

# In-Sight Platform API

| API Version | Description                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------|
| 1.0         | Released with In-Sight 24.3.0                                                                     |
| 1.1         | Released with In-Sight 25.1.0: Add support for custom server certificates                         |
| 1.2         | Released with In-Sight 25.2.0: Add support for syslog forwarding TCP framing option               |
| 2.0         | Released with In-Sight 25.3.0: Add new server certificates endpoints and change some existing API |

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# 1. Overview

The In-Sight Platform API uses the HTTP protocol to access and change resource values on the camera. This document describes the Platform API that is available via that protocol.

## 2. Platform API

In the following section, HTTP requests are made to resources.

### 2.1 Root Resources (“api”)

The following items’ base resource is “api” (e.g. “api/audit-log”).

Example usage with curl:

```
curl --user admin: --request GET http://127.0.0.1/api/audit-log
```

Default username is “admin” and password “”. The user must have an access level of “Full” to be authorized to make requests to these resources.

#### 2.1.1 Audit Log

| Endpoint  | Description                                                                                                                                                  |                                           |                                                                                                                                           |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| audit-log | <b>GET</b> – Get the audit log.                                                                                                                              |                                           |                                                                                                                                           |
|           | Example usage with curl:<br>curl --user admin: --request GET http://127.0.0.1/api/audit-log?<br>before=Value&after=Value<br>--header "Accept-Encoding: gzip" |                                           |                                                                                                                                           |
|           | <b>Query Parameters</b>                                                                                                                                      |                                           |                                                                                                                                           |
|           | <b>Parameter</b>                                                                                                                                             | <b>Value</b>                              | <b>Default</b>                                                                                                                            |
|           | before                                                                                                                                                       | ISO 8601 formatted date                   | N/A                                                                                                                                       |
|           |                                                                                                                                                              |                                           | <b>Description</b>                                                                                                                        |
|           | after                                                                                                                                                        | ISO 8601 formatted date                   | N/A                                                                                                                                       |
|           |                                                                                                                                                              |                                           | Only events with a timestamp before the provided date are included in the response. When omitted, there is no "before" filtering applied. |
|           |                                                                                                                                                              |                                           | Only events with a timestamp after the provided date are included in the response. When omitted, there is no "after" filtering applied.   |
|           | <b>Supported Coding Types (Compression)</b>                                                                                                                  |                                           |                                                                                                                                           |
|           | <b>Request “Accept-Encoding” Header</b>                                                                                                                      | <b>Response “Content-Encoding” Header</b> | <b>Description</b>                                                                                                                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                   |                          |                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | "Accept-Encoding:" (or not given) | N/A                      | No encoding requested; response will yield uncompressed JSON data.                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | "Accept-Encoding: gzip"           | "Content-Encoding: gzip" | "gzip" encoding requested; response will yield compressed JSON data, which can be decompressed with "gzip -d" or similar. |
| <p><b>Response Data</b></p> <p>JSON array literal of <a href="#">Audit Log</a> objects.</p> <pre> {   "\$schema": "https://json-schema.org/draft/2019-09/schema",   "title": "Download audit log, GET /api/audit-log",   "type": "array",   "items": {     "description": "Download audit log event entry",     "type": "object",     "required": [       "timestamp",       "hostname",       "severity",       "type",       "event",       "result",       "structuredData"     ],     "properties": {       "timestamp": {         "description": "ISO 8601 formatted timestamp of the event",         "type": "string",         "format": "date-time"       },       "hostname": {         "description": "Hostname of the machine the event occurred on",         "type": "string",         "minLength": 1       },       "severity": {         "description": "Log severity of the event",         "type": "string",         "enum": [           "emerg",           "alert",           "crit",           "err",           "warning",           "notice",           "info",           "debug"         ]       },       "type": {         "description": "Audit log event type",         "type": "string",         "minLength": 1       },       "event": {         "description": "Audit log event id",         "type": "string",         "minLength": 1       },       "result": {         "description": "Audit log event result",         "type": "string",         "minLength": 0       }     }   } }</pre> |                                   |                          |                                                                                                                           |

```

"structuredData": {
  "description": "Structured data in the corresponding syslog messages",
  "required": [
    "auditEvent@39975",
    "timeQuality"
  ],
  "properties": {
    "auditEvent@39975": {
      "description": "Additional IEC 62443 4-2 audit event data",
      "required": [
        "category",
        "source",
        "id"
      ],
      "additionalProperties": false,
      "properties": {
        "source": {
          "description": "Actor which triggered the audit log event",
          "type": "string",
          "enum": [
            "device",
            "remoteSystem",
            "humanUser"
          ]
        },
        "category": {
          "description": "Audit log event category",
          "type": "string",
          "enum": [
            "accessControl",
            "requestError",
            "controlSystem",
            "backupRestore",
            "config",
            "auditLog"
          ]
        },
        "id": {
          "description": "Id of the audit event resetting to 0 each boot and incrementing
by 1 for each successive event",
          "type": "integer",
          "minimum": 0,
        }
      }
    },
    "timeQuality": {
      "description": "RFC 5424 timeQuality structured data parameters",
      "required": [
        "isSynced",
        "tzKnown"
      ],
      "properties": {
        "isSynced": {
          "description": "Identifies whether the timestamp was recorded while the device
was synchronized with a time server",
          "type": "string",
          "enum": [
            "0",
            "1"
          ]
        },
        "tzKnown": {
          "description": "Identifies whether the timestamp was set with the time zone
configured",
          "type": "string",
          "enum": [
            "0",
            "1"
          ]
        }
      }
    },
    "auth@39975": {
      "description": "Describe the authorization of an event - who did it",
      "required": [
        "user"
      ]
    }
  ]
}

