



### QRadar Vulnerability Manager v7.2.2 QRadar Risk Manager v7.2.2

**New Feature Overview** 

April 2014





### New capabilities!

- <sup>§</sup> QRadar Vulnerability Manager
  - New capabilities deliver even more value, improve usability and scalability
  - Scan policies reduce scan time, increase performance and flexibility
  - Centralized credentials reduce administration time and overhead
  - Automatic scanner assignment increases scalability, eases administration
  - Asset owner management streamlines en masse owner changes
  - Scheduled scan views enables visualization of scheduled scans, eliminating potential overlaps and improving scan efficiencies
  - Enhanced reporting capabilities
     PCI ASV, risk prioritized remediation and asset reports and much more!
- <sup>§</sup> QRadar Risk Manager
  - Drastically improved topology performance scales to even larger environments
  - New policy tests enable complex Windows configuration policies like CIS
  - Support for new IPS and Next Gen firewall devices expands topology and policy capabilities
  - Improved path visualizations decrease network administration overhead for users





## QRadar Vulnerability Manager v7.2.2

### **New Feature Overview**





Improved usability and scan performance

- **Scan Policies**
- **S Dynamic Scanning**
- § Automated asset owner assignment

© 2014 IBM Corporation



### Scan policies enable focused, rapid scanning

- S Customers can now granularly configure the way that QRadar Vulnerability Manager scans assets through scan policies
- <sup>s</sup> This improves scan performance by reducing the total number of scan tests conducted
  - Example: turn off scans for vulnerabilities that are 10+ years old
- <sup>s</sup> This also allows customers to selectively turn specific vulnerability tests on and off, giving them a high degree of control over how their assets are scanned
- § QVM customers can now define their own scan policies, which includes selecting / deselecting specific tests, for virtually any scan type:
  - Full scan
  - Database scan
  - Discovery scan
  - PCI scan
  - Patch scan
  - Web scan
- <sup>§</sup> Patch scan policies may also include specific vulnerabilities to check for
  - Enables rapid scanning for specific vulnerabilities (e.g. heartbleed); vulnerabilities may be quickly selected via quick filter



### Scan policy example

s Scan policy that excludes thousands of old vulnerabilities from 2001

| Settings Por | t Scan Vulnerabilit | es Tool Groups       | Tools |             |             |
|--------------|---------------------|----------------------|-------|-------------|-------------|
| Included     | Excluded            | Input name           | Q 🖉   |             |             |
| Included     | Name                |                      |       |             |             |
|              | 2001-0126 - xsql s  | tylesheets           |       |             |             |
|              | 2001-0151           |                      |       |             |             |
|              | 2001-0241           |                      |       |             |             |
|              | 2001-0333           |                      |       |             |             |
|              | 2001-0419 Oracle    | oas overflow         |       |             |             |
|              | 2001-0544           |                      |       |             |             |
|              | 2001-0595 koms_c    | onfigure             |       |             |             |
|              | 2001-1010           |                      |       |             |             |
|              | 2001-1216 - Oracl   | e mod plsql overflow |       |             | -           |
|              |                     |                      |       |             |             |
|              |                     |                      |       | Include All | Exclude All |

IBM

## Dynamic scanning allows automatic selection of the appropriate scanner

- <sup>§</sup> Dynamic scanning allows QVM users to assign ranges of IPs to specific QVM scanners
- s Previously, QVM scans were limited to one scanner per scan profile
  - For example, users create a saved asset search to cover all Windows servers
  - QVM scan profile was created, specifying the saved asset search
  - The scan profile was limited to a single scanner, so selection of the "best" scanner to cover all IPs was not possible
- <sup>§</sup> Users can now assign specific CIDR or IP ranges to specific scanners; QVM then automatically selects the appropriate scanner at scan time







### Simplifying the definition of large scans

- QVM now allows users to copy and paste a delimited list of IP addresses into the QVM scan profile, specifying the separator character
- Many customers store asset information in delimited format (like CSV); QVM now simplifies the process of copying that information into the scan profile

| Include Network Nodes   | Exclude Network Nodes      |
|---|----------------------------|
| CIDR Range/IP/IP Range<br>192.168.1.0/24,<br>192.168.2.0/24,<br>192.168.3.0/24<br>Separator Character | CIDR Range/IP/IP Range Add |
| Remove Selected   | Remove Selected            |

