

RESILIENT SYSTEMS

Web URL Integration Guide

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Overview

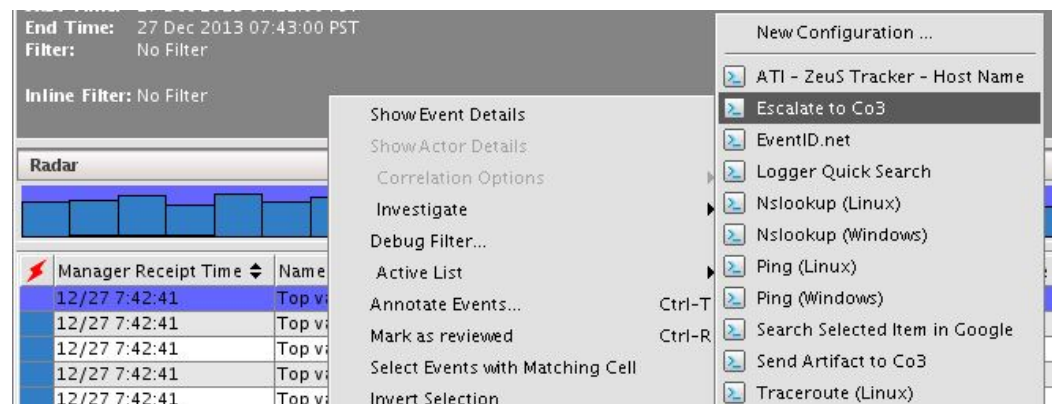
The Resilient Systems Application supports a rich variety of programmable interfaces that can be used for integration with other systems. The simplest of these interfaces is the Web URL.

By directing a user's browser to specially-constructed Web URLs, the user can be guided through automatic creation of an incident, and other functions.

Example Uses

A typical use case for this integration is in manually creating Resilient incidents from within another system, such as a SIEM. This streamlines the process of escalation to the incident response team.

For example, the user interface of HP ArcSight can be extended to add custom commands and configurations. In these configurations, a simple customization creates a direct link from the ArcSight UI where users can immediately create and enrich incidents in Resilient.



This document provides details and examples of the URL syntax, including examples of how these are used in practical integrations.

Web URL Methods

There are two methods for Web URL integration: “#external/new_by_url”, to create a new incident, and “#external/add_artifacts_by_url”, to add artifacts to an existing incident.

The full URL for these is based at the Resilient server’s normal address. For example, for server hostname “app.resilientsystems.com” and the default SSL port 443, the full URLs are

`https://app.resilientsystems.com/#external/new_by_url?...`
`https://app.resilientsystems.com/#external/add_artifacts_by_url?...`

The query-string parameters after ‘?’ are documented in the sections below.


New Incident by URL

Opens a form for creating a new incident. The URL specifies which fields should be displayed on the form layout, and optional values for those fields. If a value is omitted, the field is shown on the form layout, but has no default value.

#external/new_by_url?field=[value]&field=[value]...

A full example is shown below, from the following URL:

https://app.resilientsystems.com/#external/new_by_url?name=Incident%2022&description=Marketing%20Web%20Server%20Breached&harmstatus_id=Unknown&severity_code=high&crimestatus_id=Yes&nist_attack_vectors=Web&data_format=&incident_type_ids=19,20

