

Ethernet.  
Ethernet,

Web-

DCS

IT

2003

PC,

IT

HMI

IT

, IT  
Windows

IT

IT

Windows® MS-Word®.

VxWorks

RSLogix™,

IT

IT

IT

IT

10

IT

IT

90%

IT

IT

IT

IT

IT

( )

Slammer Worm  
2003

(RISI)

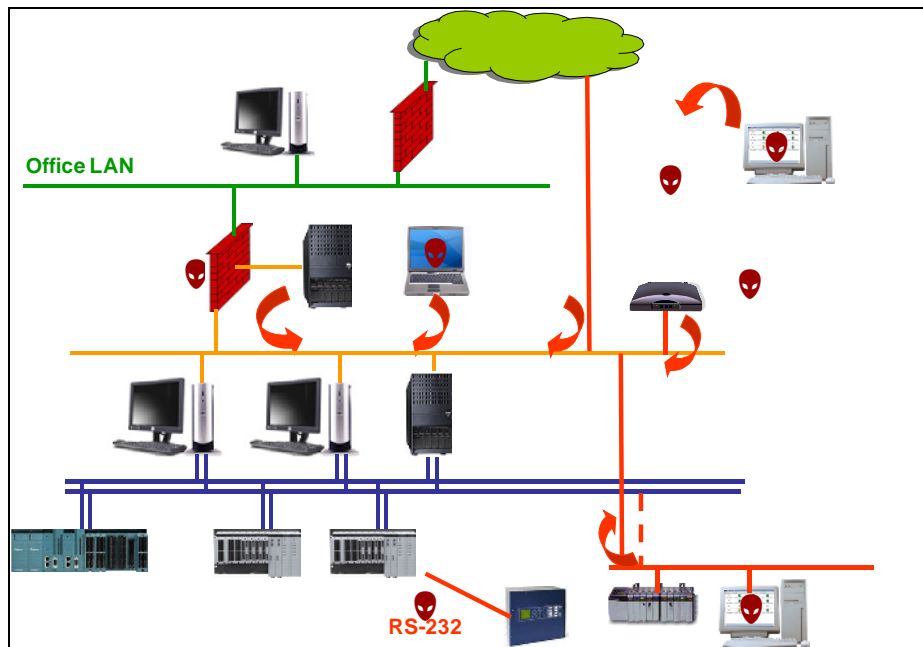
(SPDS)

Slammer worm

HMI

Slammer

2002 2006



.1 -

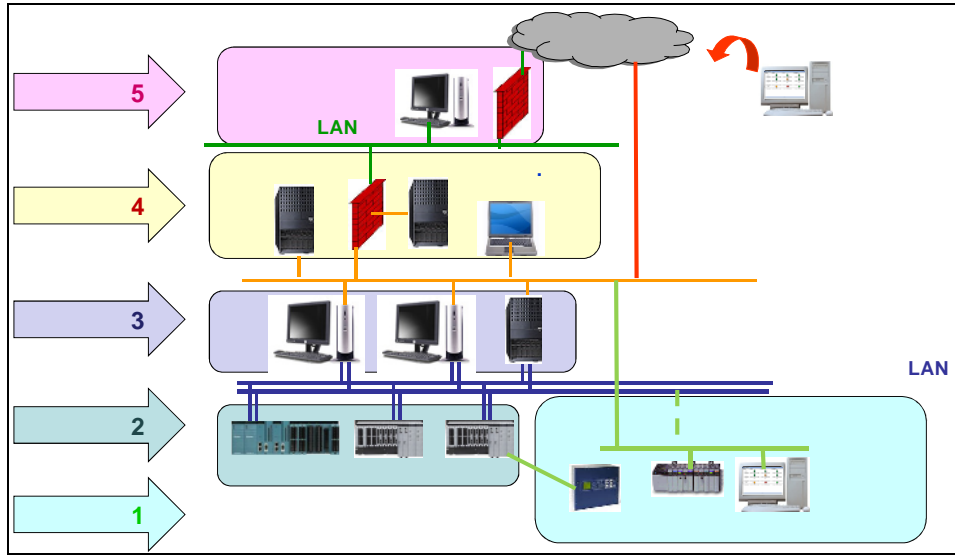
IT-

IT

<<

>>

55% Windows 2000/XP (38%)  
Sasser  
PLC DCS,  
CERN,  
25  
IT ( , Nessus  
Netwox),  
PLC DCS,  
“ ”  
“ ”  
ANSI/ISA-99,  
“ ”  
(SIS)  
IT-



.2 -

“ PCN ”

( HMI Windows ), Linux, IT IT, (A/V) PLC, RTU DCS, , PLC, Windows® )

M.

Tofin -M

Tofin -



.3 –

Tofino-M

Tofin -M

**Literature:**

1. Ensuring Reliable Production in a Dangerous Cyber World
2. Making Cyber Security Work in the Refinery