

No Tricks, Just Treats

Threat Management with

# IBM QRadar SIEM

October 27, 2022



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# Agenda

## QRadar XDR – IBM's Threat Management Portfolio

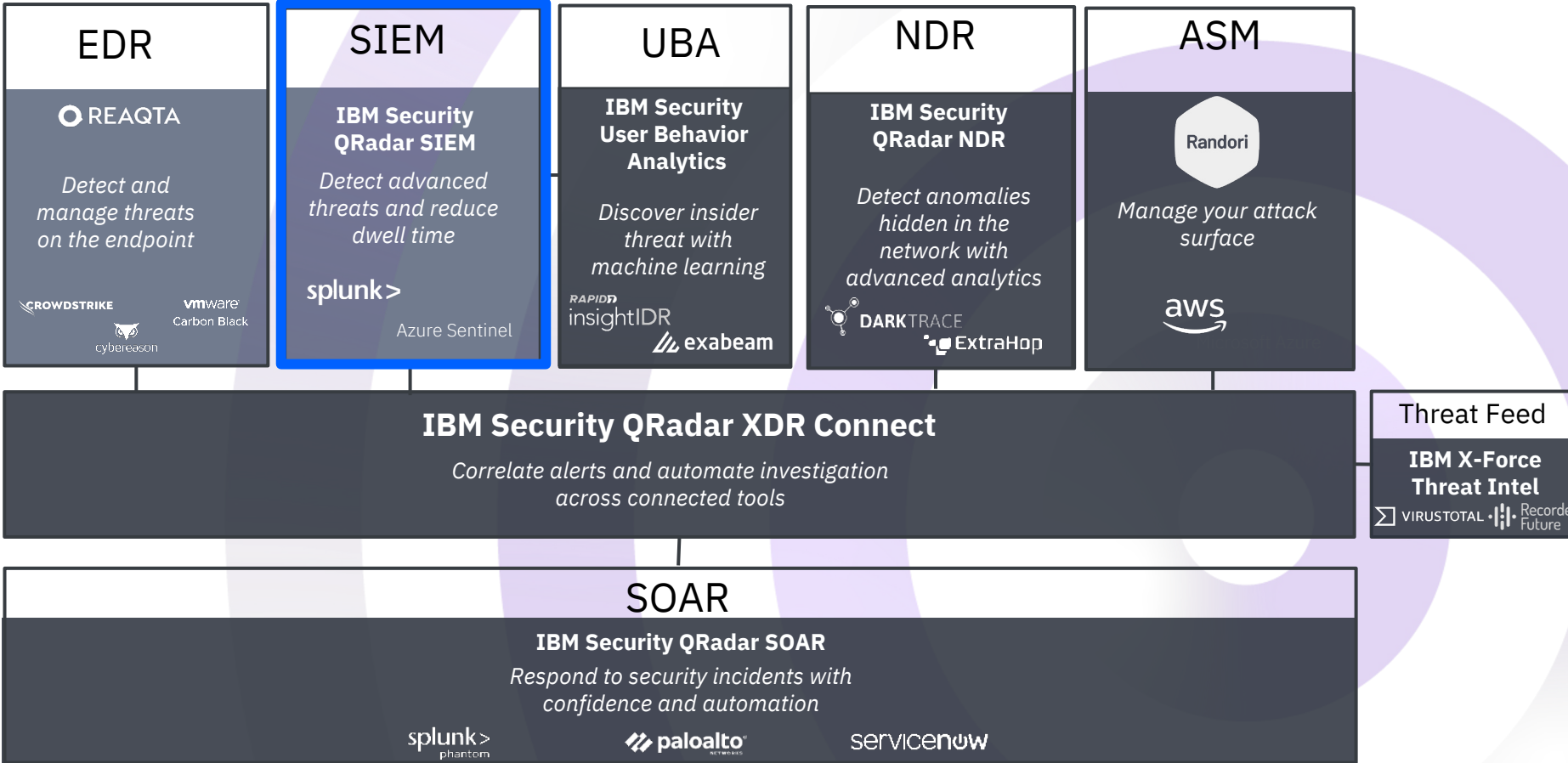
### QRadar SIEM *Core*

- Overview
- New Functionalities

### QRadar SIEM *Next-Gen*

- Sneak Peek

# IBM Security QRadar XDR: An open approach



# QRadar SIEM *Core*

# Overview QRadar SIEM Core

QRadar SIEM Core

QRadar On-Premise

QRadar On Cloud (QRoC)

QRadar SIEM Next-Gen

Currently in Beta with Ten Customers

# IBM Security QRadar a Leader 13 consecutive times

Gartner recognizes IBM QRadar SIEM for strong analytics and customization, our globally dedicated resources, and the breadth of integrations within the IBM Security portfolio.

The 2022 Gartner MQ for SIEM had a strong focus on:

- Endpoint Analytics
- Integration capabilities
- UBA
- Cloud
- Use of Threat Intelligence