 Dashboards ▾ List Incidents New Incident My Ta

Create New Incident

Name *

Incident 22

Description

Marketing Web Server Breached

Harm Foreseeable

Unknown

Severity

High

Criminal Activity

Yes

NIST Attack Vectors

Web

Data Format

—

Incident Type

Malware

System Intrusion

Create

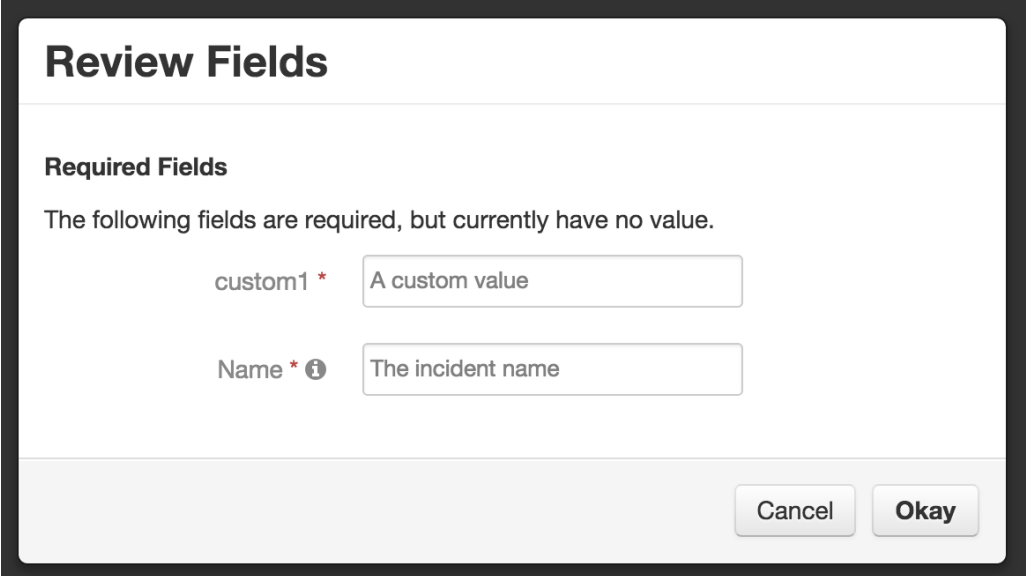
Field names

Fields are specified by their “API name”. Every field in Resilient has a unique API name.

Fields in the form layout will appear in the order that they are specified in the URL.

If a fieldname is specified in the URL but does not exist in the server, it will be ignored.

If a required field (for example ‘name’, or a custom field) is not specified in the URL, it will appear in the “Review Fields” dialog, where it must be completed before the incident can be saved.

A screenshot of a "Review Fields" dialog box. The title bar says "Review Fields". Below the title, there is a section header "Required Fields". Under this header, a message states: "The following fields are required, but currently have no value." There are two input fields. The first is labeled "custom1 *" and contains the text "A custom value". The second is labeled "Name * i" (where 'i' is an information icon) and contains the text "The incident name". At the bottom right of the dialog, there are two buttons: "Cancel" and "Okay".

Field values

Values for fields with enumerated options, for example “incident type” and “country”, can be specified by their ID value or by the full text value. For example, the enumerated code for country Belgium is 1038, so these two are equivalent:

```
#external/new_by_url?country=Belgium  
#external/new_by_url?country=1038
```

Refer to the table in Appendix 1 for the list of standard fields, and numeric IDs for standard enumerated values.

Some fields support multiple values. In these cases, the URL can include multiple values, separated by comma. For example, multiple incident types would be specified as “incident_type_ids=18,19,22”.

Text in field values should be URL-encoded (“percent-encoded”), to allow inclusion of special and non-URL-safe characters.

To specify a value for a field without showing the field on the form layout, the value can be enclosed in a JSON block that includes “hidden”:true. The URL-encoded JSON block below shows an example where the “name” field is specified but hidden, and so is not editable by the user when creating the incident.

```
#external/new_by_url?name={%22value%22:%22Incident%20X%22,%22hidden%22:true}
```

Time/date field values are specified in milliseconds of the Unix epoch. In the external application, this might be generated using for example the JavaScript ‘Date.now()’, Python ‘time.time()’, or the bash ‘date +%s’ (seconds) followed by three zeros.

Add Artifacts by URL

Opens a form for adding new artifacts to an existing incident. The URL specifies a list of artifacts, each entry having an artifact type and value.

```
#external/add_artifacts_by_url?artifacts[]=type,value...
```

The resulting page shows a dropdown list of incidents, and the supplied artifacts.

The URL parameter ends with a numeric artifact type, and then the artifact itself, separated by a comma. For example, if the number 1 is used to indicate an IP address, and the IP address is 192.168.1.2, then the resulting URL would be:

```
https://server/#external/add_artifacts_by_url?artifacts[]=1,192.168.1.2
```

Artifact types include IP addresses, DNS names, URL’s, and other types. Refer to the table in Appendix 2 for the complete list of artifact types.

