How to synchronize with a network shared folder as Windows Service

This tutorial demonstrates how to setup a task to synchronize with a network shared folder (or NAS folder), and run the task as a Windows Service without user logon.

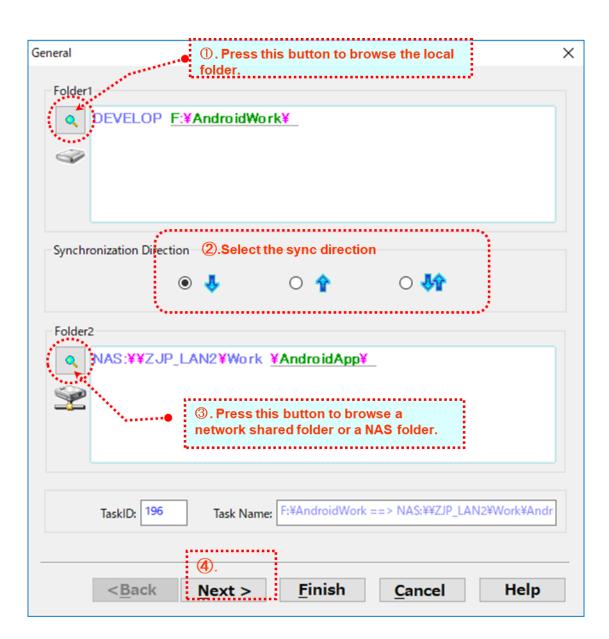
1. On the main windows, press the "Add task" button (\mathbb{N}) to add a task.

After you add a task, you can modify it later by press the "Setup task" button (

BestSync 2020 (Admin) - Setting43xfsf	
ile(<u>F)</u> Edit(<u>E)</u> Action(<u>S</u>) Option(<u>O</u>) Help(<u>H</u>)	
🗑 Preview 🔻 ≽ Start 🔳 🔰 🔯 🙆 🐼 💥 🕇	역 🕺 🔋 🧹
Task List 30251 MySite ZJP-LAN Test TestFTP CloudWork Cloud Web	Dav ZIP iSysCon Stock Android Port 🚳 🖣
Task Overview	Status
DEVELOP FAMILIER	Last time: 2020/01/21 22:16:31
Exclude]*@ Press this button to * vio *suo.** Or, Press this * ob*	.m Drive is not ready
¥¥ZJP_LA start Task Wizard to button to modify	Next time: 🕨 🏠 2020/01/28 21:15:32
	Success:3102 Failed:0
work ¥¥ZJF AN2Kwark KMyWaha 2020K	Next time:
Develop F:¥Work5.out¥	Last time: 2020/01/19 22:52:01
✓ J All Files **	Success:393 Failed:0
work ¥¥ZJP_LAN2¥work¥Work5.Out¥	Next time:
work ¥¥ZJP_LAN2¥work¥ すべてのファイルは**	Last time: 2017/03/26 16:27:06 Success:0 Failed:0
Work ¥¥ZJP-LAN¥Work¥	
	Next time: 🕨 🏷 2020/01/28 21:25:23
Develop F:¥Work5.out¥	Last time: 2020/01/12 19:43:35
	Success:707 Failed:0
¥¥ZJP-LAN¥Work5Out¥	Next time: 🏲 🞸
Develop F:¥MyWebs_2019¥	Last time: 2019/09/29 14:43:24
□↓ **	Success:136 Failed:0
D 🖸 Shutdown when all the tasks complete	Really shutdown?
or Help, press F1	

The task wizard starts up.

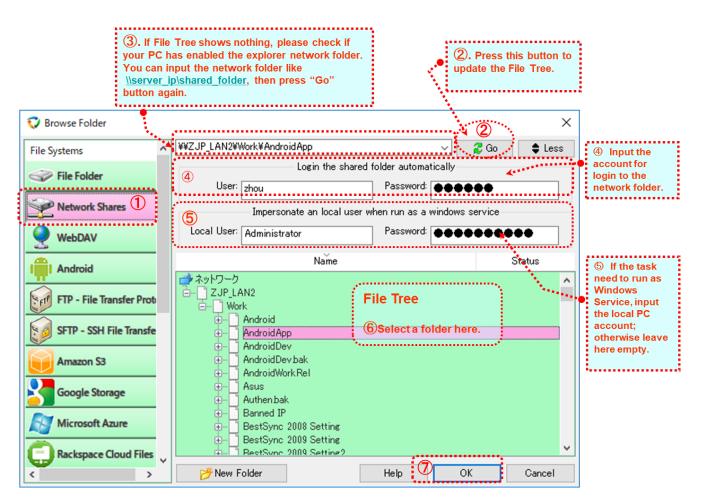
2. On the "General" wizard page, browse the local folder (Step3), set the sync direction and browse the network shared folder (Step4) like the following screenshot.