```

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <pre>     "additionalProperties": false,     "properties": {       "user": {         "description": "Id of coguser which was authorized for the event",         "type": "string",         "minLength": 1       }     }   },   "configChange@39975": {     "description": "Describe the configuration change",     "required": [       "old",       "new"     ],     "additionalProperties": false,     "properties": {       "property": {         "description": "Description of the property being changed if the 'event id' is too constrained to adequately identify the system property being configured.",         "type": [           "string",           "number",           "integer",           "object",           "array",           "boolean",           "null"         ]       },       "old": {         "description": "Value used for the configuration option prior to the config change event",         "type": [           "string",           "number",           "integer",           "object",           "array",           "boolean",           "null"         ]       },       "new": {         "description": "New value used for the configuration option as a result of the config change event",         "type": [           "string",           "number",           "integer",           "object",           "array",           "boolean",           "null"         ]       }     }   } } </pre> |
| audit-log/<br>syslog-<br>forwarding | <p><b>GET</b> – Get the current syslog forwarding configuration of whether the forwarding is enabled. When enabled, also include the address, port, and severity filter.</p> <p>Example usage with curl:<br/>curl --user admin: --request GET http://127.0.0.1/api/audit-log/syslog-forwarding</p> <p><b>Response Data</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

```

{
  "$schema": "https://json-schema.org/draft/2019-09/schema",
  "title": "GET /api/audit-log/syslog-forwarding response data",
  "type": "object",
  "required": [
    "enabled"
  ],
  "additionalProperties": false,
  "properties": {
    "enabled": {
      "type": "boolean"
    },
    "address": {
      "type": "string",
      "anyOf": [
        {
          "format": "idn-hostname"
        },
        {
          "format": "ipv4"
        }
      ],
      "description": "Address of the remote syslog collector which audit events will be forwarded to"
    },
    "port": {
      "type": "integer",
      "minimum": 1,
      "maximum": 65535
    },
    "severityFilter": {
      "description": "Log severity of the event",
      "type": "string",
      "enum": [
        "emerg",
        "alert",
        "crit",
        "err",
        "warning",
        "notice",
        "info",
        "debug"
      ]
    },
    "tcp_framing": {
      "description": "TCP framing mode",
      "type": "string",
      "enum": [
        "octet-counted",
        "traditional"
      ],
      "default": "octet-counted"
    }
  ],
  "allOf": [
    {
      "if": {
        "properties": {
          "enabled": {
            "const": true
          }
        }
      },
      "then": {
        "required": [
          "severityFilter",
          "port",
          "address",
          "tcp_framing"
        ]
      }
    }
  ],
  "examples": [
    {
      "enabled": false
    }
  ],

```

```

    {
      "enabled": true,
      "address": "example-server-hostname",
      "port": 6514,
      "severityFilter": "warning",
      "tcp_framing": "octet-counted"
    }
  ]
}