## Magic Quadrant

Figure 1: Magic Quadrant for Security Information and Event Management



# QRadar SIEM Core

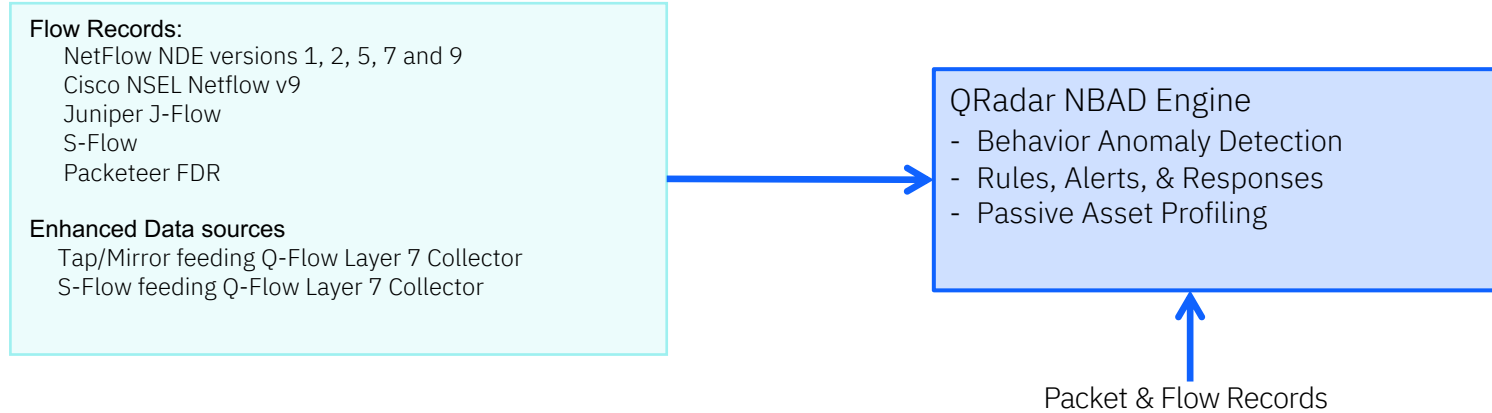
## Nuts & Bolts





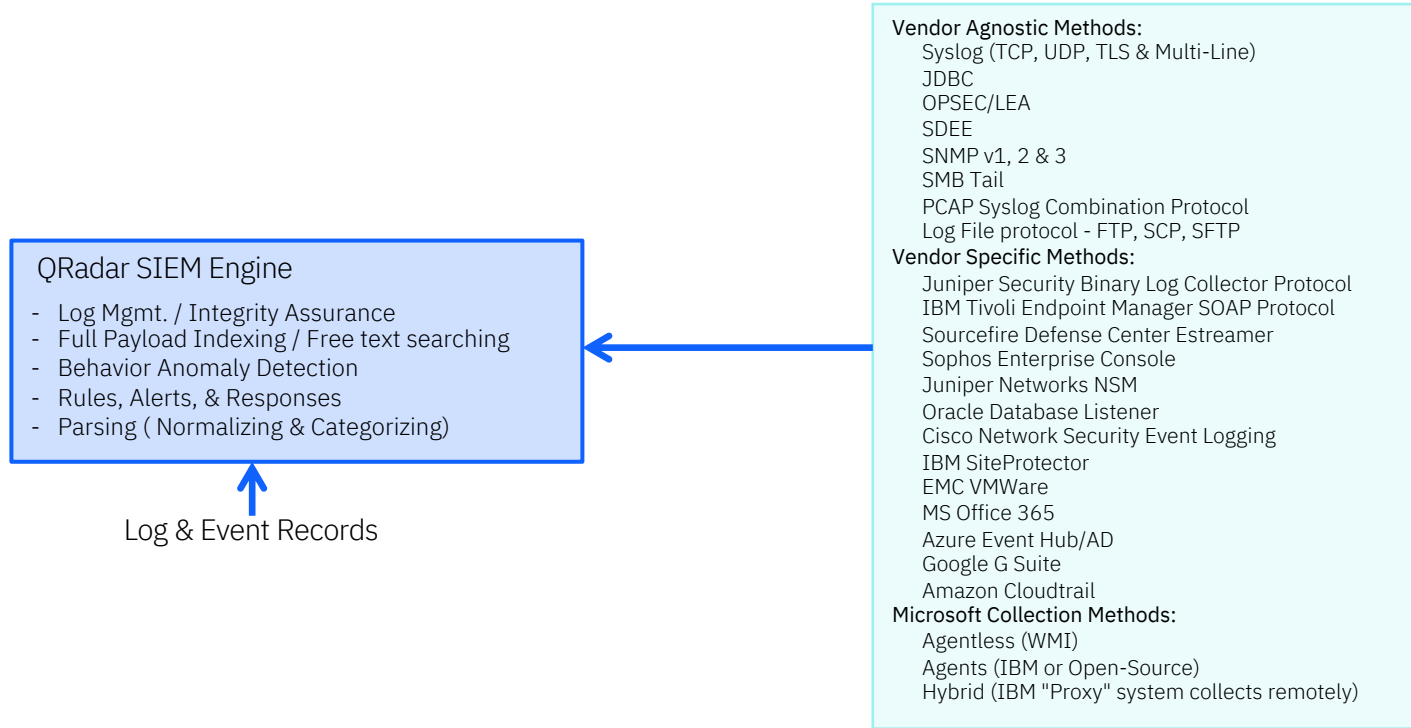
# QRadar SIEM *Core Workflow*

## Network Behavior



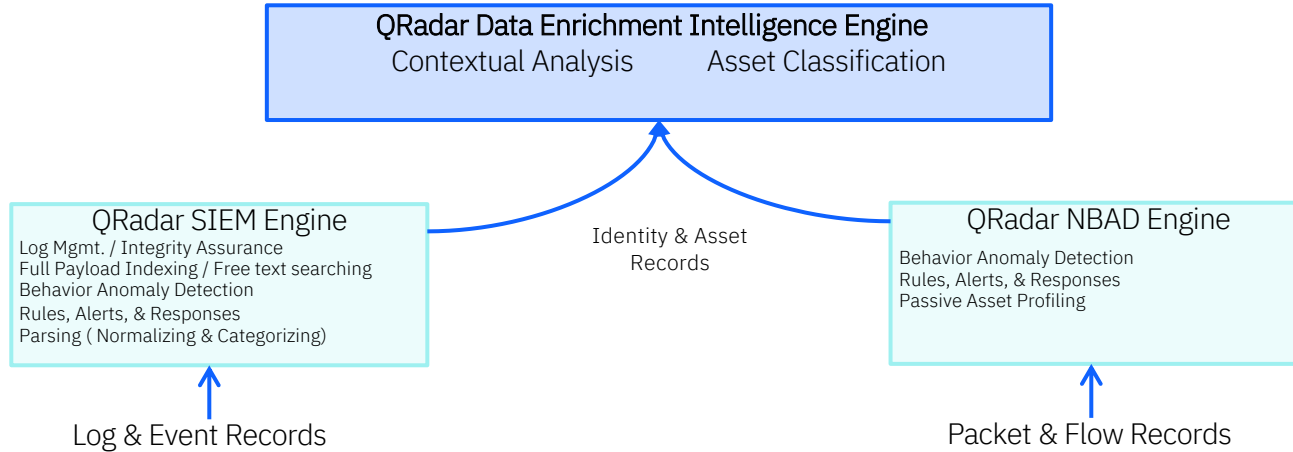
# QRadar SIEM Core Workflow

## Log Events



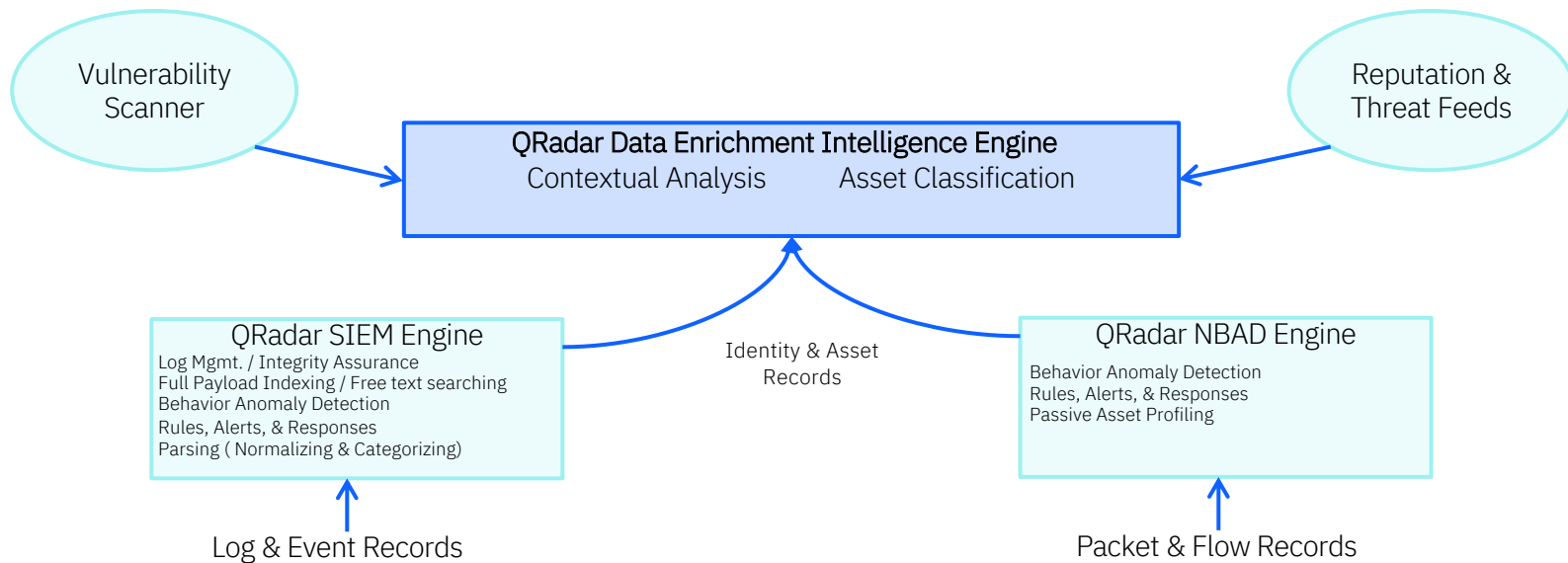
# QRadar SIEM *Core Workflow*

## Enrichment Engine



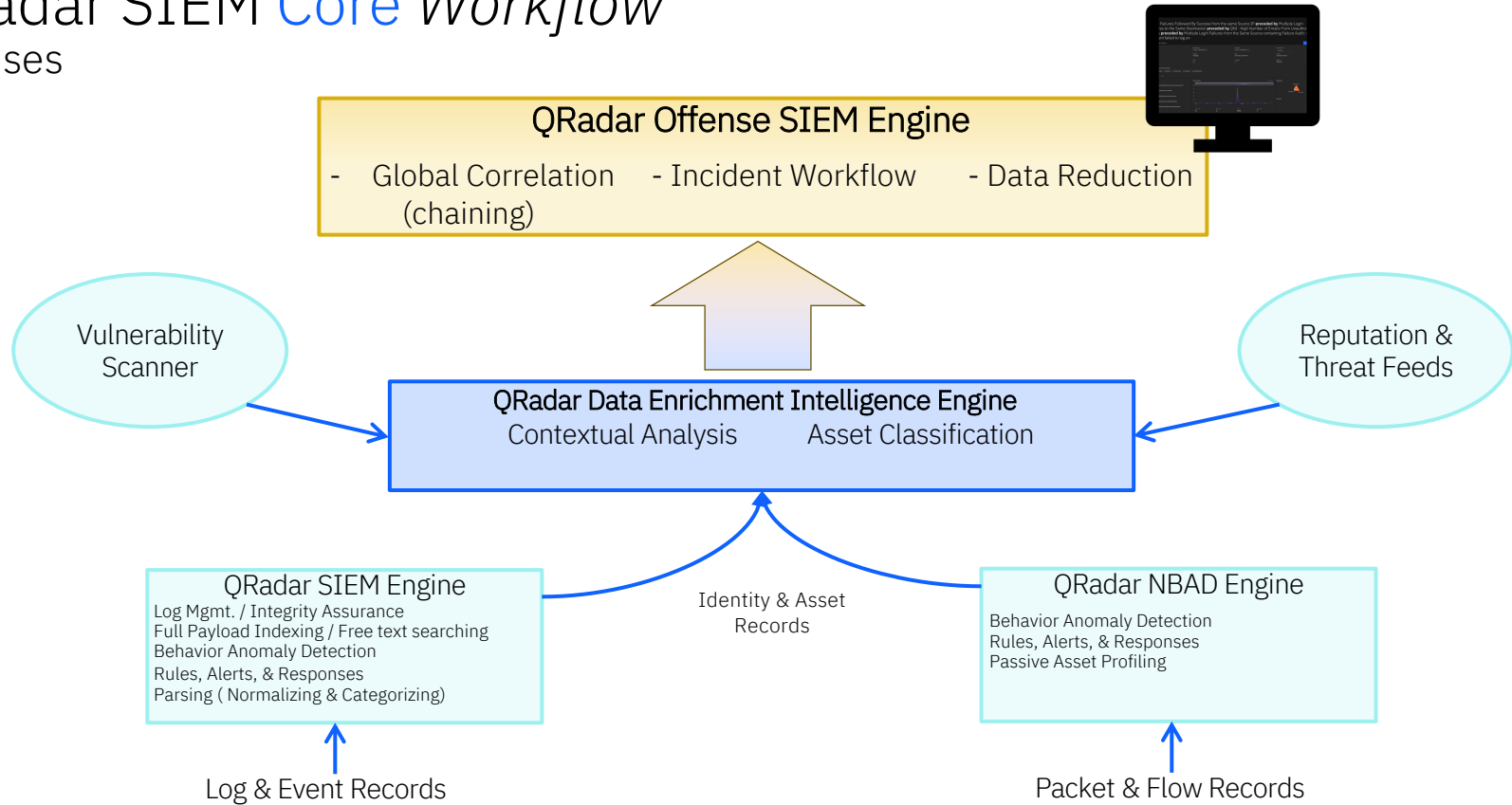
# QRadar SIEM *Core Workflow*

## Additional Data Sources



# QRadar SIEM Core Workflow

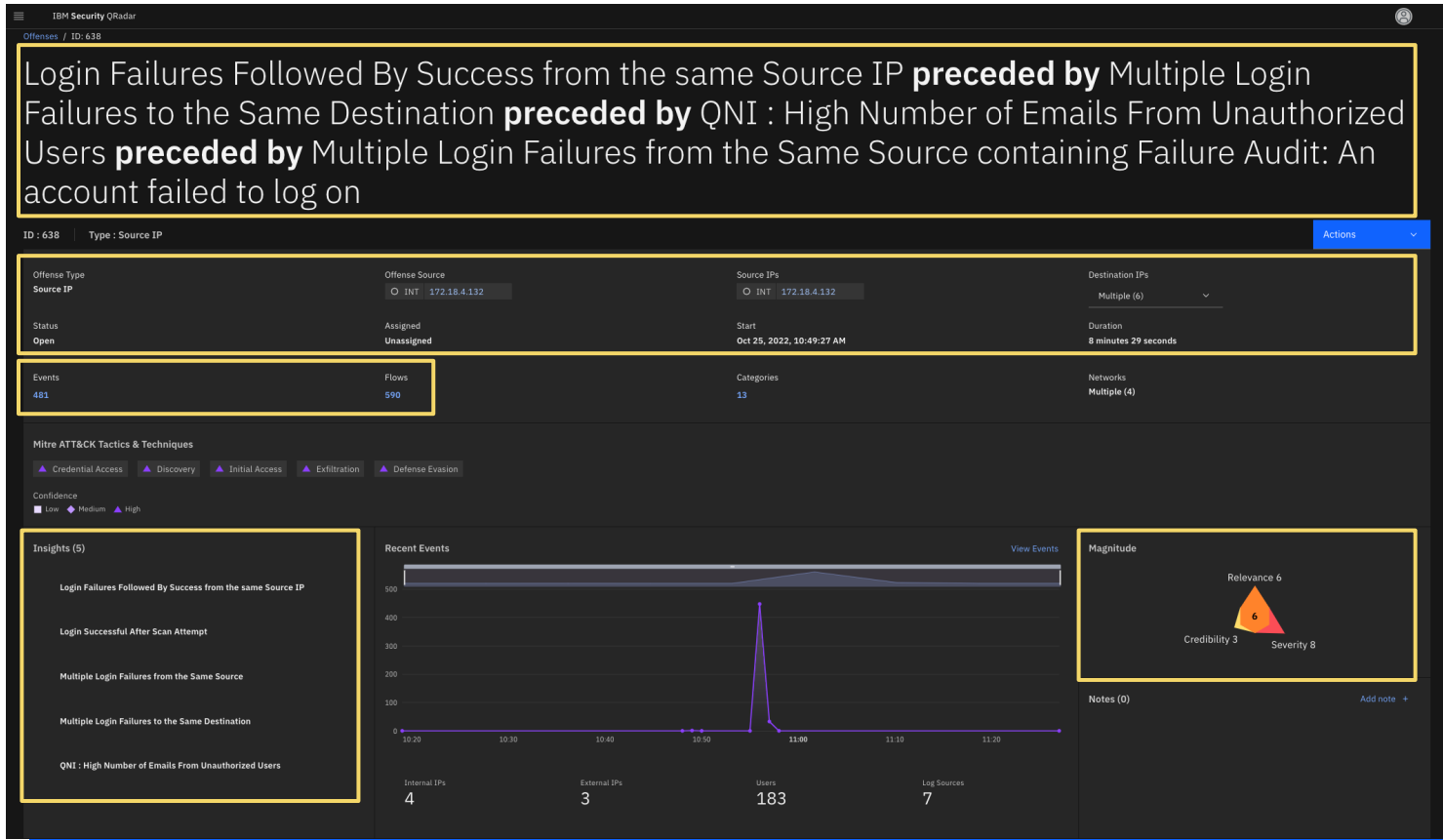
