

Kenna Security -

(ISC)² Partnership and Education Credit Program



What's New with Kenna in 2021?

(ISC)^{2®} | CPE-SUBMITTER

Kenna is now an official partner of (ISC)²!

- Customers that participate in live Kenna's webinar programs, can receive CPE (continuing education credits) toward (ISC)² certification.
- Kenna is initiating this program with a focus on webinar programs and may expand into other digital programs in 1H 2021

What do you need to do?

- ✓ **Provide** your ISC2 member ID when registering for a Kenna webinar
- ✓ Attend the live webinar
- √ Kenna will submit attendance info to (ISC)²
- ✓ (ISC)² will reflect credit for attendance in your personal (ISC)² account
- √ (ISC)² may take up to 10 business days before the credit is reflected in your account
- ✓ One CPE Credit is earned for each hour of attendance







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Getting the Most Out of Data Exports

Agenda

- Use cases for data exports
 - Custom reporting
 - Historical reporting
 - Audit/Compliance requirements
- Types of Exports
 - Assets
 - Vulnerabilities
 - Fixes
- Generating Exports
 - Crafting API Requests
 - Output file formats
 - Incremental Exports



Group Chat Question

Is anyone already using data exports in your organization? If so what use cases are you accomplishing?



Use Cases for Data Exports

- Customized Reporting
 - While Kenna offers many great reporting features, no vendor product will ever perfectly match your organizations' unique reporting needs
 - Exporting data from Kenna opens up even more integration opportunities with data lakes, SIEMs, etc.
- Historical Reporting
 - Kenna is not a historical reporting tool
 - Exporting the data for offline storage allows more in-depth inquiries into trends and "look back" analysis
- Audit/Compliance Requirements
 - Many frameworks and regulations require data to be stored offline and/or for a certain number of years





Types of Data Exports

- Kenna provides three different types of exports
 - Assets
 - Vulnerabilities
 - Fixes
- Each export type provides a different data set
- The export type can be defined in the API request
- Combining these three export types allow you to fully replicate your full Kenna data set outside of the user interface





Asset Exports

- Each asset is listed by its ID with all known metadata included such as
 - Asset priority
 - Operating system
 - Tags
 - Asset owner
 - IP address
 - Hostname
 - MAC address
 - Etc...

```
"id": 11012,
"created at": "2020-11-06T21:18:21Z",
"priority": 10,
"operating system": "Microsoft Windows Server 2008 R2 Standard Service Pack 1",
"notes": null,
"last booted at": null,
"primary locator": "mac address",
"locator": "00:50:56:81:01:df",
"vulnerabilities count": 29,
"status": "active",
"last seen time": "2013-07-01T11:47:23Z",
"network ports": [
        "id": 55204,
        "port_number": 80,
        "extra info": "",
        "hostname": null.
        "name": "www"
        "ostype": "",
        "product": null,
        "protocol": "tcp"
        "state": "open",
        "version": null
1,
"tags": [],
"owner": null,
"inactive at": null,
"status set manually": false,
"urls": {
    "vulnerabilities": "api.kennasecurity.com/assets/11012/vulnerabilities"
"ip address": "10.31.112.26",
"database": null,
"hostname": "qa3app06",
"fqdn": null,
"netbios": "QA3APP06",
"application": null,
"file": null,
"mac address": "00:50:56:81:01:df",
"ec2": null.
"url": null,
"external id": null,
"ipv6": null,
"risk meter score": 320,
"asset groups": [
        "id": 251316.
        "name": "All Assets"
        "id": 252525,
        "name": "Nessus"
```