```

**PUT** – Enable syslog forwarding by specifying the remote forwarding address and optionally an event severity filter. *Note: Syslog forwarding requires octet-counting TCP framing in the syslog collector.*

Example usage with curl:

```
curl --user admin: --request PUT --header "Content-Type: application/json"
--data "Request Data" http://127.0.0.1/api/audit-log/syslog-forwarding
```

### Request Data

```

{
  "$schema": "https://json-schema.org/draft/2019-09/schema",
  "title": "PUT /api/audit-log/syslog-forwarding request data",
  "type": "object",
  "required": [
    "address"
  ],
  "additionalProperties": false,
  "properties": {
    "severityFilter": {
      "description": "Log severity of the event",
      "type": "string",
      "enum": [
        "emerg",
        "alert",
        "crit",
        "err",
        "warning",
        "notice",
        "info",
        "debug"
      ],
      "default": "info"
    },
    "port": {
      "type": "integer",
      "minimum": 1,
      "maximum": 65535,
      "default": 6514
    },
    "address": {
      "type": "string",
      "anyOf": [
        {
          "format": "idn-hostname"
        },
        {
          "format": "ipv4"
        }
      ],
      "description": "Address of the remote syslog collector which audit events will be forwarded to"
    },
    "tcp_framing": {
      "description": "TCP framing mode",
      "type": "string",
      "enum": [
        "octet-counted",
        "traditional"
      ],
      "default": "octet-counted"
    }
  },
  "examples": [
    {
      "address": "example-server-hostname",

```

|  |                                                                                                                                                                             |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <pre>       "port": 6514,       "severityFilter": "info",       "tcp_framing": "octet-counted"     }   ] }</pre>                                                            |
|  | <p><b>DELETE</b> – Disable syslog forwarding.</p> <p>Example usage with curl:<br/> curl --user admin: --request DELETE http://127.0.0.1/api/audit-log/syslog-forwarding</p> |

## 2.1.2 Server Certificates

Note: The Server Certificates API is currently under active development. **Breaking changes** are expected in the coming releases as we continue to enhance and refine its functionality.

The following endpoints allow users to create, read, and delete server certificates on the device. After installing a certificate, users must activate it by selecting one of the supported protocols available from the protocols endpoint.