## Offenses



# QRadar SIEM Core Workflow

## Offenses

Login Failures Followed By Success from the same Source IP **preceded by** Multiple Login Failures to the Same Destination **preceded by** QNI : High Number of Emails From Unauthorized Users **preceded by** Multiple Login Failures from the Same Source containing Failure Audit: An account failed to log on



# QRadar SIEM Core

## Summary

### Scalable

- Scalability for the largest deployments, using an embedded database and unified data architecture.
- High Availability and Data Redundancy functionality built-in
- On Prem, Cloud, VM or Hybrid

### Automated

- Automation of data collection, asset discovery, asset profiling, Software updates, etc.

### Intelligent

- Real-time correlation and anomaly detection based on broadest set of contextual data
- Integrated flow analytics with Layer 7 content visibility
- Data sources (any text data, full payload indexing, Full NBAD data capture)
- User Behavior Anomaly detection built-in
- Vulnerability integration
- Reputation and Threat Feeds built-in
- Data Enrichment Engine and Offense SIEM

### Flexible

- Flexibility and ease of use enables “mere mortals” the ability to create and edit correlations rules, reports, dashboards, etc..
- Right ‘Out of the Box’ : over 450 Device Support Modules (DSMs), 620 correlation rules, and 1700 reports

IBM QRadar SIEM Core

# What's new?

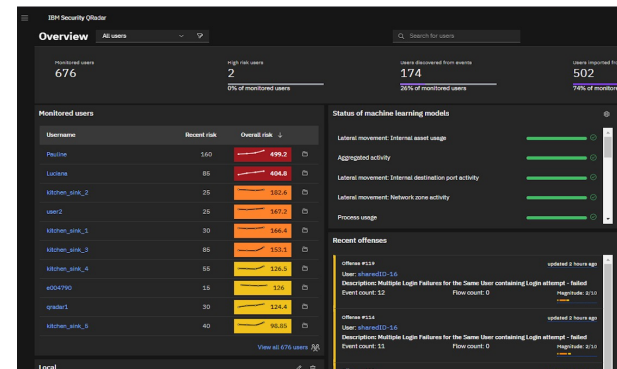
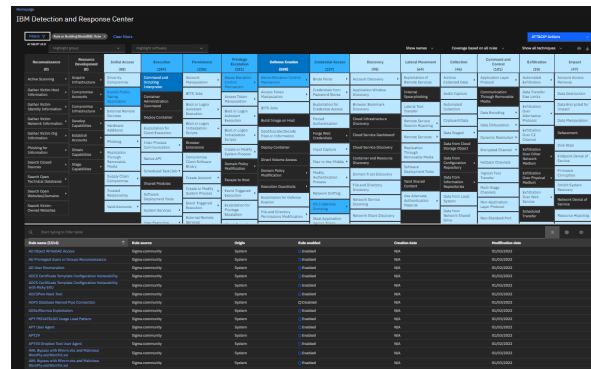
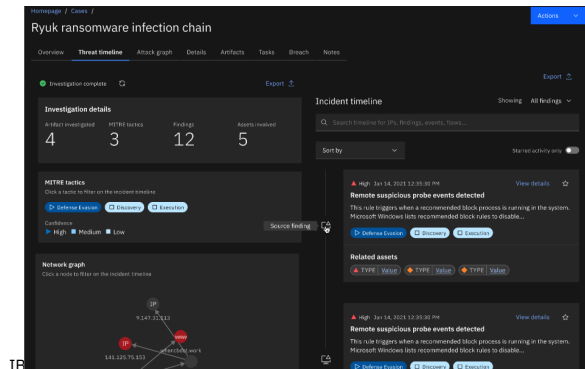


