



2003 7

2003 7



[: (KISA)
가 .

. Overview

1. 7

| | | |
|--|------------------------|--|
| <ul style="list-style-type: none"> o 7 CERTCC-KR <ul style="list-style-type: none"> 가 - Null 가 - Nimda CodeRed 가 가 o Windows NT/2000/XP 가 <ul style="list-style-type: none"> - NT 가가 - Windows Null o HTTP(80) 가 o 6 | <p>3 6 7</p> | |
| <ul style="list-style-type: none"> o 7 2,550 <ul style="list-style-type: none"> 72% (972) - Yaha (423 276) | <p>4 8</p> | |
| <ul style="list-style-type: none"> o 6 가 가 <ul style="list-style-type: none"> - 139(NetBIOS), 445(SMB) 가 o (kuang2) 17300 가 o 6 1/8 (558 -> 79) | <p>9 10 11</p> | |

2.

- o 7 CERTCC-KR 가
- o Windows NT/2000/XP 가
- NT 가가
- Windows Null
- o (135, 139, 445) 가
- o HTTP(80) 가
- o (kuang2) 17300 가
- o 6 가 가
- 139(NetBIOS), 445(SMB) 가

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|--|--------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| | 6,684 | 1,120 | 912 | 934 | 923 | 1,012 | 1,076 | 991 | | | | | | 6,968 |
| | 2,971 | 974 | 522 | 1,158 | 771 | 221 | 307 | 48 | | | | | | 4,001 |
| | 5,537 | 469 | 392 | 1,308 | 1,616 | 1,904 | 436 | 774 | | | | | | 6,899 |
| | 15,192 | 2,563 | 1,826 | 3,400 | 3,310 | 3,137 | 1,819 | 1,813 | | | | | | 17,868 |

2002. 6 6,851 .
 CERTCC-KR (419) .
 2002 (583, 70% 가), (198, 76%), (1,132, 32%)

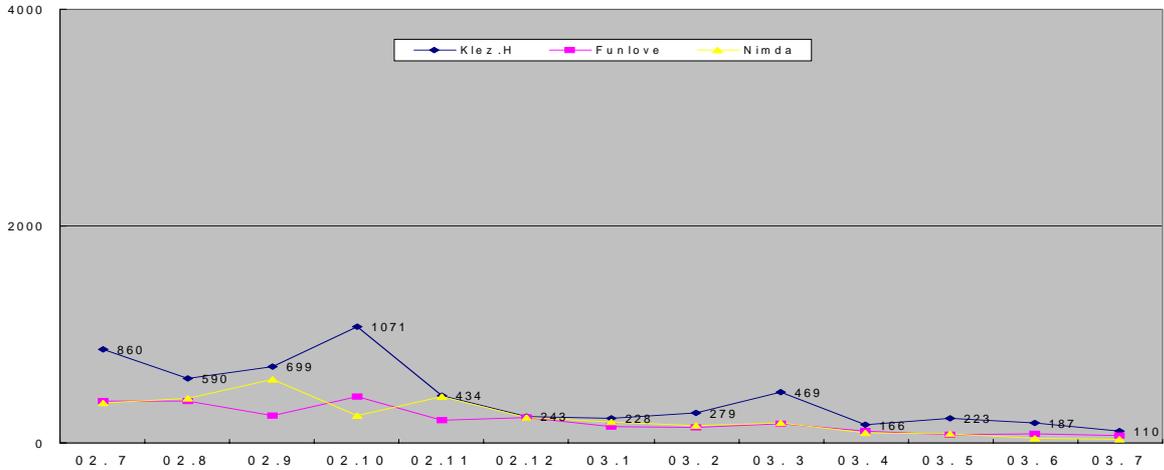
- o Fortnight, Yaha 2,550 (72%)
- o 8 (0, 8)
- 1 , 5
- 2

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|--|--------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| | 232 | 33 | 6 | 7 | 2 | 4 | 14 | 8 | | | | | | 74 |
| | 38,677 | 3,757 | 3,238 | 3,797 | 3,180 | 4,612 | 3,522 | 2,550 | | | | | | 24,656 |

