# Table of Contents

1. IN-2004-01: W32/Novarg.A Virus .................................................. 1
2. IN-2004-02: W32/Netsky.B Virus .................................................. 5
1 IN-2004-01: W32/Novarg.A Virus

Release Date: January 27, 2004
Last Updated: January 30, 2004

Overview

The CERT/CC has been receiving reports of a new mass-mailing virus known as W32/Novarg.A, W32/Shimg, or W32/Mydoom that has been reported to open a backdoor to the compromised system and possibly launch a denial-of-service attack at a fixed time in the future.

Description

The W32/Novarg.A virus attempts to do the following:

- Modify various Windows registry values so that the virus is run again upon reboot
- Open a listening TCP port in the range of 3127-3198, suggesting remote access capabilities
- Install a copy of itself in the C:\Program Files\KaZaA\My Shared Folder\ folder, which will be available for download by KaZaA users

The virus arrives as an email message with a 22,528-byte attachment that has a random filename with a file extension of .cmd, .pif, .scr, .exe, or .bat. The attachment may also arrive as a ZIP archive.

Some messages containing the virus have had the following characteristics:

Subject: <random>
From: <spoofed>
To: <email address>

Body: (The body has been reported to contain one of the following three messages.)

"The message cannot be represented in 7-bit ASCII encoding and has been sent as a binary attachment."

"The message contains Unicode characters and has been sent as a binary attachment."

"Mail transaction failed. Partial message is available."

In addition to the backdoor capabilities, the virus is also believed to have the capability to launch a distributed denial-of-service attack against a specific web site beginning on February 1, 2004. As with other malicious code having mass-mailing capabilities, W32/Novarg.A may cause "collateral" denial-of-service conditions in networks where either (a) multiple systems are infected, or (b) large volumes of infected mail are received.
The CERT/CC is continuing to analyze the malicious code and we will update this Incident Note as more information is confirmed.

Anti-virus vendors have developed signatures for W32/Novarg.A:

http://www.sarc.com/avcenter/venc/data/w32.novarg.a@mm.html


http://us.mcafee.com/virusInfo/default.asp?id=mydoom

http://www.f-secure.com/v-descs/novarg.shtml

http://www.sophos.com/virusinfo/analyses/w32mydooma.html


Solutions

In addition to following the steps outlined in this section, the CERT/CC encourages home users to review the "Home Network Security" and "Home Computer Security" documents.

Run and maintain an anti-virus product

While an up-to-date antivirus software package cannot protect against all malicious code, for most users it remains the best first-line of defense against malicious code attacks. Users may wish to read IN-2003-01 for more information on anti-virus software and security issues.

Most antivirus software vendors release frequently updated information, tools, or virus databases to help detect and recover from malicious code, including W32/Novarg.A. Therefore, it is important that users keep their antivirus software up to date. The CERT/CC maintains a partial list of antivirus vendors.

Many antivirus packages support automatic updates of virus definitions. The CERT/CC recommends using these automatic updates when available.

Do not run programs of unknown origin

Never download, install, or run a program unless you know it to be authored by a person or company that you trust. Email users should be wary of unexpected attachments, while users of Internet Relay Chat (IRC), Instant Messaging (IM), and file-sharing services should be particularly wary of following links or running software sent to them by other users since these are commonly used methods among intruders attempting to build networks of distributed denial-of-service (DDoS) agents.
Filter network traffic

Reports to CERT/CC indicate that the virus opens a listening TCP port in the range of 3127-3198. Sites should consider blocking both inbound and outbound traffic to these ports, depending on network requirements, at the host and network level.

If access cannot be blocked for all external hosts, the CERT/CC recommends limiting access to only those hosts that require it for normal operation. As a general rule, the CERT/CC recommends filtering all types of network traffic that are not required for normal operation.

Recovering from a system compromise

If you believe a system under your administrative control has been compromised, please follow the steps outlined in Steps for Recovering from a UNIX or NT System Compromise.

