# Symantec DLP

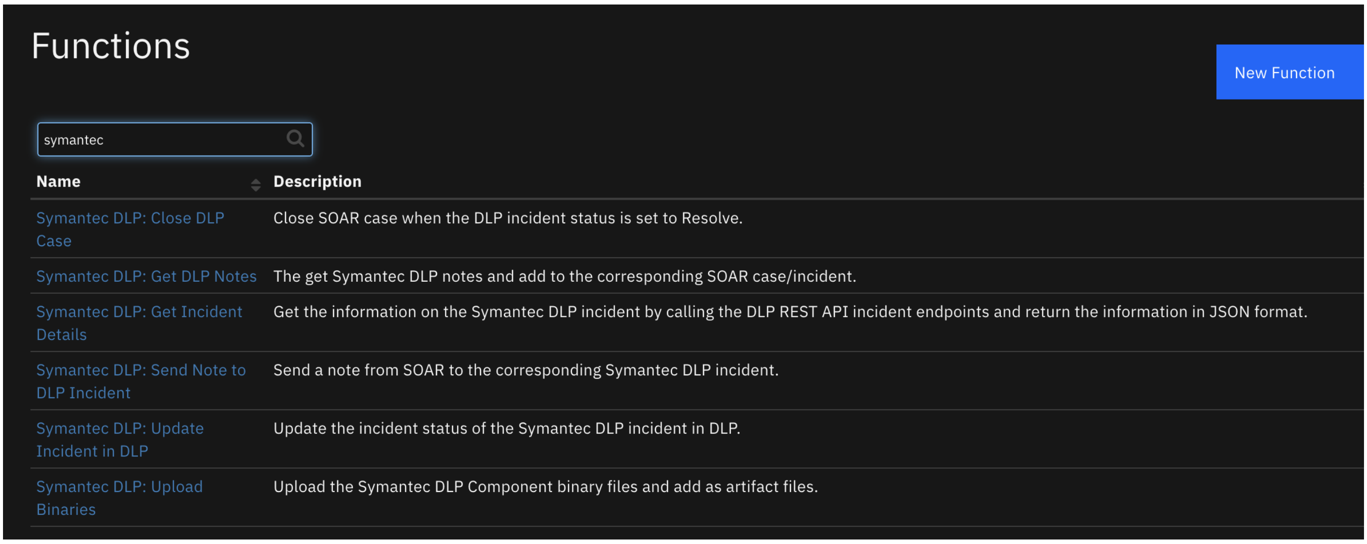
## Table of Contents

## Release Notes

| Version | Date | Notes |
|---|---|---|
| 2.0.0 | 2022 | Support for Symantec DLP REST API |
| 1.0.0 | 2019 | Initial Release (SOAP API implementation) |

## Overview

**IBM Security QRadar SOAR app for Symantec DLP**



| Name | Description |
|---|---|
| Symantec DLP: Close DLP Case | Close SOAR case when the DLP incident status is set to Resolve. |
| Symantec DLP: Get DLP Notes | The get Symantec DLP notes and add to the corresponding SOAR case/incident. |
| Symantec DLP: Get Incident Details | Get the information on the Symantec DLP incident by calling the DLP REST API incident endpoints and return the information in JSON format. |
| Symantec DLP: Send Note to DLP Incident | Send a note from SOAR to the corresponding Symantec DLP incident. |
| Symantec DLP: Update Incident in DLP | Update the incident status of the Symantec DLP incident in DLP. |
| Symantec DLP: Upload Binaries | Upload the Symantec DLP Component binary files and add as artifact files. |

This app allows bi-directional synchronization between IBM Security QRadar SOAR and Symantec DLP. Symantec DLP incidents are escalated to SOAR as cases with the creation of artifacts and notes in SOAR from the incident.

### Key Features

The Symantec DLP app implements the following functionality in the IBM QRadar SOAR platform:

- Poll Symantec DLP for incidents using a DLP saved report search filter and create a corresponding incident/case in SOAR.
- Add Symantec DLP notes to corresponding SOAR incident/case.
- Create artifacts from the Symantec DLP incident in the SOAR incident/case.
- Resolve a Symantec DLP incident when the corresponding SOAR incident/case is closed.
- Close an SOAR incident/case when the corresponding Symantec DLP incident is resolved in Symantec DLP.
- Get the Symantec DLP incident details and write the JSON in a formatted SOAR incident note.
- Create a live link in the Symantec DLP incident to the corresponding SOAR case.
- Create a live link in the a SOAR case to the corresponding Symantec DLP incident.

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## Requirements

This app supports the IBM Security QRadar SOAR Platform and the IBM Security QRadar SOAR for IBM Cloud Pak for Security.

### SOAR platform

The SOAR platform supports two app deployment mechanisms, App Host and integration server.

If deploying to a SOAR platform with an App Host, the requirements are:

- SOAR platform >= `42.0.0`.
- The app is in a container-based format (available from the AppExchange as a `zip` file).

If deploying to a SOAR platform with an integration server, the requirements are:

- SOAR platform >= `42.0.0`.

- The app is in the older integration format (available from the AppExchange as a `zip` file which contains a `tar.gz` file).
- Integration server is running `resilient_circuits>=43.0.0`.
- If using an API key account, make sure the account provides the following minimum permissions:

| Name | Permissions |
|---|---|
| Org Data | Read |
| Function | Read |
| Incident | Read, Edit, Create, Owner, Status |
| Incident Notes | Edit |

The following SOAR platform guides provide additional information:

- *App Host Deployment Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings.
- *Integration Server Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings.
- *System Administrator Guide*: provides the procedure to install, configure and deploy apps.

The above guides are available on the IBM Documentation website at ibm.biz/soar-docs. On this web page, select your SOAR platform version. On the follow-on page, you can find the *App Host Deployment Guide* or *Integration Server Guide* by expanding **Apps** in the Table of Contents pane. The System Administrator Guide is available by expanding **System Administrator**.

### Cloud Pak for Security

If you are deploying to IBM Cloud Pak for Security, the requirements are:

- IBM Cloud Pak for Security >= 1.4.
- Cloud Pak is configured with an App Host.
- The app is in a container-based format (available from the AppExchange as a `zip` file).

The following Cloud Pak guides provide additional information:

- *App Host Deployment Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings. From the Table of Contents, select Case Management and Orchestration & Automation > **Orchestration and Automation Apps**.
- *System Administrator Guide*: provides information to install, configure, and deploy apps. From the IBM Cloud Pak for Security IBM Documentation table of contents, select Case Management and Orchestration & Automation > **System administrator**.

These guides are available on the IBM Documentation website at ibm.biz/cp4s-docs. From this web page, select your IBM Cloud Pak for Security version. From the version-specific IBM Documentation page, select Case Management and Orchestration & Automation.

### Proxy Server

The app **does** support a proxy server.

## Python Environment

Both Python 2.7 and Python 3.6 are supported. Additional package dependencies may exist for each of these packages:

- jinja2
- resilient_circuits>=43.0.0

## Endpoint Developed With

This app has been implemented using:

| Product Name | Product Version | API URL | API Version |
|---|---|---|---|
| Symantec DLP | 15.8 | https://enforce-server/ProtectManager/webservices/v2 | v2 |

### Prerequisites

- Symantec DLP Enforce Server

### Configuration

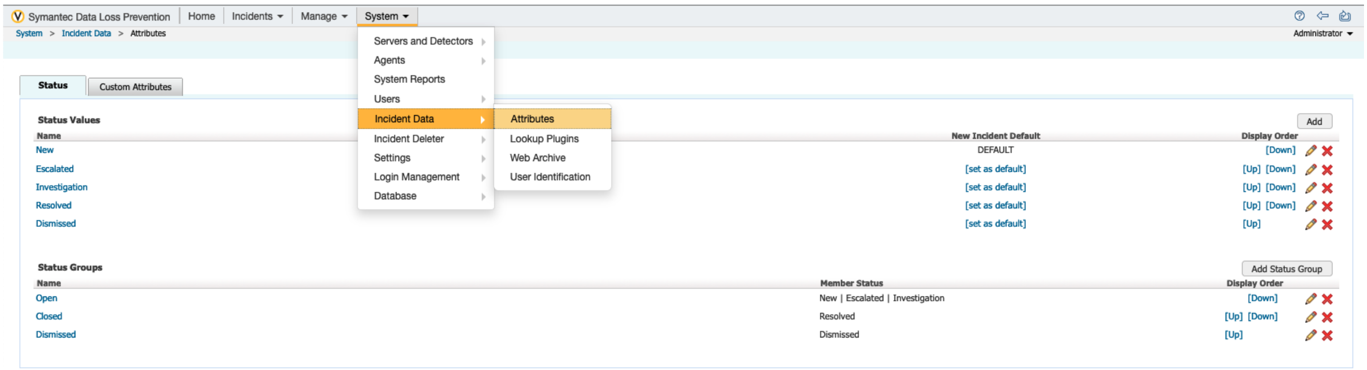
#### Configure Symantec DLP Custom Attributes

Two DLP Custom Attributes are used by the DLP integration to hold relevant information from SOAR.