KISA, , , 가
 : 가

o 2003

Klez.H(110), Funlove(69), Nimda(32)



o 6

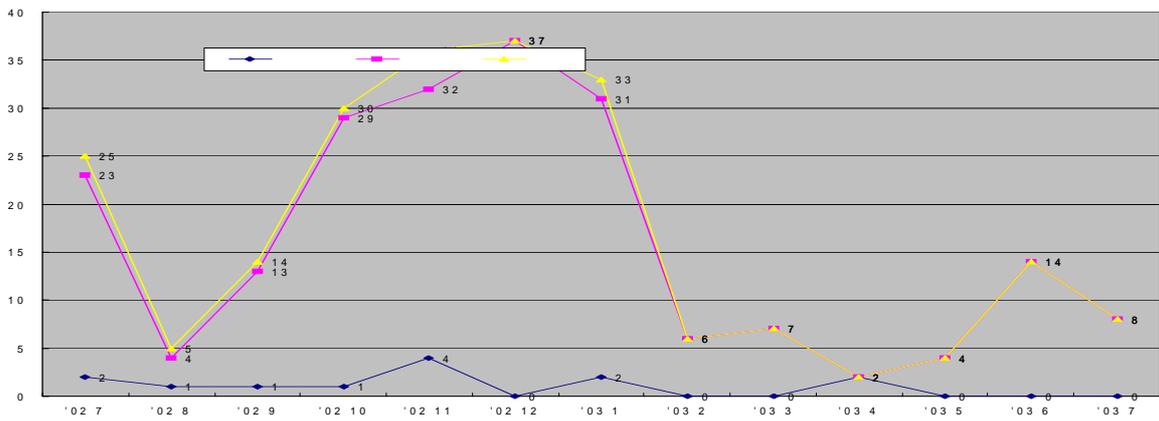
가 , 7

1,185 가

| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | 9,308 | 1,096 | 975 | 783 | 467 | 536 | 924 | 925 | | | | | | | 5,706 |
| | 27,021 | 1,361 | 1,320 | 2,537 | 2,350 | 3,704 | 1,854 | 1,185 | | | | | | | 14,311 |
| (or) | 1,687 | 1,284 | 876 | 419 | 303 | 304 | 491 | 411 | | | | | | | 4,088 |
| 가 (Hoax) | 13 | 0 | 16 | 10 | 5 | 9 | 5 | 6 | | | | | | | 51 |
| (Joke) | 111 | 5 | 1 | 6 | 3 | 0 | 0 | 3 | | | | | | | 18 |
| | 537 | 11 | 50 | 42 | 52 | 59 | 248 | 20 | | | | | | | 482 |
| | 38,677 | 3,757 | 3,238 | 3,797 | 3,180 | 4,612 | 3,522 | 2,550 | | | | | | | 24,656 |

o

8 (0 , 8)



o 7

1 , 5 , 2

| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|----------|------|------|---|---|---|---|----|---|---|---|----|----|----|------|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | 57 | 3 | 0 | 0 | 0 | 1 | 0 | 2 | | | | | | | 6 |
| | 108 | 26 | 2 | 5 | 2 | 3 | 7 | 1 | | | | | | | 46 |
| (or) | 60 | 4 | 4 | 1 | 0 | 0 | 5 | 5 | | | | | | | 19 |
| 가 (Hoax) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| (Joke) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | | | | | | 1 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | | | | | | | 2 |
| | 232 | 33 | 6 | 7 | 2 | 4 | 14 | 8 | | | | | | | 74 |

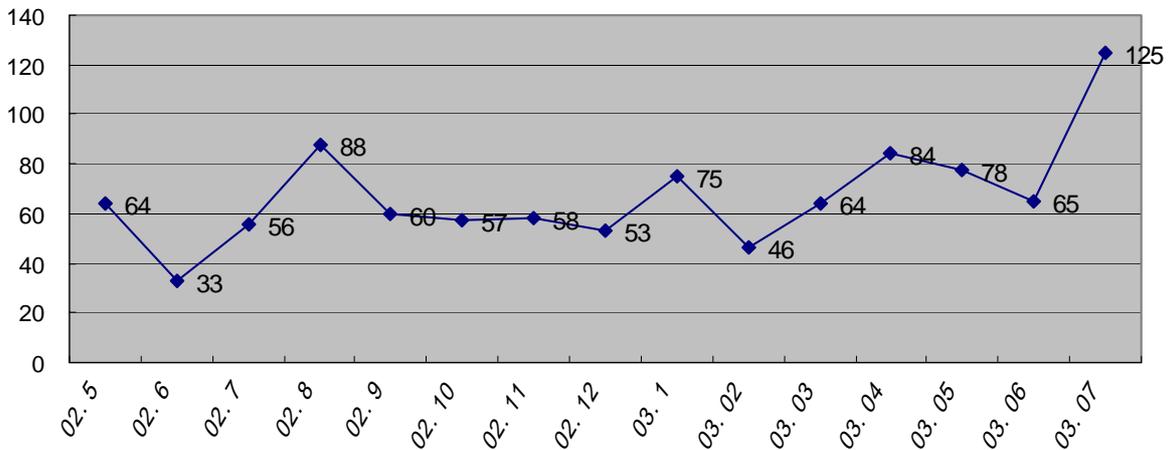
○ 6 가
 ○ (TCP 139, 445) Kuang2 TCP 17300 가

