

Buildmaster

March 2004, Issue No. Five

Welcome to Fifth issue of INSIDE BUILD-MASTER !

Build-Master creates many files for storing Input data and Output results. These files are of various types, e.g. **.MDB** database files, **.DXF** drawing files, **.TXT** text files.

Build-Master uses the formats of standard and popular software for storing the data. The interface with the standard software makes it possible for user to open / edit / print their results in more easy and presentable manner, through the **standard software**.

Build-Master creates following types of files. Each type of file has some default extension mentioned below.

Sr. No.	File Type	Default Extension	Compatible with standard software
1.	Text Files	.Txt	Edit Pad, Note Pad
2.	HTML Files	.Html	MS Word, Internet explorer
3.	Drawing Files	.Dxf	AutoCAD, IntelliCAD
4.	Database files	.mdb	MS Access, Oracle
5.	Spread Sheets	.xls	MS Excel
6.	Compacted Files	.zip	WinZip

Build-Master uses many different file extensions, other than those mentioned above, to distinguish them easily. For example **.RCC**, **.ARC**, **.DAT**, **.OUT** extensions are used for the text files storing the RCC, Architectural data and analysis input & output. The **.RBDB**, **.RSDB**, **.RCDB** and **.RFDB** extensions are used for database files storing the design data of beams, slabs, columns and footings respectively. A complete list of all file names is given in **Appendix A** of Build-Master **Reference Manual**.

The **standard software** are required to be configured to use them more effectively. These configuration settings and frequently used commands are highlighted in this **Bulletin Issue**. This bulletin will give only an overview of the useful commands; User is advised to refer to the respective manuals of these software for more elaborate details. It is worth spending some time initially on reading the manuals to save our precious time later.

Windows O.S.

Every computer Hard Disc comes blank originally. An **Operating System** is installed on it initially to make it possible for the user to store the files and run programs.

Microsoft Windows is the most popular operating systems (O.S.) available today. There are two types of Windows O.S., one is **Windows 95, 98 and ME** series derived from **MS-DOS** and other is **Windows 2000 & XP** series derived from **Windows NT** Operating System. **Build-Master** Version 2000 runs on all the above series. The earlier MS-DOS based versions of Build-Master, viz. 5.0 and 5.5 runs only on Windows 95, 98 and ME.

File is a basic entity on the hard disc. Every information is stored in some file or the other. Files are stored in various **folders** and **sub-folders** to retrieve them quickly. When Build-Master is used for the first time, it creates **BmProjects** main folder on the hard drive on which Build-Master is installed (e.g. C, D or E). For every new project, it creates a sub-folder under BmProjects for storing all the files of that project. This sub-folder name is the same as project code.

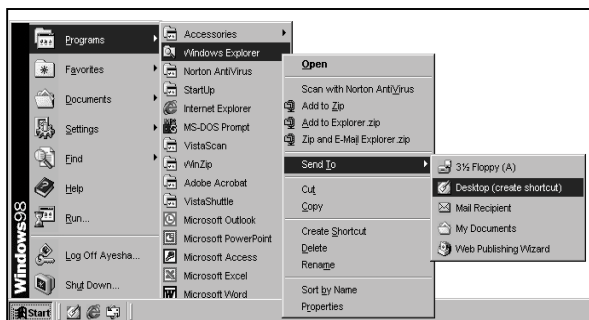
To	Command	To	Command
Open	Ctrl + O	Save	Ctrl + S
New	Ctrl + N	Close a Window	Ctrl + F4
Copy	Ctrl + C	Paste	Ctrl + V
Find a File	Ctrl + F	Rename a File	F2
Switch Application	Alt + Tab	Start Windows Explorer	⌘ + E
Minimize all application & switch to Desktop	⌘ + D	Switch from one field to another in dialog box	Tab key Shift + Tab
Menu Option	Alt + Character	Close an application	Alt + F4
Switch between windows of same application	Ctrl + F6	Open the Look In List in open Dialogue Box	F4
Refresh Data	F5		

Explorer

Windows Explorer is a powerful way to browse through and manage your files, drives, and network connections. Explorer is most frequently used program of Windows. It is a good idea to create a short-cut of Explorer on the desktop to keep it handy all the time. **Desktop** is one of the folders of Windows. All files in this folder are displayed on the screen with **START** button in the bottom-left corner.