IBM

## Automated asset owner assignment eases administration for large customers

- <sup>§</sup> QVM relies on the technical owner name and contact information in the asset database to assign vulnerabilities to users and automatically distribute reports via email
- <sup>s</sup> Users need the ability to assign technical user and contact information to many assets en masse; also allows easy reassignment
- s Asset owners may be assigned by CIDR, name, OS, or via saved asset search
- <sup>§</sup> Remediation deadlines by owner and scheduled assignment runs may also be set

| Name:          | John Doe                                      |  |
|----------------|---|--|
| Email:         | john@acmecorp.com                             |  |
| Contact:       | 876-000-3343                                  |  |
|                | CIDR:   |  |
| Fixed Settings | Asset Name Filter:                            |  |
|                | OS Filter:                                    |  |
|                |   |  |
| Asset Search   | Asset Search: Regulatory compliance servers + |  |

|         |         | Severity | Days |
|---------|---------|----------|------|
| Risk    | Days    | Urgent   | 5    |
| High    | 10      | orgent   | Ŭ    |
|         |         | High     | 10   |
| ledium  | 15      |          |      |
|         | 20      | Medium   | 15   |
| LOW     | 20      | Low      | 20   |
| Warning | 30      | 2011     |      |
|         |         | Warning  | 30   |
|         |         |          |      |
|         |         |          |      |
|         | Default | 15       |      |
|         | Deladir | 10       |      |
|         |         |          |      |
|         | Savo    | Cancel   |      |



Intelligence driven remediation and compliance efficiency improvements

© 2014 IBM Corporation



## Intelligence driven remediation and compliance efficiency improvements

- A key advantage of QVM+QRM is risk prioritization of remediation and compliance processes
  - For example, QRM policies can increase and decrease vulnerability risk scores based on factors including correlation of asset communications, network reachability, asset configuration, patch status, etc
  - This applies to virtually all vulnerabilities, including those acquired from AppScan, IEM/BigFix, Guardium, and third party vulnerability scanners
- <sup>§</sup> Addition of many new out-of-the-box reports, coupled with risk scoring, provide functionality not found in any other product on the market
  - Automated creation and distribution of risk-prioritized patching, vulnerabilities, and asset reports is a huge competitive advantage!
  - Examples
    - PCI ASV report: PCI Approved Scanning Vendors will be able to use QVM to scan customer networks and "attest" to compliance with PCI standards; QRadar customers can run their own tests to ensure that they will pass ASV scans QVM PCI ASV report is in the process of being certified by PCI; Q2 2014 target
    - Generation and distribution of risk prioritized compliance, asset, patch reports
    - "Reminder" reports for asset owners, by assignee, root cause, asset patch,
  - vulnerability asset, asset OS patches, etc





### **PCI ASV Report**

#### PCI ASV Exec Summary & Vuln Details Daily 1PM Generated: Apr 8, 2014, 1:00:18 PM



#### ASV Scan Report Attestation of Scan Compliance

|             | Scan Customer Information |          |                           |  |  |  |
|-------------|---------------------------|----------|---------------------------|--|--|--|
| Company:    | IBM                       |          |                           |  |  |  |
| Contact:    | Sean Cullen               | Title:   | MR                        |  |  |  |
| Telephone:  | 02890222000               | E-mail:  | scullen@qamail.q1labs.lab |  |  |  |
| Business Ad | dress: Legacy Building    |          |                           |  |  |  |
| City:       | Belfast                   | State/Pr | rovince: Ulster           |  |  |  |
| ZIP:        | BT39DT                    | URL:     | www.ibm.com               |  |  |  |
|             |                           |          |                           |  |  |  |

|             |                        | Approved Scanning Vendo | r Information                      |
|-------------|------------------------|-------------------------|------------------------------------|
| Company:    | ASV Company            |                         |                                    |
| Contact:    | John Doe               | Title:                  | MR                                 |
| Telephone:  | 028903333444           | E-mail:                 | JohnDoe@test.com                   |
| Business Ac | Idress: 1 Royal Avenue |                         |                                    |
| City:       | Belfast                | State/Pr                | ovince: Ulster                     |
| ZIP:        | BT100B                 | URL:                    | www.testApprovedSecurityVendor.com |

