### 3.3.1 中的 Shell 命令

1s

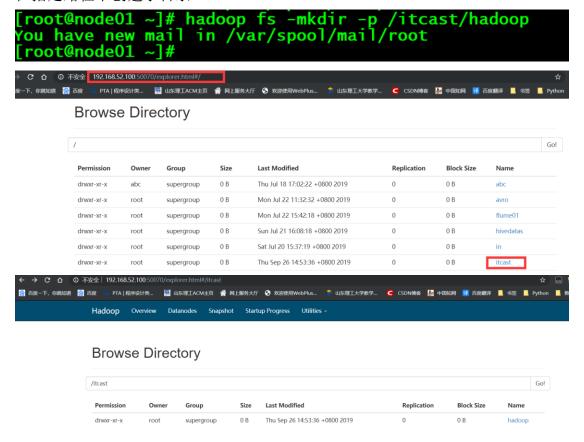
查看指定路径的当前目录结构

```
[root@node01 ~]# hadoop fs -ls /
ound 16 items
                                                                        0 2019-07-18 17:02 /abc
0 2019-07-22 11:32 /avro
0 2019-07-22 15:42 /flume01
0 2019-07-21 16:08 /hivedat
                    abc supergrouproot supergroup
drwxr-xr-x
drwxr-xr-x
                      root supergrouproot supergroup
drwxr-xr-x
drwxr-xr-x
                                                                        0 2019-07-20 15:37 /in
0 2019-07-20 10:42 /out
0 2019-07-20 15:41 /out1
0 2019-07-22 09:30 /spooldi
                     root supergrouproot supergrouproot supergroup
drwxr-xr-x
drwxr-xr-x
drwxr-xr-x
drwxr-xr-x

    root supergroup
```

### Mkdir

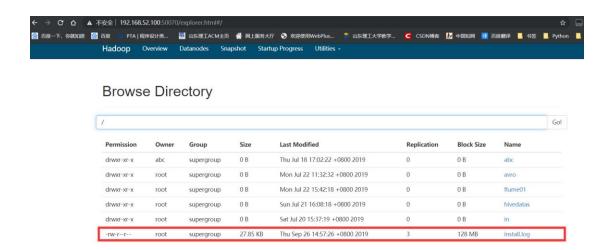
在指定路径下创建子目录



### Put

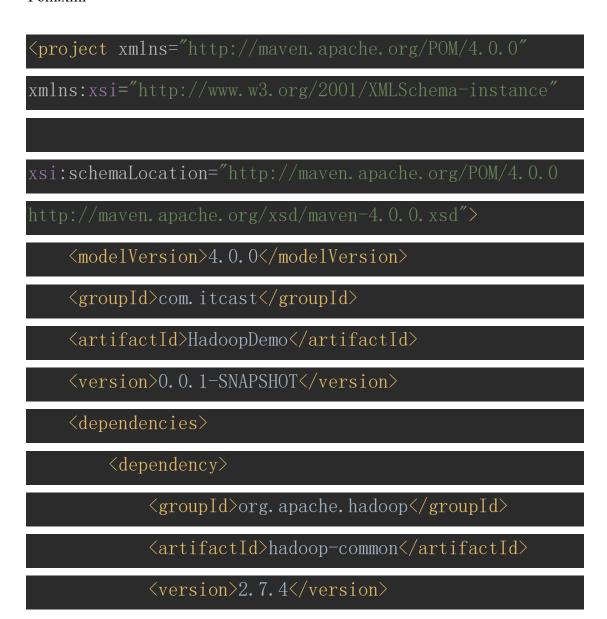
将本地系统的文件或文件夹复制到 HDFS 上

```
[root@node01 ~]# hadoop fs -put -f install.log /
[root@node01 ~]#
```



### 3.4.2 中的代码

### Pom.xml



```
</dependency>
       <dependency>
           <groupId>org. apache. hadoop</groupId>
           <artifactId>hadoop-hdfs</artifactId>
           <version>2.7.4
       </dependency>
       <dependency>
           <groupId>org. apache. hadoop</groupId>
           <artifactId>hadoop-client</artifactId>
           <version>2.7.4
       </dependency>
       <dependency>
           <groupId>org. apache. hadoop/groupId>
           <artifactId>hadoop-mapreduce-client-
core</artifactId>
           <version>2.7.4
       </dependency>
       <dependency>
           <groupId>junit
           <artifactId>junit</artifactId>
           <version>4.12
       </dependency>
```