`ibm_soar_case_id` custom attribute is used for filtering out already imported to SOAR incidents and avoiding duplication. Without this custom attribute in place, there is a potential for incident duplication.

`ibm_soar_case_url` custom attribute is used to provide a live link from Symantec DLP to IBM SOAR.

To create the custom attribute in Symantec DLP navigate to `System->Incident Attributes->Custom Attributes`



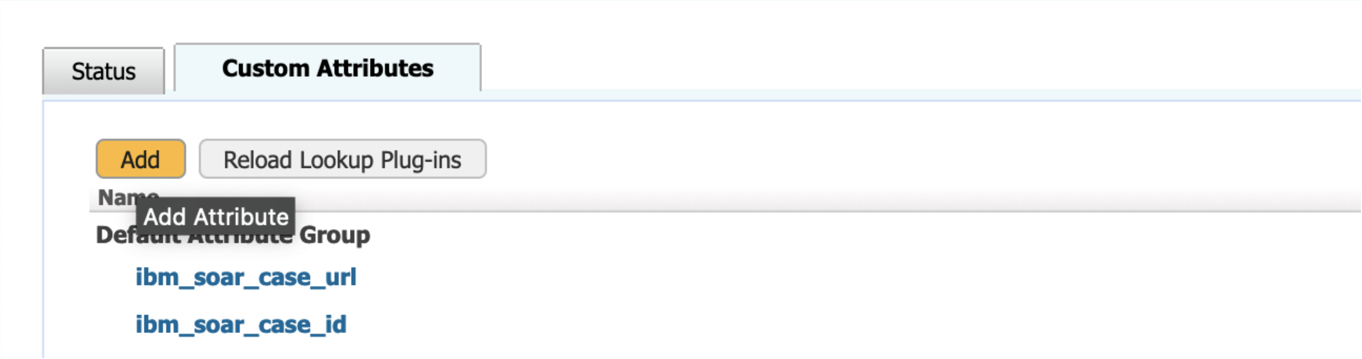
Status Values

| Name | New Incident Default | Display Order |
|---|---|---|
| New | DEFAULT | [Down] |
| Escalated | [set as default] | [Up] [Down] |
| Investigation | [set as default] | [Up] [Down] |
| Resolved | [set as default] | [Up] [Down] |
| Dismissed | [set as default] | [Up] |

Status Groups

| Name | Member Status | Display Order |
|---|---|---|
| Open | New \| Escalated \| Investigation | [Down] |
| Closed | Resolved | [Up] [Down] |
| Dismissed | Dismissed | [Up] |

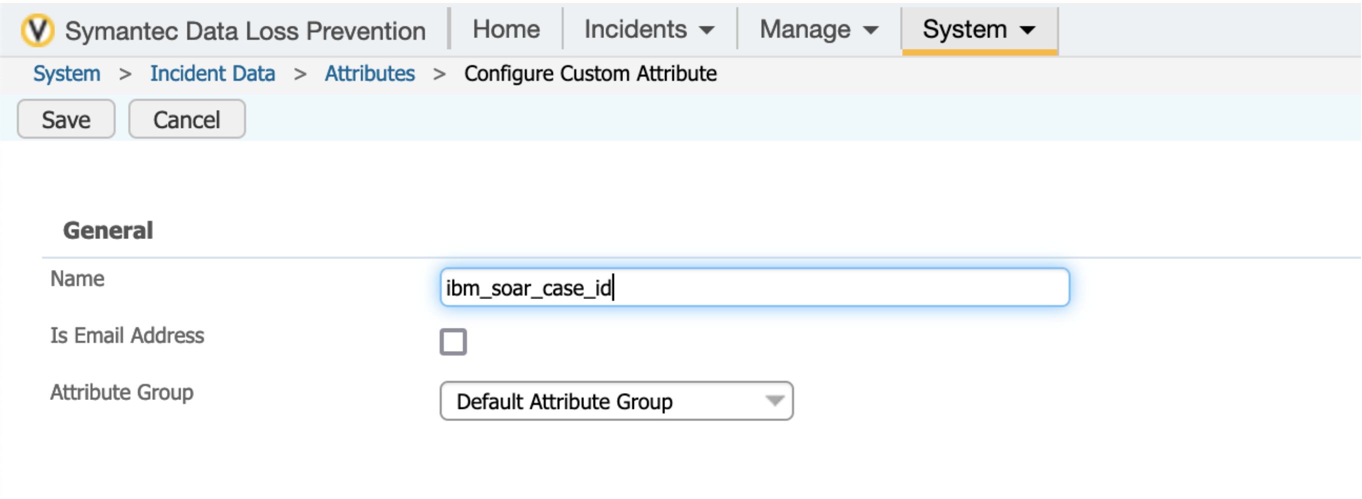
Select the option to Add a new Custom Attribute and create an `ibm_soar_case_id` and an `ibm_soar_case_url` custom attribute.



Default Attribute Group

ibm_soar_case_url

ibm_soar_case_id


Symantec Data Loss Prevention
Home
Incidents
Manage
System
System > Incident Data > Attributes > Configure Custom Attribute
Save
Cancel
General

| | |
|---|---|
| Name | ibm_soar_case_id |
| Is Email Address | ☐ |
| Attribute Group | Default Attribute Group |

#### Permissions

- Valid DLP user account created using the DLP Enforce Server administration console in order to access the REST API service.

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## Installation

### Install

- To install or uninstall an App or Integration on the *SOAR platform*, see the documentation at ibm.biz/soar-docs.
- To install or uninstall an App on *IBM Cloud Pak for Security*, see the documentation at ibm.biz/cp4s-docs and follow the instructions above to navigate to Orchestration and Automation.

### App Configuration

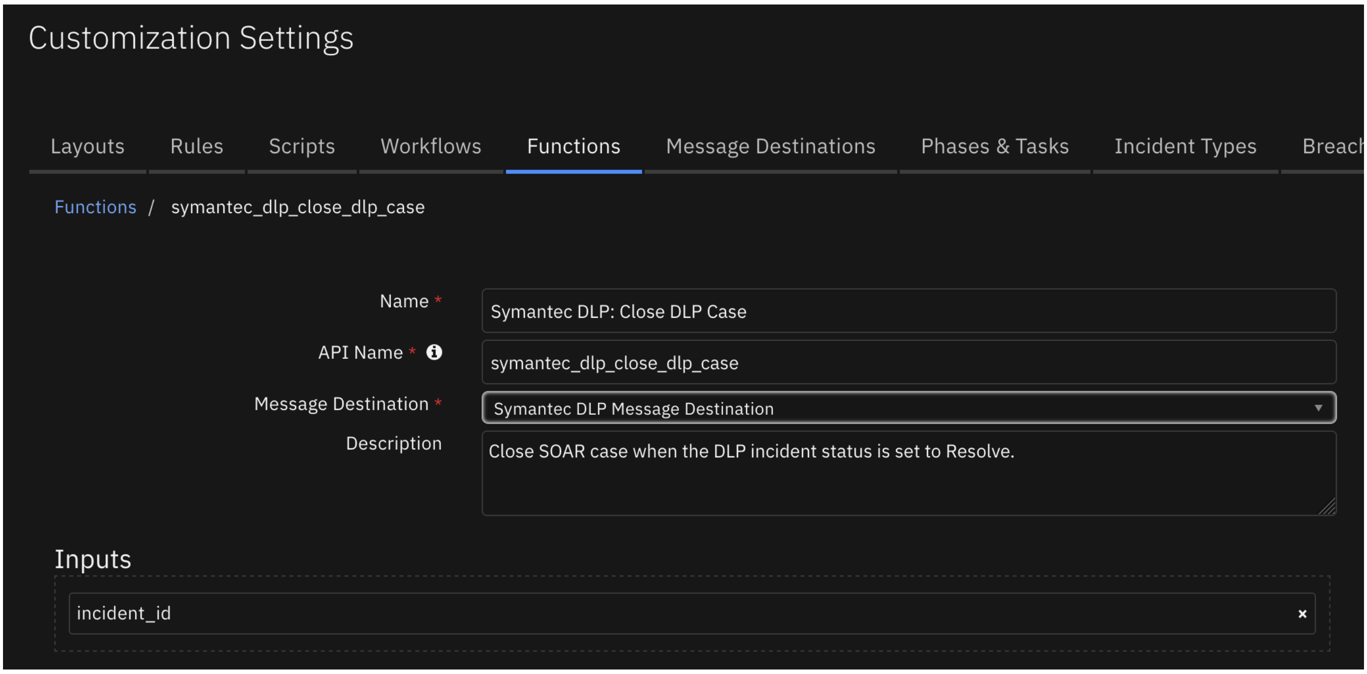
The following table provides the settings you need to configure the app. These settings are made in the app.config file. See the documentation discussed in the Requirements section for the procedure.