# QRadar SIEM Core

## Key Functionalities

Centralized visibility and intelligent security analytics to detect, investigate and respond to your critical cybersecurity threats

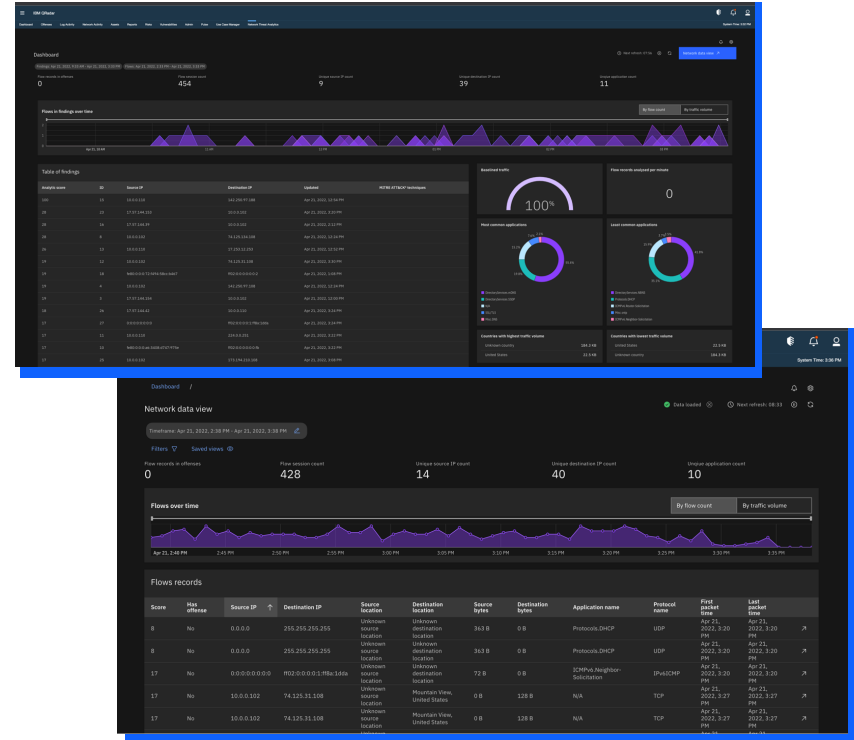
- Get complete visibility quickly and easily leveraging 700+ OOTB integrations
- Use included NDR and UBA to catch the hidden threats
- Don't miss unknown threats with 1500+ out of the box detection rules and analytics mapped to MITRE ATT&CK
- Discover, classify network assets, devices automatically
- Detect unknown threats faster with real time offense-chaining
- Find unknown threats using Machine Learning for NTA and UBA for hidden network & insider threats



# QRadar SIEM Core Key Functionalities

## Network Threat Analytics (NTA)

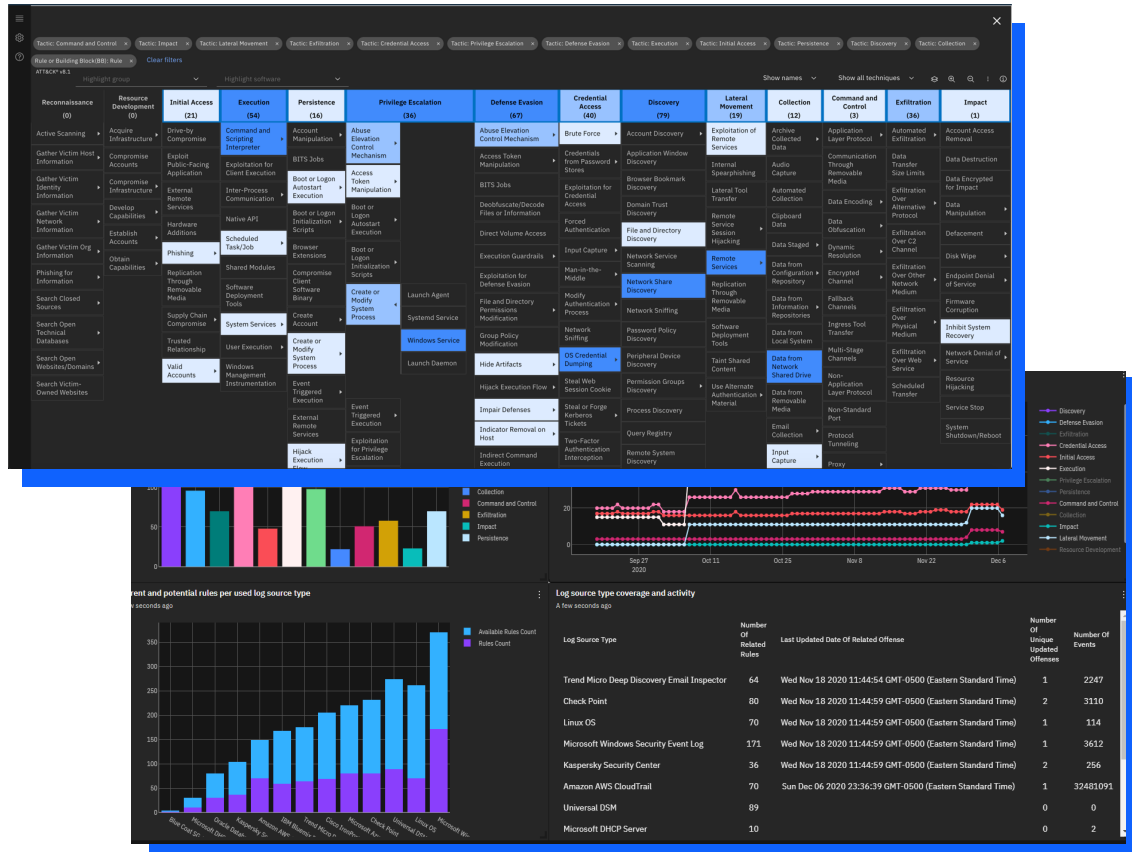
- NTA adds second tier of analytics
  - Continual analysis of related network activity
  - False positive reduction
  - MITRE ATT&CK sub-technique mapping
- Event generation
  - Events generated as new network behaviors observed or anomalies detected
  - NTA events can be used in rules, searches and other QRadar analytics
- New UI
  - Visualize all of your network communications and their analytics scores
  - Drill down into NTA tiered analytics
  - Filter and pivot across your network data and analytics during investigations or threat hunting