- (2). Press this button to 🟹 Browse Folder update the File Tree F:¥AndroidWork ~ File Systems Name Status **File Folder** ___ デスクトップ ^ 😟 📲 Jianping Zhou Network Shares 😟 👝 OneDrive 😑 💶 PC WebDAV 🕀 🏹 3D オブジェクト 📥 BACKUP (O:) Android EVELOP (F:) 3025× ٠ **File Tree** 3025x.tree1 ŧ۰ FTP - File Transfer Prot 3025x.tree1bak ÷... 3025x.tree2 ÷... 3Select a folder here. SFTP - SSH File Transfe AI_HandWash_Checker ÷... AI_HandWash_Checkerbak ÷. Amazon S3 APK_Decompile ÷--**AndroidStudioWork** ÷-ŧ AndroidStudioWork Rel Google Storage AndroidWork ŧ٠ AndroidWork Rel ŧ Microsoft Azure **BestDayRoot** ÷. BestSyncSetting 19 ÷... Š $(\mathbf{\Delta})$ Rackspace Cloud Files 0000 X0 OK Help Cancel 📂 New Folder >
- 3. Press "Folder1" button to browse a local folder.

- 1 Select "File Folder" in the File System list of "Browse Folder" dialog box.
- 2 Press "Go" button to update the File Tree.
- 3 Select the folder in the File Tree for synchronization.
- ④ Press "OK" to close the dialog box.

4. Press "Folder2" button to browse the network shared folder.



- ① Select "Network Shares" in the File System list of "Browse Folder" dialog box.
- ② Press "Go" button to update the File Tree.
- ③ If File Tree shows nothing, please check if your PC has enabled the network discovery. (You can search "Windows 10 enable network discovery" for how to enable this function in Windows 10)

Or you can input the network folder like

¥¥server_ip¥shared_folder, then press "Go" button again.

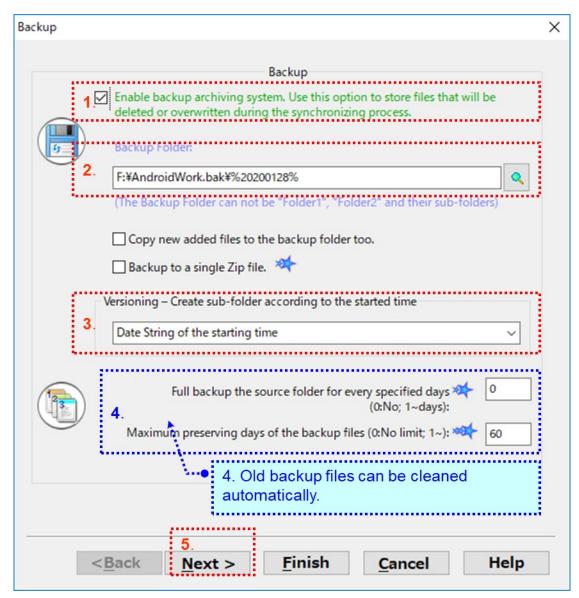
- ④ In login "Login the shared folder automatically", input the account for login the network shared folder (or NAS drive).
- (5) If this sync-task need to be ran as Windows Service (you can set a schedule later), you must set the local account (the account you login the PC) in "Impersonate a local user when

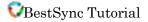
run as Windows Service" group. If you do not set this account, "**Drive not ready**" error will happen when this task is started in BestSync Service.

- 6 Select the folder in the File Tree for synchronization.
- O Press "OK" to close the dialog box.
- 5. Backup all the changed files to a backup folder if you need.

During synchronization, the updated files are copied to the target folder, and the deleted files are also deleted from the target folder (according to the deletion options in the "delete" wizard page that will be setup later).

You can backup these CHANGED files (overwritten files and deleted files) to the backup folder, like the following graph.





And you can save the versions of the CHANGED FILES into sub-folders that is created automatically by the "Versioning—Create sub-folder by the synchronizing time". If you want to clean the old versions of the backup file automatically, type a day number for preserving the old files. The backup files that are older than the designated days will be cleaned automatically. If you do not want to clean the old files, type 0. Press the "Next" button to go to the next page. 6. Exclude or include some folders or files into the synchronization task.

