



Windows Firewall Deployment and Use in the Enterprise

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O divine art of subtlety and secrecy! Through you we learn to be invisible, through you inaudible; and hence we can hold the enemy's fate in our hands.

The Art of War
Sun Tzu

- ### Release Status
- Currently in beta, Release Candidate 2
 - Download RC2 from Microsoft
<http://www.microsoft.com/technet/prodtechnol/winxppro/sp2preview.msp>
 - Very close to releasing

SP2 for Windows XP

Vulnerability	Days between patch and exploit
Ninda	331
SQL Slammer	180
Welch/Nachi	151
Blaster	25

- Why?
 - > Patch management too complex
 - > Time to exploit accelerating
 - > Exploits are more sophisticated
 - > Current approach is not sufficient
- How?
 - > Shield-style approach will give flexibility to our customers in terms of time to test/deploy
 - > Proactive instead of reactive engineering
 - > A step in the journey to more secure computing platforms, applications, and devices
 - > Goal: With SP2 changes, seven of ten vulnerabilities would have been mitigated

Overview of XP SP2

Network	Help protect the system from attacks from the network
Email/IM	Enable safer Email and Instant Messaging experience
Web	Enable safer Internet experience for most common Internet tasks
Memory	Provide system-level protection for the base operating system

Windows Firewall

- Goal and customer benefit
 - Provide better protection from network attacks by default
 - Focus on roaming systems, small business, home users
- Application impact
 - In-bound network connections not permitted by default
 - Listening ports only open as long as the application is running

New Features

- Enabled by default for all connections
- New global configuration options that apply to all connections
- New dialog boxes for local configuration
- New operating mode
- Startup security
- Traffic source restrictions
- Excepted traffic can be defined by the application name
- Built-in support for IPv6
- New configuration options

By Design

- It is **NOT** a distributed IDS
 - Logging (if turned on) is local
- Does **NOT** block outbound traffic
 - If needed, consider IPSEC filters

Enabled by Default

- All connections – LAN (wired and wireless), dial-up, VPN
- May effect the ability to manage the computer
- May impact app compatibility

Your mileage may vary.
TEST! TEST! TEST!

Global Configuration

- Configuration is applied to all connections
- SP2 also allows for per-connection configuration

New Dialog Boxes
New Operating Mode

demo

Startup Security

- ICF dependencies in the network stack
- Brief period of exposure
- WF Startup Policy
 - Allows for initial connections to the net
 - Not configurable
 - Uses its configuration once WF is fully started

Source Restrictions

Excepted traffic can originate from:

- Any IP address
- Local subnet
- Custom list of specific addresses and/or network
 - No AD site awareness
 - Does not have to include the entire Enterprise address space – just those resources authorized to initiate traffic to the desktop

Application-Defined Traffic

- ICF only allowed exceptions based upon TCP and UDP ports
- WF exceptions can also be defined by ports
- NEW: Exceptions allowed defined by the executable's name

Prompted User Control



1. Make an exception entry, unchecked
2. Make an exception entry, checked
3. Don't make an exception entry, keep blocking

IPv6 Support

- Automatically enabled on all IPv6 connections
- Configured using the commands in the netsh firewall context

New Configuration Options

- Netsh commands extended
 - Deployment Guide is a great reference
- New configuration APIs
- Group Policy extended
- Two different protection profiles
 - Domain
 - Standard

Impacts

- Managed computers
- Acting as a server
- Acting as a listener
- Acting as a peer

Firewall Settings

- Via the GUI
- Unattended setup
 - unattend.txt
 - netfw.inf
- Local group policy
- Domain group policy
- Netsh command-line scripting
- Scripting via the firewall APIs

Deploying via Group Policy

- Update the Group Policy objects with the new WF settings
 - This will replace the system.adm file with the new XP SP2 version
- Specify the WF settings for your Group Policy objects
- Assign policies to the appropriate OUs

Windows Firewall demo

Resources

- **Deploying Windows Firewall Settings for Microsoft Windows XP with Service Pack 2**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=4454e0e1-61fa-447a-bdcd-499f73a637d1&DisplayLang=en>
- **Changes to Functionality in Microsoft Windows XP Service Pack 2**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=7bd948d7-b791-40b6-8364-985b24158c78&DisplayLang=en>
- **Group Policy Settings Reference for Windows XP Professional Service Pack 2 Release Candidate 2**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=ef3a35c0-19b9-4a0c-b5be-9b7dab13108e&DisplayLang=en>
- **Using Windows XP Professional with Service Pack 2 in a Managed Environment: Controlling Communication with the Internet**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=e6a35441-918f-4022-b973-07fc0d1d2917&DisplayLang=en>

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