| Config | Required | Example | Description |
|---|---|---|---|
| **api_version** | Yes | v2 | *Symantec DLP REST API version.* |
| **cafile** | No | ` ` | *false or /path/to/certificate.* |

| Config | Required | Example | Description |
|---|---|---|---|
| **polling_interval** | Yes | `60` | *Poller interval time in seconds. Value of zero to turn poller off.* |
| **polling_lookback** | Yes | `12000` | *Number of days to look back for DLP incidents. Value is only used on the first time polling when the app starts.* |
| **sdlp_host** | Yes | `<serverip>` | *Symantec DLP Enforce Server.* |
| **sdlp_username** | Yes | `<SDLP Username>` | *Symantec DLP account username.* |
| **sdlp_password** | Yes | `<SDLP Password>` | *Symantec DLP account password.* |
| **sdlp_saved_report_id** | Yes | `0` | *Saved Report ID used to query for incidents.* |
| **create_case_template** | No | /path/create_case_template.jinja | *Use when overriding the default template.* |
| **close_case_template** | No | /path/close_case_template.jinja | *Use when overriding the default template.* |
| **update_case_template** | No | /path/update_case_template.jinja | *Use when overriding the default template.* |

## Function - Symantec DLP: Close DLP Case

Close SOAR case when the DLP incident status is set to **Resolved**.


Customization Settings

Functions / symantec_dlp_close_dlp_case

Name * Symantec DLP: Close DLP Case

API Name * symantec_dlp_close_dlp_case

Message Destination * Symantec DLP Message Destination

Description Close SOAR case when the DLP incident status is set to Resolve.

Inputs

incident_id

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `incident_id` | `number` | Yes | `-` | the id of the incident |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "success": true
  },
  "raw": null,
  "inputs": {
    "incident_id": 3661
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "MacBook-Pro.local",
    "execution_time_ms": 3326,
    "timestamp": "2022-04-01 14:47:41"
  }
}
```

▶ Example Pre-Process Script:

```
inputs.incident_id = incident.id
```

▶ Example Post-Process Script:

```

```

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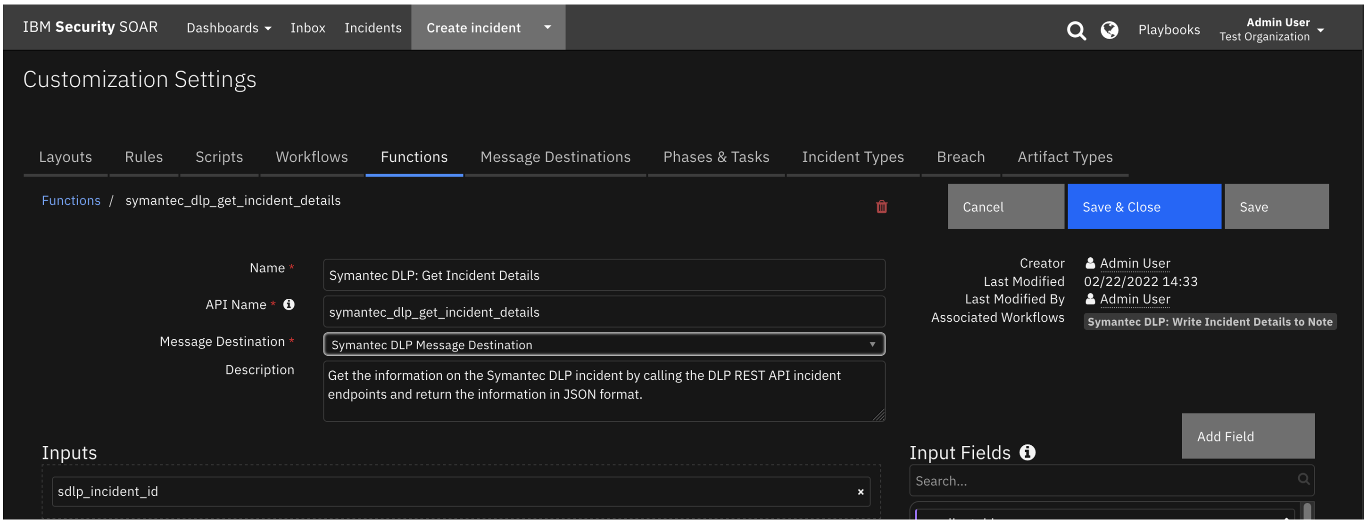
## Function - Symantec DLP: Get Incident Details

Get the information on the Symantec DLP incident by calling three DLP REST API incident endpoints to obtain **editableIncidentDetails**, **staticIncidentDetails**, and **notes** JSON objects which are combined into one JSON object which is returned by the function.



Name * Symantec DLP: Get Incident Details

API Name * symantec_dlp_get_incident_details

Message Destination * Symantec DLP Message Destination

Description Get the information on the Symantec DLP incident by calling the DLP REST API incident endpoints and return the information in JSON format.

Creator Admin User

Last Modified 02/22/2022 14:33

Last Modified By Admin User

Associated Workflows Symantec DLP: Write Incident Details to Note

sdlp_incident_id

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `sdlp_incident_id` | `number` | Yes | `-` | - |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "notes": [
      "<b>From Symantec DLP</b>\n                        <br>\n
<b>User: </b>Administrator added note at 2022-02-07T16:23:50.32\n
<br>\n                        <b>Note detail</b>: <p>added a note 2/7/2022
4:23pm</p>\n                       ",
      "<b>From Symantec DLP</b>\n                        <br>\n
<b>User: </b>Administrator added note at 2022-02-08T08:31:12.158\n
<br>\n                        <b>Note detail</b>: <p>added a second note
2/7/2022</p>\n                        ",
      "<b>From Symantec DLP</b>\n                        <br>\n
<b>User: </b>Administrator added note at 2022-02-10T20:49:58.47\n
<br>\n                        <b>Note detail</b>: <p>added note to SOAR
and will send it to DLP</p>\n                        ",
      "<b>From Symantec DLP</b>\n                        <br>\n
<b>User: </b>Administrator added note at 2022-02-10T20:49:58.47\n
<br>\n                        <b>Note detail</b>: <p>added note to SOAR
and will send it to DLP</p>\n                        "
    ],
    "editableIncidentDetails": {
      "incidentId": 468,
      "infoMap": {
        "detectedRemediationStatus": 0,
        "preventOrProtectStatusId": 0,
        "incidentStatusName": "Resolved",
        "isHidingNotAllowed": false,
        "severityId": 1,
        "incidentStatusId": 3,
        "isHidden": false
      },
      "customAttributeGroups": [
        {
          "name": "custom_attribute_group.default",
          "nameInternationalized": true,
          "customAttributes": [
            {
              "name": "ibm_soar_case_url",
              "index": 17,
              "displayOrder": 1,
              "value": "https://mysoar.com:443/#incidents/3449",
              "email": false
            },
            {
              "name": "ibm_soar_case_id",
              "index": 18,
              "displayOrder": 2,
              "value": "3449",
              "email": false
            }
          ]
        },
        {
          "name": "Predefined",
          "nameInternationalized": false,
          "customAttributes": [
            {
              "name": "Resolution",
              "index": 1,
              "displayOrder": 1,
              "value": "Business Issue",
                "email": false
              },
              {
                "name": "Dismissal Reason",
                "index": 2,
                "displayOrder": 2,
                "value": "Bus. Process Issue",
                "email": false
              },
              {
                "name": "Assigned To",
                "index": 3,
                "displayOrder": 3,
                "email": false
              },
              {
                "name": "Business Unit",
                "index": 4,
                "displayOrder": 4,
                "email": false
              },
              {
                "name": "Employee Code",
                "index": 5,
                "displayOrder": 5,
                "email": false
              },
              {
                "name": "First Name",
                "index": 6,
                "displayOrder": 6,
                "email": false
              },
              {
                "name": "Last Name",
                "index": 7,
                "displayOrder": 7,
                "email": false
              },
              {
                "name": "Phone",
                "index": 8,
                "displayOrder": 8,
                "email": false
              },
              {
                "name": "Sender Email",
                "index": 9,
                "displayOrder": 9,
                "email": true
              },
              {
                "name": "Manager First Name",
                "index": 11,
                "displayOrder": 10,
                "email": false
              },
              {
                "name": "Manager Last Name",
                "index": 10,
                "displayOrder": 11,
                "email": false
              },
              {
                "name": "Manager Phone",
                "index": 12,
                "displayOrder": 12,
                "email": false
              },
              {
                "name": "Manager Email",
                "index": 13,
                "displayOrder": 13,
                "email": true
              },
              {
                "name": "Region",
                "index": 14,
                "displayOrder": 14,
                "email": false
              },
              {
                "name": "Country",
                "index": 15,
                "displayOrder": 15,
                "email": false
              },
              {
                "name": "Postal Code",
                "index": 16,
                "displayOrder": 16,
                "email": false
              }
            ]
          }
        ]
      },
      "staticIncidentDetails": {
        "incidentId": 468,
        "infoMap": {
          "messageType": "EDAR",
          "discoverContentRootPath": "DLP-WINDOWS10-8",
          "policyName": "Customer Data Protection",
          "discoverMillisSinceFirstSeen": 165799618,
          "detectionServerName": "Single-tier Detection Server",
          "discoverTargetId": 21,
          "discoverName": "passwordpolicy.ini",
          "fileOwner": "BUILTIN\\administrators",
        "policyVersion": 2,
        "discoverServer": "DLP-WINDOWS10-8",
        "discoverRepositoryLocation": "DLP-WINDOWS10-8 - c:\\passwordpolicy.ini",
        "discoverScanId": 41,
        "endpointConnectionStatus": "CONNECTED",
        "policyId": 16,
        "detectionServerId": 1,
        "messageId": 468,
        "creationDate": "2022-02-04T16:08:48.678",
        "isBlockedStatusSuperseded": false,
        "detectionDate": "2022-02-04T16:08:43.08",
        "messageDate": "2022-02-03T22:40:43",
        "attachmentInfo": [
          {
            "messageComponentName": "c:\\passwordpolicy.ini",
            "messageComponentId": 981,
            "wasCracked": false,
            "documentFormat": "unicode",
            "messageComponentType": 3,
            "originalSize": 16482
          }
        ],
        "fileCreateDate": "2021-02-12T09:50:16.39",
        "fileAccessDate": "2022-02-04T16:01:06.431",
        "discoverTargetName": "SS number on 9.30.94.38",
        "policyGroupName": "Customer Data Protection",
        "policyGroupId": 5,
        "messageSource": "DISCOVER",
        "matchCount": 2,
        "messageAclEntries": [
          {
            "cloudStorageCollaborator": "BUILTIN\\administrators",
            "aclType": "FILE",
            "sharepointPermission": "WRITE",
            "cloudstorageRole": "WRITE",
            "grantDeny": "GRANT",
            "sharePointACL": "BUILTIN\\administrators",
            "readACLShare": "BUILTIN\\administrators",
            "readACLFile": "BUILTIN\\administrators"
          },
          {
            "cloudStorageCollaborator": "BUILTIN\\administrators",
            "aclType": "FILE",
            "sharepointPermission": "READ",
            "cloudstorageRole": "READ",
            "grantDeny": "GRANT",
            "sharePointACL": "BUILTIN\\administrators",
            "readACLShare": "BUILTIN\\administrators",
            "readACLFile": "BUILTIN\\administrators"
          },
          {
            "cloudStorageCollaborator": "NT AUTHORITY\\system",
            "aclType": "FILE",
            "sharepointPermission": "WRITE",
            "cloudstorageRole": "WRITE",
            "grantDeny": "GRANT",
            "sharePointACL": "NT AUTHORITY\\system",
            "readACLShare": "NT AUTHORITY\\system",
            "readACLFile": "NT AUTHORITY\\system"
          },
          {
            "cloudStorageCollaborator": "NT AUTHORITY\\system",
            "aclType": "FILE",
            "sharepointPermission": "READ",
            "cloudstorageRole": "READ",
            "grantDeny": "GRANT",
            "sharePointACL": "NT AUTHORITY\\system",
            "readACLShare": "NT AUTHORITY\\system",
            "readACLFile": "NT AUTHORITY\\system"
          },
          {
            "cloudStorageCollaborator": "BUILTIN\\users",
            "aclType": "FILE",
            "sharepointPermission": "READ",
            "cloudstorageRole": "READ",
            "grantDeny": "GRANT",
            "sharePointACL": "BUILTIN\\users",
            "readACLShare": "BUILTIN\\users",
            "readACLFile": "BUILTIN\\users"
          },
          {
            "cloudStorageCollaborator": "NT AUTHORITY\\authenticated
users",
            "aclType": "FILE",
            "sharepointPermission": "WRITE",
            "cloudstorageRole": "WRITE",
            "grantDeny": "GRANT",
            "sharePointACL": "NT AUTHORITY\\authenticated users",
            "readACLShare": "NT AUTHORITY\\authenticated users",
            "readACLFile": "NT AUTHORITY\\authenticated users"
          },
          {
            "cloudStorageCollaborator": "NT AUTHORITY\\authenticated
users",
            "aclType": "FILE",
            "sharepointPermission": "READ",
            "cloudstorageRole": "READ",
            "grantDeny": "GRANT",
            "sharePointACL": "NT AUTHORITY\\authenticated users",
            "readACLShare": "NT AUTHORITY\\authenticated users",
            "readACLFile": "NT AUTHORITY\\authenticated users"
          }
        ],
        "messageTypeId": 15,
        "discoverScanStartDate": "2022-02-04T15:39:28",
        "discoverUrl": "DLP-WINDOWS10-8 - c:\\passwordpolicy.ini"
      }
```

```
    },
    "sdlp_incident_url": "https://my-IP/ProtectManager/IncidentDetail.do?value(variable_1)=incident.id&value(operator_1)=incident.id_in&value(operand_1)=468"
  },
  "raw": null,
  "inputs": {
    "sdlp_incident_id": 468
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "my-laptop",
    "execution_time_ms": 7312,
    "timestamp": "2022-03-03 10:53:00"
  }
}
```

▶ Example Pre-Process Script:

```
inputs.sdlp_incident_id = incident.properties.sdlp_incident_id
```

