Pipl Function for IBM SOAR

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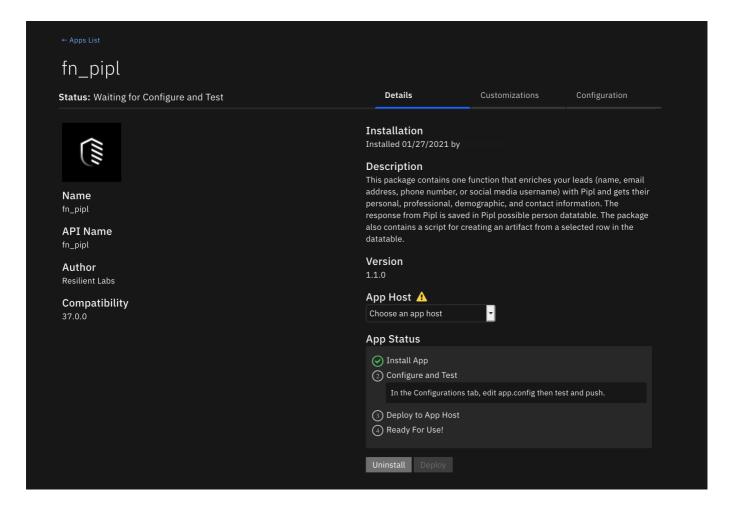
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Release Notes

Version	Date	Notes
1.1.2	10/2023	Only Python 3 supported
1.1.1	05/2022	Submission fix
1.1.0	01/2021	App Host Support
1.0.0	12/2018	Initial Release

Overview

Resilient Circuits Functions to query Pipl Data API



This package contains one function that enriches your leads (name, email address, phone number, or social media username) with Pipl and gets their personal, professional, demographic, and contact information. The response from Pipl is saved in Pipl possible person datatable. The package also contains a script for creating an artifact from a selected row in the datatable.

Key Features

- Query the Pipl API
- Add Pipl data to datatable
- Create artifacts from datatable entries

Requirements

This app supports the IBM QRadar SOAR Platform and the 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 >= 37.0.0.
- 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 >= 37.0.0.
- 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>=44.0.0.
- If using an API key account, make sure the account provides the following minimum permissions:

Name		Permissions	
	Org Data	Read	
	Function	Read	

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 Knowledge Center 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 **SOAR 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 Knowledge Center table of contents, select Case Management and Orchestration & Automation > System administrator.

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

Proxy Server

The app does not support a proxy server.

Python Environment

Only Python 3.6 and 3.9 are officially supported. Since v1.1.2 support for Python 2.7 was removed.

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.

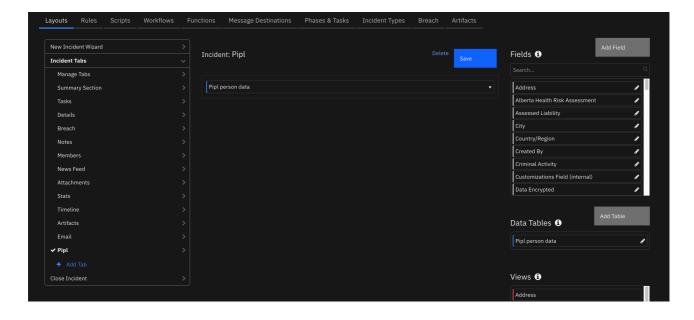
App Configuration

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
pipl_api_key	Yes	XXXXX	API key for the PipI API
pipl_max_no_possible_per_matches	Yes	10	Max number of persons to return if your query does not match a unique person
pipl_minimum_match	No	0.85	Float between 0 and 1. Minimum match score for a person to be returned in the results
pipl_minimum_probability	No	0.7	Float between 0 and 1. Minimum acceptable probability for inferred data
pipl_infer_persons	No	True	Boolean. True if the API should return persons made up solely from data inferred by statistical analysis from your search query.