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|--|--------|------|-----|-----|-----|-----|-------|-----|---|---|----|----|----|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| | 22,036 | 648 | 593 | 656 | 402 | 345 | 1,489 | 469 | | | | | | 4,602 |
| | 6,200 | 425 | 422 | 519 | 329 | 266 | 1,246 | 410 | | | | | | 3,617 |

2000 11 30
 2002 3 KISA가 CERT RTSD

○ 7 가 118 , 7
 -
 -

| | 02.07 | 02.08 | 02.09 | 02.10 | 02.11 | 02.12 | 03.01 | 03.02 | 03.03 | 03.04 | 03.05 | 03.06 | 03.07 | 2003 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 56 | 88 | 60 | 57 | 58 | 53 | 75 | 46 | 64 | 84 | 78 | 65 | 125 | 537 |



(2003)

1. 7

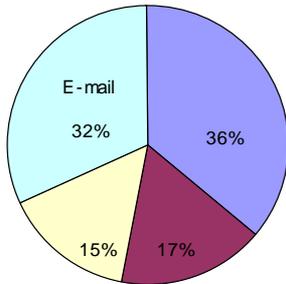
o 2003 7 1,394 가 542

OS ()

o Windows NT/2000/XP 가
 - NT 가가
 - Windows Null

| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|----------------|-------|-------|-----|-------|-------|-------|-----|-----|---|---|----|----|----|------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| Win NT/2000/XP | 2,279 | 687 | 248 | 1,338 | 1,082 | 935 | 189 | 227 | | | | | | | 4,706 |
| Win 95/98 | 2,098 | 458 | 405 | 366 | 564 | 347 | 370 | 129 | | | | | | | 2,639 |
| Linux | 574 | 29 | 74 | 62 | 53 | 33 | 21 | 20 | | | | | | | 292 |
| Solaris | 90 | 7 | 1 | 2 | 1 | 3 | 0 | 0 | | | | | | | 14 |
| AIX | 19 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | | | | | | | 3 |
| HP-UX | 12 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | | | | | | | 4 |
| Digital Unix | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | | | | | | | 2 |
| DEC/IRIX | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| CISCO | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| N/A | 1,361 | 278 | 180 | 476 | 859 | 901 | 165 | 166 | | | | | | | 3,025 |
| | 6,444 | 1,459 | 911 | 2,245 | 2,562 | 2,220 | 746 | 542 | | | | | | | 10,685 |

OS OS 가 ,
 ()

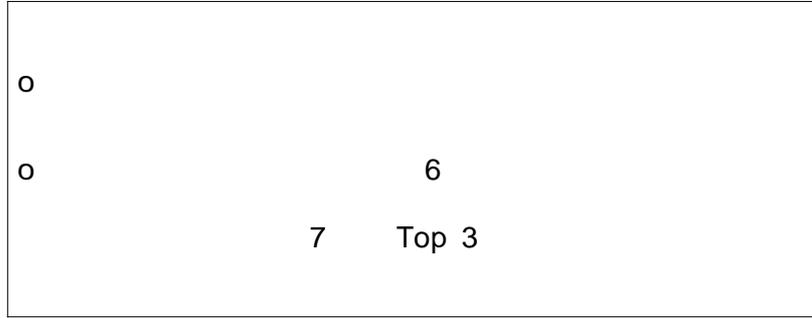
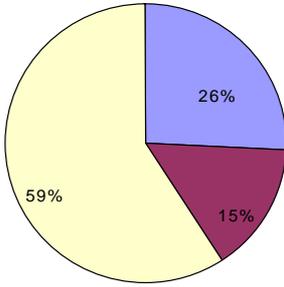


o E-mail 가 가
 PC
 7 Top 4

| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | 147 | 12 | 9 | 7 | 4 | 1 | 3 | 3 | | | | | | | 39 |
| S/W | 602 | 130 | 34 | 893 | 452 | 92 | 14 | 0 | | | | | | | 1,615 |
| | 243 | 445 | 28 | 28 | 43 | 42 | 47 | 42 | | | | | | | 675 |
| | 4,638 | 733 | 808 | 2,059 | 1,960 | 2,031 | 585 | 399 | | | | | | | 8,575 |
| | 4,112 | 1,148 | 557 | 1,232 | 934 | 306 | 450 | 185 | | | | | | | 4,812 |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| | 18 | 29 | 0 | 0 | 0 | 0 | 0 | 1 | | | | | | | 30 |
| E-mail | 1,943 | 258 | 346 | 1,018 | 1,617 | 1,905 | 289 | 353 | | | | | | | 5,786 |
| | 3,971 | 703 | 535 | 1,219 | 930 | 303 | 440 | 171 | | | | | | | 4,301 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| | 15,675 | 3,458 | 2,317 | 6,456 | 5,940 | 4,680 | 1,828 | 1,154 | | | | | | | 25,833 |

9 “3.”