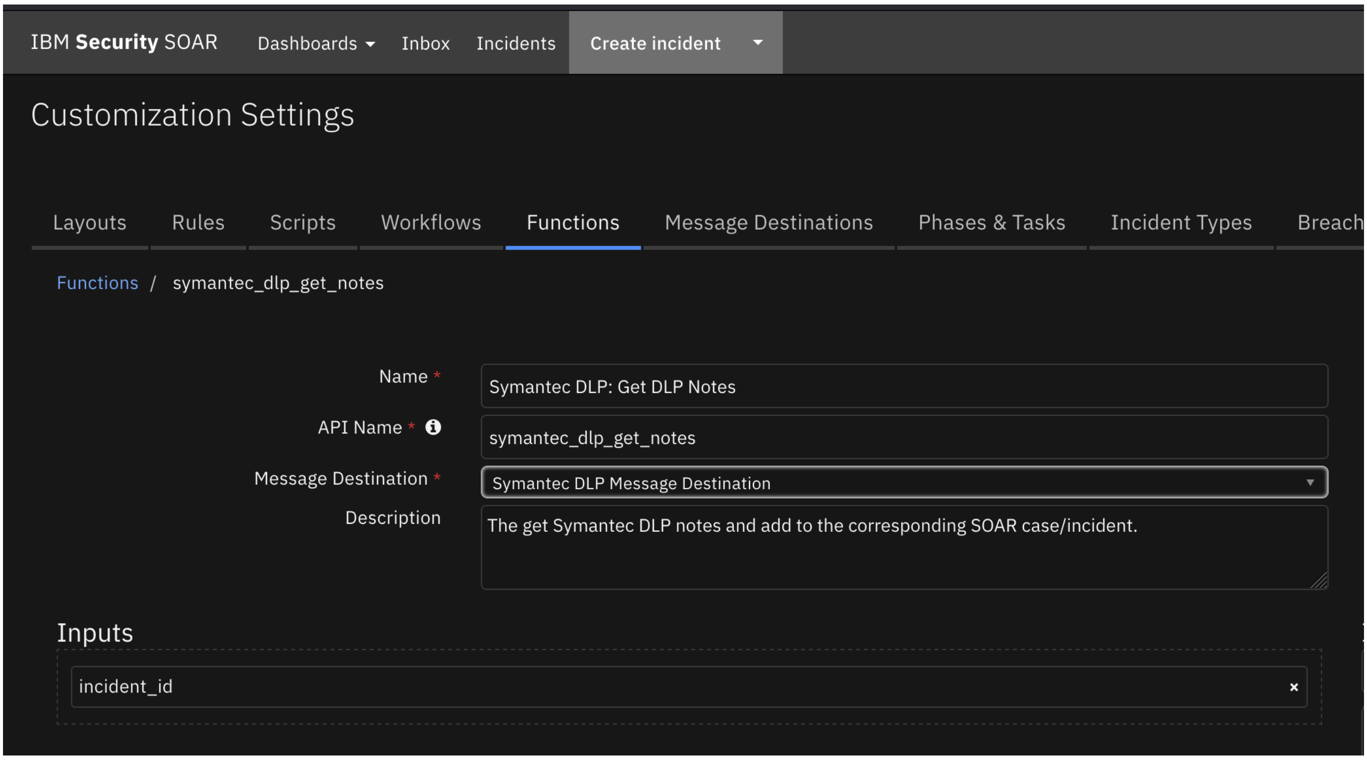
▶ Example Post-Process Script:

```
# Put the results json into a workflow property so we can call the
# convert_json_to_rich_text script to print readable formatted json in an incident note.
inputs = results.get("inputs")
sdlp_incident_id = inputs.get("sdlp_incident_id")
content = results.get("content")

header = u"Symantec DLP Incident Id: {0} Details:".format(sdlp_incident_id)

json_note = {
              "version": "1.1",
              "header": header,
              "json": content,
              "sort": False
            }

workflow.addProperty('convert_json_to_rich_text', json_note)
```

## Function - Symantec DLP: Get DLP Notes

The get Symantec DLP notes and add to the corresponding SOAR case/incident.

**NOTE:** Notes that are sent to DLP from SOAR that contain the header text **From IBM SOAR** will not be brought into SOAR Notes to avoid duplication of notes.



Name * Symantec DLP: Get DLP Notes

API Name * symantec_dlp_get_notes

Message Destination * Symantec DLP Message Destination

Description The get Symantec DLP notes and add to the corresponding SOAR case/incident.

Inputs

incident_id

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `incident_id` | `number` | Yes | `-` | the id of the incident |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "success": true,
    "sdlp_incident_id": 468,
    "sdlp_incident_status": "Resolved"
  },
  "raw": null,
  "inputs": {
    "incident_id": 3449,
    "sdlp_incident_status": "Resolved"
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "MacBook-Pro.local",
    "execution_time_ms": 16146,
    "timestamp": "2022-03-03 10:53:44"
  }
}
```

▶ Example Pre-Process Script:

```
inputs.incident_id = incident.id
```

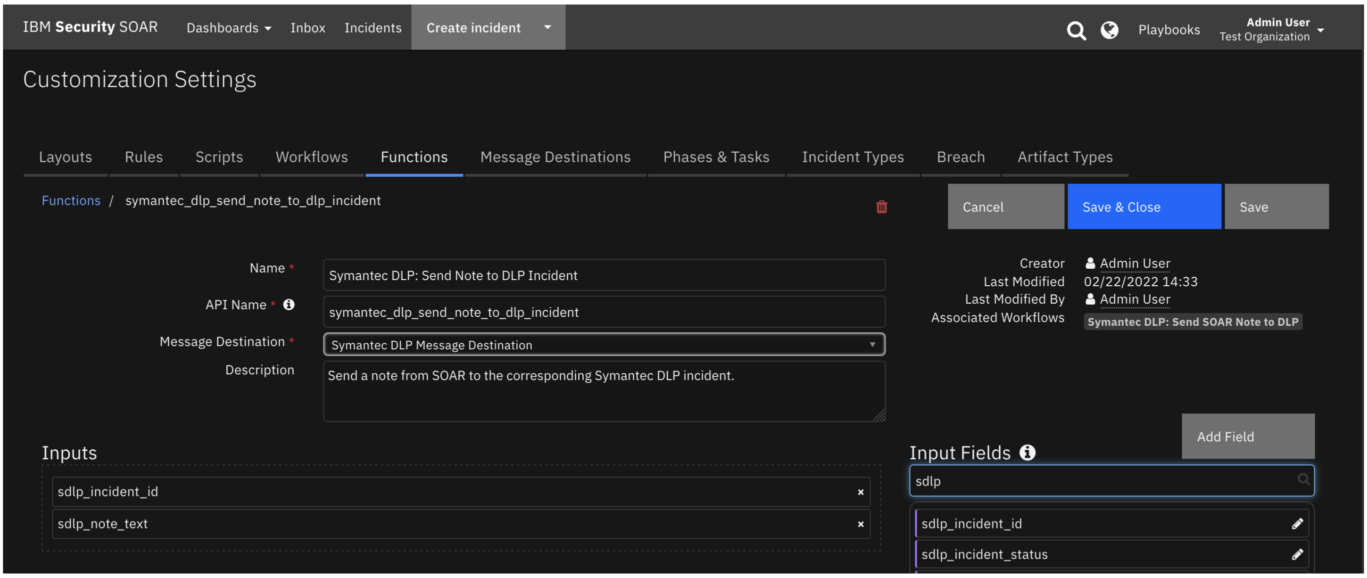
▶ Example Post-Process Script:

```
if results.success:
  content = results.get("content")
  number_dlp_notes = len(content.get("new_notes"))
else:
  number_dlp_notes = 0

note_text = u"<b>Symantec DLP: Get DLP Notes</b> added {0} to SOAR
case".format(number_dlp_notes)
incident.addNote(note_text)
```

---

## Function - Symantec DLP: Send Note to DLP Incident

Send a case note from SOAR to the corresponding Symantec DLP incident.



Name * Symantec DLP: Send Note to DLP Incident

API Name * symantec_dlp_send_note_to_dlp_incident

Message Destination * Symantec DLP Message Destination

Description Send a note from SOAR to the corresponding Symantec DLP incident.

Creator: Admin User
Last Modified: 02/22/2022 14:33
Last Modified By: Admin User
Associated Workflows: Symantec DLP: Send SOAR Note to DLP

Inputs
- sdlp_incident_id
- sdlp_note_text

Input Fields
sdlp
- sdlp_incident_id
- sdlp_incident_status

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `sdlp_incident_id` | `number` | Yes | `-` | - |

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `sdlp_note_text` | `text` | Yes | `-` | - |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "success": true,
    "reason:": null
  },
  "raw": null,
  "inputs": {
    "sdlp_note_text": "<b>Symantec DLP: Update Incident </b><br /> DLP
incident 468 status set to: Resolved.",
    "sdlp_incident_id": 468
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "my-laptop",
    "execution_time_ms": 30032,
    "timestamp": "2022-03-03 11:29:55"
  }
}
```

▶ Example Pre-Process Script:

```
inputs.sdlp_incident_id = incident.properties.sdlp_incident_id
inputs.sdlp_note_text = note.text.content
```

▶ Example Post-Process Script:

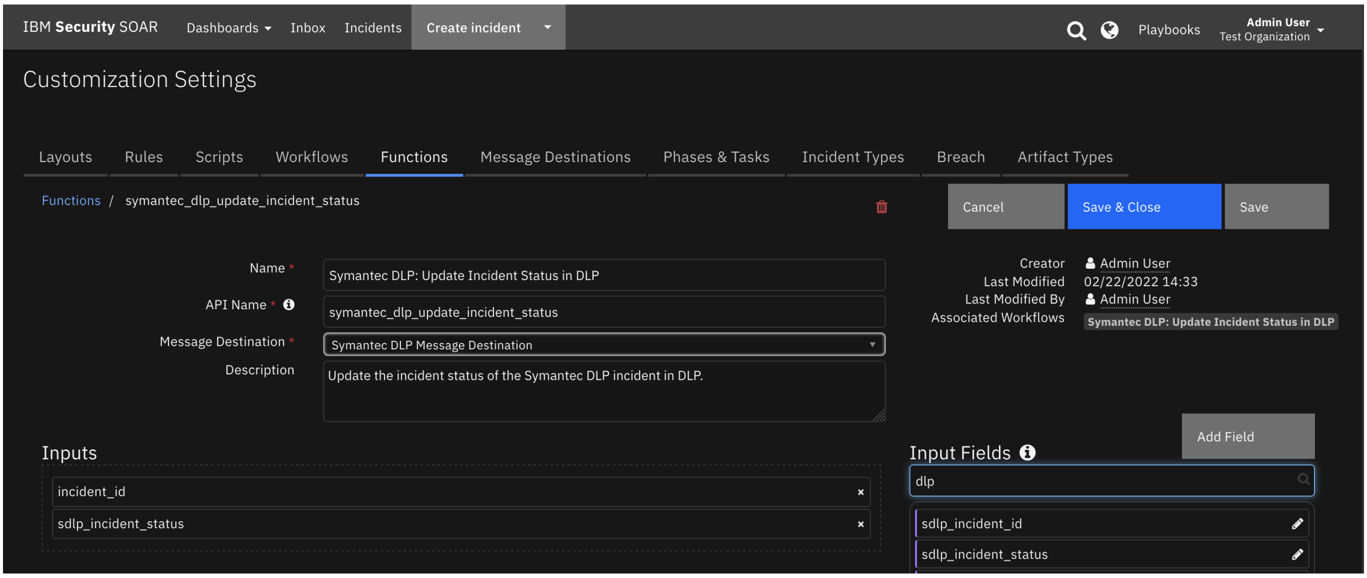
```
# Import Date
from java.util import Date

# Edit note in SOAR to indicate it was sent to SentinelOne
if results.success:
  # Get the current time
  dt_now = Date()
```

```
    note.text = u"<b>Sent to Symantec DLP at {0}</b><br>{1}".format(dt_now,
  unicode(note.text.content))
```

---

## Function - Symantec DLP: Update Incident in DLP

Update the status or severity of the Symantec DLP incident in DLP.



Name * Symantec DLP: Update Incident Status in DLP

API Name * symantec_dlp_update_incident_status

Message Destination * Symantec DLP Message Destination

Description Update the incident status of the Symantec DLP incident in DLP.

Creator Admin User
Last Modified 02/22/2022 14:33
Last Modified By Admin User
Associated Workflows Symantec DLP: Update Incident Status in DLP

Inputs: incident_id, sdlp_incident_status

Input Fields: dlp — sdlp_incident_id, sdlp_incident_status

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `incident_id` | `number` | Yes | `-` | the id of the incident |
| `sdlp_incident_status` | `select` | Yes | `-` | - |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "success": true,
    "sdlp_incident_id": 468,
    "sdlp_incident_status": "Resolved"
  },
  "raw": null,
  "inputs": {
    "incident_id": 3449,
    "sdlp_incident_status": "Resolved"
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "MacBook-Pro.local",
    "execution_time_ms": 16146,
    "timestamp": "2022-03-03 10:53:44"
  }
}
```

▶ Example Pre-Process Script:

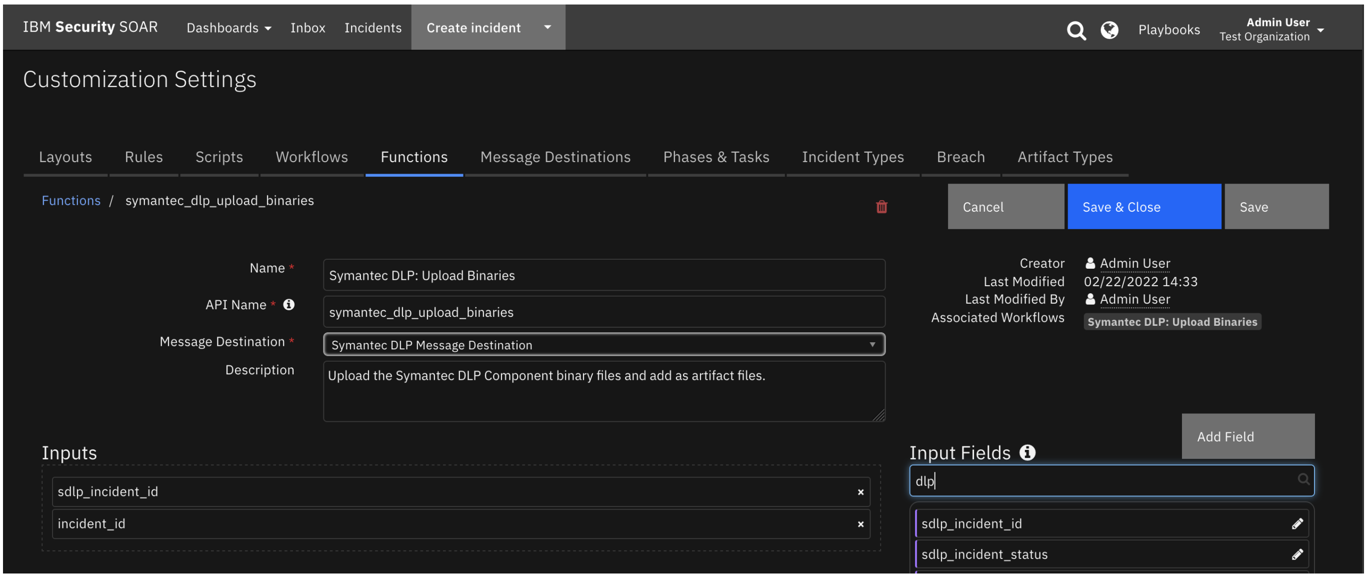
```
inputs.incident_id = incident.id
inputs.sdlp_incident_status = rule.properties.sdlp_incident_status
inputs.sdlp_incident_severity_id =
rule.properties.sdlp_incident_severity_id
```

▶ Example Post-Process Script:

```
content = results.get("content")
success = content.get("success", False)
sdlp_incident_id = content.get("sdlp_incident_id", None)
sdlp_incident_status = content.get("sdlp_incident_status", None)
sdlp_incident_severity_id = content.get("sdlp_incident_severity_id", None)

if success:
  noteText = u'<b>Symantec DLP: Update Incident</b><br> DLP incident {0}
<br>   Status set to: {1}<br>   Severity set to:
{2}'.format(sdlp_incident_id, sdlp_incident_status,
sdlp_incident_severity_id)
else:
  noteText = u'<b>Symantec DLP: Update Incident</b><br>DLP incident {0}
was not updated.  Check input values.'.format(sdlp_incident_id)

incident.addNote(noteText)
```

## Function - Symantec DLP: Upload Binaries

Upload the Symantec DLP Component binary files contained in a DLP incident and add as artifact files. An automatic rule **Symantec DLP: Upload Binaries** is included in this package but disabled by default. The automatic rule is triggered when a case is created and the function uploads the binary files at that time. However due to bandwidth considerations when uploading many files when the poller is escalating many incidents, enabling this rule may not be advisable. Also included is a manual menu item rule, **Symantec DLP: Upload Binaries as Artifact**, which allows users to choose the binary files to upload to a case or incident.



Name * Symantec DLP: Upload Binaries

API Name * symantec_dlp_upload_binaries

Message Destination * Symantec DLP Message Destination

Description Upload the Symantec DLP Component binary files and add as artifact files.

Creator Admin User
Last Modified 02/22/2022 14:33
Last Modified By Admin User
Associated Workflows Symantec DLP: Upload Binaries

Inputs
- sdlp_incident_id
- incident_id

Input Fields
dlp
- sdlp_incident_id
- sdlp_incident_status

▶ Inputs:

| Name | Type | Required | Example | Tooltip |
|---|---|---|---|---|
| `incident_id` | `number` | Yes | `-` | the id of the incident |
| `sdlp_incident_id` | `number` | Yes | `-` | - |

▶ Outputs:

> **NOTE:** This example might be in JSON format, but `results` is a Python Dictionary on the SOAR platform.

