SSM EC

数据写入到对应目录后，SSM Server扫描每个文件，启动Task将文件转换为EC文件，EC的执行Rule定义如下：

*file:path matches "/ec" a | setecpolicy -ecPolicy XOR-2-1-1024k*

*在Smart-Hadoop中增加EC Policy*

*@ActionSignature(*

*actionId = "setecpolicy",*

*displayName = "setecpolicy",*

*usage = HdfsAction.FILE\_PATH + " $file " + SetErasureCodingPolicyAction.EC\_POLICY + " $policy"*

*)*

*public class SetErasureCodingPolicyAction extends HdfsAction {*

*public static final String EC\_POLICY = "-ecPolicy";*

*private String fileName;*

*private String ecPolicy;*

*@Override*

*public void init(Map<String,String> args) {*

*super.init(args);*

*this.fileName = args.get(FILE\_PATH);*

*this.ecPolicy = args.get(EC\_POLICY);*

*}*

*@Override*

*protected void execute() throws Exception {*

*if(dfsClient.getFileInfo(fileName).isDir()) {*

*dfsClient.setErasureCodingPolicy(fileName, ecPolicy);*

*}*

*}*

*}*

*将匹配文件进行EC转换，将文件复制到该EC Zone目录*

*file: every 5min | path matches "/tmp/\*" | ec -dest /ec*

*添加ErasureCodeFileAction*

*@ActionSignature(*

*actionId = "ec",*

*displayName = "ec",*

*usage = HdfsAction.FILE\_PATH + " $src " + ErasureCodeFileAction.DEST\_PATH +*

*" $dest " + ErasureCodeFileAction.OFFSET\_INDEX + " $offset" +*

*ErasureCodeFileAction.LENGTH +*

*" $length" + ErasureCodeFileAction.BUF\_SIZE + " $size"*

*)*

*public class ErasureCodeFileAction extends CopyFileAction {*

*static final Logger LOG = LoggerFactory.getLogger(ErasureCodeFileAction.class);*

*@Override*

*protected void execute() throws Exception {*

*if(dfsClient.getFileInfo(destPath).getErasureCodingPolicy() == null) {*

*appendLog(*

*String.format("Copy destPath %s is Not ECZone Dir", destPath));*

*return;*

*}*

*super.execute();*

*}*

*}*

*在HdfsActionFactory中添加支持EC Action*

*addAction(SetErasureCodingPolicyAction.class);*

*addAction(ErasureCodeFileAction.class);*