## </dependencies>

# </project>

## HDFS\_CRUD.java

## 初始化客户端对象

```
public class HDFS_CRUD {
FileSystem fs = null;

@Before

public void init() throws Exception {
    // 构造一个配置参数对象,设置一个参数: 我们要访问的hdfs的URI
    Configuration conf = new Configuration();
    // 这里指定使用的是HDFS文件系统
    conf. set("fs. defaultFS", "hdfs://192. 168. 52. 100:8020");

    // 通过如下的方式进行客户端身份的设置
    System. setProperty("HAD00P_USER_NAME", "root");
    // 通过FileSystem的静态方法获取文件系统客户端对象
    fs = FileSystem. get(conf);
```

## 上传文件到 hdfs

```
### Public void testAddFileToHdfs() throws IOException {

// 要上传的文件所在本地路径

Path src = new Path(pathString: "E:/test.txt");

// 要上传到hdfs的目标路径

Path dst = new Path(pathString: "/testFile");

// 上传文件方法

fs.copyFromLocalFile(src, dst);

// 关闭资源

fs.close();

}

// 从hdfs中复制文件到本地文件系统

#### HDFS_CRUD > testAddFileToHdfs()

1 test passed - 2s 109ms

at org. apache. hadoop. fs. FileSystem.get(FileSystem.java:2584)

at org. apache. hadoop. fs. FileSystem.get(FileSystem.java:373)

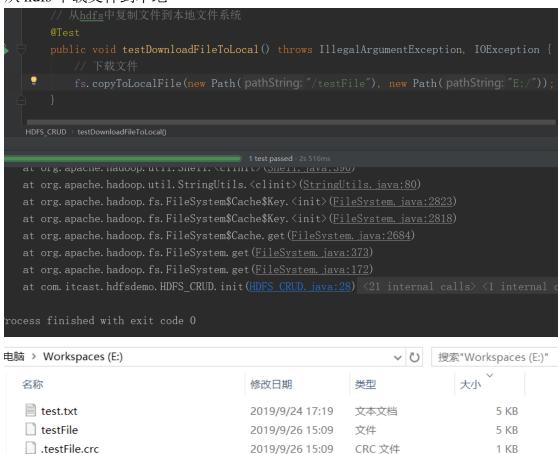
at org. apache. hadoop. fs. FileSystem.get(FileSystem.java:172)

at com. itcast. hdfsdemo. HDFS_CRUD. init(HDFS_CRUD. java:28)

**Process_finished_with_exit_code_0
```

drwxrwxrwx	root	supergroup	0 B	Wed Jul 24 08:54:50 +0800 2019	0	0 B	sqoop	
drwxrwxrwx	root	supergroup	0 B	Thu Jul 18 09:53:08 +0800 2019	0	0 B	test	
-rw-rr	root	supergroup	4.12 KB	Thu Sep 26 15:07:20 +0800 2019	3	128 MB	testFile	
drwxrwxrwx	root	supergroup	0 B	Sun Jul 21 09:34:50 +0800 2019	0	0 B	tmp	
drwxrwxrwx	root	supergroup	0 B	Sun Jul 21 15:48:01 +0800 2019	0	0 B	user	

## 从 hdfs 下载文件到本地



目录操作

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name		
drwxr-xr-x	root	supergroup	0 B	Thu Sep 26 15:12:51 +0800 2019	0	0 B	<b>a</b> 3		
drwxrwxrwx	abc	supergroup	0 B	Thu Jul 18 17:02:22 +0800 2019	0	0 B	abc		

查看目录信息

```
public void testListFiles() throws FileNotFoundException, Ille
// 获取迭代器对象
RemoteIterator<LocatedFileStatus> listFiles = fs.listFiles
while (listFiles.hasNext()) {
    LocatedFileStatus fileStatus = listFiles.next();
    // 打印当前文件名
    System. out. println(fileStatus.getPath().getName());
    // 打印当前文件块大小
    System. out. println(fileStatus.getBlockSize());
    // 打印当前文件权限

HDFS_CRUD > testListFiles()

1 test passed - 2s 303ms

access_log. 1563764757395

134217728
rwxrwxrwx
3654
block-length: 3654--block-offset: 0
node01. hadoop. com
```