```
results = {
  {
  "version": 2.0,
  "success": true,
  "reason": null,
  "content": {
    "success": true,
    "artifact_name_list": [
      "c:\\Users\\Administrator\\Documents\\three-ss-one-cc.txt"
    ]
  },
  "raw": null,
  "inputs": {
    "incident_id": 3456,
    "sdlp_incident_id": 578
  },
  "metrics": {
    "version": "1.0",
    "package": "fn-symantec-dlp",
    "package_version": "2.0.0",
    "host": "MacBook-Pro.local",
    "execution_time_ms": 9905,
    "timestamp": "2022-03-07 14:10:32"
  }
}
```

▶ Example Pre-Process Script:

```
inputs.sdlp_incident_id = incident.properties.sdlp_incident_id
inputs.incident_id = incident.id
```

▶ Example Post-Process Script:

```
sdlp_inputs = results.get("inputs")
sdlp_incident_id = sdlp_inputs.get("sdlp_incident_id")

note = u"<b>Symantec DLP: Upload Binaries for incident Id {0}</b><br>".format(sdlp_incident_id)
success = results.get("success")
if success:
  content = results.get('artifact_name_list')
  num_artifacts = len(content)
  note = u"{0} {1} artifact files added".format(note, num_artifacts)
else
  note = u"{0}artifact NOT added".format(note)
incident.addNote(helper.createRichText(note))
```

---

## Script - Convert JSON to rich text v1.1

This script converts a json object into a hierarchical display of rich text and adds the rich text to a case or incidents rich text (custom) field or a case or incident note. A workflow property is used to share the json to convert and identify parameters used on how to perform the conversion.

Typically, a function will create the workflow property 'convert_json_to_rich_text', and this script will run after that function to perform the conversion.

Features:

- Display the hierarchical nature of json, presenting the json keys (sorted if specified) as bold labels
- Provide links to found URLs
- Create either a case or incident note or add results to a case or incident(custom) rich text field.

**Object:** incident

▶ Script Text:

```
# (c) Copyright IBM Corp. 2010, 2020. All Rights Reserved.
VERSION = 1.1
"""
```

```
  This script converts a json object into a hierarchical display of rich
text and adds the rich text to an incident's rich text (custom) field or
an incident note.
  A workflow property is used to define the json to convert and identify
parameters used on how to perform the conversion.
  Typically, a function will create workflow property and this script will
run after that function to perform the conversion.
  Features:
    * Display the hierarchical nature of json, presenting the json keys as
bold labels
    * Provide links to found URLs
    * Create either an incident note or add results to an incident
(custom) rich text field.

  In order to use this script, define a workflow property called:
convert_json_to_rich_text, to define the json and parameters to use for
the conversion.
  Workflow properties can be added using a command similar to this:
  workflow.addProperty('convert_json_to_rich_text', {
    "version": 1.1,
    "header": "Artifact scan results for: {}".format(artifact.value),
    "padding": 10,
    "separator": u"<br />",
    "sort": True,
    "json": results.content,
    "json_omit_list": ["omit"],
    "incident_field": None
  })

  Format of workflow.property.convert_json_to_rich_text:
  {
    "version": 1.1, [this is for future compatibility]
    "header": str, [header line to add to converted json produced or None.
Ex: Results from scanning artifact: xxx. The header may contain rich text
tags]
    "padding": 10, [padding for nested json elements, or defaults to 10]
    "separator": u"<br />"|list such as ['<span>','</span>'], [html
separator between json keys and lists or defaults to html break: '<br />'.
                        If a list, then the data
is brackets by the pair specified]
    "sort": True|False, [sort the json keys at each level when displayed]
    "json": json, [required json to convert]
    "json_omit_list": [list of json keys to exclude or None]
    "incident_field": "<incident_field>" [indicates a builtin rich text
incident field, such as 'description'
                     or a custom rich text field in
the format: 'properties.<field>'. default: create an incident note]
  }
"""

import re

# needed for python 3
try:
    unicode("abc")
except:
    unicode = str


rc = re.compile(r'http[s]?://(?:[a-zA-Z]|[0-9]|[$-_@.&+#\?]|[!*\(\),]|(?:%
[0-9a-fA-F][0-9a-fA-F]))+')

class ConvertJson:
    """Class to hold the conversion parameters and perform the
conversion"""

    def __init__(self, omit_keys=[], padding=10, separator=u"<br />",
sort_keys=False):
        self.omit_keys = omit_keys
        self.padding = padding
        self.separator = separator
        self.sort_keys = sort_keys


    def format_link(self, item):
        """[summary]
          Find embedded urls (http(s)) and add html anchor tags to display
as links
          Args:
              item ([string])

          Returns:
              [str]: None|original text if no links|text with html links
        """
        formatted_item = item
        if item and not isinstance(item, (int, bool, float)):
            list = rc.findall(item)
            if list:
                for link in list:
                    formatted_item = formatted_item.replace(link, u"<a
target='blank' href='{0}'>{0}</a>".format(link))

        return formatted_item

    def expand_list(self, list_value, is_list=False):
        """[summary]
          convert items to html, adding indents to nested dictionaries.
          Args:
              list_value ([dict|list]): json element

          Returns:
              [str]: html converted code
        """
        if not isinstance(list_value, list):
            return self.format_link(list_value)
        elif not list_value:
            return u"None<br>"
        try:
            items_list = []  # this will ensure list starts on second line
of key label
            for item in list_value:
                if isinstance(item, dict):
                    result = self.convert_json_to_rich_text(item)
                    if is_list:
                        items_list.append(u"<li>{}</li>".format(result))
                    else:
                        items_list.append(result)
                elif isinstance(item, list):
                    items_list.append(self.expand_list(item,
is_list=True))
                elif is_list:
                    items_list.append(u"<li>{}
</li>".format(self.format_link(unicode(item))))
                else:
                    items_list.append(self.format_link(unicode(item)))

            expand_list_result = self.add_separator(self.separator if not
is_list else u"",
                                                    items_list,
                                                    is_list=is_list)

            if is_list:
                return u"<ul>{}</ul>".format(expand_list_result)
            else:
                return u"<div style='padding:5px'>{}
</div>".format(expand_list_result)
        except Exception as err:
            return str(err)

    def convert_json_to_rich_text(self, sub_dict):
        """[summary]
          Walk dictionary tree and convert to html for better display
          Args:
              sub_dict ([type]): [description]

          Returns:
              [type]: [description]
        """
        notes = []
        if sub_dict:
            if isinstance(sub_dict, list):
                expanded_list = self.expand_list(sub_dict, is_list=True)
                notes.append(self.add_separator(self.separator,
expanded_list))
            else:
                keys = sorted (sub_dict.keys()) if self.sort_keys else
sub_dict.keys()

                for key in keys:
                    if key not in self.omit_keys:
                        value = sub_dict[key]
                        is_list = isinstance(value, list)
                        item_list = [u"<strong>{0}</strong>:
".format(key)]
                        if isinstance(value, dict):
                            convert_result =
self.convert_json_to_rich_text(value)
                            if convert_result:
                                item_list.append(u"<div style='padding:
{}px'>{}</div>".format(self.padding, convert_result))
                            else:
                                item_list.append(u"None<br>")
                        else:
                            item_list.append(self.expand_list(value,
is_list=is_list))
                        notes.append(self.add_separator(self.separator,
u"".join(unicode(v) for v in item_list), is_list=is_list))

        result_notes = u"".join(notes)
        if isinstance(self.separator, list):
            return result_notes
        else:
            return result_notes.replace(
                u"</div>{0}".format(self.separator), u"</div>").replace(
                u"{0}</div>".format(self.separator), u"</div>"
            )  # tighten up result

    def add_separator(self, separator, items, is_list=False):
        """
        apply the separator to the data
        :param separator: None, str or list such as ['<span>', '</span>']
        :param items: str or list to add separator
        :return: text with separator applied
        """
        _items = items

        if not _items:
            return "<br>"

        if not isinstance(_items, list):
            _items = [_items]

        if isinstance(separator, list):
            return u"".join([u"{}{}{}".format(separator[0], item,
separator[1]) for item in _items])