If known, the URL can specify the incident ID. This selects the given incident in the dropdown list:

```
#external/add_artifacts_by_url?incident_id=1234&artifacts[]=type,value...
```

Multiple artifacts can be specified in one URL. To do this, repeat the ‘artifacts’ parameter as many times as required. For example,

```
https://server/#external/add_artifacts_by_url?artifacts[]=1,18.181.2.75&artifacts[]=2,rtfm.mit.edu&artifacts[]=9,sender@example.com
```

produces the result below:

Add Artifacts to Incident

Incident

4455 - fax1

Artifacts

1. IP Address 18.181.2.75**2. DNS Name** rtfm.mit.edu**3. Email****Sender**

sender@example.com

[Add Artifacts](#)

Authentication

When opening a browser window with one of these URLs, a login prompt will appear if the user is not already logged in to the Resilient server. This login prompt requires the user's normal credentials (email address and password). If SAML authentication or two-factor authentication is configured, it also applies to the URL integration methods.

Appendices

Appendix 1: Standard Fields and Values

Field	Description	Available Values
name	Name	Text field
exposure_individual_name	Individual Name	Text field
addr	Address	Text field
zip	Zip	Text field
city	City	Text field
reporter	Reporting Individual	Text field
country	Country	1017 Afghanistan 1261 Åland Islands 1018 Albania 1019 Algeria 1020 American Samoa 1021 Andorra 1022 Angola 1023 Anguilla 1024 Antarctica 1025 Antigua and Barbuda 1026 Argentina 1027 Armenia 1028 Aruba 1029 Ascension and Tristan Da Cunha Saint Helena 1262 Asia 1030 Australia 1031 Austria 1032 Azerbaijan 1033 Bahamas 1034 Bahrain 1035 Bangladesh 1036 Barbados 1037 Belarus 1038 Belgium 1039 Belize 1040 Benin 1041 Bermuda 1042 Bhutan 1043 Bolivarian Republic of Venezuela 1044 Bosnia and Herzegovina 1045 Botswana 1046 Bouvet Island 1047 Brazil 1048 British Indian Ocean Territory

		1049 British Virgin Islands 1050 Brunei Darussalam 1051 Bulgaria 1052 Burkina Faso 1053 Burundi 1054 Cambodia 1055 Cameroon 1001 Canada 1056 Cape Verde 1057 Cayman Islands 1058 Central African Republic 1059 Chad 1060 Chile 1061 China 1062 Christmas Island 1063 Cocos (Keeling) Islands 1064 Colombia 1065 Comoros 1066 Congo 1067 Cook Islands 1068 Costa Rica 1074 Côte d'Ivoire 1069 Croatia 1070 Cuba 1071 Curaçao 1072 Cyprus 1073 Czech Republic 1075 Democratic People's Republic of Korea 1076 Denmark 1077 Djibouti 1078 Dominica 1079 Dominican Republic 1080 Ecuador 1081 Egypt 1082 El Salvador 1083 Equatorial Guinea 1084 Eritrea 1085 Estonia 1086 Ethiopia 1002 Europe 1087 Falkland Islands (Malvinas) 1088 Faroe Islands 1089 Federated States of Micronesia 1090 Fiji 1091 Finland 1092 France 1093 French Guiana 1094 French Polynesia 1095 French Southern Territories
--	--	---

		1096 Gabon 1097 Gambia 1098 Georgia (Country) 1099 Germany 1100 Ghana 1101 Gibraltar 1102 Greece 1103 Greenland 1104 Grenada 1105 Guadeloupe 1106 Guam 1107 Guatemala 1108 Guernsey 1109 Guinea 1110 Guinea-Bissau 1111 Guyana 1112 Haiti 1113 Heard Island and Mcdonald Islands 1114 Holy See (Vatican City State) 1115 Honduras 1116 Hong Kong 1117 Hungary 1118 Iceland 1119 India 1120 Indonesia 1121 Iraq 1122 Ireland 1123 Islamic Republic of Iran 1124 Isle of Man 1125 Israel 1126 Italy 1127 Jamaica 1128 Japan 1129 Jersey 1130 Jordan 1131 Kazakhstan 1132 Kenya 1133 Kiribati 1134 Kuwait 1135 Kyrgyzstan 1136 Lao People's Democratic Republic 1137 Latvia 1138 Lebanon 1139 Lesotho 1140 Liberia 1141 Libya 1142 Liechtenstein 1143 Lithuania
--	--	---