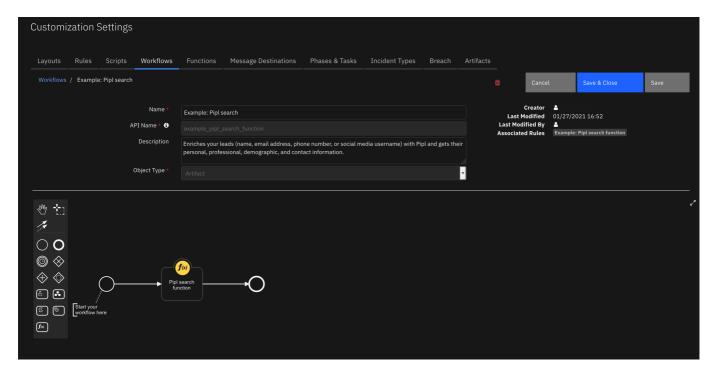
Custom Layouts

• Import the Data Tables and Custom Fields like the screenshot below:



Function - Pipl search function

Function enriches your leads (name, email address, phone number, or social media username) with Pipl and gets their personal, professional, demographic, and contact information.



▶ Inputs:

Name	Type	Required	Example	Tooltip
pipl_artifact_type	text	Yes	_	-
pipl_artifact_value	text	Yes	_	-

▶ Outputs:

```
results =
{
```

```
"version": "1.0",
   "success": true,
   "reason": null,
   "content": {
       "pipl response": "definite match",
       "person list": [
               "@id": "a00f861a-5815-41f0-8ec9-a2dbb074cb64",
               "@search pointer":
"bf63b8c7c3585d05dd2358eb52f4a9ca05d02aec8b2ae7a5eaed4d9320bcfbb9940055167
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                       "@last_seen": "2018-04-01",
                       "first": "Kal",
                       "last": "El",
                       "display": "Kal El"
                   },
                       "@valid_since": "2010-05-11",
                       "first": "Clark",
```

```
"middle": "Joseph",
                        "last": "Kent",
                        "display": "Clark Joseph Kent"
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                        "display": "The red blue blur"
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                ],
                "addresses": [
                    {
                        "@valid_since": "2005-02-12",
                        "@type": "work",
                        "country": "US",
                        "state": "KS",
                        "city": "Metropolis",
                        "street": "Broadway",
                        "house": "1000",
                        "apartment": "355",
                        "display": "1000-355 Broadway, Metropolis, Kansas"
                    },
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                        "@last_seen": "2018-05-01",
                        "@type": "home",
                        "country": "US",
                        "state": "KS",
                        "city": "Smallville",
                        "zip_code": "66605",
                        "street": "Hickory Lane",
                        "house": "10",
                        "apartment": "1",
                        "display": "10-1 Hickory Lane, Smallville, Kansas"
                    }
                ],
                "phones": [
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                        "@valid_since": "2003-08-18",
                         "@last_seen": "2018-06-01",
                        "@type": "home_phone",
                        "country_code": 1,
                        "number": 9785550145,
                        "display": "978-555-0145",
                        "display_international": "+1 978-555-0145"
                    }
                ],
                "emails": [
                    {
                        "@type": "work",
                         "@email_provider": false,
                        "address":
"full.email.available@business.subscription",
                        "address_md5": "eb3e11de3c9cefc2d9d70972350e2b28",
                         "display":
"full.email.available@business.subscription"
```

```
},
                        "@disposable": true,
                        "@email_provider": false,
                        "address":
"full.email.available@business.subscription",
                        "address md5": "999e509752141a0ee42ff455529c10fc",
"full.email.available@business.subscription"
                    },
                        "@type": "personal",
                        "@email_provider": true,
                        "address":
"full.email.available@business.subscription",
                        "address md5": "501548362894b9a08f071b1565d8aa14",
                        "display":
"full.email.available@business.subscription"
                    },
                        "@disposable": true,
                        "@email_provider": false,
                        "address":
"full.email.available@business.subscription",
                        "address md5": "2610ee49440fe757e3cc4e46e5b40819",
                        "display":
"full.email.available@business.subscription"
                    }
                ],
                "jobs": [
                        "title": "Field Reporter",
                        "organization": "The Daily Planet",
                        "industry": "Journalism",
                        "date_range": {
                            "start": "2000-12-08",
                            "end": "2012-10-09"
                        "display": "Field Reporter at The Daily Planet
(2000-2012)"
                    },
                        "title": "Junior Reporter",
                        "organization": "The Daily Planet",
                        "industry": "Journalism",
                        "date_range": {
                            "start": "1999-10-10",
                            "end": "2000-10-10"
                        "display": "Junior Reporter at The Daily Planet
(1999-2000)"
                    },
                        "title": "Top Reporter",
```

