

```

# One key per line in $FIRST_IN_HEADERS to get its first value in the headers.
FIRST_VALUE_IN_HEADERS='X-UIDL
Return-Path
Message-ID
Subject
Content analysis details'
# One pair (name, regexp) per line in $DISTINCT_IN_HEADERS_OR_CONTENT to get the distinct matching strings in the
headers and the content.
DISTINCT_IN_HEADERS_OR_CONTENT='URL https?://[a-zA-Z0-9./?=%:~]*
IPv4-addr (([0-9]|[0-9]{2}|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.)\{3\}([0-9]|[0-9]{2}|1[0-9]{2}|2[0-4][0-9]|25[0-5])
email-addr [a-zA-Z0-9._]+@[a-zA-Z]+\.[a-zA-Z]+
email-addr-with-at [a-zA-Z0-9._]+ *\[at\] *[a-zA-Z]+\.[a-zA-Z]+'
group_by_line () {
    awk -F : -v i=2 '{
        if ($1 - i) {
            print str
            while ($1 - ++i)
                print ""
            sub(/^[^:]*:/, "")
            str = $0 }
        else {
            sub(/^[^:]*:/, "")
            if (str)
                str = str "," $0
            else
                str = $0 } }
    END {
        print str }'
}
TMP=$(mktemp -d)
trap "rm -r $TMP 2>/dev/null" 0
mkdir $TMP/headers $TMP/contents $TMP/fields
files=$(seq 2 $(awk -v RS='\nX-Account-Key: ' -F '\n\n' -v tmp=$TMP/ 'NR - 1 {
    printf substr($1, 1, index($1, "\n")) >> tmp "fields/X-Account-Key"
    print $1 > tmp "headers/" NR
    close(tmp "headers/" NR)
    for (i = 2; i <= NF; ++i) {
        gsub(/=\n/, "", $i)
        print $i >> tmp "contents/" NR }
    close(tmp "contents/" NR) }
END {
    print NR }' "$@"))
# cd $TMP/contents
# touch $files
cd $TMP/headers
echo "$FIRST_VALUE_IN_HEADERS" | while read -r key
do
    mkfifo "../fields/$key"
    grep -im 1 "^*$key:" $files |
    sed -e 's/:[^:]*: */:/' -e 's/</</' -e 's/>/>/' |
    group_by_line > "../fields/$key" &
done
for part in headers contents
do
    cd ../$part
    echo "$DISTINCT_IN_HEADERS_OR_CONTENT" | while read -r name regexp
    do
        mkfifo "../fields/$name-in-$part"
        grep -Eo "$regexp" $files |
        sort -ut : -k 1,1n -k 2 |
        group_by_line > "../fields/$name-in-$part" &
    done
done
cd ../fields/
set *
echo -n '# '
while [ -n "$2" ]
do
    i=$(expr $i + 1)
    echo -n "$i:$1\t"
    shift
done
echo "$(expr $i + 1):$1"
paste *

```