| Endpoint                         | Verb Description                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| security/certificates/protocols  | <p><b>GET</b> – Get the list of supported protocols.</p> <p>Example usage with curl:<br/> curl --user admin: --request GET<br/> http://127.0.0.1/api/security/certificates/protocols</p> <p><b>Response Data</b></p> <p>200 – JSON array of <a href="#">ProtocolModel</a> objects</p>                                                             |
| security/certificates/tls        | <p><b>GET</b> – Get the list of installed certificates and pending certificate signing requests.</p> <p>Example usage with curl:<br/> curl --user admin: --request GET<br/> http://127.0.0.1/api/security/certificates/tls</p> <p><b>Response Data</b></p> <p>200 – JSON object literal of <a href="#">CertificateAndCsrMetadataListModel</a></p> |
| security/certificates/tls/rename | <p><b>POST</b> – Rename a certificate using two query params, src and dest.</p> <p>Example usage with curl:<br/> curl --user admin: --request POST<br/> "http://10.28.124.120/api/security/certificates/tls/rename?<br/> src=existing_cert_name&amp;dest=new_cert_name "</p> <p><b>Response Data</b></p> <p>200 – TLS certificate renamed</p>     |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |                                                 |                                        |                                                      |                      |                                              |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------|----------------------------------------|------------------------------------------------------|----------------------|----------------------------------------------|
|                                        | <p>400 – Invalid request</p> <p>404 – TLS certificate not found</p> <p>409 – Certificate ID already in use</p> <p>500 – Internal server error</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                 |                                        |                                                      |                      |                                              |
| security/certificates/tls/{id}         | <p><b>GET</b> – Get the certificate.</p> <p>Example usage with curl:</p> <pre>curl --user admin: --request GET http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT</pre> <p><b>Response Data</b></p> <p>200 – JSON object literal of <a href="#">CertificateMetadataModel</a></p> <p>404 – TLS certificate not found</p> <p><b>PUT</b> – Install a certificate with an encrypted private key. The private key must be password protected, and the password must be provided to unwrap the private key.</p> <table> <tr> <td>cert_file<br/>required</td><td>string &lt;binary&gt;<br/>DER encoded certificate file</td></tr> <tr> <td>encrypted_private_key_file<br/>required</td><td>string &lt;binary&gt;<br/>Encrypted PKCS#8 private key file</td></tr> <tr> <td>password<br/>required</td><td>string<br/>Password for encrypted private key</td></tr> </table> <p>Example usage with curl:</p> <pre>curl --user admin: --request PUT --form cert_file=@/data/workspace/certificate-management/premade_cert.der --form encrypted_private_key_file=@/data/workspace/certificate-management/premade_key.der --form password=the_keys_password http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT</pre> <p><b>Response Data</b></p> <p>200 – Certificate installed</p> <p>400 – Invalid request</p> <p>409 – Certificate already installed with another ID, or ID already in use</p> | cert_file<br>required | string <binary><br>DER encoded certificate file | encrypted_private_key_file<br>required | string <binary><br>Encrypted PKCS#8 private key file | password<br>required | string<br>Password for encrypted private key |
| cert_file<br>required                  | string <binary><br>DER encoded certificate file                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |                                                 |                                        |                                                      |                      |                                              |
| encrypted_private_key_file<br>required | string <binary><br>Encrypted PKCS#8 private key file                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                 |                                        |                                                      |                      |                                              |
| password<br>required                   | string<br>Password for encrypted private key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                                                 |                                        |                                                      |                      |                                              |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | <p>500 – Internal server error</p> <hr/> <p><b>DELETE</b> – Delete the certificate.</p> <p>Example usage with curl:</p> <pre>curl --user admin: --request DELETE http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT</pre> <p><b>Response Data</b></p> <p>204 – TLS certificate deleted</p> <p>400 – Invalid TLS certificate identity</p> <p>404 – TLS certificate not found</p>                                                                                                                                                                                                                                                        |
| security/certificates/tls/{id}/csr | <p><b>PUT</b> – Generate a certificate signing request for the device using a 3072-bit RSA key.</p> <p>Example usage with curl:</p> <pre>curl --user admin: --request PUT --header "Content-Type: application/json" --data '{"subject": {"C": "US", "ST": "MA", "L": "Natick", "O": "Cognex", "CN": "IS3805MP-abcdef"}, "subjectAltName": ["DNS:IS3805MP-abcdef", "DNS:IS3805MP-abcdef.net.corporation.com", "IP:127.0.0.1"]}' http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT/csr</pre> <p><b>Response Data</b></p> <p>200 - String containing the contents of a certificate signing request</p> <p>400 – Invalid CSR identity</p> |
| security/certificates/tls/{id}/pem | <p><b>PUT</b> – Install a signed certificate.</p> <p>Example usage with curl:</p> <pre>curl -user admin: --request PUT --form cert_pem_file=@/data/workspace/certificate-management/signed.pem http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT/pem</pre> <p><b>Response Data</b></p> <p>200 – JSON object literal of <a href="#">CertificateMetadataModel</a></p>                                                                                                                                                                                                                                                                   |

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | 400 – Invalid request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| security/certificates/tls/{id}/activate | <p><b>PUT</b> – Activate a TLS certificate for specific protocols or set it as the default certificate. Use an empty list to clear assignments, "default" to set the certificate as the default certificate, or a list of specific protocols to activate the certificate for. Note that this will cause a configuration change that may cause temporary downtime for some services.</p> <p>Example usage with curl:</p> <pre>curl --user admin: --request PUT --header "Content-Type: application/json" --data '{ "protocols": [ "https" ] }' http://127.0.0.1/api/security/certificates/tls/INSIGHT_TLS_CERT/activate</pre> <p><b>Response Data</b></p> <p>200 – Certificate activated</p> <p>400 – Invalid request</p> <p>404 – TLS certificate not found</p> <p>500 – Internal server error</p> |

## 3.Object Types

### 3.1 Audit Log

| Property       | Description                                                                                                                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| severity       | <a href="#">Priority</a>                                                                                                                                                                                           |
| type           | Customer facing ID for the subsystem or process on the system that records the event.                                                                                                                              |
| event          | The event ID uniquely identifies an audit log event within the scope of the audit log event type.                                                                                                                  |
| result         | <p>When an event ID may not sufficiently describe the result of an event due to non-static data, additional data may be provided in the event result.</p> <p>Events are allowed to have an empty event result.</p> |
| structuredData | <a href="#">Structured Data</a>                                                                                                                                                                                    |
| hostname       | Name of the device on which the event occurred.                                                                                                                                                                    |
| timestamp      | System time in milliseconds when the log event was reported.                                                                                                                                                       |