#### Scan Status

| Compliance Status   |    | Fail        |  |
|---|----|-------------|--|
| Number of unique components scanned:                      | 6  |             |  |
| Number of identified failing vulnerabilities:             | 68 |             |  |
| Number of components found by ASV but not scanned because | 0  |             |  |
| scan customer confirmed components were out of scope:     |    |             |  |
|   |    |             |  |
| Date scan completed:                                      |    | 26 Mar 2014 |  |
| Scan expiration date (90 days from date scan completed):  |    | 24 lun 2014 |  |
| bean expiration date (so days nom date sean completed)    |    | 21 Jun 2021 |  |

#### Scan Customer Attestation

IBM attests on 08 Apr 2014 that this scan includes all components which should be in scope for PCI DSS, any component considered out-of-scope for this scan is properly segmented from my cardholder data environment, and any evidence submitted to the ASV to resolve scan exceptions is accurate and complete. IBM also acknowledges the following: 1) proper scoping of this external scan is my responsibility, and 2) this scan result only indicates whether or not my scanned systems are compliant with the external vulnerability scan requirement of PCI DSS. This scan result does not represent my overall compliance status with PCI DSS or provide any indication of compliance with other PCI DSS requirements.

#### ASV Attestation

This scan and report was prepared and conducted by ASV Company under certificate number R2839040EP, according to internal processes that meet PCI DSS requirement 11.2 and the PCI DSS ASV Program Guide. ASV Company attests that the PCI DSS scan process was followed, including a manual or automated Quality Assurance process with customer boarding and scoping practices, review of results for anomalies, and review and correction of 1) disputed or incomplete results, 2) false positives, and 3) active scan interference. This report and any exceptions were reviewed by John Doe.





## Assets and patches prioritized by risk allow customers to remediate riskiest assets first

| ulnerability | Risk  |
|--------------|-------|
| Count S      | Score |
| 153.         | 3.6   |
|              |       |
|              |       |
|              |       |
| 153.         | 3.6   |
|              |       |
|              | 15    |





## Patches prioritized by vulnerability count allow customers to determine which patches to apply first

| Patch  | Vulnerability<br>Count | Risk Score | Asset Count |
|--|------------------------|------------|-------------|
| RHSA-2013:1806   | 18                     | 96.3       | 9           |
| AIX 5.3: Security Advisory: AIX OpenSSH multiple vulnerabilities                 | 17                     | 93.9       | 10          |
| 120544-33: SunOS 5.10_x86: Apache 2 Patch  | 16                     | 62.4       | 16          |
| Critical Patch Update 2012-07  | 16                     | 59.2       | 16          |
| RHSA-2013:1591   | 13                     | 57.2       | 13          |
| RHSA-2013:1156   | 10                     | 37.0       | 10          |
| CESA-2014:0305   | 9                      | 39.6       | 9           |
| AIX 5.3: Security Advisory: AIX OpenSSL session renegotiation vulnerability      | 9                      | 42.3       | 9           |
| MS10-012: Vulnerabilities in SMB Server Could Allow Remote Code Execution        | 8                      | 59.0       | 2           |
| MS09-001: Vulnerabilities in SMB Could Allow Remote Code Execution               | 6                      | 47.2       | 2           |
| MS09-048: Vulnerabilities in Windows TCP/IP Could Allow Remote Code Execut       | 6                      | 41.8       | 2           |
| ion  |                        |            |             |
| MS03-042: Buffer Overflow in Windows Troubleshooter ActiveX Control Could        | 5                      | 36.5       | 5           |
| Allow Code Execution   |                        |            |             |
| CESA-2011:1378   | 5                      | 18.5       | 5           |
| CESA-2014:0311   | 5                      | 22.0       | 5           |
| MS03-044: Buffer Overrun in Windows Help and Support Center Could Lead to        | 5                      | 32.5       | 5           |
| System Compromise  |                        |            |             |
| MS04-045: Vulnerability in WINS Could Allow Remote Code Execution                | 5                      | 41.5       | 5           |
| MS05-045: Vulnerability in Network Connection Manager Could Allow Denial of      | 5                      | 18.5       | 5           |
| Service  |                        |            |             |
| MS06-025: Vulnerability in Routing and Remote Access Could Allow Remote          | 5                      | 32.5       | 5           |
| Code Execution   |                        |            |             |
| MS12-020: Vulnerabilities in Remote Desktop Could Allow Remote Code Execu        | 4                      | 14.8       | 4           |
|  |                        | 01.0       | 2           |
| MS08-036: Vulnerabilities in Pragmatic General Multicast (PGM) Could Allow       | 4                      | 21.8       | 2           |
| Denial of Service  | 2                      | 12.0       | 1           |
| AIX 7.1: Security Advisory: Multiple Vulnerabilities in AIX BIND                 | 3                      | 13.2       | 1           |
| MS08-020: Vulnerability in DNS Client Could Allow Spooling                       | 2                      | 14.0       | 2           |
| MS08-037: Vulnerabilities in DivS Could Allow Spooling                           | 2                      | 10.4       | 2           |
| MS08-067: Vulnerability in Server Service Could Allow Remote Code Execution      | 2                      | 17.4       | 2           |
| IMS07-058: Vulnerability in KPC Could Allow Denial of Service                    | 2                      | 12.8       | 2           |
| INSU9-041: Vulnerability in Workstation Service Could Allow Elevation of Privile | 2                      | 15.0       | 2           |
| ye<br>MS05-047: Vulpershility in Dlug and Dlay Could Allow Remets Code Execution | 2                      | 17.4       | 2           |
| and Local Elevation of Privilege   | 2                      | 17.4       | 2           |