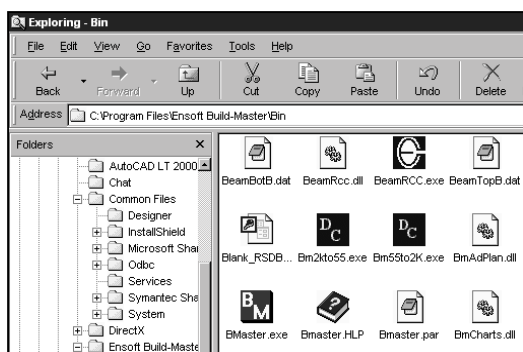
To create a shortcut

- With left click of mouse on **START** button of *Windows 95 & 98*, select **Programs** menu
- Select **Windows Explorer**, in **Programs** menu,
- Right click on **Windows Explorer**, go to **Send to** option and then select **Desktop (Create Shortcut)** option.

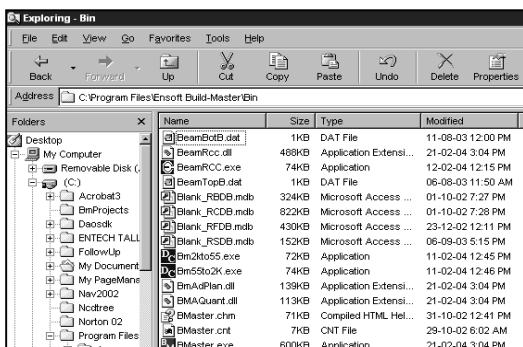


The Windows Explorer shortcut will be created on Desktop. In Windows 2000 & XP O.S. this option available under **Accessories** sub-menu. Windows Explorer can also be started with right click of mouse on **START** button, selecting **Explore**.

When you run Explorer, it may display a list of files alongwith Icon or Bitmap associated as shown below.



It is advisable to display the list in a tabular form instead.



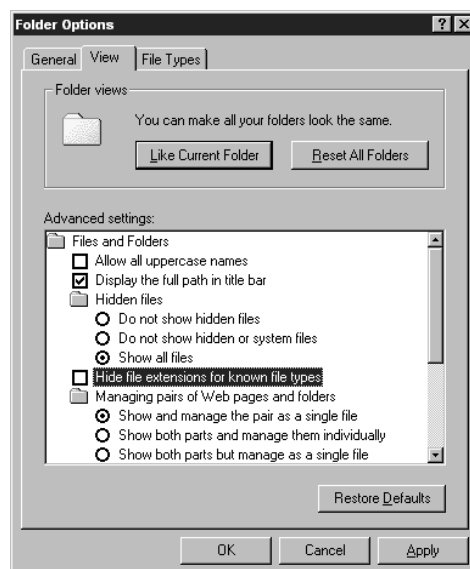
To bring the tabular format in your Explorer :

- Go to **View** on Main Menu of Explorer
- Click **Details**

Click on the title Name, Size, Type or Modified to arrange the files in proper sequence according to various priorities, such as by name, by size by type and by date.

Explorer does not display the file extension by default. But displaying them makes the file easily locatable, to do this.

- Go to **View** Menu & Click on **Folder Options**
- **Folder Options** is available under **Tools** menu in Windows 2000 & XP
- Select **View** Tab button from **Folder Options** Dialogue Box.
- Undo Tick (✓) on **"Hide file extension for known file types"**
- Tick (✓) on **"Display the full path in Title bar"**
- Select **"Show all files"** option as shown below



This will list all the files with their extensions. For each type of file extension, User can assign software, which shall start running whenever that type of file is double-clicked in Windows Explorer. To do this

- Go to Windows Explorer and select the file
- Hold the Shift key and right click on the file and select the **Open with** option from the Pop-up Menu.
- An **Open with** dialogue box will appear listing the various programs using which you can open the file.
- Now select the appropriate program and tick the **"Always use this program to open this type of file"** option to configure it as a default program for this file and click on **OK**.

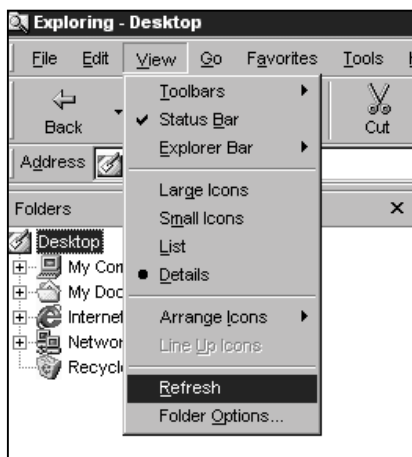
Now next time when you double-click on that type of file, it will get opened in the selected software.