        return u"{}{}".format(separator.join(_items), separator if not
is_list else u"")

def get_properties(property_name):
    """
    Logic to collect the json and parameters from a workflow property.
    Args:
      property_name: workflow property to reference
    Returns:
      padding, separator, header, json_omit_list, incident_field, json,
sort_keys
    """
    if not workflow.properties.get(property_name):
        helper.fail("workflow.properties.{}
undefined".format(property_name))

    padding = int(workflow.properties[property_name].get("padding", 10))
    separator = workflow.properties[property_name].get("separator", u"<br
/>")
    if isinstance(separator, list) and len(separator) != 2:
        helper.fail("list of separators should be specified as a pair such
as ['<div>', '</div>']: {}".format(separator))

    header = workflow.properties[property_name].get("header")
    json_omit_list =
workflow.properties[property_name].get("json_omit_list")
    if not json_omit_list:
        json_omit_list = []
    incident_field =
workflow.properties[property_name].get("incident_field")
    json = workflow.properties[property_name].get("json", {})
    if not isinstance(json, dict) and not isinstance(json, list):
        helper.fail("json element is not formatted correctly:
{}".format(json))
    sort_keys = bool(workflow.properties[property_name].get("sort",
False))

    return padding, separator, header, json_omit_list, incident_field,
json, sort_keys


## S T A R T
if 'workflow' in globals():
    padding, separator, header, json_omit_list, incident_field, json,
sort_keys = get_properties('convert_json_to_rich_text')

    if header:
        if isinstance(separator, list):
            hdr = u"{0}{1}{2}".format(separator[0], header, separator[1])
        else:
            hdr = u"{0}{1}".format(header, separator)
    else:
        hdr = u""

    convert = ConvertJson(omit_keys=json_omit_list, padding=padding,
separator=separator, sort_keys=sort_keys)
    converted_json = convert.convert_json_to_rich_text(json)
    result = u"{}{}".format(hdr, converted_json if converted_json else
"\nNone")

    rich_text_note = helper.createRichText(result)
    if incident_field:
        incident[incident_field] = rich_text_note
    else:
        incident.addNote(rich_text_note)
```

## Custom Fields

| Label | API Access Name | Type | Prefix | Placeholder | Tooltip |
|---|---|---|---|---|---|
| Symantec DLP Incident ID | `sdlp_incident_id` | `number` | `properties` | - | - |
| Symantec DLP Incident Status | `sdlp_incident_status` | `text` | `properties` | - | - |
| Symantec DLP Incident URL | `sdlp_incident_url` | `textarea` | `properties` | - | - |
| Symantec DLP Policy Group ID | `sdlp_policy_group_id` | `number` | `properties` | - | - |
| Symantec DLP Policy Group Name | `sdlp_policy_group_name` | `textarea` | `properties` | - | - |
| Symantec DLP Policy ID | `sdlp_policy_id` | `number` | `properties` | - | - |
| Symantec DLP Policy Name | `sdlp_policy_name` | `textarea` | `properties` | - | - |

## Rules

| Rule Name | Object | Workflow Triggered |
|---|---|---|
| Symantec DLP: Close DLP Case | incident | `sdlp_close_dlp_case` |
| Symantec DLP: Get DLP Notes | incident | `sdlp_get_dlp_notes` |
| Symantec DLP: Resolve Incident in DLP | incident | `sdlp_resolve_incident_in_dlp` |
| Symantec DLP: Send SOAR Note to DLP | note | `sdlp_send_soar_note_to_dlp` |
| Symantec DLP: Update DLP Incident | incident | `sdlp_update_incident` |
| Symantec DLP: Update Severity in DLP | incident | `sdlp_update_incident_status` |
| Symantec DLP: Upload Binaries | incident | `sdlp_upload_binaries` |
| Symantec DLP: Upload Binaries as Artifact | incident | `sdlp_upload_binaries` |

| Rule Name | Object | Workflow Triggered |
|---|---|---|
| Symantec DLP: Write DLP Incident Details to Note | incident | `sdlp_write_incident_details_to_note` |

## Troubleshooting & Support

Refer to the documentation listed in the Requirements section for troubleshooting information.

### For Support

This is an IBM supported app. Please search ibm.com/mysupport for assistance.

## Template Appendix

Below are examples of templates for creating, updating, and closing IBM SOAR incidents. Customize these templates and refer to them in the app.config file. These default jinja templates map SOAR fields to Symantec DLP incident fields.

Each template should be reviewed for correctness in your enterprise. For instance, closing a SOAR incident may include additional custom fields which the default template does not include.

▶ incident_creation_template

```
{#  Custom properties for DLP Attributes #}
"properties": {
    "sdlp_incident_id": {{ staticIncidentDetails.incidentId }},
    "sdlp_incident_status": "{{
editableIncidentDetails.infoMap.incidentStatusName }}",
    "sdlp_incident_url": {"format" : "html", "content" : "<a
target='blank' href='{{ sdlp_incident_url }}'>Symantec DLP Incident</a>"},
    "sdlp_policy_name": "{{ staticIncidentDetails.infoMap.policyName }}",
    "sdlp_policy_id": {{ staticIncidentDetails.infoMap.policyId }},
    "sdlp_policy_group_id": {{ staticIncidentDetails.infoMap.policyGroupId
}},
    "sdlp_policy_group_name": "{{
staticIncidentDetails.infoMap.policyGroupName }}"
},
{# Artifacts which we will try to pull out of the Incident #}
"artifacts": [
{% if staticIncidentDetails.infoMap.get('discoverServer', False) %}
  {{- comma() }}
  {
    "type": {"name": "System Name"},
    "value": "{{
staticIncidentDetails.infoMap.discoverServer|replace('\\',
'\\\\')|replace('"', '\\"') }}",
    "description": {
      "format": "text",
      "content": "System Name of the machine that generated Symantec DLP
Incident Id {{ staticIncidentDetails.incidentId }}"
    }
  }
{% endif %}
{% if staticIncidentDetails.infoMap.get('discoverContentRootPath', False)
%}
  {{- comma() }}
  {
    "type": { "name": "File Path"},
    "value": "{{
staticIncidentDetails.infoMap.discoverContentRootPath|replace("\\",
"\\\\") }}",
    "description" : {
        "format" : "html",
        "content" : "File Path of the file that generated Symantec DLP
Incident Id {{ staticIncidentDetails.incidentId }}"
    }
  }
{%- endif -%}
{% if staticIncidentDetails.infoMap.get('discoverName', False) %}
  {{- comma() }}
  {
    "type": { "name": "File Name"},
    "value": "{{ staticIncidentDetails.infoMap.discoverName|replace("\\",
"\\\\") }}",
    "description" : {
        "format" : "html",
        "content" : "File Name of the file that generated Symantec DLP
Incident Id {{ staticIncidentDetails.incidentId }}"
    }
  }
{%- endif -%}
{% if staticIncidentDetails.infoMap.get('fileOwner', False) %}
  {{- comma() }}
  {
    "type": { "name": "User Account"},
    "value": "{{ staticIncidentDetails.infoMap.fileOwner|replace("\\",
"\\\\") }}",
    "description" : {
        "format" : "html",
        "content" : "File Owner of the file that generated Symantec DLP
Incident Id {{ staticIncidentDetails.incidentId }}"
    }
  }
{%- endif -%}
{% if staticIncidentDetails.infoMap.get('endpointMachineIpAddress', False)
%}
  {{- comma() }}
  {
    "type": {"name": "IP Address"},
    "value": "{{
staticIncidentDetails.infoMap.endpointMachineIpAddress|replace('\\',
'\\\\')|replace('"', '\\"') }}",
    "description": {
      "format": "text",
      "content": "IP Address of the machine that generated Symantec DLP
Incident Id {{ staticIncidentDetails.incidentId }}",
      "properties": [{"name": "source", "value": true}]
    }
  }
{% endif %}
],
"comments": [
    {%- for note_text in notes -%}
    {
        "text": {
            "format": "html",
            "content": "{{note_text|replace('\\', '\\\\')|replace('"',
'\\"')}}"
        }
    }
    {{ "," if not loop.last else "" }}
    {%- endfor -%}
]
```

}

- ▶ incident_close_template
- ▶ incident_update_template

"properties": { "sdlp_incident_status": "{{ editableIncidentDetails.infoMap.incidentStatusName }}" } }