Making QVM even easier to use

Scheduled scan views





## Centralized credentials streamlines administration, enables separation of duties

- QRadar Vulnerability Manager now allows users to specify vulnerability scan credentials in each scan profile or via a secure centralized credentials facility
- <sup>§</sup> Credentials can be selectively applied to scan profiles, simplifying administration and enabling separation of duties
  - People scheduling scans don't need credentials for the machines being scanned
  - Eases credential definition for on-demand and rule-driven scans
- <sup>§</sup> Users create credential sets via the QRadar admin tab, specifying CIDRs covered by the credentials
  - Centralized credentials utility can be utilized by other QRadar modules in the future
- <sup>s</sup> Credentials are then entered for Windows, Linux/UNIX and network (SNMP) devices
- <sup>§</sup> When users create QVM scan profile, they check 'use centralized credentials', which instructs QVM to pull credentials from the CC store at scan time

| Þ. | Scan Profile Details |
|----|----------------------|
| Þ  | When To Scan         |
| ×  | What To Scan         |
| •  | How To Scan          |
|    | Scan Setup           |





### **Centralized credentials**





## Scheduled scan views help avoid overlaps, minimize network and asset traffic

- <sup>§</sup> Users can now view which scans are scheduled to run on a daily, weekly, and monthly basis
- § Views also graphically display last scan duration; scans profiles may also be edited directly from calendar views







## QRadar Risk Manager v7.2.2

**New Feature Overview** 





Improved QRM performance, scalability and usability
 New topology model

- S Complex configuration tests and compliance standard support
- § New device support
- § Improved path searching

## New QRM topology model provides drastically faster performance, scalability

- S Performing topology calculations in large, complex customer networks could be time and resource intensive
- A new approach to topology calculations now uses set arithmetic and geometric shapes, combined with improved multi-threading, dramatically improves performance and scalability
  - Initial benchmarks show 600% to 700% topology calculation performance gains
  - This will allow QRM to support large customers with > 10,000 devices and will set the stage for near time-time topology and risk calculations as customer network configurations change







## New policy monitor tests support complex configuration tests and compliance standards

- GRadar Risk Manager policy monitor test mechanism has been improved, removing requirement for additive communications tests and increasing test flexibility
- s Improved policy monitor tests
  - Windows configuration tests can now be additive; Windows property tests can be 'equal' or 'not equal'; multiple configuration tests can be included in a single policy
- s These changes are required in order to support configuration-based compliance policies
- s Examples: CIS benchmarks, enforcing corporate configuration standards

| What do you want to name this question?   | Evaluate On: 📀                  |
|---|---------------------------------|
| Windows config tests  | Actual Communication V          |
| What type of data do you want to return? Assets   | Importance Factor:              |
| Time Range:   |                                 |
| Interval Last Hour     ▼  |                                 |
| ○ Fixed 4/8/2014  |                                 |
| Which tests do you want to include in your question?  |                                 |
| have accepted communication to any destination  |                                 |
| have accepted communication to destination networks   |                                 |
| have accepted communication to destination IP addresses   |                                 |
| have accepted communication to destination asset building blocks  |                                 |
| have accepted communication to destination asset saved searches   |                                 |
| have accepted communication to destination reference sets   |                                 |
| have accepted communication to destination remote network locations   |                                 |
| Find Assets that (Clic  | k underlined parameter to edit) |
| have a Microsoft Windows service (lanmanserver) equal to status (Auto)  |                                 |
| and <u>include only</u> if the Microsoft Windows <u>security setting</u> (Accounts: Guest Account Enabled) is <u>equal to</u> | 1                               |
|   |                                 |
|   |                                 |
|   |                                 |