#### 3.1.1 Priority

| Level     | Value | Example Usage                                                                                                                              |
|-----------|-------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Emergency | emerg | N/A                                                                                                                                        |
| Alert     | alert | <ul style="list-style-type: none"> <li>Detected tamper events</li> <li>Detected configuration incompatible with security policy</li> </ul> |
| Critical  | crit  | N/A                                                                                                                                        |

|               |         |                                                                                          |
|---------------|---------|------------------------------------------------------------------------------------------|
| Error         | err     | <ul style="list-style-type: none"> <li>Failure to apply configuration changes</li> </ul> |
| Warning       | warning | <ul style="list-style-type: none"> <li>Access denied to device</li> </ul>                |
| Notice        | notice  | <ul style="list-style-type: none"> <li>Changes in system configuration</li> </ul>        |
| Informational | info    | <ul style="list-style-type: none"> <li>Access granted to device</li> </ul>               |
| Debug         | debug   | N/A                                                                                      |

### 3.1.2 Structured Data

| SD-ID              | PARAM-NAME | PARAM-VALUE                                                                                                                               |
|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| timeQuality        | tzKnown    | See RFC-5424: The Syslog Protocol, section 7.1.1 tzKnown.                                                                                 |
|                    | IsSynced   | See RFC-5424: The Syslog Protocol, section 7.1.2 isSynced.                                                                                |
| auditEvent@39975   | source     | <a href="#">Source</a>                                                                                                                    |
|                    | category   | <a href="#">Category</a>                                                                                                                  |
|                    | id         | Monotonically increasing counter to track all successfully recorded audit events.                                                         |
| auth@39975         | user       | ID of coguser that was authorized for the event.                                                                                          |
| configChange@39975 | property   | Description of the property being changed if the event ID is too constrained to adequately identify the system property being configured. |
|                    | old        | Value used for the configuration option prior to the config change event.                                                                 |
|                    | new        | New value used for the configuration option because of the config change event.                                                           |

#### 3.1.2.1 Source

| Name               | Value        | Actor triggering the event                |
|--------------------|--------------|-------------------------------------------|
| Originating Device | device       | A process internal to the system          |
| Software Process   | remoteSystem | A remote system without human interaction |
| Human User Account | humanUser    | A human interaction with the system       |

#### 3.1.2.2 Category

| Name                     | Value         | Priority | Event Trigger                                                                                                                                                                                                                                                                                      |
|--------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access Control           | accessControl | 1        | <p>An access request to the device by any external person or system has been granted or denied.</p> <ul style="list-style-type: none"> <li>Password/certificate-based authentication success/failure to the device</li> <li>Access to the device granted/denied due to user permissions</li> </ul> |
| Request Error            | requestError  | 6        | <p>An error occurred while processing a request from a remote actor.</p> <ul style="list-style-type: none"> <li>Invalid request data</li> </ul>                                                                                                                                                    |
| Control System Event     | controlSystem | 4        | The device sends a request to a remote system to alter the behavior of that remote system.                                                                                                                                                                                                         |
| Backup and Restore Event | backupRestore | 5        | <ul style="list-style-type: none"> <li>A backup download started</li> <li>A backup download failed</li> <li>A restore started</li> <li>A restore completed</li> </ul>                                                                                                                              |

|                      |          |   |                                                                                                                                                                                            |
|----------------------|----------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |          |   | <ul style="list-style-type: none"> <li>• A restore failed</li> </ul>                                                                                                                       |
| Configuration Change | config   | 3 | The configuration of the system has been changed. <ul style="list-style-type: none"> <li>• Network interface IP address changes</li> <li>• Common service configuration changes</li> </ul> |
| Audit Log            | auditLog | 2 | Any event that impacts the quantity, quality, or availability of information available in the audit log.                                                                                   |

### 3.1.3 Syslog Forwarding

| Property       | Type    | Description                                                                                                                                                        |
|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled        | boolean | Whether or not syslog forwarding is enabled. If enabled is false, then no other properties are returned in the GET request.                                        |
| address        | string  | The address of the server to forward logs to.                                                                                                                      |
| port           | integer | The port of the server to forward logs to.                                                                                                                         |
| severityFilter | string  | The minimum severity threshold for log forwarding, where messages matching or exceeding this severity level are forwarded while less severe messages are excluded. |
| tcp_framing    | string  | The TCP framing mode to use, accepting either "octet-counted" (default) or "traditional" framing methods to determine message boundaries.                          |