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"organization": "The Daily Planet",
                        "industry": "Reporting",
                        "display": "Top Reporter at The Daily Planet"
                    }
                ],
                "educations": [
                        "degree": "B.Sc Advanced Science",
                        "school": "Metropolis University",
                        "date range": {
                            "start": "2005-09-01",
                            "end": "2008-05-14"
                        "display": "B.Sc Advanced Science from Metropolis
University (2005-2008)"
                    {
                        "@valid since": "2015-07-18",
                        "@last seen": "2018-10-10",
                        "school": "Smallville High",
                        "date_range": {
                            "start": "2001-09-01",
                            "end": "2005-06-01"
                        "display": "Smallville High (2001-2005)"
                    }
                ],
                "images": [
                        "url":
"http://vignette1.wikia.nocookie.net/smallville/images/e/ea/Buddies foreve
r.jpg",
                        "thumbnail_token":
"AE2861B242686E7BD0CB4D9049298EB7D18FEF66D950E8AB78BCD3F484345CE74536C19A8
5D0BA3D32DC9E7D1878CD4D341254E7AD129255C6983E6E154C4530A0DAAF665EA325FC020
6F8B1D7E0B6B7AD9EBF71AFAC4C88709957ECDD78608B",
                        "display":
"http://vignette1.wikia.nocookie.net/smallville/images/e/ea/Buddies_foreve
r.jpg"
                    },
                        "@valid_since": "2014-08-18",
                        "@last_seen": "2019-05-01",
                        "url":
"http://vignette3.wikia.nocookie.net/smallville/images/5/55/S10E18-
Booster21.jpg",
                        "thumbnail_token":
"AE2861B242686E7BD0CB4D9049298EB5D18FEF66D950E8AB78BCD3F484345CE74536C19A8
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                        "display":
"http://vignette3.wikia.nocookie.net/smallville/images/5/55/S10E18-
Booster21.jpg"
```

```
"usernames": [
                    {
                        "content": "superman@facebook",
                        "display": "superman@facebook"
                    },
                        "content": "@ckent",
                        "display": "@ckent"
                    }
                ],
                "user_ids": [
                    {
                        "content": "11231@facebook",
                        "display": "11231@facebook"
                ],
                "urls": [
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                        "@domain": "linkedin.com",
                        "@name": "LinkedIn",
                        "@source id": "edc6aa8fa3f211cfad7c12a0ba5b32f4",
                        "url": "http://linkedin.com/clark.kent",
                        "display": "http://linkedin.com/clark.kent"
                    },
                        "@category": "personal_profiles",
                        "@domain": "facebook.com",
                        "@name": "Facebook",
                        "@source id": "5d836a4acc55922e49fc709c7a39e233",
                        "url": "http://facebook.com/superman",
                        "display": "http://facebook.com/superman"
                    },
                        "@category": "professional_and_business",
                        "@domain": "linkedin.com",
                        "url":
"https://www.linkedin.com/pub/superman/20/7a/365",
                        "display":
"https://www.linkedin.com/pub/superman/20/7a/365"
                ],
                "relationships": [
                        "@type": "family",
                        "@subtype": "Adoptive Father",
                        "names": [
                            {
                                 "first": "Jonathan",
                                "last": "Kent",
                                "display": "Jonathan Kent"
                            }
                        ],
```

```
"emails": [
                             {
                                 "@email_provider": false,
                                 "address":
"full.email.available@business.subscription",
                                 "address md5":
"428ffee0df26012a5a2c95b65af0025c",
                                 "display":
"full.email.available@business.subscription"
                             }
                     },
                         "@type": "family",
                         "@subtype": "Father",
                         "names": [
                             {
                                 "first": "Jor",
                                 "last": "El",
                                 "display": "Jor El"
                             }
                         1
                     },
                         "@type": "family",
                         "@subtype": "Cousin",
                         "names": [
                             {
                                 "first": "Kara",
                                 "last": "Kent",
                                 "display": "Kara Kent"
                             }
                         ]
                     },
                         "@type": "other",
                         "@subtype": "Archenemy",
                         "names": [
                             {
                                 "first": "Alexander",
                                 "middle": "Joseph",
                                 "last": "Luthor",
                                 "display": "Alexander Joseph Luthor"
                             }
                         ]
                     },
                         "@type": "work",
                         "@subtype": "Colleague",
                         "names": [
                             {
                                 "first": "Ron",
                                 "last": "Troupe",
                                 "display": "Ron Troupe"
```