If no folders or files are needed to be excluded from the synchronization, just click "Next" button.

them to the fo	llowing list. This software scans the li		synchroni n top to b		uuu
强 Add in Folder1	Add in Folder2	×	₹ 1	•	4
File/Folder			Include/	Exclu	
ConloServer_Plugin_M	arkDown		Excl		
☐ metadata ✓ metadata ✓ metadata			Excl		
	folders (including descendants) of th de the following sub-strings. (Separa folders):				•
xclude sub-folders that inclu	de the following sub-strings. (Separa				

Hint: You can exclude sub-folders later in the Preview Window of the task.

7. Filter files by file types.

In the "Filter" setting tab, select file types that are needed to be synchronized by button. Check "Include subfolders" to backup file in all the sub-folders.

	1. Press this button to select the file
	Filter types for sync or backup.
	Ellere ha file hanne
	Filter by file types
	Document *.doc;*.dot;*.pdf;*.ppt;*.rtf;*.txt;*.xls;*.xlw;*.vsd;*.mdb
	Include subfolders
2. Include the	• Filter by time stamp
subfolders if necessary.	Only synchronize files changed after(in) following time (range).
necessary.	After last synchronized time: Has not synchronized yet
*	In the past specified time: (days[-minutes])
	O Popup a dialogbox to specify the time range. (This option is not suitable for the automatic synchronization)
	Filter sub-folders by timestamp. (Warning: An old folder may contain new files)
	Ignore the files that are changed in less than this specified seconds.
	0 (<900 seconds; In Real-Time Mode, this option delays the processing of file changes)
	gnore file timestamp change caused by Daylight Savings Time (DST) change.
	Don't copy files that are larger than MB. Only in daytime (8:00-18:00).
	Only scan the source folder to detect if files are changed. (Faster, it is only suitable for single-direction synchronization.)
	3. < <u>B</u> ack <u>N</u> ext > <u>F</u> inish <u>C</u> ancel Help

If your country uses Daylight Savings Time, and one of the two folders is FAT or FAT32 file system, please select the "Ignore file date & time changes that are because of Daylight Savings Time (DST) changes" option, otherwise, when the DST changes, all the files may be copied again.

8. Select the necessary copy options.

The following screenshot shows the recommended copy options.

opy Options		×		
	Copy Options			
	Copy new empty folder.			
	Protect read-only file from being deleted or modified.			
	Use intermediate file during copy. (To prevent the file from crashing.)			
	Process multiple files simultaneously			
	Maximum thread number(<=16): 8			
	Verify file by the available method from the server or by comparing content.			
	🗌 Copy NTFS permissions. 🧐			
	Task Priority: Normal ~			
	Recover from fail conditions			
	Retry synchronization if there are failed files.			
$\langle \mathbf{x} \rangle$	Retry times(<=10): 3			
	Resume failed file from the last breakpoint.			
	······································			
	< <u>Back</u> <u>Next</u> > <u>Finish</u> <u>Cancel</u> Help			

"Use intermediate file during copy. (To prevent the file from being crashed.)" option:

If this option is checked, BestSync will use an intermediate file as the target file during copying process. When the file is copied successfully, the intermediate file is renamed to the target file. This action avoids an incomplete file in the target folder, and the target file is never cashed even if it fails to copy the file due to any error (such as network error).

"Process multiple files simultaneously." Option:

This option will improve the performance dramatically when synchronize with network folder.

"Retry synchronization if there are failed files." Option:

If this option is checked, BestSync will retry the synchronization if there are failed items.

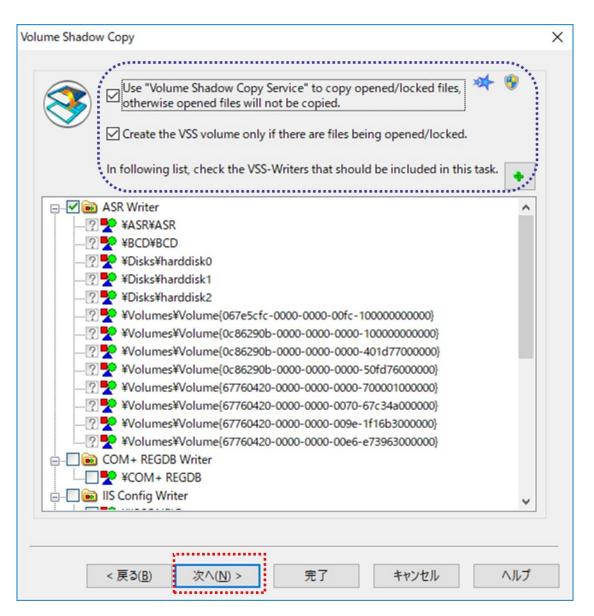
"Verify file after copy by available method from the server or MD5" option:

If this option is checked, when sync with FTP server, BestSync will try to use XCRC or XMD5 command to verify the file after download/upload the file; when synchronize with Amazon S3 or Google Storage, BestSync uses MD5 to verify the file.