Even if no printer is attached to your computer, at least one printer driver shall be installed to make Build-Master or any other program to display the print preview.

Switching between the applications is most powerful facility of Windows. When you are running many applications, e.g., Build-Master, AutoCAD, MS-Word and Explorer simultaneously, you can easily switch between them without closing any of them. Use **Alt+Tab** or click on the application name on **Task Bar**.

Take care that one file is not open in two application simultaneously. Only close the file but keep the application running.

To avoid the trouble of user to check whether a file is up-to-date or not, Build-Master uses the checking of **interdependency** of files, by comparing date and time of the files. For example, during Frame analysis, the Space Frame Data file must have been created after all the floor data files. If it not so, Build-Master gives a Warning. Windows send date and time information to Build-Master. Sometimes **Refresh View** command has to be given by the user to make Windows send the latest information of date and time of files. For this give **Refresh** command from View menu of Explorer, or **Press F5** function key.



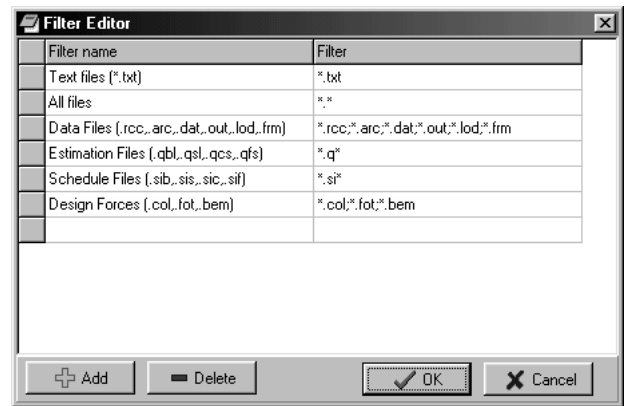
EDITING DIFFERENT TYPE OF FILES

Text Files

Text files can be opened in any **Text Editors** such as **Notepad**, **WordPad** or **Edit Pad**. Notepad and WordPad are available in Windows, but both these programs can open only one file at a time.

Editpad, a freeware program, is copied in Build-Master folder at the time of installation. By default this folder is C:\ProgramFiles\Ensoft Build-Master\Bin. Using Explorer go to this folder and double-click on file EditPad.Exe. When you run Editpad for the first time, it will say Sorry cannot proceed unless you read the agreement. Do the needful and it will start running with displaying Thank you. Multiple Text files can be opened simultaneously.

Editpad has a very good feature to assign the user defined file types in the Open File Dialog box. To use this select **Filters** sub-menu, from the **Options** main menu. Type the contents in Filter Editor as shown below. The next time when you use Open dialog box, the following file types will be readily available to you.



Text files can also be opened with MS Word, for printing a multi page document. Default extension for MS Word is .DOC, but you can open Text only files using File of Type option.

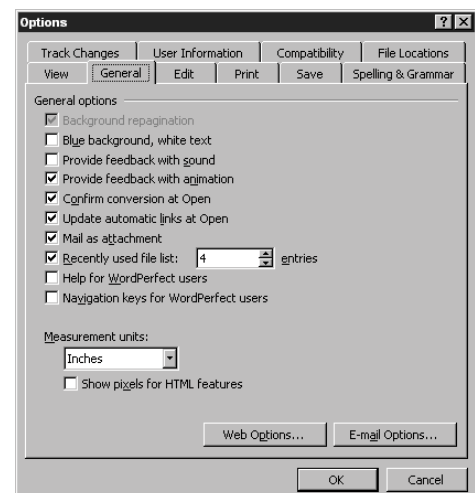
For e.g. to open an Output file (.OUT file) created by Build-Master, use following instructions

- Go to **File** Menu and click on **Open** button
- A Dialogue Box will appear on the screen asking for the File Name. Go to the folder with "**Look In**" option.
- Select the File of Type as "Text Files (*.txt)"
- In **File Name** type ***.out** which will show list of all the Output files in that particular folder.

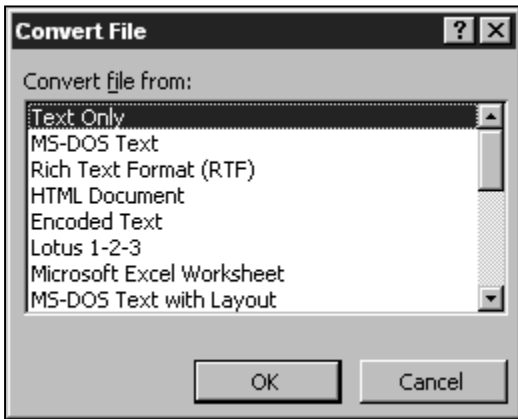
Choose the file of your choice and give open command.