```
1
    },
    {
        "@type": "friend",
        "@subtype": "The real love",
        "names": [
            {
                "first": "Chloe",
                "middle": "Anne",
                "last": "Sullivan",
                "display": "Chloe Anne Sullivan"
            }
        ]
    }
],
"ethnicities": [
    {
        "content": "other",
        "display": "Other"
    },
        "content": "american_indian",
        "display": "American Indian"
    },
    {
        "content": "white",
        "display": "White"
    }
],
"origin_countries": [
        "country": "US",
        "display": "United States"
],
"languages": [
        "language": "en",
        "region": "US",
        "display": "en_US"
    }
],
"gender": {
    "@valid_since": "2004-05-16",
    "content": "male",
    "display": "Male"
},
"dob": {
    "date_range": {
        "start": "1986-01-01",
        "end": "1987-05-13"
    },
    "display": "34 years old"
```

```
],
        "raw data": ""
    },
    "raw": "",
    "inputs": {
        "pipl artifact value": "clark.kent@example.com",
        "pipl artifact type": "Email Sender"
    },
    "metrics": {
        "version": "1.0".
        "package": "fn-pipl",
        "package_version": "1.1.0",
        "host": "Brians-MacBook.hsd1.ma.comcast.net",
        "execution_time_ms": 2,
        "timestamp": "2021-01-27 18:17:34"
    },
    "person list": [
        {
            "@id": "a00f861a-5815-41f0-8ec9-a2dbb074cb64",
            "@search pointer":
"bf63b8c7c3585d05dd2358eb52f4a9ca05d02aec8b2ae7a5eaed4d9320bcfbb9940055167
```

dba6bd2d936c8af29efcf70b569cad8e3d3cf55e956ac1fb43bee7476127e1746cd442207d 6bff13ed82e4e6c80b8306ff74afbf301fdc93f4e0d3b6c5d8b6b57db7546813506ea2d8f6 13dbc58de5cab9281ced1def935f7e92b8c1f07441fda6eb534f6e8a39eb687256043aac4a 2eb3526ee5e6860b75fed448a4fa2f66f72012593f91a854f6c3b082999dfae3a72b50292c 99916c106f233c9d0bb16ac85650b1584e039c4298319045624b53895bf0e7ff6c7fa2196d 7302bd6a2239e0855ab36f441ba336fac06bf5a9235cc05479f7262571c5e4961464b3513b 543879036e347b5ed780b9a0d9088bcc11632036711f6ebb3815143cb618484939d7e6b527 feef4ac7f85ad3aa7f663165cae3cbacf80c81ec6f8203eca62a0edb74a29bda7c5dea39da 96d075294e41aaef353db096cddcf224713ee7d3c8b286893121ed84dabc5e9cd7177b7bcf 2e03687a1c93cfc89b8b47d002acb52e331ff2a730bcdc72c130b2ab9e20c5da2d46afbc2c f87ff547910de9414bb8ad436cc89fea9bdaca8c2a0fb297b56fc9bf54a561607aa18a5dc9 66744ee2807c2faa30a92b0e05345fc31e2af240fffecf108c7ce0f8ebc482d84d344cd996 68ad3799a1ae28df6b4c06c28f1b3f4744880b959b769efad87b02be9ba567d647142ced2d 00ff5b8f47da4c3b4e0fd54347fe4839fb117584eb2c07dfa239b9cd64676ad3a5aff1140e 3c2d591ef7da67171afcd1adbef3628ac21cf56d9465212ea01555c736a7d17d3435f68526 dc21354f7b70bb768202d3c90e08cc028ed4f97500e3445f7ad9626d3dbe61824dd59c2ac7 7603ab39ed8e46078c5108205f689e8ede8e0de2fe230247c6f9242fa6ebd77a7e2e629e11 acfd08612cc6d88e696aa28d1ccb4210ef0a568b5a54175e6246a2e79225fbbe39e3a8bddc 884fd9a2b6760f0f6a76b7fb2d1fdf48d81393374e5e4b8442e5af8ba50cefbcafbb15d65c f5ff22233aedbbe5931de02e1203df2704838cd0e727dc916dcf6f3f2c4fa925f7c1bdc356 5133cddd338ef8f2f93d924456fc317d5f4414b815977014bd551aec83c8f60fcbc1d1fed6 f996776302ce8324e66ceba93636e942bbbd6eb6bbf4762a2063a1cda838e20b9d551a03c5 a6b6613a443f90d7a2d6c8517a1f18202e11c2dee7295bb3cdbe755bb0105d142a9fc0b322 0d4615b1b47fd3991514a24156f99c011b8239491b5d70414162811ff60cf0b6d5598743e1 7bd4cfe9f0f32e8ab02599ca010f75d86c9e60ca8958fa575d04eb20f807352634c53ae285 a750cfc6bac6b2836f4ba42b2cc041c37a8529a4e87b99c7e36fd49d318c09188b49ce3ef5 96f951c93b1af5a099b37f5dc75ed232f10b377b904ec361e764d12f28f2bfc9b8b891140f 46f475fedcdeb2cd769994dbed0a6c8bd45d75588bc7de9b6d69ed8592eb3d65c2a4480d07 04a484e0904fd7cc6c990ec3911b0fbe35d095ef2674904dbd97ce9b70eb480d1f75a86dda d76fb3f84c4ad4e0c529962e03e77310d5336985e456c26a2f0bf9e2d8f40e6d5f2ad3a3e5

