



Lumen Learning Integration

PIPEDRIVE & HUBSPOT – CONTACTS, COMPANIES & DEALS

CONTRIBUTORS (Vo.7)

Name	Role
Julie Curtis/Rachel Zaccaro/ Brigeth Rivera <i>Lumen Learning</i>	Customer Review
Rachel Prewitt/Sara Miller <i>Intersekt Solutions</i> Tim Munro/Tina Kepler <i>Trujay</i>	Authors

1. Preamble

This document details the Lumen Learning integration between Pipedrive and HubSpot. It may be read by business users and technical staff supporting the integration. Key project contacts are:

Lumen Learning - Customer

Julie Curtis (julie@lumenlearning.com), Rachel Zaccaro (rachel@lumenlearning.com),
Brigeth Rivera (brigeth@lumenlearning.com)

Intersekt Solutions - CRM/MA Process Experts

Rachel Prewitt (rachel@intersektolutions.com), Sara Miller
(sara@intersektolutions.com)

Trujay – Technical assist to Intersekt Solutions

Tina Kepler (tina@trujay.com), Tim Munro (tim@trujay.com)

2. Integration Data Flow

The integration has the following key components:

- HubSpot (HS) is the system of record for marketing data
- Pipedrive (PD) is the system of record for sales data
- IntegrateHQ middleware connects the systems, synchronizing records each 5 minutes (approximately)

The sales team manages CRM data (Organizations, Persons and Deals) from within Pipedrive, with this data to be replicated into HubSpot to support marketing/customer engagement objectives. HubSpot should be kept up to date with the latest CRM information from Pipedrive.

Web form submissions, marketing campaigns and such trigger creation of new HubSpot Company and Contact records. Once qualified these new Company and Contact records are to be written to Pipedrive as Organization and Person records, and assigned to a sales rep. A select subset of HubSpot Contact interactions (e.g. web form submission events) should also be sent from HubSpot to Pipedrive.

To facilitate the periodic synchronization of data between PD and HS:

- Custom PD field “HubSpot Id” on Organization, Person and Deal records will be populated with the Id of the associated HS record
- Custom HS field “Pipedrive Id” on Company, Contact and Deal records will be populated with the Id of the associated PD record

2.1. HS Contacts >> to >> PD Persons

This is a movement of qualified HS Contact records to PD. After PD record creation PD records are regarded as the “master” for future data flows (i.e. changes made to these records flow from PD to HS). PD Organization records are not automatically created from HS Company records as (almost) all valid Organizations should already be present in PD.

1. HS Contacts are managed using standard HS tools. Once these records meet the following criteria the HS to PD sync is initiated:
 - a. Have a primary email address assigned, and
 - b. Achieve a **Lifecycle Stage** of **Sales Qualified Lead** (SQL)
 - i. HS workflows may be used to auto set Contacts to this stage based on, e.g. the associated Company having “Live Customer” set to “Yes”
 - ii. The integration checks that the stage is one of “salesqualifiedlead”, “opportunity”, “customer” or “evangelist”

2. If HS Contact field “Pipedrive Id” is populated:
 - a. Exit the sync of this HS Contact (i.e. skip steps below) as Contact already created/linked with a PD Person
3. Search PD for Person record(s) having a primary email address matching that of the HS Contact:
 - a. No Match? Create a PD Person, carrying across all mapped field values, and Organization association:
 - i. PD Organization is determined from HS Company record the HS Contact is associated with, using the “Pipedrive Id” from that HS Company record
 - ii. If the HS Company record’s “Pipedrive Id” is blank, PD is searched for an Organization with a name matching that of the HS Company
 1. Match? Associate PD Person with matched PD Organization
 2. No Match? Write “Associated Organization not found” on the Person “HubSpot Sync Issues” field (a human can resolve)
 - b. ^{^1}Single Match with PD field “HubSpot Id” blank? Update the PD Person with mapped field values from the HS record, do not overwrite PD values that are non-blank
 - c. ^{^1}Multiple Matches with PD field “HubSpot Id” blank? Select the PD Person with the oldest created-date, update the PD Person with mapped field values from the HS record, do not overwrite PD values that are non-blank
 - d. ^{^1}Single/Multiple Matches with PD field “HubSpot Id” populated? Check if other HS Contact(s) deleted?
 - i. Yes: Update the PD Person with mapped field values & “HubSpot Id” from this new HS record, do not overwrite PD values that are non-blank
 - ii. No: Very rare ... PD Person email updated, but not yet sync’d to HS, in same time window HS Contact created/updated with same email address as PD Person.
Action: do nothing (the next PD sync will detect and resolve this issue)
4. During the PD Person Create/Update process, if the PD Person has no Owner (sales rep) assigned, the PD Person will be auto-assigned an Owner based on the Owner of the PD Organization that the PD Person has been assigned to
5. If this sequence has triggered the creation of a new PD Contact:
 - a. **HOLD: Deal instead of activity (under discussion, ref section 4)** A new PD Activity of type “Task” should also be created, associated with the PD Owner and PD Person, with a due date of 2 days after the initial contact creation and a title of “Start Contact Engagement”
6. During the PD Person Create/Update process, historic HS Engagement information associated with the HS Contact is to be copied across to PD (specific details outlined later)

^{^1} These are documented for completeness however should be extremely rare as PD to HS sync will create/link to the HS record before SQL stage reached.