If a text file opened in MS Word is saved as .DOC file by mistake, you will not be able to use it in Build-Master. To avoid this configure it to ask the type of file every time you open a non .Doc file. To do this

- Go to **Tools** Menu and click on **Option** Button
- From various sub-menus, choose **General**
- Click on "**Confirm Conversion at open**" in order to activate the command

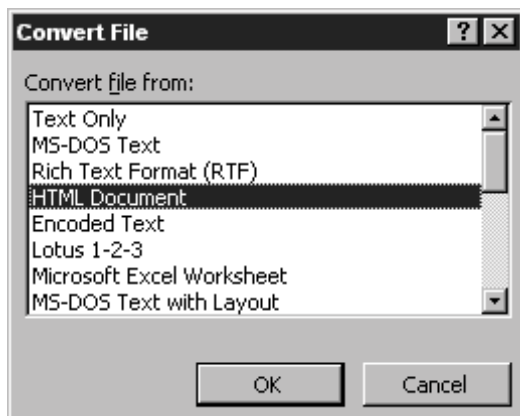


- Hence forth following Dialog Box will appear
- Choose the option **Text Only** to open a Text file.



HTML Files

Text files have limitations that they can be of a single font, size and colour. **HTML** file format is now industry standard. The text in this type of file can be multi colored with different sizes. One can insert a graphics image as well. Therefore RCC design output files are stored in .HTML format. These files can be opened in Internet Explorer, any HTML editor or MS Word as well. Select "Confirm conversion at Open" option in MS Word, as mentioned above, to make it display file in proper format. File will be printed in multi colours on a Color printer. If you wish to print in Black only, then when you open .HTML file in MS Word, select the entire content with **CTRL+A** command and assign a single BLACK color to the entire text.



Drawing Files

Build-Master creates all drawing files in .DXF format. DXF (Drawing Exchange File) is a standard format for storing the drawing information. File written in this format can be read in many drafting packages like AutoCAD, VersaCad, RoboCad or IntelliCAD etc. AutoCAD is the most popular among the all. The default extension of AutoCAD is DWG, but it can read and store a DXF file.

Opening a DXF File in AutoCAD

- Start AutoCAD, select **OPEN** option from the **FILE** menu or type **DXFIN** at Command Prompt.
- **Select File** dialogue box will appear on screen.
- Using the **Look In** option select the folder from which the file is to be opened.

- Select "**Files of Type**" as "**DXF (*.dxf)**". Thereby listing only DXF files in the dialogue box.
- Select the appropriate file from the list of DXF files displayed and click on **OPEN**.

The drawing sketch will be displayed. You can use any of the AutoCAD editing command to modify it. Or print it directly.

While creating a DXF file in Build-Master, it will ask for the **Drawing Scale** and **Plan Origin**. If you enter the scale as 100 (1:100), it will create a DXF file storing the reduced size of drawing. When you take this drawing to AutoCAD, always use scale 1:1 while printing. This facility is useful when you bring two or more sketches of different scales in one drawing, e.g. Floor Plan, Schedules and Beam Details. Default location for all floor plans is 0,0 mm and for all schedules it is 10, 750 mm.

To superimpose another DXF file on the same drawing

- Start AutoCAD and open the first drawing
- From the **INSERT** menu select **BLOCK** option. **Insert** dialogue will appear on the screen.
- Use **Browse** button to go to the folder where the second drawing is present. **Select Drawing File** dialogue box will appear.
- Select **Files of type** as DXF, from the list of DXF files displayed select the desired one. **Remove** tick mark against **Specify On-screen** option under **Insertion Point** and click on **OK**.
- The second drawing file will be seen superimposed over the first one.