```
1b7d1c5a743768211e924d5083bf55aae",
            "@match": 1.0,
            "names": [
                {
                    "@valid since": "2011-07-11",
                    "@last seen": "2018-04-01",
                    "first": "Kal",
                    "last": "El",
                    "display": "Kal El"
                },
                    "@valid_since": "2010-05-11",
                    "first": "Clark",
                    "middle": "Joseph",
                    "last": "Kent",
                    "display": "Clark Joseph Kent"
                },
                {
                    "display": "The red blue blur"
                }
            ],
            "addresses": [
                {
                    "@valid_since": "2005-02-12",
                    "@type": "work",
                    "country": "US",
                    "state": "KS",
                    "city": "Metropolis",
                    "street": "Broadway",
                    "house": "1000",
                    "apartment": "355",
                    "display": "1000-355 Broadway, Metropolis, Kansas"
                },
                {
                    "@valid_since": "1999-02-01",
                    "@last_seen": "2018-05-01",
                    "@type": "home",
                    "country": "US",
                    "state": "KS",
                    "city": "Smallville",
                    "zip_code": "66605",
                    "street": "Hickory Lane",
                    "house": "10",
                    "apartment": "1",
                    "display": "10-1 Hickory Lane, Smallville, Kansas"
                }
            ],
            "phones": [
                {
                    "@valid_since": "2003-08-18",
                    "@last_seen": "2018-06-01",
                    "@type": "home_phone",
                    "country_code": 1,
                    "number": 9785550145,
```

```
"display": "978-555-0145",
                    "display international": "+1 978-555-0145"
                }
            ],
            "emails": [
                {
                    "@type": "work",
                    "@email provider": false,
                    "address":
"full.email.available@business.subscription",
                    "address_md5": "eb3e11de3c9cefc2d9d70972350e2b28",
                    "display":
"full.email.available@business.subscription"
                },
                    "@disposable": true,
                    "@email_provider": false,
                    "address":
"full.email.available@business.subscription",
                    "address md5": "999e509752141a0ee42ff455529c10fc",
                    "display":
"full.email.available@business.subscription"
                },
                    "@type": "personal",
                    "@email_provider": true,
                    "address":
"full.email.available@business.subscription",
                    "address md5": "501548362894b9a08f071b1565d8aa14",
                    "display":
"full.email.available@business.subscription"
                },
                    "@disposable": true,
                    "@email_provider": false,
                    "address":
"full.email.available@business.subscription",
                    "address_md5": "2610ee49440fe757e3cc4e46e5b40819",
                    "display":
"full.email.available@business.subscription"
            ],
            "jobs": [
                    "title": "Field Reporter",
                    "organization": "The Daily Planet",
                    "industry": "Journalism",
                    "date_range": {
                        "start": "2000-12-08",
                        "end": "2012-10-09"
                    },
                    "display": "Field Reporter at The Daily Planet (2000-
2012)"
                },
```