Vulnerability Exports

- Each finding of a vulnerability is included separately
- As an example, if CVE-2021-1234 is found on 25 assets, we'll have 25 entries in the export
- Data points include
 - Asset ID
 - Creation date
 - Associated fix
 - Connector
 - Scanner detection
 - Risk score
 - Custom fields
 - Etc...

```
"id": 629607,
"status": "open",
"closed at": null,
"created at": "2020-11-06T21:18:21Z",
"due date": null,
"notes": null,
"port": [
    3389
"priority": 10,
"identifiers": [
    "18405"
"last seen time": "2013-07-01T11:47:23.000Z",
"scanner score": 2.0,
"fix id": 1770971,
"scanner vulnerabilities": [
        "port": 3389,
        "external unique id": "18405",
        "open": true
"asset id": 11012,
"connectors": |
        "id": 156474,
        "name": "Nessus XML",
        "connector definition name": "Nessus XML",
        "vendor": "Tenable"
"service ticket": null,
"urls": {
    "asset": "api.kennasecurity.com/assets/11012"
"solution": "- Force the use of SSL as a transport layer for
this service if supported, or/and\n- Select the 'Allow
connections only from computers running Remote Desktop with
Network Level Authentication' setting if it is available.",
"patch": true,
"patch published at": null,
"cve id": "CVE-2005-1794",
"cve description": "Microsoft Terminal Server using Remote
Desktop Protocol (RDP) 5.2 stores an RSA private key in
mstlsapi.dll and uses it to sign a certificate, which allows
```

Fixes Exports

- Each fix that applies to an asset in the environment can be exported
- Fixes are reported uniquely, with the associated assets and vulnerabilities linked
- Data points include
 - Assets
 - Vulnerabilities
 - Diagnosis
 - Solution
 - Reference links
 - Scanner IDs
 - Patch publication date
 - Etc...

```
"fixes": [
       "id": 1770969.
       "diagnosis": "One of several ports that were previously
       open are now closed or unresponsive. <br>There are several
       possible reasons for this :<br>> - The scan may have
       caused a service to freeze or stop
                                              running.<br><br> - An
       administrator may have stopped a particular service
       the scanning process. <br>>This might be an availability
       problem related to the following :<br>> - A network outage
       has been experienced during the scan,
                                                 and the remote
       network cannot be reached anymore by the
                                                    scanner.<br><br>>
       - This scanner may has been blacklisted by the system
       administrator or by an automatic intrusion detection /
       prevention system that detected the scan. <br > - The
       remote host is now down, either because a user
                                                           turned it
       off during the scan or because a select denial
                                                          of service
       was effective. <pr><pr>In any case, the audit of the remote
       host might be incomplete and may need to be done again",
       "consequence": null,
       "solution": "- Increase checks read timeout and/or reduce
       max checks\n\n- Disable any IPS during the Nessus scan",
       "url": null.
       "title": "Open Port Re-check",
       "vendor": null,
       "reference links": null,
       "exact match": null,
       "alternates visible": false,
       "assets": [
           "api.kennasecurity.com/assets/11011",
           "api.kennasecurity.com/assets/11012",
           "api.kennasecurity.com/assets/11013",
           "api.kennasecurity.com/assets/11014",
           "api.kennasecurity.com/assets/11015",
           "api.kennasecurity.com/assets/11016",
           "api.kennasecurity.com/assets/11017"
       "scanner ids": [
           "10919"
       "cves": [].
       "updated at": "2020-11-06T21:18:02.000Z",
       "patch publication date": null,
       "category": null,
       "vuln count": 7,
       "vulnerabilties": [
           "api.kennasecurity.com/vulnerabilties/629570",
```

Interactive Poll

What type of export would provide a list of the tags found on each asset?



Demo Time

- Crafting API requests to target data exports
- Using Gzip to unzip output
- How and why to use incremental exports



Using the API to create data exports

- Data exports are asynchronous so you must run one request to generate an export, and then another to download that export
- Add query parameters to the body of the request to fine-tune your export so that you only grab the data that you need
- Declare your data export type (Asset/Vulnerability/Fix) and file format (XML/Json) in the body of the request



Using Gzip

- Data exports are condensed into a zipped file format called Gzip
- Gzip utilities are built into Linux/Mac OS, but you may need to install additional software such as 7zip to extract on Windows



Incremental Exports

- Export file sizes can be huge! Use incremental exports to only download data that has changed or been added since your last export
- Both relative time ranges and literal date/time stamps can be used e.g. ("records_updated_since": "now-1w") or ("records_updated_since": "2021-01-01")



Interactive Poll

Which of these is not a benefit of incremental exports?









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Thank you