# QRadar SIEM Core Key Functionalities

## Use Case Manager

- Integration with UBA to centrally manage all use cases, and apply any rule to UBA
- New ability to report on deployed but inactive rules
- Support for all MITRE platforms, with the ability to select preferred platforms
- Updated support to MITRE ATT&CK v8.2



# QRadar SIEM Core Key Functionalities

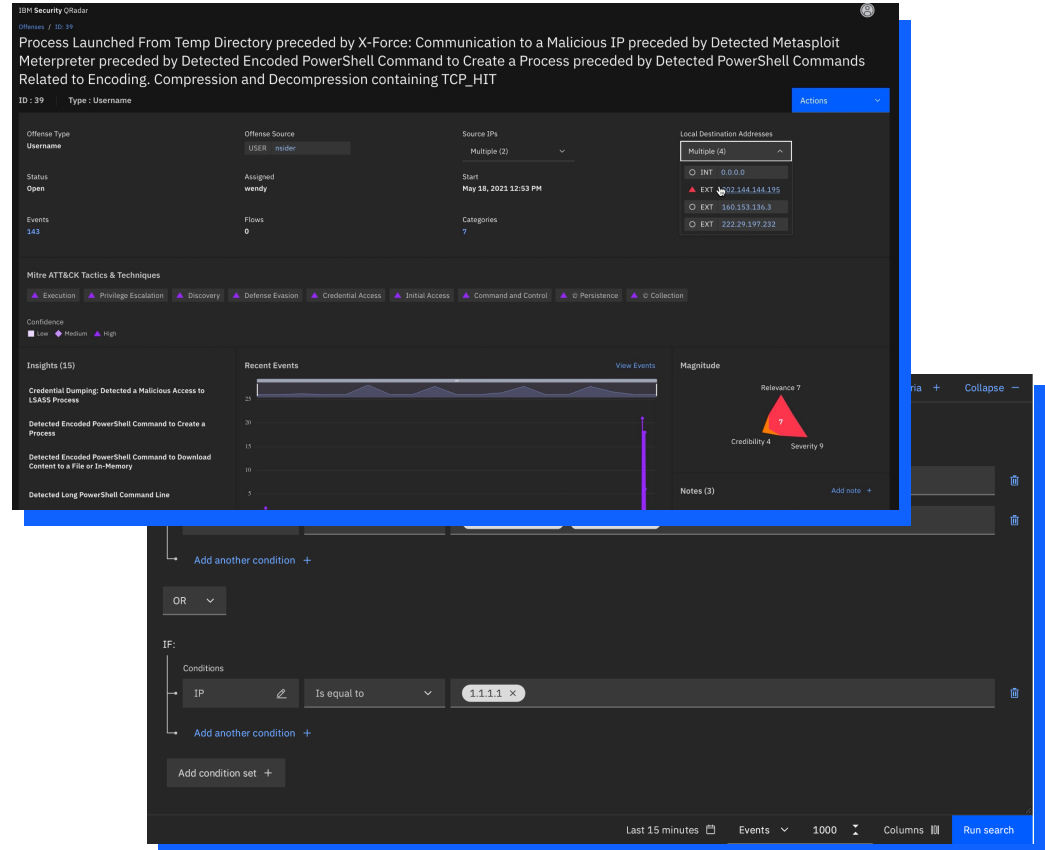
## Analyst Workflow

### Accelerate offense investigations

- New ability to see MITRE ATT&CK Tactics and Techniques that are part of an Offense
- Slide out panel integration with Reference Sets for greater business context
- Major performance improvements to users can navigate more quickly

### Improved search experience

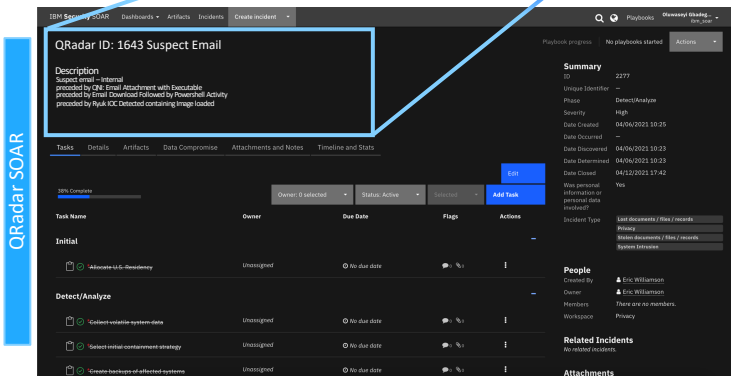
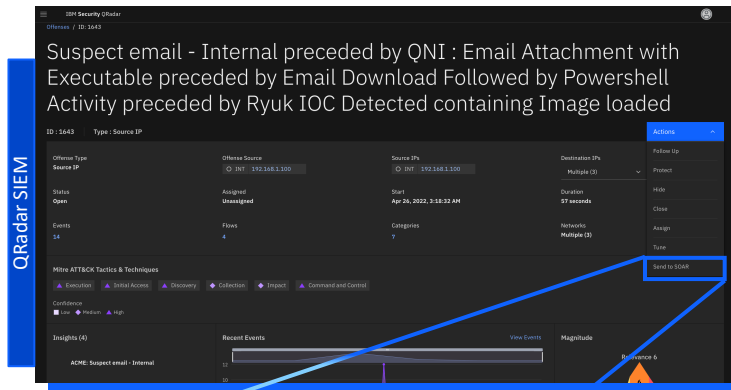
- AQL-less search experience
- Customize column views to see exactly what you're most interested in
- Shared, saved and recent searches for quicker searching
- Delivered as a standard QRadar Application starting with 7.4.3 patch