```
"title": "Junior Reporter",
                    "organization": "The Daily Planet",
                    "industry": "Journalism",
                    "date range": {
                        "start": "1999-10-10",
                        "end": "2000-10-10"
                    },
                    "display": "Junior Reporter at The Daily Planet (1999-
2000)"
                },
                {
                    "title": "Top Reporter",
                    "organization": "The Daily Planet",
                    "industry": "Reporting",
                    "display": "Top Reporter at The Daily Planet"
                }
            ],
            "educations": [
                {
                    "degree": "B.Sc Advanced Science",
                    "school": "Metropolis University",
                    "date range": {
                        "start": "2005-09-01",
                        "end": "2008-05-14"
                    },
                    "display": "B.Sc Advanced Science from Metropolis
University (2005-2008)"
                },
                {
                    "@valid since": "2015-07-18",
                    "@last_seen": "2018-10-10",
                    "school": "Smallville High",
                    "date_range": {
                        "start": "2001-09-01",
                        "end": "2005-06-01"
                    },
                    "display": "Smallville High (2001-2005)"
                }
            ],
            "images": [
                {
                    "url":
"http://vignette1.wikia.nocookie.net/smallville/images/e/ea/Buddies_foreve
r.jpg",
                    "thumbnail token":
"AE2861B242686E7BD0CB4D9049298EB7D18FEF66D950E8AB78BCD3F484345CE74536C19A8
5D0BA3D32DC9E7D1878CD4D341254E7AD129255C6983E6E154C4530A0DAAF665EA325FC020
6F8B1D7E0B6B7AD9EBF71AFAC4C88709957ECDD78608B",
                    "display":
"http://vignette1.wikia.nocookie.net/smallville/images/e/ea/Buddies_foreve
r.jpg"
                },
```

```
"@valid_since": "2014-08-18",
                    "@last seen": "2019-05-01",
                    "url":
"http://vignette3.wikia.nocookie.net/smallville/images/5/55/S10E18-
Booster21.jpg",
                    "thumbnail token":
"AE2861B242686E7BD0CB4D9049298EB5D18FEF66D950E8AB78BCD3F484345CE74536C19A8
5D0BA3D32DC9E7D1878CD4D341254E7AD12C25596CC3E7F51186468FD84B26F5EA234EF154
6E7F5CDF7F7F5BA84B228F4A349812F8C57A1DE7B6388B6".
                    "display":
"http://vignette3.wikia.nocookie.net/smallville/images/5/55/S10E18-
Booster21.jpg"
            ],
            "usernames": [
                {
                    "content": "superman@facebook",
                    "display": "superman@facebook"
                },
                    "content": "@ckent",
                    "display": "@ckent"
                }
            ],
            "user_ids": [
                {
                    "content": "11231@facebook",
                    "display": "11231@facebook"
            ],
            "urls": [
                {
                    "@category": "professional_and_business",
                    "@domain": "linkedin.com",
                    "@name": "LinkedIn",
                    "@source_id": "edc6aa8fa3f211cfad7c12a0ba5b32f4",
                    "url": "http://linkedin.com/clark.kent",
                    "display": "http://linkedin.com/clark.kent"
                },
                    "@category": "personal_profiles",
                    "@domain": "facebook.com",
                    "@name": "Facebook",
                    "@source_id": "5d836a4acc55922e49fc709c7a39e233",
                    "url": "http://facebook.com/superman",
                    "display": "http://facebook.com/superman"
                },
                    "@category": "professional_and_business",
                    "@domain": "linkedin.com",
                    "url":
"https://www.linkedin.com/pub/superman/20/7a/365",
                    "display":
"https://www.linkedin.com/pub/superman/20/7a/365"
```