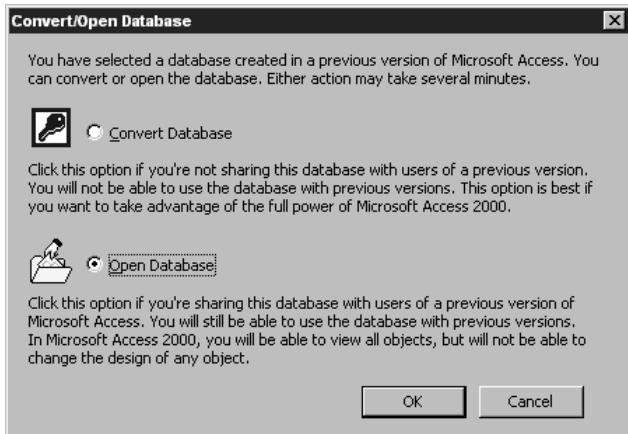
DXF files created through BUILD-MASTER have many layers with pre-defined colours and line types. AutoCAD has a facility to create a template drawing (.DWT), in which User can define the layer colours or his choice. When you give NEW drawing command in AutoCAD it will ask name of .DWT file copying all standard settings. VIEW POINT and HIDE command can be used for 3D DXF.

Data Base Files

Build-Master creates database files for storing data for beams, slabs, columns and footings e.g. .RBDB, .RSDB, .RCDB and .RFDB respectively. User can open these Data Base files in MS Access Software as follows:

- Start **Microsoft Access** and select **OPEN** option from **FILE** menu.
- In the OPEN dialogue box, select the folder in which your files are stored.
- In the option **File Name** type *.rdbb
- It will show all the .rdbb files. Choose the file you want and click on **OPEN**.
- Following dialogue box will appear on screen before opening the database.
- Click on **Open Database** option. **Do Not** click on **Convert Database**, otherwise you can not open this file again in Build-Master.
- After clicking **OK** another dialogue box will appear saying "**You cannot change the database objects in the database**" Click **OK** to continue further.
- List of tables is displayed. Select one for editing.

User is advised to change only the values of various fields and shall not edit the design of Tables and fields.



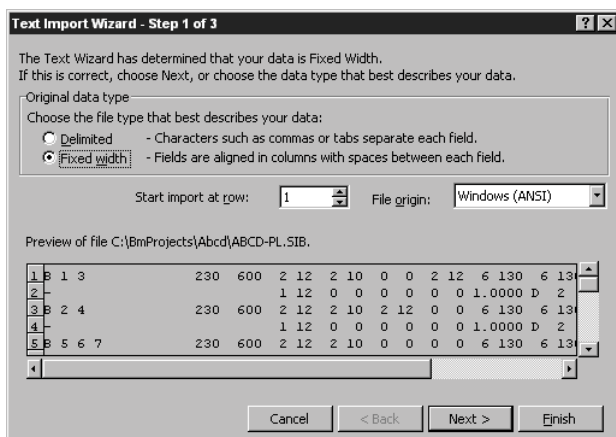
Tabular Data Files

Build-Master creates schedule files (extension .SIB, .SIS, .SIC and .SIF) for storing schedule data of beams, slabs, columns and footings respect.

Similarly **Road-Master** software creates .OGL, .FNL, .PRL files for storing formation level, original ground level and progress level.

These tabular data files can be opened with **MS Excel**:

- Start **Microsoft EXCEL** and select **OPEN** option from **FILE** menu. In **Open** dialogue box, Choose the folder from LOOK IN where data file is stored.
- Type *.SIB as **File Name** and select Text Files option in **Files of Type**.
- It will list all the .SIB files, amongst which you can choose the file you want to edit and Click on **OPEN**
- **Text Import Wizard** dialogue box as shown below will appear on the Screen. Click on **Fixed Width** option. Let the value of **Start import at row** be 1.



In case if .SIC file this value shall be changed to 16, since tabular format starts at Row 16.

- Say **Next** to continue further. **Break Line Arrows** will appear where Excel has detected the column break. This can shifted if desired. Press **Next** and then click on **Finish** button.

The tabular format file will be displayed and you can use any of the Excel commands for editing.

- After the editing is over, give **SAVE** command. **Save AS** dialogue box will appear. Let the name of file be enclosed in double quotes ". This will not append the .XLS extension to the file. Another dialogue box will appear saying that your "**File contain feature that are Not compatible**" Say **YES** to keep this format. File will be saved. From **FILE** menu select **EXIT** and Not to Save changes, since they are already saved.

Compacted ZIP Files

Compacted files or Archive files are those, which contain other files. Archives usually have file names ending with ZIP, LZH, ARJ, or ARC, depending on how they were created. Archives make it easy to group files and make transporting and copying these files faster.

WinZip is the most popular software for making the Archive files. WinZip is useful for taking backup of project files or while sending project data files as attachment with an email. WinZip is the most perfect and bug free software, amongst all discussed above. It works with an amazing speed.