		1144 Luxembourg 1145 Macao 1146 Madagascar 1147 Malawi 1148 Malaysia 1149 Maldives 1150 Mali 1151 Malta 1152 Marshall Islands 1153 Martinique 1154 Mauritania 1155 Mauritius 1156 Mayotte 1157 Mexico 1158 Monaco 1159 Mongolia 1160 Montenegro 1161 Montserrat 1162 Morocco 1163 Mozambique 1164 Myanmar 1165 Namibia 1166 Nauru 1167 Nepal 1168 Netherlands 1169 New Caledonia 1170 New Zealand 1171 Nicaragua 1172 Niger 1173 Nigeria 1174 Niue 1175 Norfolk Island 1176 Northern Mariana Islands 1177 Norway 1178 Oman 1016 Other 1179 Pakistan 1180 Palau 1181 Panama 1182 Papua New Guinea 1183 Paraguay 1184 Peru 1185 Philippines 1186 Pitcairn 1187 Plurinational State of Bolivia 1188 Poland 1189 Portugal 1190 Province of China Taiwan 1191 Qatar 1192 Republic of Korea
--	--	--

		1193 Republic of Moldova 1197 Réunion 1194 Romania 1195 Russian Federation 1196 Rwanda 1198 Saint Barthélemy 1199 Saint Kitts and Nevis 1200 Saint Lucia 1201 Saint Martin (French Part) 1202 Saint Pierre and Miquelon 1203 Saint Vincent and the Grenadines 1204 Samoa 1205 San Marino 1206 Sao Tome and Principe 1207 Saudi Arabia 1208 Senegal 1209 Serbia 1210 Seychelles 1211 Sierra Leone 1212 Singapore 1213 Sint Eustatius and Saba Bonaire 1214 Sint Maarten (Dutch Part) 1215 Slovakia 1216 Slovenia 1217 Solomon Islands 1218 Somalia 1219 South Africa 1220 South Georgia and the South Sandwich Islands 1221 South Sudan 1222 Spain 1223 Sri Lanka 1224 State of Palestine 1225 Sudan 1226 Suriname 1227 Svalbard and Jan Mayen 1228 Swaziland 1229 Sweden 1230 Switzerland 1231 Syrian Arab Republic 1232 Tajikistan 1233 Thailand 1234 The Democratic Republic of the Congo 1235 The Former Yugoslav Republic of Macedonia 1236 Timor-Leste 1237 Togo 1238 Tokelau
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		1239 Tonga 1240 Trinidad and Tobago 1241 Tunisia 1242 Turkey 1243 Turkmenistan 1244 Turks and Caicos Islands 1245 Tuvalu 1246 Uganda 1247 Ukraine 1248 United Arab Emirates 1249 United Kingdom 1250 United Republic of Tanzania 1000 United States 1251 United States Minor Outlying Islands 1252 Uruguay 1253 Uzbekistan 1254 Vanuatu 1255 Viet Nam 1256 Wallis and Futuna 1257 Western Sahara 1258 Yemen 1259 Zambia 1260 Zimbabwe
exposure_type_id	Exposure Type	1 Unknown 2 External Source/Vendor 3 Individual
data_source_ids	Source of Data	CUSTOM #
data_format	Data Format	0 Electronic 1 Paper 2 Oral
exposure_dept_id	Department	CUSTOM #
exposure_vendor_id	Vendor	CUSTOM #
state	State, or Province for Canada	1 Alabama 2 Alaska 4 Arizona 5 Arkansas 6 California 7 Colorado 8 Connecticut 9 Delaware 10 District of Columbia 12 Florida 13 Georgia 15 Hawaii 16 Idaho 17 Illinois 18 Indiana 19 Iowa 20 Kansas

