A Tutorial on compressing IFC files with batch file

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1. Software Introduction

IFCCompression is a compression software for IFC files on Windows, Support for 32 and

64 bit operating systems and Support the use of batch files for batch processing. You can

download **IFCCompression** from following links:

http://cgcad.thss.tsinghua.edu.cn/liuyushen/IFCCompressor/index_software.html

The directory structure after uncompressing are shown in Figure 1

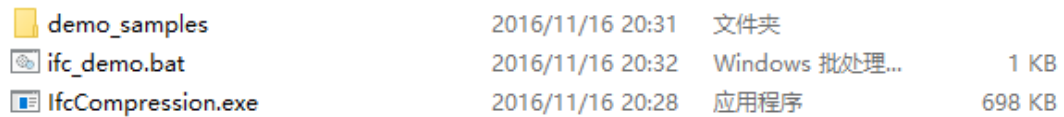|			
demo_samples	2017/5/10 17:21	文件夹	
x64_64	2017/5/10 20:13	文件夹	
x86_32	2017/5/10 20:13	文件夹	
ifc_demo.bat	2016/11/16 20:32	Windows 批处理...	1 KB
IfcCompression - tutorial_en.docx	2016/11/25 16:45	Microsoft Word ...	58 KB
IfcCompression - 教程_中文.docx	2017/5/10 20:20	Microsoft Word ...	57 KB
IfcCompression.exe	2017/5/10 20:04	应用程序	85 KB

Figure 1

The tutorial is given according to the **32bit version IFCCompression**

TIPS: If you want to compress IFC files larger than 200M, Please use 64Bit version

IFCCompression，and make sure your memory is large enough.

2. Compress the IFC files with batch file

1）First, all the IFC files to be converted should be put in the folder ".\demo_samples" and copy **IFCCompression.exe** and **ifc_demo.bat to the same path, shown in Figure 2.**

📁 demo_samples	2016/11/16 20:31	文件夹		
📄 ifc_demo.bat	2016/11/16 20:32	Windows 批处理...	1 KB	
🔲 IfcCompression.exe	2016/11/16 20:28	应用程序	698 KB	

Figure 2

2）Use text editor to open **ifc_demo.bat,** as shown in Figure 3. The parameters in bat are listed as follows:

- **targer_dir** is the directory of IFC files to be converted;
- **out** is the path for outputting new IFC files.
- **Y** which can be replaced by **N** indicate whether to output file with '.csv' extension.
- One can modify the third and/or fourth line to control the format of the output file and output file path.

```
@echo off
set /p target_dir="Please Input File directory:"
mkdir out
for /r %target_dir%/ %%i in (*.ifc) do IfcCompression.exe %%i Y out/%%~ni_out.ifc
pause
```

Figure 3

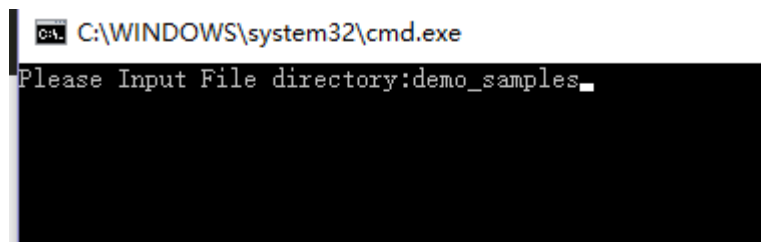3）Double click **ifc_demo.bat**, input the IFC file path, as shown in Figure 4.

```
C:\WINDOWS\system32\cmd.exe
Please Input File directory:demo_samples_
```

Figure 4

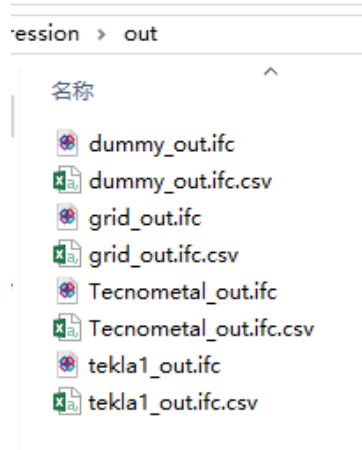4）If the program runs normally, you can get the results which are shown in Figure 5

Figure 5

3. Compress a single IFC file in command line

1） Input **ifcCompression.ext –help** or **ifcCompression.ext –h** can get the usage of exe as well as the meaning of parameters, shown in Figure 6.

```
C:\Users\fjq\Desktop\ifcCompression>IfcCompression.exe -help
Usage: IfcCompression.exe <input filename> <needOutPutCSV> <output filename>
Parameter: needOutPutCSV should be Y or N

C:\Users\fjq\Desktop\ifcCompression>_
```

Figure 6

2） Input the right parameters, like demo in Figure 7.

```
C:\Users\fjq\Desktop\ifcCompression>IfcCompression.exe demo_samples/grid.ifc Y out.ifc
demo_samples/grid.ifc
0.308219
```

Figure 7

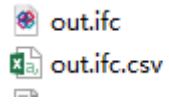3） The program will output the results according to the parameters (see Figure 8).

3

out.ifc
out.ifc.csv

Figure 8