## 3.2 CertificateAndCsrMetadataListModel

| Property     | Type                                        | Description                                                                                                                                      |
|--------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| certificates | <a href="#">CertificateMetadataModel</a> [] | Array of certificate information.                                                                                                                |
| csrs         | <a href="#">CSRDetails</a> []               | Array of certificate signing request details. These are pending requests that will become certificates upon upload of a PEM file to this record. |

### 3.2.1 CertificateMetadataModel

| Property       | Type                          | Description                                                                                                                                      |
|----------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| id             | string                        | Name given to the certificate for internal reference.                                                                                            |
| serialNumber   | integer                       | Big-endian hexadecimal string set by the Certificate Authority.                                                                                  |
| version        | integer                       | X509 version of the certificate.                                                                                                                 |
| subject        | <a href="#">X509NameModel</a> | Distinguished name of the client to which the certificate belongs.                                                                               |
| issuer         | <a href="#">X509NameModel</a> | Distinguished name of the issuing Certificate Authority that signed the certificate.                                                             |
| notBefore      | date-time (string)            | ASN1_TIME of when the certificate becomes valid.                                                                                                 |
| notAfter       | date-time (string)            | ASN1_TIME of when the certificate expires.                                                                                                       |
| subjectAltName | array<string>                 | List of additional host names (IP addresses, common names, etc.) to be protected by this certificate. Values must be prefixed with <b>IP:</b> or |

|             |         |                                               |
|-------------|---------|-----------------------------------------------|
|             |         | <b>DNS:</b> depending on the type.            |
| subjectHash | string  | Hash value of the subject of the certificate. |
| expired     | boolean | Whether or not the certificate has expired.   |

### 3.2.2 X509NameModel

| Property | Type   | Description                                   |
|----------|--------|-----------------------------------------------|
| C        | string | Two-letter ISO country code (e.g., US, CA)    |
| ST       | string | Geographic region within country              |
| L        | string | City or town name                             |
| O        | string | Legal entity name (e.g., Example Corporation) |
| OU       | string | Department or division (e.g., IT Department)  |
| CN       | string | Device name or device IP                      |

### 3.2.3 CSRDetails

| Property       | Type                          | Description                                                                                                                                                                         |
|----------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id             | string                        | Name given to the certificate signing request for internal reference.                                                                                                               |
| subject        | <a href="#">X509NameModel</a> | X509 version of the certificate.                                                                                                                                                    |
| subjectAltName | string[]                      | List of additional host names (IP addresses, common names, etc.) to be protected by this certificate. Values must be prefixed with <b>IP:</b> or <b>DNS:</b> depending on the type. |

### 3.2.4 ProtocolModel

| Property    | Type    | Description                                                                                                                   |
|-------------|---------|-------------------------------------------------------------------------------------------------------------------------------|
| name        | string  | The name of the protocol.                                                                                                     |
| usesDefault | boolean | Whether or not this protocol is using the default certificate. False means that it's assigned to a user-uploaded certificate. |

## 4. Error Handling

When there is an error completing the request, an error response is returned:

```
{
  "status": <http error response code>,
  "detail": "Example description of a user displayed error message for the bad request"
}
```

### 4.1 HTTP Responses

If you are making HTTP requests for the resources, then the expected response would look like this...

A successful GET:

```
curl --user admin: http://127.0.0.1/api/audit-log
200 OK Response with JSON payload in the body
```

When a page not found:

```
curl --user admin: http://127.0.0.1/api/audit-log2
HTTP ERROR 404 Not Found
```

```
<html>
<head><title>404 Not Found</title></head>
<body>
<center><h1>404 Not Found</h1></center>
<hr><center>nginx</center>
</body>
</html>
```

Access to a resource with unauthorized user:

```
curl --user John: http://127.0.0.1/api/audit-log
```

HTTP ERROR 401 Unauthorized

```
<html>
<head><title>401 Authorization Required</title></head>
<body>
<center><h1>401 Authorization Required</h1></center>
<hr><center>nginx</center>
</body>
</html>
```