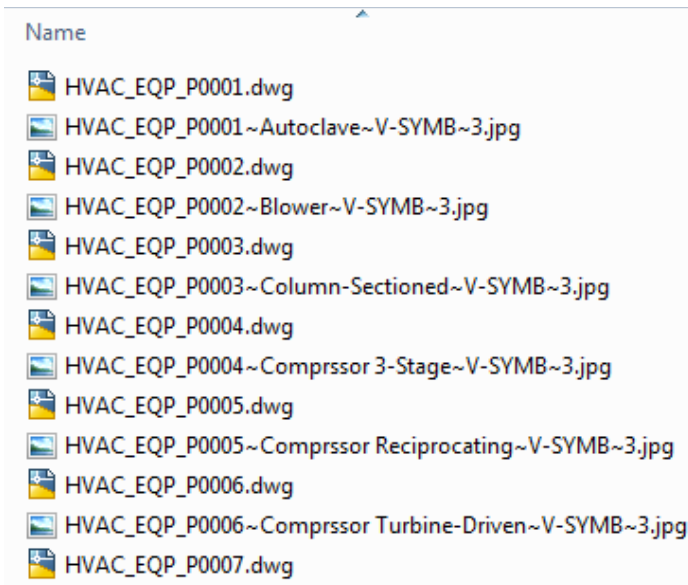
In the image option, user needs to set up the file name of the image (block name, description, layer and color number) and corresponding drawing file should accompany with only block name as shown below.

In this option the drawing will be inserted as block and the block preview, layer and color is referred from the corresponding image.

The advantages of using image method is quicker it loads with light image files and additional information can be added to image file to convey special instruction and settings to be followed for that particular block.

Name
HVAC_EQP_P0001.dwg
HVAC_EQP_P0001~Autoclave~V-SYMB~3.jpg
HVAC_EQP_P0002.dwg
HVAC_EQP_P0002~Blower~V-SYMB~3.jpg
HVAC_EQP_P0003.dwg
HVAC_EQP_P0003~Column-Sectioned~V-SYMB~3.jpg
HVAC_EQP_P0004.dwg
HVAC_EQP_P0004~Comprssor 3-Stage~V-SYMB~3.jpg
HVAC_EQP_P0005.dwg
HVAC_EQP_P0005~Comprssor Reciprocating~V-SYMB~3.jpg
HVAC_EQP_P0006.dwg
HVAC_EQP_P0006~Comprssor Turbine-Driven~V-SYMB~3.jpg
HVAC_EQP_P0007.dwg

Sorting:

Click on the header to short in Ascending/Descending order

A>> -Indicates shorting in Ascending order

Z>> -Indicates shorting in Descending order

Blocks: 20 nos.

A>> Block Name	Description	Layer	Color
HVAC_EQP_P0001	Autoclave	V-SYMB	3
HVAC_EQP_P0002	Blower	V-SYMB	3
HVAC_EQP_P0003	Column-Sectioned	V-SYMB	3
HVAC_EQP_P0004	Comprssor 3-Stage	V-SYMB	3
HVAC_EQP_P0005	Comprssor Reciprocating	V-SYMB	3
HVAC_EQP_P0006	Comprssor Turbine-Driven	V-SYMB	3
HVAC_EQP_P0007	Conveyor-Flight	V-SYMB	3
HVAC_EQP_P0008	Conveyor-Roller	V-SYMB	3
HVAC_EQP_P0009	Dryer - Rotary	V-SYMB	3
HVAC_EQP_P0010	Dryer Double-Drum	V-SYMB	3
HVAC_EQP_P0011	Exchanger Air-Cooled	V-SYMB	3
HVAC_EQP_P0012	Expansion Joint	V-SYMB	3
HVAC_EQP_P0013	Feeder Belt	V-SYMB	3
HVAC_EQP_P0014	Gas cooling	V-SYMB	3
HVAC_EQP_P0015	Heater Electric	V-SYMB	3
HVAC_EQP_P0016	Kettle Jacketed	V-SYMB	3
HVAC_EQP_P0017	Kettle Reboiler	V-SYMB	3

