

Linux作业3-Shell脚本

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生成TCP活动状况报告

运行结果

```

1 [root@server Linux_TCP]# ./tcp.sh > tcp_out.txt
2 [root@server Linux_TCP]# cat tcp_out.txt
3 2021-05-24 14:37 1148 1148 2296
4 2021-05-24 14:38 917 917 1834 -
5 2021-05-24 14:39 929 929 1858 +
6 2021-05-24 14:40 966 966 1932 +
7 2021-05-24 14:41 721 721 1442 -
8 2021-05-24 14:42 1012 1012 2024 +
9 2021-05-24 14:43 1135 1135 2270 +
10 2021-05-24 14:44 1337 1337 2674 +
11 2021-05-24 14:45 1189 1189 2378 -
12 2021-05-24 14:46 1076 1076 2152 -
13 2021-05-24 14:47 982 982 1964 -
14 2021-05-24 14:48 904 904 1808 -
15 2021-05-24 14:49 935 935 1870 +
16 2021-05-24 14:50 1514 1514 3028 +
17 2021-05-24 14:51 814 814 1628 -
18 2021-05-24 14:52 1268 1268 2536 +
19 2021-05-24 14:53 1305 1305 2610 +
20 2021-05-24 14:54 1022 1022 2044 -
21 2021-05-24 14:55 832 832 1664 -
22 2021-05-24 14:56 1125 1125 2250 +
23 2021-05-24 14:57 877 877 1754 -
24 下略

```

源码

```

1 comp()
2 {
3     if [ $2 -gt $(expr $1 + 10) ]
4     then
5         eval "$3=\"+\"\""
6     elif [ $2 -gt $(expr $1 - 10) ]
7     then
8         eval "$3=\" \"\""
9     else
10        eval "$3=\"-\"\""
11    fi
12 }
13
14 output()
15 {
16     outnum=`expr $2 - $4`

```

```
17     recvnum=`expr $1 - $3`
18     sum=`expr $outnum + $recvnum`
19     if [ $7 -gt 0 ]
20     then
21         comp $pre_sum $sum "flag"
22     fi
23     pre_sum=$sum
24     eval "$5=$1";eval "$6=$2"
25     echo -e "\r" `date "+%Y-%m-%d %H:%M"` "\c"
26     printf "%4d %4d %4d %4c\n" $outnum $recvnum $sum $flag
27 }
28
29 index=0
30 while (true)
31 do
32     sleep 60
33     str=`netstat --statistics | grep "[0-9][0-9]* segments received"`
34     tcp_recv=$(expr "$str" : '^ *\[0-9\][0-9]*\).*$')
35     tcp_out=$(expr "$str" : '^ *\[0-9\][0-9]*\).*$')
36     output $tcp_recv $tcp_out $recv $out "recv" "out" $index
37     index=$(expr $index + 1)
38 done
```