```
],
            "relationships": [
                {
                    "@type": "family",
                    "@subtype": "Adoptive Father",
                    "names": [
                         {
                             "first": "Jonathan",
                             "last": "Kent",
                             "display": "Jonathan Kent"
                         }
                    ],
                    "emails": [
                         {
                             "@email_provider": false,
                             "address":
"full.email.available@business.subscription",
                             "address md5":
"428ffee0df26012a5a2c95b65af0025c",
                             "display":
"full.email.available@business.subscription"
                         }
                },
                {
                    "@type": "family",
                    "@subtype": "Father",
                    "names": [
                         {
                             "first": "Jor",
                             "last": "El",
                             "display": "Jor El"
                         }
                    1
                },
                    "@type": "family",
                    "@subtype": "Cousin",
                    "names": [
                         {
                             "first": "Kara",
                             "last": "Kent",
                             "display": "Kara Kent"
                         }
                    ]
                },
                    "@type": "other",
                    "@subtype": "Archenemy",
                    "names": [
                             "first": "Alexander",
                             "middle": "Joseph",
```

```
"last": "Luthor",
                "display": "Alexander Joseph Luthor"
            }
        ]
    },
    {
        "@type": "work",
        "@subtype": "Colleague",
        "names": [
            {
                "first": "Ron",
                "last": "Troupe",
                "display": "Ron Troupe"
            }
        ]
    },
    {
        "@type": "friend",
        "@subtype": "The real love",
        "names": [
            {
                "first": "Chloe",
                "middle": "Anne",
                "last": "Sullivan",
                "display": "Chloe Anne Sullivan"
            }
        ]
    }
],
"ethnicities": [
   {
        "content": "other",
        "display": "Other"
    },
        "content": "american_indian",
        "display": "American Indian"
    },
        "content": "white",
        "display": "White"
   }
],
"origin_countries": [
   {
        "country": "US",
        "display": "United States"
],
"languages": [
    {
        "language": "en",
        "region": "US",
        "display": "en_US"
```

```
],
            "gender": {
                "@valid_since": "2004-05-16",
                "content": "male",
                "display": "Male"
            },
            "dob": {
                "date_range": {
                     "start": "1986-01-01",
                     "end": "1987-05-13"
                },
                "display": "34 years old"
            }
        }
    ],
    "pipl_response": "definite match",
    "raw data": ""
}
```

► Example Pre-Process Script:

```
# Required inputs are: the artifact_type and artifact_value
inputs.pipl_artifact_type = artifact.type
inputs.pipl_artifact_value = artifact.value
```

► Example Post-Process Script:

```
from java.util import Date
def add_row_to_pipl_datatable(db_timestamp, db_artifact_value,
db_match_no, db_property, db_value, db_match, db_inferred):
  pipl_person_data = incident.addRow("pipl_person_data")
  pipl_person_data.pipl_timestamp = db_timestamp
  pipl_person_data.pipl_artifact_value = db_artifact_value
  pipl_person_data.pipl_possible_match_no = db_match_no
  pipl_person_data.pipl_property = db_property
 pipl_person_data.pipl_value = db_value
  pipl_person_data.pipl_match = db_match
  pipl_person_data.pipl_inferred = db_inferred
if results.success:
 # Create a datatable from pipl response
  possible_person_counter = 0
  for person in results.person_list:
   # generate result_id and timestamp
   possible_person_counter += 1
```

```
now = Date()
    # 0-1. The level of confidence we have that this is the person you're
looking for.
    match = str(person.get("@match", ""))
    # Whether this person is made up solely from data inferred by
statistical analysis from your search query.
    # You can control inference using the minimum probability parameter,
and inference of persons using the infer_persons parameter.
    inferred = str(person.get("@inferred", ""))
    # Person data
    names = person.get("names", [])
    for name in names:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "name", name.get("display", ""), match, inferred)
    emails = person.get("emails", [])
    for email in emails:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "email address", email.get("address", ""), match,
inferred)
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "address_md5", email.get("address_md5", ""),
match, inferred)
    usernames = person.get("usernames", [])
    for usrname in usernames:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "username", usrname.get("content", ""), match,
inferred)
    phones = person.get("phones", [])
    for phone in phones:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "phone", phone.get("display_international", ""),
match, inferred)
    gender = person.get("gender")
    if gender:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "gender", gender.get("content", ""), match,
inferred)
    dob = person.get("dob")
    if dob:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "dob", dob.get("display", ""), match, inferred)
    addresses = person.get("addresses", [])
    for address in addresses:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "address", address.get("display", ""), match,
```