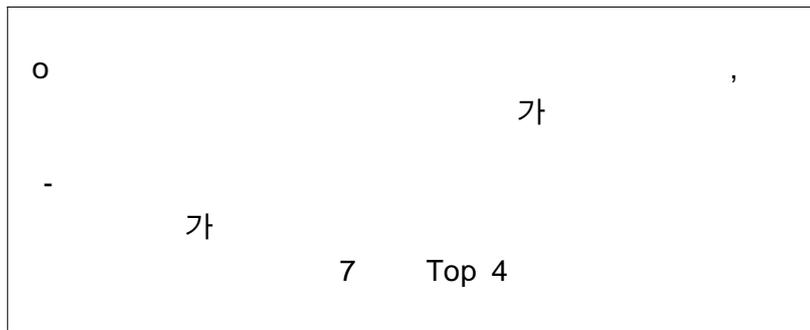
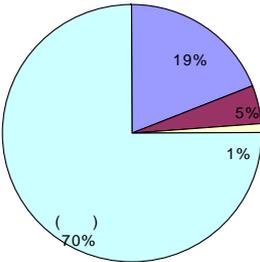
()



| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|--|--------|-------|-------|-------|-------|-------|-------|-----|---|---|----|----|----|------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | 4,044 | 705 | 537 | 1,217 | 930 | 303 | 435 | 168 | | | | | | | 4,295 |
| | 3,364 | 1,006 | 530 | 1,202 | 827 | 262 | 365 | 97 | | | | | | | 4,289 |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| | 61 | 1 | 1 | 1 | 3 | 1 | 5 | 5 | | | | | | | 17 |
| | 3,296 | 601 | 722 | 1,997 | 1,884 | 1,997 | 558 | 386 | | | | | | | 8,145 |
| | 5 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | | | | | | | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | | 1 |
| | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | | 1 |
| | 11 | 29 | 0 | 0 | 0 | 0 | 0 | 1 | | | | | | | 30 |
| | 10,784 | 2,343 | 1,790 | 4,417 | 3,645 | 2,564 | 1,365 | 658 | | | | | | | 16,782 |

가

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| | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|-----|-------|-------|-----|-------|-------|-------|-----|-----|---|---|----|----|----|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| co | 1,812 | 298 | 190 | 900 | 303 | 254 | 101 | 104 | | | | | | | 2,150 |
| ac | 716 | 142 | 71 | 108 | 155 | 79 | 44 | 27 | | | | | | | 626 |
| or | 154 | 31 | 11 | 24 | 22 | 17 | 6 | 5 | | | | | | | 116 |
| re | 22 | 3 | 2 | 2 | 3 | 3 | 0 | 0 | | | | | | | 13 |
| ne | 4 | 6 | 2 | 2 | 0 | 10 | 12 | 0 | | | | | | | 32 |
| () | 3,736 | 979 | 635 | 1,235 | 2,042 | 1,587 | 572 | 410 | | | | | | | 7,460 |
| | 6,444 | 1,459 | 911 | 2,271 | 2,525 | 1,950 | 735 | 546 | | | | | | | ## |

ISP

2. ()

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| | | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|-------|
| | | | 03.1 | 03.2 | 03.3 | 03.4 | 03.5 | 03.6 | 03.7 | 03.8 | 03.9 | 03.10 | 03.11 | 03.12 | | |
| Klez.H | 02.4 | 8,711 | 228 | 279 | 469 | 116 | 223 | 187 | 110 | | | | | | | 1,612 |
| Nimda.A | 01.9 | 6,717 | 189 | 157 | 186 | 90 | 86 | 39 | 32 | | | | | | | 779 |
| Funlove4099 | | 4,413 | 153 | 145 | 174 | 110 | 78 | 87 | 69 | | | | | | | 816 |
| Opaserv | 02.10 | 2,332 | 365 | 173 | 300 | 172 | 126 | 89 | 86 | | | | | | | 1,311 |
| Nimda.D | | 1,362 | 63 | 59 | 59 | 43 | 43 | 47 | 276 | | | | | | | 590 |
| Winevar | 02.11 | 944 | 20 | 35 | 6 | 4 | 2 | 1 | 2 | | | | | | | 70 |
| Spida | | 568 | 5 | 57 | 7 | 0 | 1 | 2 | 1 | | | | | | | 73 |
| Bride | 02.11 | 438 | 4 | 0 | 12 | 0 | 3 | 0 | 0 | | | | | | | 19 |
| niRCPack | 02.11 | 343 | 683 | 125 | 180 | 71 | 80 | 103 | 60 | | | | | | | 1,302 |
| Sircam.Worm | | 270 | 8 | 6 | 4 | 4 | 1 | 5 | 4 | | | | | | | 32 |
| Slammer | 03.1 | 0 | 67 | 81 | 2 | 4 | 2 | 4 | 2 | | | | | | | 162 |