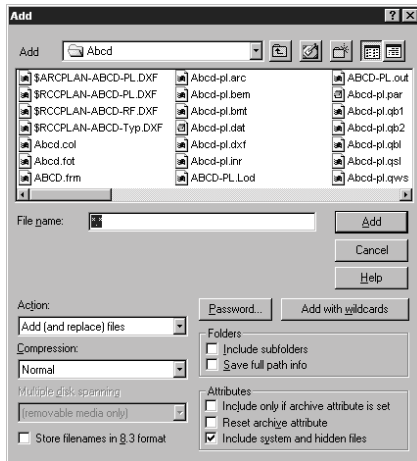
In text file each character occupies a byte. If a file is about 10 KB, it means there are about 10,000 characters in it. During compaction, the sequence of characters are converted into code nos. and stored. For example, an integer no. Occupies only 2 bytes but can store a value of 32,000. Similarly a double number occupies 8 bytes but can store any number up to 10,000,000,000. Thus when sequences of characters are converted into numbers the file occupies very less size.

The compacted text files occupies only about 10% of the original size and on an average all type of files get compacted to 50% of their original size.

To create a new Winzip files

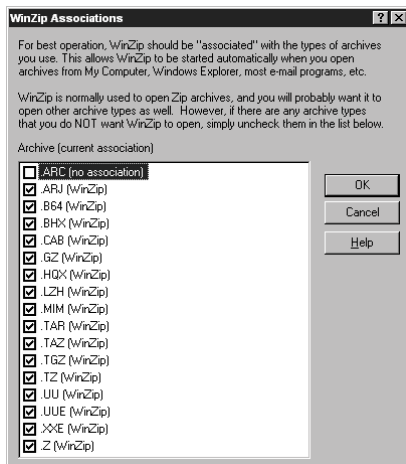
- Start **Winzip** and press "**New**" button
- In the **New Archive** dialogue box, specify the file name and the folder in which the Zip file is to be created and say **OK**.
- **Add** dialogue box appears on the screen
- In **Folders Option** tick on "**Include subfolders**" option and Do Not tick on "**Save full path info**"
- In **Attributes Option** tick on "**Include system & hidden files**".
- Select **Add with Wildcard** button to include all the files in the current folder
- Select **EXIT** option from **FILE** menu to save the ZIP file and exit.

Although every care is taken to provide the correct information in this bulletin, **Ensoft Consultants** is **not** responsible for any errors, mistakes, wrong interpretation in or as a result of the usage of it.



Default extension of WinZip file is .ZIP. Different compaction programs use many other extensions to store the compacted files, for e.g. .ARC, .ARJ, .CAB, etc. WinZip support all these files and associate them as winzip files. Build-Master uses **.ARC** extension for storing Architectural plan data.

By default .ARC files are marked as winzip files in Explorer and does not get included in the Zip file. Therefore the association of .ARC files shall be removed from the WinZip type files.



To do this

- Start WinZip, from **Options** menu select **Configuration**
- Select **System** tab option button

- Press **Association** button. It will display **WinZip Association** dialogue box. Remove tick against .ARC file extensions.
- Press **OK** to save changes.

With this .ARC files will not be marked as WinZip files.

Whenever you ask any doubt to our support engineers, if your project data is available to them, the answer to your query will be more precise. WinZip can be used to create an Archive of your project data and send it more easily. Build-Master has an inbuilt facility to create a Zip file out of all the data files of the current project.

To do this

- When a project is open in Build-Master, from **Utilities** menu, select **Copy Files for Zip** option. A dialogue box will appear. **Details** button will show you the list of files, which will be included in Zip file.
- Select **Copy** button to start the creation of Zip file. If WinZip software is present on your hard disk, Build-Master will automatically start WinZip and create a zip file with primary name same as the project name.
- During this process it will create a sub-folder with name **Files For Zip**, in the current project folder. In case WinZip software is Not present and encounters some problem during run, the files from this folder can be attached to the Email specifying your query.

Other recommended software :

Acrobat Reader 5.0 for reading PDF files
<http://www.adobe.com/acrobat>

Eudora 4.3 for sending / receiving Emails
[www.qualcomm.com / Eudora](http://www.qualcomm.com/Eudora)

AceFTP 3.0 for uploading files to website
[www.visicommedia .com / aceftp](http://www.visicommedia.com/aceftp)

We hope that this issue will be useful to you. See you soon in the next issue of Inside Build-Master.