Reporting

The CERT/CC is tracking activity related to this virus as CERT#25304. Relevant artifacts or activity can be sent to cert@cert.org with the appropriate CERT# in the subject line.

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This document is available from: http://www.cert.org/incident_notes/IN-2004-01.html.

CERT/CC Contact Information

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CERT/CC personnel answer the hotline 08:00-17:00 EST(GMT-5) / EDT(GMT-4) Monday through Friday; they are on call for emergencies during other hours, on U.S. holidays, and on weekends.

Using encryption

We strongly urge you to encrypt sensitive information sent by email. Our public PGP key is available from http://www.cert.org/CERT_PGP.key.

If you prefer to use DES, please call the CERT hotline for more information.
Getting security information

CERT publications and other security information are available from our website:
http://www.cert.org/.

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Revision History
January 27, 2004: Initial Release
January 30, 2004: Changed worm references
2 IN-2004-02: W32/Netsky.B Virus

Release Date: February 18, 2004
Last Updated: --

Overview

The CERT/CC has been receiving reports of a new mass-mailing virus known as W32/Netsky.B.

Description

The W32/Netsky.B virus propagates either as an attachment to an email message or by automatically copying itself to Windows network shares. Upon successful execution, the virus attempts to

- modify various Windows registry values so that the virus is run again upon reboot.
- install a copy of itself in the %Windir%\services.exe, where %Windir% is a variable pointing to the root of the Windows directory on the host.
- collect target email addresses from files with specific extensions on the local system.
- copy itself to particularly-named files within non-CDROM local drives or mapped network shares.
- remove registry keys that were added as a likely result of successful compromise via other recent malicious code, including W32/Novarg.A and W32/MyDoom.B.

When spreading via email, the virus arrives as an email message with a 22,016-byte attachment that has a filename selected randomly from a fixed list and a double-extension of one of the following combinations:

- .txt
- .rtf
- .doc
- .htm

and

- .com
- .pif
- .scr
- .exe

The attachment may also arrive as a ZIP (.zip) archive.

Some messages containing the virus have had the following characteristics:

Subject: (one of the following)

- stolen
- fake
Body:
(The body has been reported to contain a short message selected randomly from a fixed list.)

When spreading via the filesystem, the virus searches non-CDROM drives C: through Z:, including mapped network shares, for any folders containing "Share" or "Sharing" in their name. The virus then copies itself into these folders as a filename selected randomly from a fixed list and containing a double-extension.

As with other malicious code having mass-mailing capabilities, W32/Netsky.B may cause "collateral" denial-of-service conditions in networks where either (a) multiple systems are infected, or (b) large volumes of infected mail are received.

The CERT/CC is continuing to analyze the malicious code and we will update this Incident Note as more information is confirmed.

Anti-virus vendors have developed signatures for and information about W32/Netsky.B:

    http://www.sarc.com/avcenter/venc/data/w32_netsky.b@mm.html
    http://www.trendmicro.com/vinfo/virusencyclo/default5.asp?VName=WORM_NETSKY.B
    http://us.mcafee.com/virusinfo/default.asp?id=description&virus_k=101034
    http://www.f-secure.com/v-descs/netsky_b.shtml
    http://www.sophos.com/virusinfo/analyses/w32netskyb.html

Solutions

In addition to following the steps outlined in this section, the CERT/CC encourages home users to review the "Home Network Security" and "Home Computer Security" documents.
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While an up-to-date antivirus software package cannot protect against all malicious code, for most users it remains the best first-line of defense against malicious code attacks. Users may wish to read IN-2003-01 for more information on anti-virus software and security issues.

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Recovering from a system compromise

If you believe a system under your administrative control has been compromised, please follow the steps outlined in Steps for Recovering from a UNIX or NT System Compromise.

Reporting

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This document is available from: http://www.cert.org/incident_notes/IN-2004-02.html.
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Using encryption

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If you prefer to use DES, please call the CERT hotline for more information.

Getting security information

CERT publications and other security information are available from our website:
http://www.cert.org/

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Revision History

February 18, 2004: Initial Release
February 18, 2004: Clarify information about filesystem propagation