"Resume failed file from the breakpoint." Option:

If this option is checked, BestSync will resume the file copy operation from the last breakpoint if error happens during synchronization. This option is very useful to copy a large file to/from FTP server or network drive.

9. The "Volume Shadow Copy" options are optional.



If the task needs to copy the opened/locked files, "Use "Volume Shadow Copy Service" to copy opened files......" option must be checked.

If this option is checked, the opened files such as windows registry file, data base file, Outlook .PST files can also be copied. Some files such as the SQL database file, and Outlook PST file are always locked, if you do not use this option, copying these files will fail. *NOTE:* For using this option, BestSync must be started by Administrator. You can start BestSync as Administrator by right click the "Run as administrator" context menu of BestSync icon on the desktop.



10. The "Encryption" options are optional.

If you want to compress and encrypt the files while synchronize the files, select the options like following graph.

Encryption X	
Encryption/Decryption Setting	
O No encryption or compression	1. If you need
1. Folder1 Compress & Energy Folder2	to compress and encrypt files to the Folder2, check
O Folder1 Dactypt & Datempress Folder2	this option.
Encrypt & compress Backup File. Encrypt the file name. Password Hint: test Encrypt Password: Onfirm Password: Confirm Password: Compression Filter	2. Specify the encryption password.
Don't compress following file types: *.bz2;*.cab;*.gif;*.gz;*.jpg;*.lzh;*.mp3;*.mpg;*.tar;*.tgz;*.z;*.zip	
NOTE:If you lost the password, any data encrypted by the password will be unreadable. We won't be able to help to recover the data.	
< <u>Back Next > Finish Cancel Help</u>	

When the encryption option is selected, BestSync compress the file first then used AES 256bit algorithm to encrypt the file.

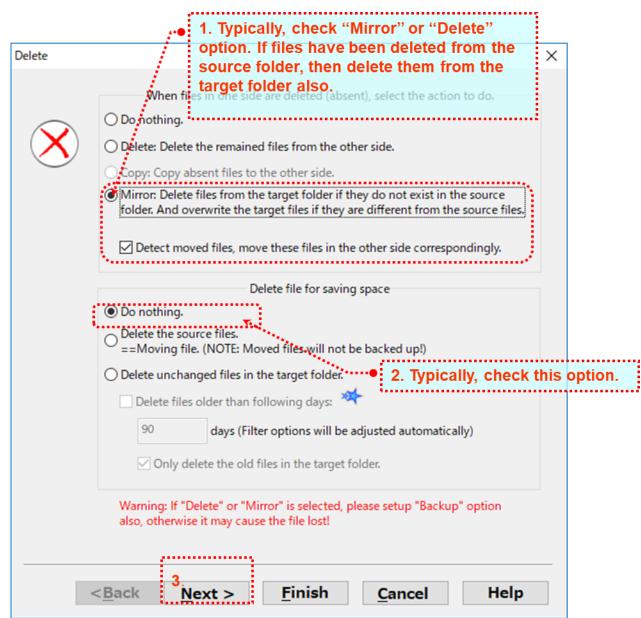
11. The "Rename" options are optional.

If need to rename the files when synchronize the files, add the rules to rename the files.

Old name	Ne	ew name		Continue?
abc#1.#2	r	new*1.*2		
💠 Add item		×		↑ ↑ ↓ ↓
Copy to a single fol	der (All the files a	re expanded to	a single folder)	
		sts in the target		

If not need to rename the files, just click the "Next" button. Press the "Next" button to go to the next page. 12. Select the "Delete" options as you prefer.

The typical option is "Delete: Delete the remained file in the other side".



(1) "Do nothing". If you want to use a backup profile, than deleted files from the source will still be preserved in the Target Folder.