KISA, , , ,

7 Top10

| | | |
|----|-----------|-------|
| 1 | FORTNIGHT | 321 |
| 2 | YAHA | 276 |
| 3 | VALLA | 159 |
| 4 | PARITE | 151 |
| 5 | KLEZ.H | 110 |
| 6 | LOVGATE.F | 105 |
| 7 | OPASERV | 86 |
| 8 | REDLOF | 78 |
| 9 | LOVGATE | 71 |
| 10 | FUNLOVE | 69 |
| | | 1,124 |
| | | 2,550 |

7 (: 1 , : 0)

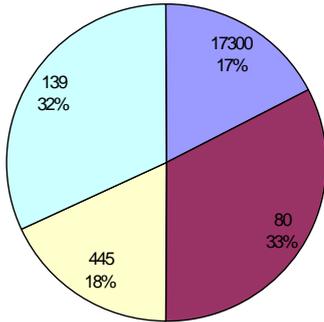
| | | | | |
|---|-----------------|---|-------|---|
| 1 | Win-Trojan/Sins | C | 07.30 | http://www.certcc.r.kr/cvirc/Alert/warning/2003/win_trojan_sins.html |
|---|-----------------|---|-------|---|

A : , B : , C :

3.

o CERTCC-KR

가



o 6 가 가
o (135, 139, 445) 가
o HTTP 가
o (kuang2) 17300 가
7 Top 4

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 21 | 2,065 | 114 | 97 | 74 | 51 | 70 | 61 | 131 | | | | | | 598 |
| 22 | 672 | 18 | 17 | 22 | 9 | 2 | 3 | 5 | | | | | | 76 |
| 23 | 70 | 9 | 6 | 2 | 3 | 5 | 6 | 11 | | | | | | 42 |
| 25 | 4,228 | 200 | 136 | 105 | 49 | 56 | 54 | 110 | | | | | | 710 |
| 53 | 372 | 5 | 7 | 6 | 1 | 9 | 8 | 17 | | | | | | 53 |
| 80 | 1,065 | 262 | 151 | 529 | 712 | 455 | 194 | 649 | | | | | | 2,952 |
| 110 | 241 | 0 | 0 | 1 | 0 | 10 | 13 | 23 | | | | | | 47 |
| 111 | 744 | 12 | 10 | 10 | 10 | 6 | 6 | 12 | | | | | | 66 |
| 135 | 53 | 15 | 22 | 8 | 3 | 15 | 6 | 21 | | | | | | 90 |
| 137 | 746 | 254 | 386 | 193 | 117 | 12 | 27 | 39 | | | | | | 1,028 |
| 139 | 441 | 309 | 47 | 21 | 135 | 84 | 550 | 634 | | | | | | 1,780 |
| 443 | 270 | 15 | 43 | 19 | 11 | 29 | 100 | 129 | | | | | | 346 |
| 445 | 287 | 127 | 180 | 718 | 183 | 165 | 193 | 358 | | | | | | 1,924 |
| 515 | 136 | 1 | 4 | 2 | 2 | 2 | 1 | 3 | | | | | | 15 |
| 1433 | 2,452 | 150 | 100 | 92 | 78 | 38 | 40 | 78 | | | | | | 576 |
| 1434 | 0 | 429 | 7 | 10 | 7 | 5 | 6 | 11 | | | | | | 475 |
| 8080 | 36 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | | | | | | 5 |
| 12345 | 1,717 | 121 | 7 | 6 | 43 | 18 | 61 | 79 | | | | | | 335 |
| 17300 | 16 | 0 | 61 | 4 | 44 | 118 | 228 | 346 | | | | | | 801 |
| 27374 | 601 | 116 | 27 | 32 | 4 | 23 | 58 | 81 | | | | | | 341 |
| | 4,123 | 53 | 148 | 139 | 17 | 141 | 324 | 465 | | | | | | 1,287 |
| | 20,335 | 2,211 | 1,456 | 1,993 | 1,479 | 1,263 | 1,941 | 3,204 | | | | | | 13,547 |