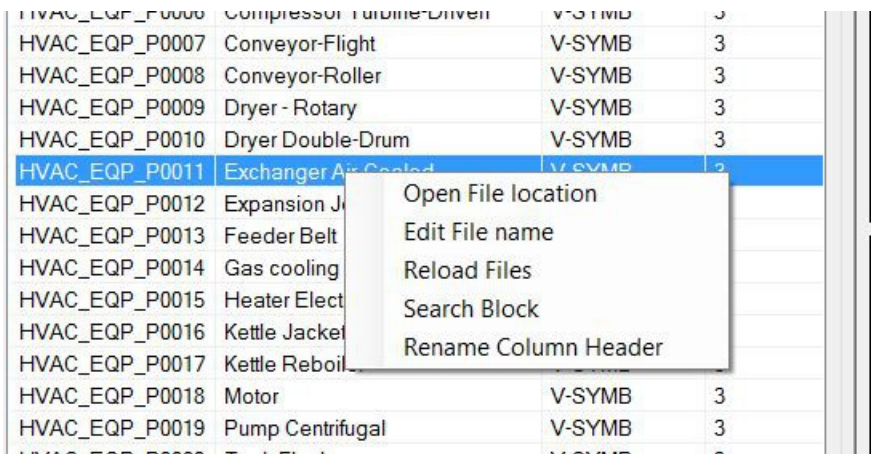## Right Click Menu:

Right click menu on block list view enables easy access to some of its features

Open File Location: Opens the file location in windows explorer and highlights the file for renaming/editing

Edit File Name: Opens the dialog box for editing of block name, description, Layer and Color number

Reload Files: Reloads the files from the current group folder, file name changes in the current f   older needs reloading of files.

Search Block: Searches and loads the *matching result* into the block list

Rename Column Header: Opens List header rename dialog box to rename the default header names to user's choice
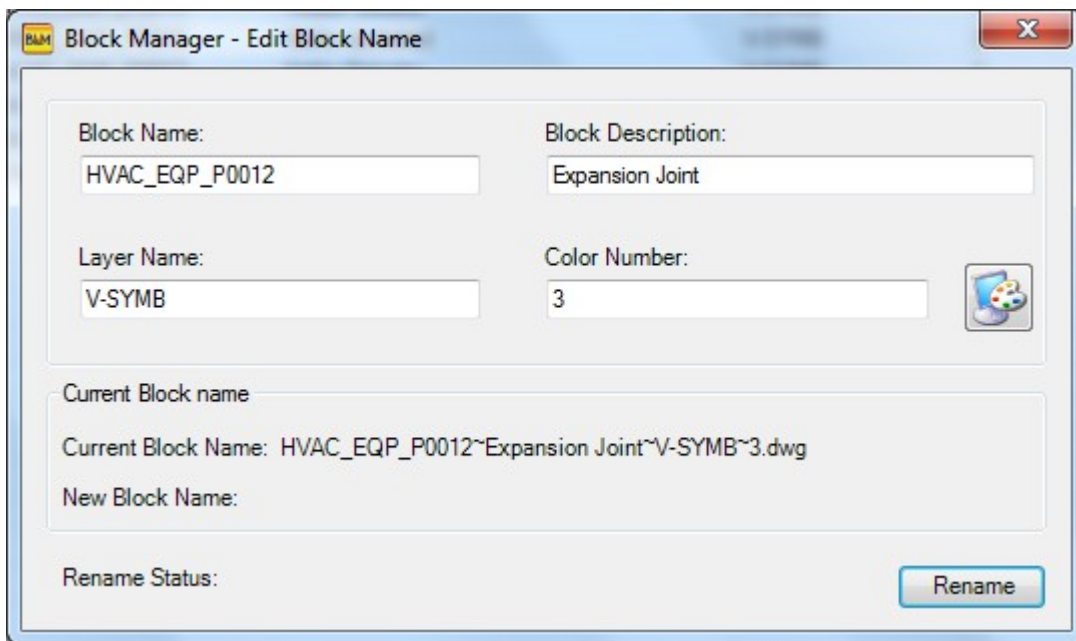
Edit File Name:

Edit block name, description, Layer and Color number (True color/Index color), the new block name will show the new file name which is being edited and click Rename button to finalize the operation.
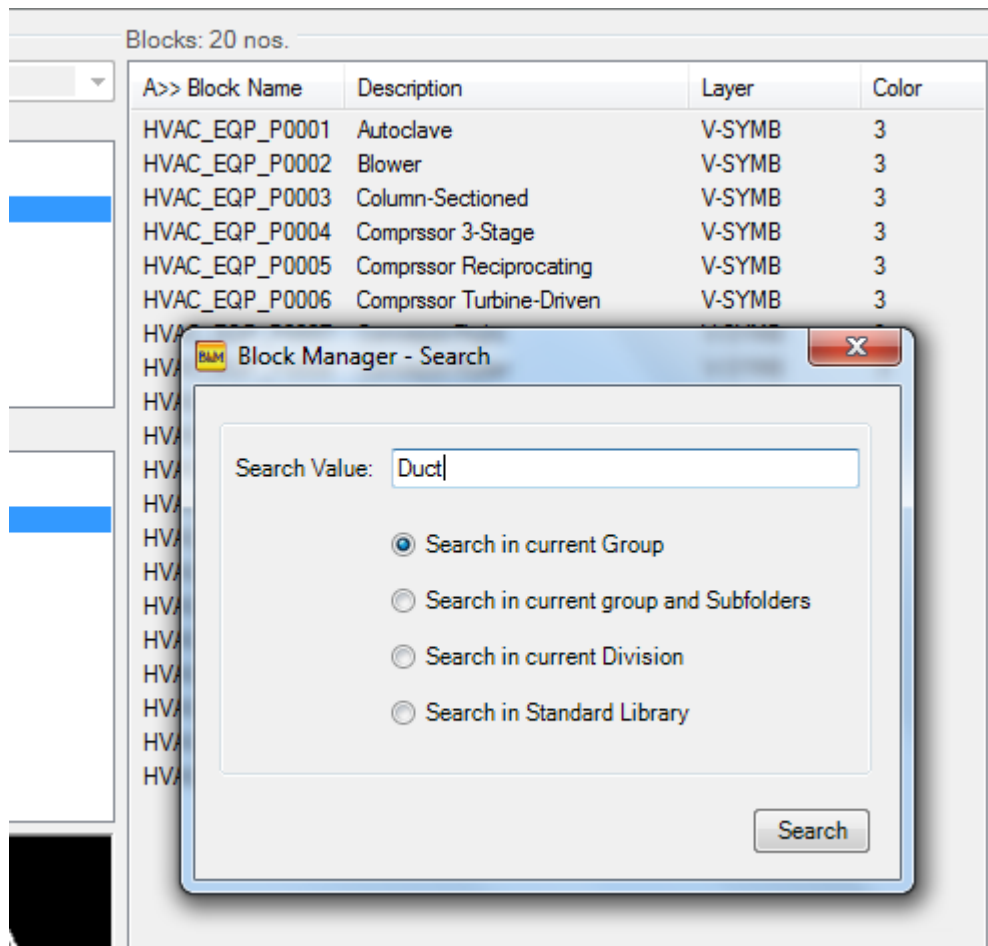
The status of rename will be displayed at bottom of the dialog box.

In case of Image type is "dwg" then only drawing file is renamed and in image type is set to any one of the image format (jpg, bmp, png) , the image file as well as the corresponding drawing file will be renamed

Search Block:

Searches and loads the *matching result* into the block list and the same function is available in the Main application dialog as well

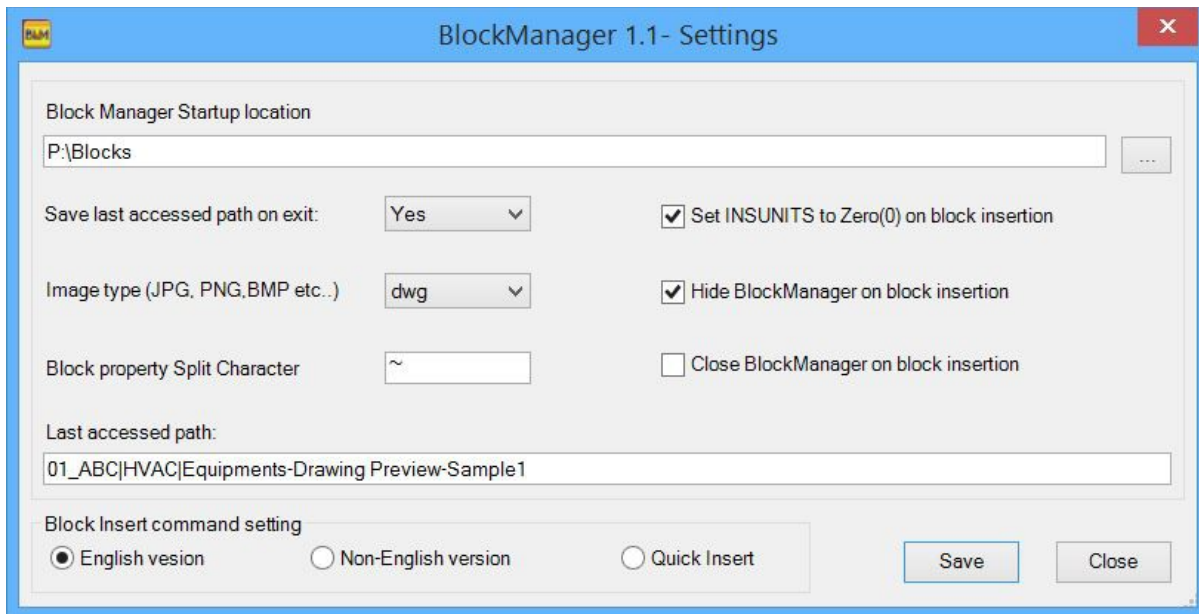*There are four options for search criteria*

1. Search in current Group – Searches blocks in the current selected folder only, current folder is visible on the left side of the application under groups

2. Search in current group and subfolders – Searches blocks in the current selected group folder and its sub-folders

3. Search in current Division – Searches blocks in the current Division folder and its sub-folders

4. Search in Standard Library – Searches blocks in the Standard Library folder

Settings:

Arrange the blocks with preferred image type and file naming convention as described in the image type section and for the first time, set the block library location and image type and save the settings.