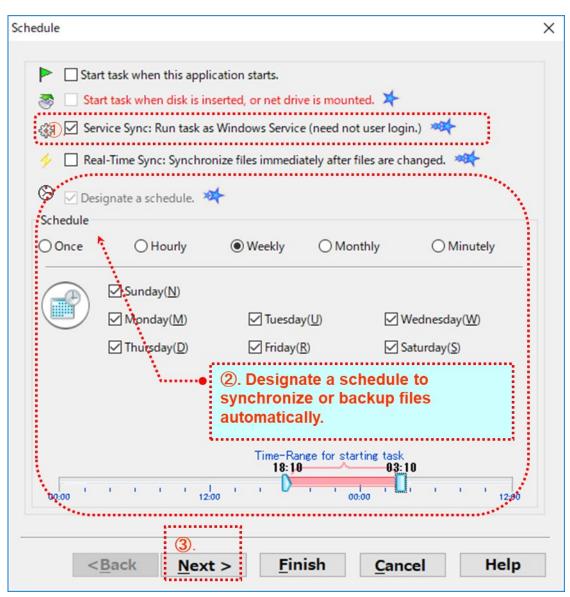
(2) Or, "Delete: Delete remained file in the other side". If the files are deleted from the source, then it will also be deleted from the target folder.

(3) Or, "Mirror: Delete file in". To make the contents of both folders exactly the same. All the files that do not exist in the source folder will be deleted from the target folder. If the files in the source folder are old, the old files will overwrite the new files in the target folder.

(4) Leave "Do nothing" selected, in "Delete file for save space".

Press the "Next" button to go to the next page.

13. Designate a schedule to start the task automatically.



Check "Service Sync: Run task as Windows Service (need not user login)" option, this task will be ran by BestSync Service. Even no user login the PC, or the user logs off, this task is still ran by the designated schedule.

Select "Designate a schedule", and select a time mode to start the schedule.

If you want the changed files be backed up or synchronized immediately after the files are changed, select the "Real-Time Sync: Synchronize files immediately after they are changed". If this option is selected, the task will be started immediately after BestSync is started; and whenever files or folders are changed, the task detects the changes immediately and update the changes to another side.

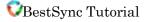
NOTE: Real-time may not be support by a NAS drive, but network shared folder of Windows supports real-time sync. If real-time sync is not supported, BestSync will synchronize the folder in about 3 minutes.

Log	>
	Log To restore the backup files conveniently, please check the log option at
	Record the log data for the log view window.
	Maximum preserving days of log data. (0:No limit; 1~): 60
·	Export log data to following files:
	Q
	Maximum preserving days of the log files (0:No limit; 1~): 60
	Only export and/or send the log data of the failed items.
	E-mail
	Send log data by e-mail.
	Send e-mail only when there are failed files.
	Subject: BestSync 2020 Log Data
	Address: tes@riselfy.com
	Use semi-colon ';' to separate multiple mail addresses.
	Do not attach log data.
	2
	< <u>Back</u> <u>Next</u> > <u>Finish</u> <u>Cancel</u> Help

14. Press the "Next" button, to use the default log setting.

Check the "Record the log data for the log view window" option. This option will record the log data of the synchronization. You can view the log data by the Log View, and if you have setup the "Backup" option in "step 4", you can also restore the backup data conveniently in the Log View.

If you want to send the log data by the email to monitor the synchronization remotely, check the "Send log data by e-mail" option. After this option is checked, the "General Option" "Email" dialog box will popup, you can setup the SMTP account in the dialog box. Press the "Next" button to go to the next page.



15. The "Application" options are optional.

Appli	ication >
A	Application to run before synchronization
(1)	Application file (or Batch file):
	c+¥test¥parepare.bat
i	Arguments:
	Wait until end of the application. Do sync only when exit code is 0.
	Run the application only when there are files need to be synchronized after scanning.
1	Application or Sync-Task to run after synchronization
	O Application file or Batch file Sync-Task ID
(2	
	Task ID:(ID1,ID2,)
	2,3
-/	Addon DLL file ***
	Q
_	· · · · · · · · · · · · · · · · · · ·
	< <u>Back</u> <u>N</u> ext > <u>Finish</u> <u>Cancel</u> Help

If you want a program, batch file or Power shell script be started just before the synchronization is started, set the program and argument like step (1) in the above image. You can also designate the Task be ran after this task like step (2) in the above image. Press "Finish" to end the Wizard Page.

16. Press the "Preview" button to start the preview window, to view the hit files and modify the sync actions of sub-folders of individual files if necessary.

Or just press the "Start" button to synchronize the files immediately.