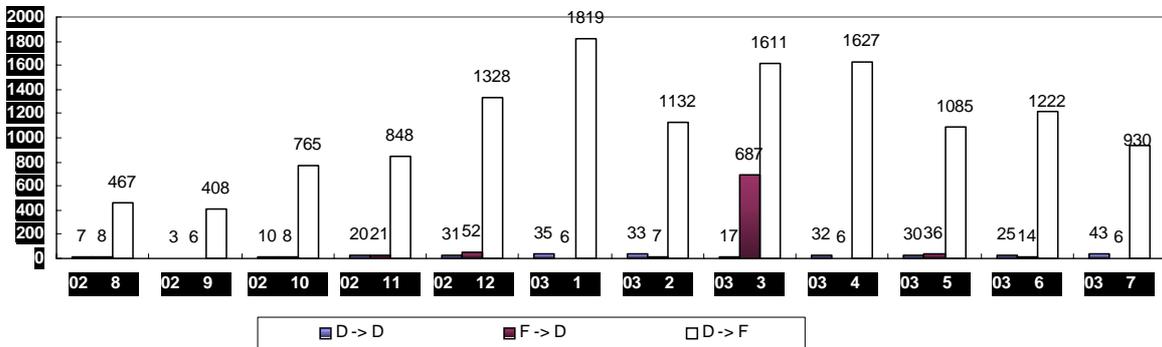
CERTCC-KR RTSD
3389, 500, 3128, 1080

()

| | | |
|---------------|----------|--|
| 80 | web | o CodeRed, Nimda |
| 137(UDP), 139 | NETBIOS | o Opaserv Bot |
| 445 | SMB | o Window NetBios |
| 1433 | MS-SQL | o Spida |
| 1434 | MS-SQL | o Slammer |
| 8080, 3128 | Squid | o - http://www.certcc.or.kr/paper/tr2002/tr2002_04/spam.pdf |
| 2222 | Apache | o - http://www.certcc.or.kr/advisory/ka2002/ka2002-060.txt |
| 6667 | mIRC | o mIRC |
| 12345 | netbus | o Window98 netbus |
| 17300 | Kuang2 | o Windows |
| 27374 | SubSeven | o Window subseven |

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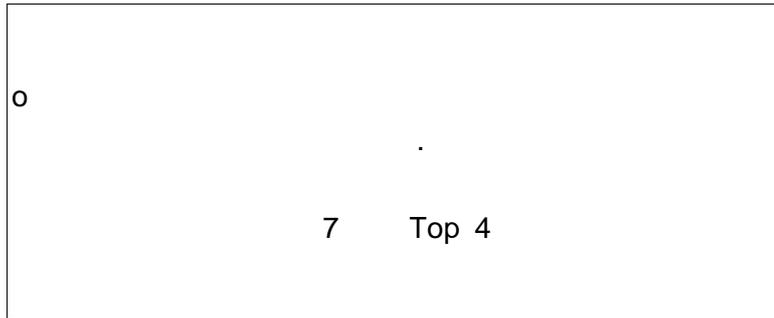
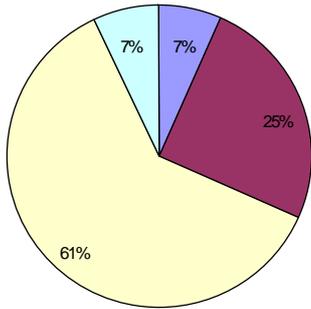


.(RTSD)

SPAM

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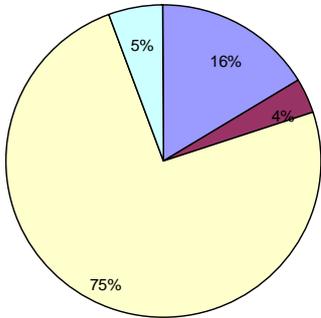
Source가 , Destination (whois)