Any changes on the settings block library location needs restarts of this application to read from the new location.

Save last accessed path on exit: Set to "Yes" saves the last accessed directory and loads files and images from the saved location during the application startup and Set to "No" loads files and images from the first directory in the list

Image type (DWG, JPG, PBG, BMP): Set the preferred image type

Block Property Split Character: Set the preferred split letter which you have assigned to file name

Set INSUNITS to Zero (0) on block insertion: Enable this option to avoid automatic scale conversion

Hide BlockManager on block insertion: Enable this option to minimize the application during block insertion

Close BlockManager on block insertion: Enable this option to close the application during block insertion

Block Insert command setting: This option is added to support English/Non-English version of AutoCAD command line behavior,

1. **English version** : The command line uses "**-Insert**" command and the insertion points, scale and rotation prompt will follow and the Explode option supports AutoCAD 2015 and above

2. **Non-English version** : The command line uses "**_Insert**" command and the insertion points, scale and rotation prompt will follow and the Explode option supports AutoCAD 2015 and above

3. **Quick Insert** : This option eliminates the need for scale and rotation prompts , it uses the values scale=1 and rotation=0 and the Explode option supports AutoCAD 2012 and above

Block Insert:

To insert a block, first select a block either in the file list or in the image list and click the Insert button and the command will continue in AutoCAD for the user input of insertion points, Scale and Rotation.

Additional options "Refer from block" are available for scale and Rotation values, use this to assign the existing block scale/Rotation values to block being inserted. This option is not available to Quick-insert option.

The option "Snap cursor to angles" sets and enable the polar angles which helps to snap the cursor to specified angle intervals during block insert command. This option is not available to Quick-insert option.

During the block insertion the existence of assigned layer name in the current drawing will be checked; if layer exist then it will be set as current, if does not then layer will be created and sets it as current layer and the previous layer will be re-set upon completion/Termination of the insert command.

New option Explode(Burst) option is included in the newer version 2.0

Double click option is enabled in file list and image list for quicker block insertion.

Preparing drawings for BlockManager:

Here are the steps for preparing your drawings which is based on drawing preview (image type "dwg") for BlockManager

1. Arrange the drawings in directories with correct naming convention as described in section "Setting up Block naming convention"

2. Watch this Video for details: *http://youtu.be/kJCEcv9lDWA*

3. Launch the *BatchInEditor* application and load the drawing files

4. Add the below commands as shown in the video

a. Model-Set Current

b. Zoom-Extents

c. (command "zoom" "0.95x")   - This command is to show some space around block preview

d. (command "-layer" "lw" "0.3" "0" "")   - This is optional to sharpen the preview

e. (setvar "lwdisplay" 1)   - This is optional to sharpen the preview

5. Draw a rectangle any size in the current drawing and size the AutoCAD Main window, zoom extents the drawing and make sure the rectangle fits the active drawing window (No need to be a Perfect sizing of window) and if needed close the command line as well

6.   Run the Batch application which will create perfect preview for blocks

Here are the steps for preparing your drawings which is based on image preview (image type "jpg, bmp, png") for BlockManager and user can adopt their own preferred way for creating image files

1.   Arrange the drawings in directories with block name only as described in section "Setting up Block naming convention"

2.   Watch this Video for details

3.   Launch the *BatchInEditor* application and load the drawing files

4.   Add the below commands

f. Model-Set Current

g. Zoom-Extents

h. (command "zoom" "0.95x")   - This command is to show some space around block preview

i. (command "-layer" "lw" "0.3" "0" "")   - This is optional to sharpen the preview

j. (setvar "lwdisplay" 1)   - This is optional to sharpen the preview

k. Export-To Image with preferred image type and enable "Export Image file to drawing location" to save image in the same folder

5.   Draw a rectangle any size in the current drawing and size the AutoCAD Main window, zoom extends the drawing and make sure the rectangle fits the active drawing window (No need to be a Perfect sizing of window) and if needed close the command line as well

6.   Run the Batch application which will create images for block preview

7.   Apply the correct naming convention for images only as described in section "Setting up Block naming convention"