Cisco DNA Spaces Firehose Archiver

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This Firehose Archiver application pulls the data from DNA Spaces over firehose as events and writes them into local disk as hourly files. Below are the events received on the firehose.

Events

- Profile Update: When a device profile is updated. For example, this event is sent when an end-user provides information in a captive portal.
- Device Presence: Used to track life cycle of a device at a location. Events are generated at device entry, when a device is inactive for 10 minutes, when a device is active after being inactive or when we determine that the device has exited. These events also provide current count of devices at location (active and inactive).

Writing firehose events into local disk

- The events received over the firehose are written into local disk as hourly files. It creates a file called “firehose-data.txt” for every hour for a day.
- All the received events are written as json object into that file by separating line separator.
- Below is the path format of the local disk files:
  Format: /path/to/output/utc_date=${UTC_DATE}/utc_hour=${UTC_HOUR}/firehose-data.txt
  E.g.: /mnt/data/output/utc_date=2020-07-23/utc_hour=15/firehose-data.txt

Instance Details

Recommended memory:

- Memory 4 GB
- Disk 100 GB for a period of 3months

Installation Details

Please refer this below link to see the installation details:

https://hub.docker.com/r/ciscodnaspaces/cisco-dna-spaces-firehose-archiver

Profile Update Event Fields

Field	Data Type	Description

device_id	String	Device ID of the device in DNASpaces
user_id	String	User ID of the user in DNASpaces, applicable for only users with valid user ids
tags	List<String>	List of Tag/Persona associated with the device
mobile	String	Mobile number of the device
email	String	Email of the device
gender	String	Gender of the device
first_name	String	First name of the device
last_name	String	Last name of the device
postal_code	String	Postal code of the device
opt_ins	List<String>	OptIn contains the values of MOBILE_NUMBER, EMAIL, TERMS_AND_CONDITIONS
attributes	List<Attribute>	It has attributes fields. Please see the Attribute Fields Section.
mac_address	String	Mac address of the device
manufacturer	String	Manufacturer of the device
os	String	OS of the device
os_version	String	OS Version of the device
Type	String	Type contains either of these values NOT_AVAILABLE, MOBILE, TABLET, LAPTOP, OTHER_DEVICE
social_network_info	List <SocialNetworkInfo>	It has social info fields. Please see the Social Network Info Fields Section.

Device Presence Event Fields

Field	Data Type	Description

presence_event_type	String	Presence event type contains either of these values DEVICE_ENTRY_EVENT, DEVICE_IN_ACTIVE_EVENT, DEVICE_ACTIVE_EVENT, DEVICE_EXIT_EVENT, DEVICE_SSID_CHANGE_EVENT, DEVICE_RAW_USER_ID_CHANGE_EVENT
was_in_active	Boolean	Whether the device was in-active before, this gets significance in exit to know if device has exited from in-active or entry
device	Device	Profile data of the device. Plese see PROFILE_UPDTE Events Fields section
location	Location	Location Data of the device. Please see the Location Fields section
Ssid	String	SSID of the device connected to
raw_user_id	String	User id used for Wi-Fi authentication
visit_id	String	Unique ID for a visit starting from entry to exit, Its same across all levels during the visit
days_since_last_visit	Int32	Number of days since the last visit of a device at the location
entry_timestamp	Int64	Entry timestamp in epoch millisecond
entry_date_time	String	Entry time in string format after converting to local timezone
exit_timestamp	Int64	Exit timestamp in epoch millisecond
exit_date_time	String	Exit time in string format after converting to local timezone
visit_duration_minutes	Int32	Visit duration in minutes [by doing (exit_timestamp - entry_timestamp) / 60 * 1000], applicable only for exit, otherwise its 0
time_zone	String	TimeZone of a location
device_classification	String	Classification of device
visit_classification	String	Classification of visit
active_devices_count	Int32	Current Active devices count at the location, Its count after the current device presence event
in_active_devices_count	Int32	Current InActive devices count at the location, Its count after the current device presence event

Attribute Fields

Field	Data Type	Description
Name	String	Name of the field
values	List<String>	Values associated with the field

Social Network Info Fields

Field	Data Type	Description
social_network	String	Social Network contains either os these values FACEBOOK, TWITTER, LINKEDIN
social_handle	String	Handle/ID of the Social network
social_info	Object	It contains one of these objects either Facebook, Twitter or LinkedIn based on social network. Please see Facebook Fields section, Twitter Fields section, LinkedIn Fields section.

Location Fields

Field	Data Type	Description
location_id	String	Location ID of the location in DNASpaces
Name	String	Name of the location in DNASpaces
inferred_location_types	List<String>	Types of the location inferred by DNASpaces
parent	Location	Parent of the location in DNASpaces Location Hierarchy.

Facebook Fields

Field	Data Type	Description
id	String	ID of the user in Facebook
first_name	String	First name of the user in Facebook
last_name	String	Last name of the user in Facebook
middle_name	String	Middle name of the user in Facebook

name	String	Name of the user in Facebook
short_name	String	Short name of the user in Facebook
name_format	String	Name format used in Facebook
picture	String	Picture image url in Facebook
email	String	Email of the user in Facebook
attributes	List<Attribute>	Other non-standard fields of the user available in Facebook. Please see Attribute Fields section

Twitter Fields

Field	Data Type	Description
id	String	ID of the user in Twitter
name	String	Name of the user in Twitter
screen_name	String	Screen name of the user in Twitter
friends_count	Int32	Friends count of the user in Twitter
followers_count	Int32	Followers count of the user in Twitter
profile_image_url	String	Profile image url in Twitter
profile_banner_url	String	Profile banner url in Twitter
location	String	Location info in Twitter
statuses_count	Int32	Statuses count of the user in Twitter
email	String	Email of the user in Facebook
profile_verified	Boolean	Verified status of the user profile in Twitter
utc_offset	String	Timezone UTC offset of the user in Twitter
time_zone	String	Timezone of the user in Twitter
geo_enabled	Boolean	Geo Enabled status of the user in Twitter
lang	String	Language of the user in Twitter

attributes	List<Attribute>	Other non-standard fields of the user available in Twitter. Please see Attribute Fields section

LinkedIn Fields

Field	Data Type	Description
id	String	ID of the user in LinkedIn
first_name	String	First name of the user in LinkedIn
last_name	String	Last name of the user in LinkedIn
profile_picture	String	Profile Picture image url in LinkedIn
email	String	Email of the user in LinkedIn
attributes	List<Attribute>	Other non-standard fields of the user available in LinkedIn. Please see Attribute Fields section

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*.

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