# QRadar SIEM<sup>x</sup>SOAR Integration

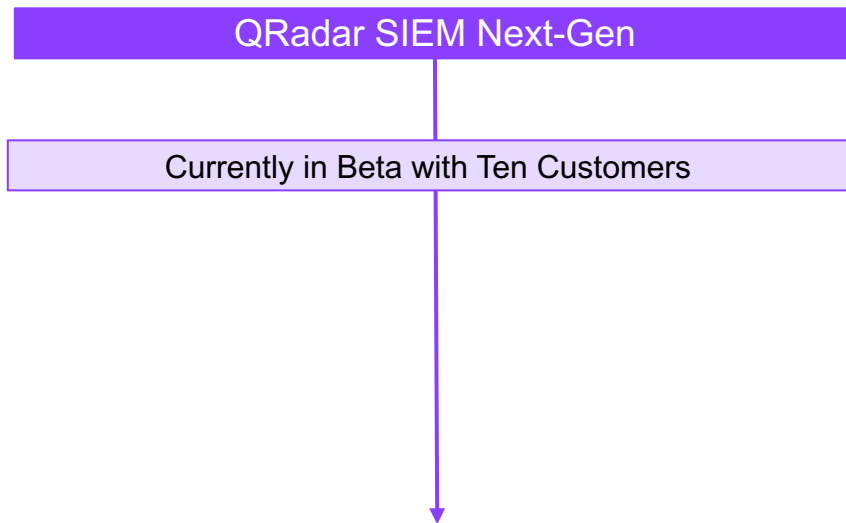
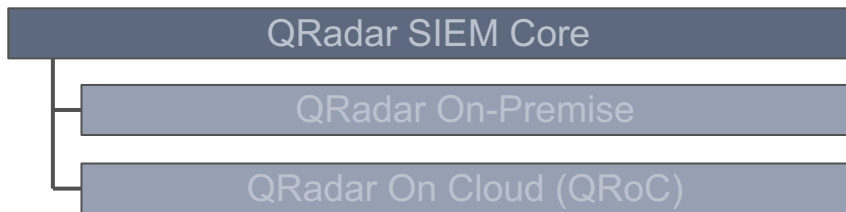
Application to empower, simplify, and streamline the process of escalating and managing cases between QRadar SIEM and QRadar SOAR.

- Now with support for Analyst Workflow integration
- Automatically or manually escalate a QRadar offense to a SOAR case
- Map SOAR case fields to QRadar offense fields using JINJA2 templating syntax and filters
- Query/add SOAR artifacts to QRadar reference sets
- Synchronize notes between SOAR cases and QRadar offenses
- Close QRadar offenses and SOAR cases simultaneously



# QRadar SIEM *Next-Gen*

# Introducing QRadar SIEM *Next-Gen*



# What Customers Have Asked Us

## A solution that can...

1. Ingest telemetry, events at cloud scale with cloud elasticity to extract insights – tightly integrated w/ Cloud Security Services
2. Produce sub-second search results to large queries and enable real-time investigations
3. Offer insightful, interactive, intuitive Visualizations for quick, at-a-glance visibility to most critical threats
4. Provide flexible retention options in hot, warm and cold storage
5. Provide turn-key OOTB cloud services onboarding and automation
6. Provide correlation rules and open analytics for real-time threat detection

# What IBM Security Will Deliver

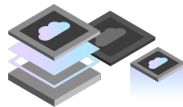
## QRadar SIEM *Next-Gen*

**A cloud-native SIEM solution with cloud-scale elastic ingestion, sub-second search performance, insightful visualization and open/real-time analytics**

Phase 2 – QRadar SIEM

Phase 1 – QRadar NGLM

### Cloud-scale Ingestion



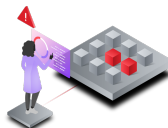
### Sub-second Search



### Insightful Visualization



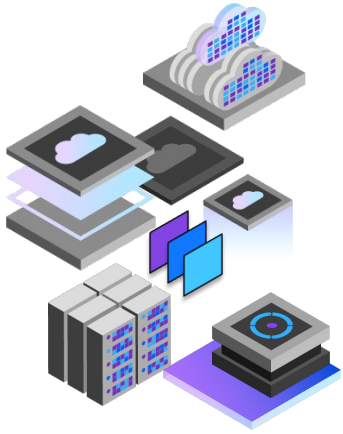
### Real-Time Analytics





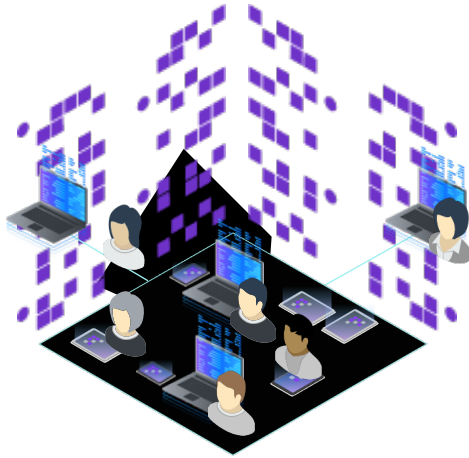
# QRadar SIEM *Next-Gen*

## Phase 2



### Ingestion

Cloud-scale log ingestion to improve visibility



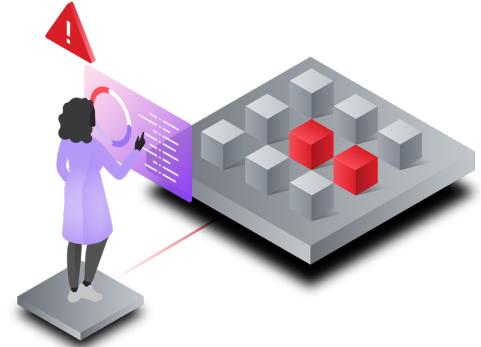
### Search

Sub-second search speed to reduce threat detection and dwell time



### Visualization

Insightful data visualization for efficient threat investigation



### Detection

Community driven Sigma and Yara Analytics for real-time threat detection

IBM QRadar SIEM *Next-Gen*

# Architecture

# QRadar SIEM *Next-Gen* Architecture

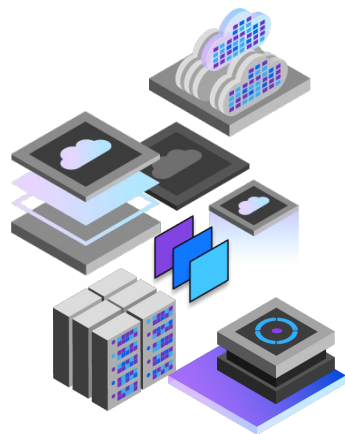
## A Targeted Transformation



- Elastically Scalable
- Cloud Native Architecture
- Multi-Tenancy and HA by Design
- Granular Access Control
- Modern High-Performant Data Warehouse
- Sub-second Search Results
- Hyper Ingestion Capable Parsers

IBM QRadar SIEM *Next-Gen*

# Planned Innovations & Roadmap



## Ingestion

Cloud-scale log  
ingestion to improve  
visibility

- Connect 100+ data sources with a single, easy to follow workflow
- Ingest 500K EPS to collect essential data on all your threat vectors
- Normalize raw payloads to interpret previously unrecognizable events

# Ingestion

## Data Source Management

Homepage / Data Ingestion Management

### Add a data source

**Overview** Connector Connector test Summary

Name

Enter the data source name.