IBM

# New IPS and NextGen firewall support extends topology and policy coverage

- <sup>§</sup> Support for "next generation", "application layer", and "layer 7" devices, which function at the application level, is being added to QRM this year in phases
  - This includes firewalls and intrusion prevention systems (IPS)
    - Examples: Palo Alto Networks, Juniper Networks SRX, IBM XGS IPS, Sourcefire IPS, Tipping Point IPS, etc.
  - Support for these devices provides many advantages
    - Policy monitor tests that correlate vulnerabilities with network reachability will take these devices into account
    - Ability to view device configurations and track historical configuration changes
- S Phased approach
  - 1. QRM 7.2.2: layer 3 support
    - Collection of device configuration data
    - · Placement of devices in topology
  - 2. QRM 7.2.3 and 7.2.4: layer 7 (application) support
    - Full support for layer 7 (application) configurations
    - Additional policy monitor tests to support application layer communication and exploitability tests
- <sup>§</sup> This support also requires an appropriate adapter, released separately



### "Net::Net" path summary summarizes all enabled application paths during path searches

- § QRM now provides the capability to view all enabled ports and protocols across a specific path search
- S Network and security engineers can use this capability to easily determine which application paths exist across specified points on the network







## Improved "blocked path" display simplifies analysis of blocked application paths

- <sup>§</sup> Path searches that fail ("no path") now show the point of the blockage, along with a hoverover option to display the reason
- <sup>s</sup> Users can also display the actual reason for the path blockage (e.g. firewall rules)
- S Network and security engineers can use this to quickly determine what changes need to be made in order to enable application paths

| Below is a representation of the current ne  | etwork topology mod | del.                                   |                      |             |                    |
|--|---------------------|--|----------------------|-------------|--------------------|
| Current Filter:<br>Path from 192.168.230.0/24 to 192.168.24<br>Path Summary:<br>Blocked by rules | 40.0/24 and protocc | ol TCP ( <u>Clear Filter</u> )         | )                    |             |                    |
| Path permutations: 192.168.230.0/24 > 192.168.   | 240.0/24 💌 View F   | Rule(s)                                |                      |             |                    |
| 1:   |                     |  |                      |             |                    |
|  | firewall1           |  |                      |             |                    |
|  | Access Blocked o    | on firewall1<br>.dapters::Generic::XML | -192.168.250.1 eth2: | 192.168.230 | 0.1/24             |
|  | Source<br>Address   | Destination<br>Address                 | Destination<br>Port  | Protocol    | Reason             |
| 192.168.230.0/24   | 192.168.230.0/24    | 192.168.240.0/24                       | 1-65535              | ТСР         | Blocked by<br>rule |
|  |                     |  |                      |             | View Rule(s)       |

### Major QVM and QRM release

- s QRadar Vulnerability Manager
  - Fantastic new capabilities deliver even more value, improve usability and scaraoury
  - Scan policies reduce scan time, increase performance and flexibility
  - Centralized credentials reduce administration time and overhead
  - Automatic scanner assignment increases scalability, eases administration
  - Asset owner management streamlines en masse owner changes
  - Scheduled scan views enables visualization of scheduled scans, eliminating potential overlaps and improving scan efficiencies
  - PCI ASV, risk prioritized remediation and asset reports and much more!
- s QRadar Risk Manager
  - Drastically improved topology performance scales to even larger environments
  - New policy tests enable complex Windows configuration policies like CIS
  - Support for new IPS and Next Gen firewall devices expands topology and policy capabilities
  - Improved path visualizations decrease network administration overhead for users
- s Remember to include QVM+QRM in every deal!



### ibm.com/security

© Copyright IBM Corporation 2014. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, these materials. Nothing contained in these materials is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software. References in these materials to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. Product release dates and/or capabilities referenced in these materials may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. IBM, the IBM logo, and other IBM products and services are trademarks of the International Business Machines Corporation, in the United States, other countries or both. Other company, product, or service names may be trademarks or service marks of others.