| 가 | 2002 | 2003 | | | | | | | | | | | | 2003 | |
|---|-------|-------|-------|-------|-------|-------|-------|-----|---|---|----|----|----|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | 2,100 | 611 | 639 | 441 | 401 | 247 | 416 | 185 | | | | | | | 2,940 |
| | 68 | 46 | 15 | 7 | 5 | 6 | 50 | 21 | | | | | | | 150 |
| | 173 | 63 | 73 | 31 | 47 | 31 | 33 | 25 | | | | | | | 303 |
| | 189 | 0 | 0 | 0 | 10 | 0 | 18 | 4 | | | | | | | 32 |
| | 2,530 | 720 | 727 | 479 | 463 | 284 | 517 | 255 | | | | | | | 3,445 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | | | | | | | 8 |
| | 2,050 | 595 | 188 | 537 | 345 | 289 | 479 | 457 | | | | | | | 2,890 |
| | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 1 |
| | 418 | 102 | 21 | 241 | 578 | 369 | 8 | 51 | | | | | | | 1,370 |
| | 43 | 2 | 1 | 1 | 36 | 2 | 41 | 29 | | | | | | | 112 |
| | 2,511 | 700 | 210 | 779 | 959 | 660 | 536 | 537 | | | | | | | 4,381 |
| | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | | 1 |
| | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | | | | | | 2 |
| | 20 | 1 | 2 | 10 | 9 | 1 | 24 | 11 | | | | | | | 58 |
| | 407 | 21 | 5 | 1 | 9 | 5 | 10 | 8 | | | | | | | 59 |
| | 427 | 22 | 7 | 11 | 18 | 6 | 34 | 19 | | | | | | | 117 |
| | 7 | 10 | 3 | 30 | 1 | 0 | 0 | 0 | | | | | | | 44 |
| | 7 | 1 | 0 | 0 | 3 | 1 | 0 | 1 | | | | | | | 6 |
| | 349 | 29 | 12 | 11 | 3 | 1 | 0 | 1 | | | | | | | 57 |
| | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | | | | | | 1 |
| | 132 | 3 | 0 | 1 | 3 | 0 | 4 | 0 | | | | | | | 11 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| | 5 | 3 | 32 | 0 | 0 | 1 | 0 | 0 | | | | | | | 36 |
| | 34 | 3 | 4 | 10 | 8 | 17 | 11 | 4 | | | | | | | 57 |
| | 11 | 6 | 2 | 0 | 2 | 2 | 1 | 2 | | | | | | | 15 |
| | 358 | 53 | 52 | 56 | 54 | 54 | 48 | 50 | | | | | | | 367 |
| | 154 | 111 | 66 | 4 | 90 | 2 | 24 | 46 | | | | | | | 343 |
| | 1,062 | 219 | 172 | 112 | 164 | 78 | 92 | 114 | | | | | | | 951 |
| | 6,531 | 1,661 | 1,116 | 1,381 | 1,604 | 1,028 | 1,180 | 926 | | | | | | | 8,896 |

.(RTSD)

Source가 , Destination (whois)

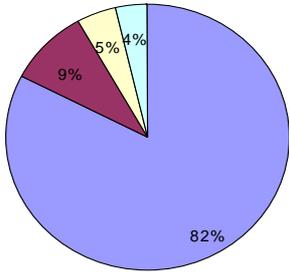


오 6 , 가 , 6 1/8 가
7 Top 4

| 가 | 2002 | 2003 | | | | | | | | | | | | 2003 |
|---|------|------|-----|-----|-----|-----|-----|----|---|---|----|----|----|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| | 4 | 43 | 81 | 41 | 22 | 44 | 111 | 9 | | | | | | 43 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | 0 |
| | 1 | 5 | 11 | 5 | 4 | 2 | 6 | 0 | | | | | | 5 |
| | 9 | 0 | 18 | 8 | 3 | 8 | 0 | 2 | | | | | | 0 |
| | 14 | 48 | 110 | 54 | 29 | 54 | 117 | 11 | | | | | | 423 |
| | 48 | 5 | 53 | 21 | 6 | 7 | 44 | 0 | | | | | | 136 |
| | 24 | 3 | 11 | 10 | 2 | 1 | 21 | 1 | | | | | | 49 |
| | 98 | 13 | 66 | 40 | 30 | 41 | 163 | 41 | | | | | | 394 |
| | 10 | 0 | 5 | 4 | 0 | 1 | 9 | 2 | | | | | | 21 |
| | 51 | 5 | 10 | 8 | 7 | 8 | 23 | 6 | | | | | | 67 |
| | 231 | 26 | 145 | 83 | 45 | 58 | 260 | 50 | | | | | | 667 |
| | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | 2 |
| | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | | | | | | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | | | 1 |
| | 7 | 46 | 39 | 19 | 1 | 1 | 1 | 0 | | | | | | 107 |
| | 7 | 46 | 39 | 19 | 1 | 1 | 2 | 0 | | | | | | 108 |
| | 13 | 4 | 12 | 11 | 5 | 12 | 102 | 1 | | | | | | 147 |
| | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | | | | | | 4 |
| | 85 | 11 | 31 | 16 | 10 | 9 | 17 | 2 | | | | | | 96 |
| | 13 | 1 | 5 | 2 | 1 | 0 | 3 | 0 | | | | | | 12 |
| | 8 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | | | | | | 5 |
| | 6 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | | | | | 2 |
| | 3 | 0 | 2 | 2 | 0 | 2 | 2 | 0 | | | | | | 8 |
| | 0 | 0 | 6 | 2 | 3 | 4 | 6 | 1 | | | | | | 22 |
| | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | | | | | | 2 |
| | 52 | 5 | 11 | 4 | 10 | 7 | 25 | 3 | | | | | | 65 |
| | 27 | 3 | 21 | 12 | 17 | 9 | 15 | 13 | | | | | | 90 |
| | 214 | 26 | 90 | 49 | 48 | 48 | 172 | 20 | | | | | | 453 |
| | 468 | 146 | 384 | 205 | 123 | 162 | 552 | 81 | | | | | | 1,653 |