		21 Kentucky 22 Louisiana 23 Maine 25 Maryland 26 Massachusetts 27 Michigan 28 Minnesota 29 Mississippi 30 Missouri 31 Montana 32 Nebraska 33 Nevada 34 New Hampshire 35 New Jersey 36 New Mexico 37 New York 38 North Carolina 39 North Dakota 41 Ohio 42 Oklahoma 43 Oregon 45 Pennsylvania 77 Puerto Rico 47 Rhode Island 48 South Carolina 49 South Dakota 50 Tennessee 51 Texas 52 Utah 53 Vermont 55 Virginia 54 Virgin Islands 56 Washington 57 West Virginia 58 Wisconsin 59 Wyoming 77 Puerto Rico 1003 Alberta 1004 New Brunswick 1005 Newfoundland and Labrador 1006 Ontario 1007 Manitoba 1008 Quebec 1009 Nova Scotia 1010 British Columbia 1011 Prince Edward Island 1012 Saskatchewan 1013 Yukon 1014 Northwest Territories 1015 Nunavut
--	--	---

		1106 Guam 1176 Northern Mariana Islands
start_date	Date Occurred	Time/date
discovered_date	Date Discovered	Time/date
harmstatus_id	Harm Foreseeable	1 No 2 Unknown 3 Yes
severity_code	Severity	H High M Medium L Low
crimestatus_id	Criminal Activity	1 No 2 Yes 3 Yes – Freeze Tasks 4 Completed 5 Unknown
confirmed	Incident Disposition	0 No 1 Yes
negative_pr_likely	Negative PR	0 No 1 Yes null = Unknown
data_compromised	Data Compromised	0 No 1 Yes null = Unknown
data_encrypted	Data Encrypted	0 No 1 Yes null = Unknown
data_contained	Exposure Resolved	0 No 1 Yes null = Unknown
employee_involved	Employee Involved	0 No 1 Yes null = Unknown
plan_status	Status	A Active C Closed
phase_id	Phase	1 Engage 2 Detect/Analyze 3 Respond 4 Post-Incident
nist_attack_vectors	NIST Attack Vectors	0 Manual Selection 1 External Media 2 Attrition (Denial-of-Service and Brute-Force Attacks) 3 Web 4 Email 5 Impersonation 6 Improper Usage 7 Theft or Loss of Equipment 8 Other
incident_type_ids	Incident Type	1 Lost PDA/Smartphone 2 Reserved

		3 Lost PDA/Laptop/Tablet 4 Lost Documents/Files/Records 5 Reserved 6 Improper Disposal of Digital Assets 7 Improper Disposal of Documents/Files 8 Lost Storage Device/Media 9 Reserved 10 Reserved 11 Stolen Documents/Files/Records 12 Stolen PC/Laptop/Tablet 13 Stolen PDA/Smartphone 14 Stolen Storage Device/Media 15 Vendor/3rd Party Error 16 TBD/Unknown 17 Communication Error(fax;email) 18 Other 19 Malware 20 System Intrusion 21 Denial of Service 22 Phishing 23 Not an Issue
description	Description	Multiline text or rich-text
hard_liability	Assessed Liability	Numeric field (no “\$” sign allowed)
owner_id	Owner	Email address. Must be an invited member of the Resilient organization.
members	Members	Email address(es). Must be an invited member of the Resilient organization. Multi-select allowed, separated by comma
jurisdiction_name	Jurisdiction	Text field
inc_training	Simulation	0 No 1 Yes

Appendix 2: Artifact Type IDs

Value	Artifact Type
1	IP Address
2	DNS Name
3	URL
5	Email Subject
6	Email Body
8	Email Attachment Name
9	Email Sender
13	MD5 Hash

14	Malware SHA-1 Hash
19	Email Sender Name
20	Email Recipient
22	Malware Sample Fuzzy Hash
23	User Account
24	Registry Key
25	System Name
26	Process Name
27	Port
28	Service
29	String
30	Mutex
31	File Name
32	Password
34	HTTP Request Header
35	HTTP Response Header