Name of the data source.

Description (Optional)

Enter the data source description.

Description of the data source.

Data source type

There is no data source type available for t

The system or application that events are collected

Connector type

There is no connector type

The collection method for events.

Data source identifier

Connect & Modify Data Sources

*Previously known as Log Sources*

Homepage

### Log and alert sources

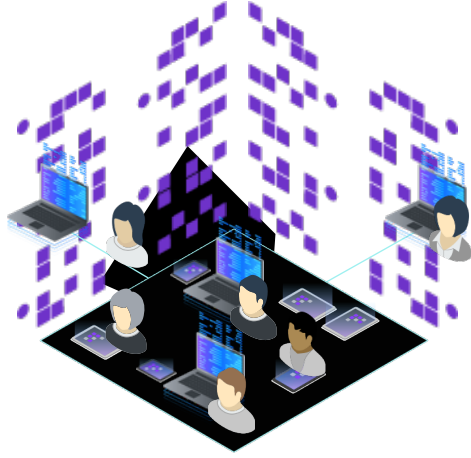
Search by data source name

Refresh Filter Add a data source +

Name	Data source type	Connector type	Data source identifier	Enabled	Data Collector	Added date	Modified date	
ciscoIDSSource1	Cisco Intrusion Prevention System (IPS)	Syslog	ciscoIDSSource1	Yes	N/A	Sat, 09 Jul 2022 20:11:31 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
microsoftWindowsSource6	Microsoft Windows Security Event Log	Syslog	microsoftWindowsSource6	Yes	N/A	Sat, 09 Jul 2022 20:11:34 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
ciscoIDSSource2	Cisco Intrusion Prevention System (IPS)	Syslog	ciscoIDSSource2	Yes	N/A	Sat, 09 Jul 2022 20:11:32 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
microsoftWindowsSource3	Microsoft Windows Security Event Log	Syslog	microsoftWindowsSource3	Yes	N/A	Sat, 09 Jul 2022 20:11:33 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
SendingIP_test	Check Point	Syslog	www.ibm.com	Yes	N/A	Tue, 16 Aug 2022 16:58:39 GMT	Tue, 16 Aug 2022 16:58:39 GMT	:
Test	Check Point	Syslog	Testing	Yes	N/A	Mon, 22 Aug 2022 17:13:32 GMT	Mon, 22 Aug 2022 17:44:57 GMT	:
gnuLinuxSource4	Linux OS	Syslog	gnuLinuxSource4	Yes	N/A	Sat, 09 Jul 2022 20:11:33 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
gnuLinuxSource3	Linux OS	Syslog	gnuLinuxSource3	Yes	N/A	Sat, 09 Jul 2022 20:11:32 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
gnuLinuxSource6	Linux OS	Syslog	gnuLinuxSource6	Yes	N/A	Sat, 09 Jul 2022 20:11:33 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:
trendMicroDeepSecuritySource	Trend Micro Deep Security	Syslog	trendMicroDeepSecuritySource	Yes	N/A	Sat, 09 Jul 2022 20:11:31 GMT	Thu, 04 Aug 2022 17:36:51 GMT	:

Items per page: 10 1-10 of 36 items

1 1 of 4 pages



## Search

Sub-second search speed  
to reduce threat detection  
and dwell time

- Identify threats in seconds by harnessing the power of high performant data warehouse
- Minimize detection time by employing KQL, an advanced intuitive query language
- Build visual queries effortlessly that require no advanced query language knowledge

# Search

## KQL Supported Search & Query Builder via Data Explorer

IBM Cloud Pak | Security

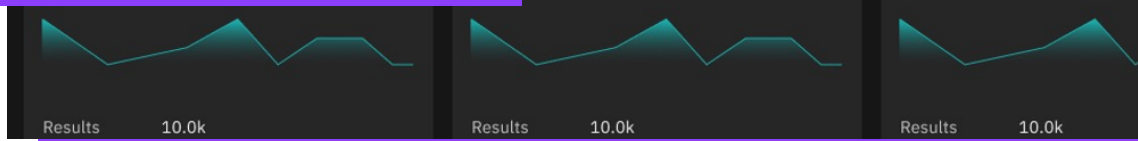
Homepage

### IBM Data Explorer

Visual Advanced KQL ▾

```
| project IPs = tostring(parse_json(ExtendedProperties)["IP Addresses"])
| extend IPs = split(IPs,"") | mv-expand IPs
| where isnotempty(IPs) | distinct tostring(IPs) // get only unique IPs
| union (SecurityAlert // join to Entities IP pool
| mv-expand parse_json(Entities)
| project IPs = Entities["Address"]
| where isnotempty(IPs) | distinct tostring(IPs)) // get only unique IPs
| order by IPs
| count
```

KQL Supported Search & Query Builder via Data Explorer







## Visualization

Insightful data  
visualization for efficient  
threat investigation

- Insightful dashboards to obtain a centralized view of IOC
- Interactive analyst dashboards to visualize critical threats by severity and impact
- Customizable dashboards that streamline SOC Analyst workflow

# QRadar SIEM *Next-Gen*

## Summary

### Ingestion

- Connect 100+ data sources with a single, easy to follow workflow
- Ingest 500K EPS to collect essential data on all your threat vectors
- Normalize raw payloads to interpret previously unrecognizable events

### Search

- Identify threats in seconds by harnessing the power of high performant data warehouse
- Minimize detection time by employing KQL, an advanced threat hunting language
- Build visual queries effortlessly that require no advanced query language knowledge

### Visualization

- Intuitive, powerful dashboards to obtain a centralized view
- Interactive analyst dashboards to visualize critical threats by severity and impact
- Customizable dashboards that streamline SOC Analyst workflow

### Detection

- Community driven Sigma and Yara Analytics for real-time threat detection (Phase II)



Thank you