BestSync Main Window:

You can start the selected task manually, or start the preview of the task by the toolbar buttons.

Start Preview Window of the selected Sync-ta	ask.	Start the s Sync-task.							
Start the selection synchronization to	ask unit preview								9 X3
Preview Start		0) 🔀 å	<u>×</u> ×			× 2	C	
🎽 Task List 30251 MySite	ZJP-LAN Te	st TestFTP	CloudWork	Cloud	WebDav	ZIP	iSysCon	Stock	/ €
Task Overview			·	Sta	atus		<u> </u>		>
DEVELOP F:¥Work¥Work5¥ [Exclude]*.obj;*res;*.map;*p ¥¥ZJP_LAN2¥Work¥Work¥	och;*.sbr;*.idb;*.p	db;*.wip;*.suo;*.s	scc;*plg;*pcc;*	.opt;* Dri		eady	21 22:16:31 120/01/28 2	1:15:32	
DEVELOP F:¥MyWebs_2020 ** work ¥¥ZJP_LAN2¥work¥M				Suc	st time: <mark>202</mark> ccess:3102 xt time:		19 22:53:05 :0		
Develop F:¥Work5.out¥ All Files *.* work ¥¥ZJP_LAN2¥work¥W	ork5.Out¥			Suc	st time: <mark>202</mark> ccess:393 F xt time:				
work ¥¥ZJP_LAN2¥work¥ すべてのファイル ** Work ¥¥ZJP-LAN¥Work¥				Suc	cess:0 Fai	iled:0	26 16:27:06 120/01/28 2	1:25:23	
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Start the selected synchronization ta			V Co	nfirm: Real	ly shutdow	n?			

😯 Preview Window-F:¥Work3 ▷ Start 🔳 🎘 😓 🎼	¥Work5¥ ==> ¥¥ZJI ≠2 × ¹ × ² ×			[¥¥ZJP_LAN2¥Work¥Wor ♀♀☆│₽ぉ♂∥♀			23
Backup Comment:	<u></u>	<u>a</u> a a V	<u> </u>	V D D V	♦ 1 ** **	Full back	ир
File		Time		Size	Result	Backup	
	#¥ZJP_LAN2¥Work¥Wo	rk¥Work5¥ *[¥¥ZJP_L	AN2¥Work¥V	Vork5bak¥20200128¥]Prev	iew completed		^
🚊 🗹 🛅 BestSync2020		9-23:34:06 <2020/01/3		3.769 MB = 3.769 MB			
🖻 🗹 🗁 common 🛌	2020/01/2	6-15:37:27 \2020/01/3	21-21:46:55	68,110 = 68,110			
	Refresh Folder(<u>R</u>)	Ctrl+Shift+F		19,882 > 18,697		2→ B	
🖳 🗹 🖧 CIniFil 🔥	Copy file from Folder	2 to Folder1 Ctrl+	-10:43:49	7,320 > 6,995		5→ B	
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CMsgL 📈	Delete file from Fold	er 1 Shift+	-23:40:49	12,193 > 11,999	_	5+ B	
E Language	Delete file from Fold	er2 Shift+:	-21:33:37	665.92 KB = 665.92 KE			
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	Explore Folder 1(1)	Ctrl+Shift+		783.85 KB = 783.85 KE		e-10	
			111107	396.02 KB < 396.02 KE		2+B	
	Explore Folder2(2)	Ctrl+Shift+:	-14:41:06	387.83 KB < 387.83 KE		2+B	
	Explore Backup(B)	Ctrl+Shift+B	-22:16:32	244.29 KB = 244.29 KE			
	View difference(V)	Ctrl+Shift+\	100 C	< 23,814		2→ B	
- 🗸 🖌 CIniFil			-13:21:59	₹7,526		2+B	
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		5-16:05:08 > 2020/01/0 5-16:05:08 > 2020/01/0		ide all folders with this name		2+B	
Total Num:		< <u>18-18-08-00 × 409070170</u>		and the second	au au ar acku	o Num: 0	_
				ide this type	Otri+onint+1		
Completed Num	: 0	Con	F Exclu	ide this type in this folder or	nly Faile	d Num: 0	
Filtered Num	206826	Pro	c Exclu	ide this type under this folde	er and children		
Exclude this file/folder from synd	chronization		Undo	Exclude		00:00	_
Actuace and they folder notifi synd	ornomization					00.00	

BestSync Preview Window:

In the preview Windows, you can change the synchronizing actions of files.

Also, you can exclude files, folders or file types from the synchronization.

(End)