```
inferred)
   jobs = person.get("jobs", [])
   for job in jobs:
      add row to pipl datatable(now, artifact.value,
possible_person_counter, "job", job.get("display", ""), match, inferred)
   educations = person.get("educations", [])
   for edu in educations:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "education", edu.get("display", ""), match,
inferred)
   user_ids = person.get("user_ids", [])
   for usr id in user ids:
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "user_id", usr_id.get("content", ""), match,
inferred)
   images = person.get("images", [])
   for image in images:
      image url = """<a href='{0}'>{0}</a>""".format(image.get("url", ""))
if image.get("url", "") else ""
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "image", image_url, match, inferred)
   urls = person.get("urls", [])
   for url in urls:
      url_url = """<a href='{0}'>{0}</a>""".format(url.get("url", "")) if
url.get("url", "") else ""
      add_row_to_pipl_datatable(now, artifact.value,
possible_person_counter, "url", url_url, match, inferred)
 # Save the json result as an Note
 raw_data = results.raw_data if results.raw_data else ""
 counter = possible_person_counter if possible_person_counter > 0 else ""
 noteText = u"""Pipl Data API response for artifact_value {} returned {}
{}: \n{}""".format(artifact.value, counter, results.pipl_response,
raw_data)
  incident.addNote(noteText)
```

Script - Create Artifact from Pipl Data

Script creates an artifact based from a selected row in Pipl possible person data.

Object: pipl_person_data

► Script Text:

```
# Create an artifact based from a selected row in Pipl possible person data.
```

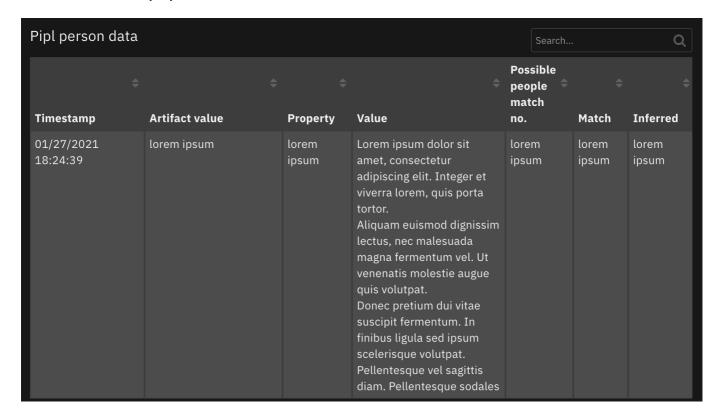
```
# artifact description
artifact_description = u"""Created by Pipl Data results generated for
artifact_value {}""".format(row.pipl_artifact_value)

# artifact type - read it from the menu item's activity field
artifact_type = rule.properties.pipl_artifact_type

# artifact value
# pipl_value column in Pip possible person data is in this format
{u'format': u'html', u'content': u'your api data'}
rich_text_pipl_value = row.pipl_value
artifact_value = rich_text_pipl_value.get("content")

# create an artifact
if artifact_value:
   incident.addArtifact(artifact_type, artifact_value,
artifact_description)
```

Data Table - Pipl person data



API Name:

pipl_person_data

Columns:

Column Name API Access Name Type Tooltip

Column Name	API Access Name	Туре	Tooltip
Artifact value	pipl_artifact_value	text	-
Inferred	pipl_inferred	text	-
Match	pipl_match	text	-
Possible people match no.	pipl_possible_match_no	text	-
Property	pipl_property	text	-
Timestamp	pipl_timestamp	datetimepicker	-
Value	pipl_value	textarea	-

Rules

Rule Name	Object	Workflow Triggered
Example: Create an Artifact from Pipl data	pipl_person_data	_
Example: Pipl search function	artifact	example_pipl_search_function

Troubleshooting & Support

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

For Support

This is a IBM Community provided App. Please search the Community https://ibm.biz/soarcommunity for assistance.