.(RTSD 2002 10 가)

() Source (whois)

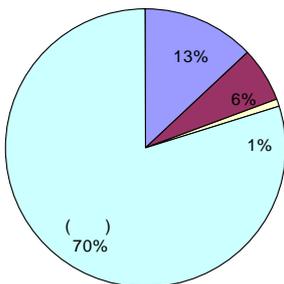


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7 Top 4
(->) + (->)

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|---|---|----|----|----|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| | 5,162 | 1,026 | 792 | 1,118 | 1,085 | 758 | 1,187 | 703 | | | | | | 6,669 |
| | 384 | 66 | 41 | 44 | 27 | 17 | 25 | 39 | | | | | | 259 |
| | 191 | 21 | 29 | 21 | 23 | 20 | 6 | 10 | | | | | | 130 |
| | 105 | 16 | 16 | 18 | 17 | 14 | 7 | 12 | | | | | | 100 |
| | 108 | 16 | 2 | 11 | 10 | 4 | 10 | 7 | | | | | | 60 |
| | 180 | 70 | 36 | 49 | 53 | 43 | 46 | 30 | | | | | | 327 |
| | 56 | 12 | 5 | 15 | 8 | 2 | 2 | 0 | | | | | | 44 |
| | 825 | 143 | 84 | 126 | 90 | 92 | 133 | 79 | | | | | | 747 |
| | 140 | 11 | 11 | 24 | 6 | 4 | 11 | 3 | | | | | | 70 |
| | 249 | 10 | 11 | 21 | 5 | 5 | 11 | 3 | | | | | | 66 |
| | 106 | 34 | 14 | 7 | 10 | 5 | 7 | 4 | | | | | | 81 |
| | 116 | 20 | 16 | 139 | 99 | 34 | 58 | 8 | | | | | | 374 |
| | 141 | 79 | 52 | 11 | 6 | 7 | 8 | 3 | | | | | | 166 |
| | 122 | 20 | 12 | 19 | 17 | 20 | 5 | 5 | | | | | | 98 |
| | 143 | 9 | 13 | 14 | 10 | 9 | 21 | 25 | | | | | | 101 |
| | 30 | 2 | 3 | 4 | 4 | 3 | 4 | 0 | | | | | | 20 |
| N/A | 1,565 | 656 | 317 | 397 | 317 | 226 | 397 | 417 | | | | | | 2,727 |
| | 9,623 | 2,211 | 1,454 | 2,038 | 1,787 | 1,263 | 1,938 | 1,348 | | | | | | 12,039 |

RTSD 2002 10 가

() Source (whois)



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7 Top 4
RTSD 가 .

| | 2002 | 2003 | | | | | | | | | | | | 2003 |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|---|---|----|----|----|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| co | 1,634 | 289 | 206 | 228 | 236 | 159 | 141 | 125 | | | | | | 1,384 |
| ac | 815 | 171 | 75 | 155 | 127 | 90 | 68 | 61 | | | | | | 747 |
| or | 99 | 34 | 27 | 33 | 18 | 15 | 15 | 10 | | | | | | 152 |
| re | 20 | 4 | 5 | 3 | 2 | 0 | 0 | 4 | | | | | | 18 |
| ne | 9 | 7 | 2 | 2 | 1 | 14 | 27 | 0 | | | | | | 53 |
| () | 3,917 | 1,207 | 809 | 1,148 | 1,237 | 812 | 944 | 765 | | | | | | 6,922 |
| | 6,494 | 1,712 | 1,124 | 1,569 | 1,621 | 1,090 | 1,195 | 965 | | | | | | 9,276 |