



链滴

Linux tr 命令

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来源网站: [链滴](#)

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Linux `tr` 命令用于转换或删除文件中的字符。

`tr` 指令从标准输入设备读取数据，经过字符串转译后，将结果输出到标准输出设备。

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```
tr [-cdst][--help][--version][第一字符集][第二字符集]
```

```
tr [OPTION]...SET1 SET2]
```

```
tr [OPTION]...SET1 SET2]
```

参数说明

- `-c, --complement`: 反选设定字符。也就是符合 SET1 的部份不做处理，不符合的剩余部份才进行转换

- `-d, --delete`: 删除指令字符

- `-s, --squeeze-repeats`: 缩减连续重复的字符成指定的单个字符

- `-t, --truncate-set1`: 削减 SET1 指定范围，使之与 SET2 设定长度相等

- `--help`: 显示程序用法信息

- `--version`: 显示程序本身的版本信息

字符集合的范围:

- `\NNN` 八进制值的字符 NNN (1 to 3 为八进制值的字符)

- `\反斜杠`

- `\a` Ctrl-G 铃声

- `\b` Ctrl-H 退格符

- `\f` Ctrl-L 走行换页

- `\n` Ctrl-J 新行

- `\r` Ctrl-M 回车

- `\t` Ctrl-I tab 键

- `\v` Ctrl-X 水平制表符

- `CHAR1-CHAR2`: 字符范围从 CHAR1 到 CHAR2 的指定，范围的指定以 ASCII 码的次序为基，只能由小到大，不能由大到小。

- `[CHAR*]`: 这是 SET2 专用的设定，功能是重复指定的字符到与 SET1 相同长度为止

- `[CHAR*REPEAT]`: 这也是 SET2 专用的设定，功能是重复指定的字符到设定的 REPEAT 次数为止 REPEAT 的数字采 8 进制计算，以 0 为开始)

- `[:alnum:]`: 所有字母字符与数字

- `[:alpha:]`: 所有字母字符

- `[:blank:]`: 所有水平空格

- `[:cntrl:]`: 所有控制字符

- `[:digit:]`: 所有数字

- `[:graph:]`: 所有可打印的字符(不包含空格符)

- `[:lower:]`: 所有小写字母

- `[:print:]`: 所有可打印的字符(包含空格符)

- `[:punct:]`: 所有标点字符

- `[:space:]`: 所有水平与垂直空格符

- `[:upper:]`: 所有大写字母

- `[:xdigit:]`: 所有 16 进位制的数字

- `[=CHAR=]`: 所有符合指定的字符(等号里的 CHAR, 代表你可自订的字符)

实例

将文件 `testfile` 中的小写字母全部转换成大写字母，此时，可使用如下命令:

```
cat testfile |tr a-z A-Z
```

```

</span></span></code></pre>
<p>testfile 文件中的内容如下: </p>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">$ cat testfile      #testfile原来的内容
</span></span><span class="highlight-line"><span class="highlight-cl">Linux networks are
becoming more and more common,
</span></span><span class="highlight-line"><span class="highlight-cl">but scurity is often
an overlooked
</span></span><span class="highlight-line"><span class="highlight-cl">issue. Unfortunate
y, in today' s environment all networks
</span></span><span class="highlight-line"><span class="highlight-cl">are potential hack
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itary research networks to small home LANs.
</span></span><span class="highlight-line"><span class="highlight-cl">Linux Network Se
urty focuses on securing Linux in a
</span></span><span class="highlight-line"><span class="highlight-cl">networked enviro
ment, where the
</span></span><span class="highlight-line"><span class="highlight-cl">security of the ent
re network needs to be considered
</span></span><span class="highlight-line"><span class="highlight-cl">rather than just iso
ated machines.
</span></span><span class="highlight-line"><span class="highlight-cl">It uses a mix of th
ory and practicl techniques to
</span></span><span class="highlight-line"><span class="highlight-cl">teach administrat
rs how to install and
</span></span><span class="highlight-line"><span class="highlight-cl">use security appli
cations, as well as how the
</span></span><span class="highlight-line"><span class="highlight-cl">applcations work
nd why they are necessary.
</span></span></code></pre>
<p>使用 tr 命令大小写转换后, 得到如下输出结果: </p>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">$ cat testfile | tr a-z A-Z #转换后的输出
</span></span><span class="highlight-line"><span class="highlight-cl">LINUX NETWORKS
ARE BECOMING MORE AND MORE COMMON, BUT SCURITY IS OFTEN AN OVERLOOKED
</span></span><span class="highlight-line"><span class="highlight-cl">ISSUE. UNFORTU
ATELY, IN TODAY' S ENVIRONMENT ALL NETWORKS ARE POTENTIAL HACKER TARGETS,
</span></span><span class="highlight-line"><span class="highlight-cl">FROM TP-SECRET
MILITARY RESEARCH NETWORKS TO SMALL HOME LANS.
</span></span><span class="highlight-line"><span class="highlight-cl">LINUX NETWORK
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</span></span><span class="highlight-line"><span class="highlight-cl">SECURITY OF THE
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</span></span><span class="highlight-line"><span class="highlight-cl">IT USES A MIX OF
THEORY AND PRACTICL TECHNIQUES TO TEACH ADMINISTRATORS HOW TO INSTALL AND
</span></span><span class="highlight-line"><span class="highlight-cl">USE SECURITY AP
PLICATIONS, AS WELL AS HOW THE APPLCATIONS WORK AND WHY THEY ARE NECESSARY.
</span></span></code></pre>
<p>大小写转换, 也可以通过 <code>[:lower][:upper]</code> 参数来实现。例如使用如下命令: </p>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">cat testfile |tr [:lower:] [:upper:]
</span></span></code></pre>

```

<p>输出结果如下: </p>

```
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">$ cat testfile | tr [:lower:] [:upper:] #转换后的输出</span></span><span class="highlight-line"><span class="highlight-cl">LINUX NETWORKS ARE BECOMING MORE AND MORE COMMON, BUT SCURITY IS OFTEN AN OVERLOOKED</span></span><span class="highlight-line"><span class="highlight-cl">ISSUE. UNFORTUATELY, IN TODAY' S ENVIRONMENT ALL NETWORKS ARE POTENTIAL HACKER TARGETS,</span></span><span class="highlight-line"><span class="highlight-cl">FROM TP-SECRET MILITARY RESEARCH NETWORKS TO SMALL HOME LANS.</span></span><span class="highlight-line"><span class="highlight-cl">LINUX NETWORK ECURTY FOCUSES ON SECURING LINUX IN A NETWORKED ENVIRONMENT, WHERE THE</span></span><span class="highlight-line"><span class="highlight-cl">SECURITY OF THE ENTIRE NETWORK NEEDS TO BE CONSIDERED RATHER THAN JUST ISOLATED MACHINES.</span></span><span class="highlight-line"><span class="highlight-cl">IT USES A MIX OF THEORY AND PRACTICL TECHNIQUES TO TEACH ADMINISTRATORS HOW TO INSTALL AND</span></span><span class="highlight-line"><span class="highlight-cl">USE SECURITY AP LICATIONS, AS WELL AS HOW THE APPLCATIONS WORK AND WHY THEY ARE NECESSARY.</span></span></code></pre>
```

<p>参考: </p>

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