2.2. HS Contact Interactions >> to >> PD Person Notes

Important HS Contact interactions, shown within HS as timeline events against HS Contacts, should be written to PD to provide the sales team a complete view of the Contact. Not all marketing related events detail will be written from HS to PD, the specific events are:

- Email sent: An email was sent to the Contact using HS email marketing features
 - Carry into PD a summary of the message (timestamp, subject, not the body)
- Form submission: The Contact submitted a HubSpot web form
 - Carry into PD the field values entered onto the form

When the events noted above are triggered the integration will check whether the HS Contact property “Pipedrive Id” is set and, if it is, it will write a summary of the event to the corresponding PD Contact.

2.3. PD Persons, Organizations & Deals >> to >> HS Contact, Company & Deals

All PD Person, Organization and Deal records should be sync'd to HS, with a selected subset of PD fields mapped to overwriting corresponding HS field values.

1. Organizations, Persons and Deals are managed using standard PD tools. Any time these PD records are added/modified (* Persons must have a valid email address) the following will occur
2. If the PD record field “HubSpot Id” is populated, retrieve the record from HS and update HS with recent PD information (as-per the mapped fields)
 - a. Note: if the record with the “HubSpot Id” is not-found it implies that the record was deleted from HS, and so the integration will treat the PD record as though the PD “HubSpot Id” is blank
3. If the PD record field “HubSpot Id” is blank, HS is searched to identify a Company/Contact/Deal record matching the PD record (Organization: match on Company name, Persons: match on Contact primary email, Deals no need to search just assume need to add-new as Deals are not manually created in HS)
 - a. No Match? Create HS record, carrying across all mapped field values
 - b. Single Match with HS field “Pipedrive Id” blank? Update the HS record with mapped field values from the PD record, overwriting as- appropriate
 - c. Multiple Match with HS field “Pipedrive Id” blank? (only applicable to Organizations) Select the HS Company with the oldest created-date, update the HS Company with mapped field values from the HS record, overwriting as needed
 - d. Single/Multiple Matches with HS field “Pipedrive Id” populated and corresponding to a different PD record? (applicable to Organizations and Persons) Check if the other PD Organization(s)/Person(s) deleted?

- i. Yes: Update the HS Company/Contact with mapped field values & “Pipedrive Id” from the new PD record, overwriting as needed
 - ii. No – for Organizations: Proceed as per “No Match”
 - iii. No – for Contacts: Refer to “HubSpot Contact Duplicate Email Issues” section
4. In the case of PD Persons, if the sync process is a “link to existing HS Contact” (rather than create-new) then the “HS Contact Interactions >> to >> PD Person Notes” process should be triggered to back-load PD with historic HS interactions.

2.4. PD “Delivering” Deal “Won” >> Create new PD “Growth” Deal

PD Deals in the “Delivery” pipelines are marked as “Won” by sales reps when the active delivery period (e.g. Spring 19) closes. When this occurs the integration should create a new PD Deal in the corresponding “Growth” pipeline, carrying over relevant PD Deal details, and setting the stage of this new Deal to “Interested”.

- Deals in the “Delivering AYCE” pipeline will be cloned into the “Growth – AYCE” pipeline
- Deals in the “Delivering PAYG/Follett” pipeline will be cloned into the “Growth – ?? [TBA PAYGO or Follett, how to tell?]” pipeline

To manage this process custom field “Next Growth Deal Id” will be added PD Deals – after cloning the deal into the “Growth” pipeline the integration will set the “Next Growth Deal Id” field on the source (won) Deal to track which PD Deals it has already rolled forward & so avoid creating duplicates.

The following deal fields will be carried from the “won” deal onto the clone:

- Title (the prefix will be “rolled forward”, e.g. “S19” would become “F19” and “F19” will become “S20”)
- Contact Person
- Owner
- Academic Term (“rolled forward”, e.g. “Spring 19” would become “Fall 19” and “Fall 19” will become “Spring 20”)
- Payment Model
- Lead Source
- Follett Carve Out
- Value
- Organization
- Products (Price, Quantity, Discount)

2.5. HubSpot Contact Duplicate Email Issues

HubSpot prohibits the creation of multiple Contact records with the same email address, does not allow Contacts to have their email address reset to a blank value, and does not

allow invalid email (e.g. no @ symbol, bad top-level domain). Pipedrive does not enforce these same constraints, hence it is possible to end up in a state such that certain Person cannot be sync'd to HubSpot. This is how the integration will handle this such instances

- If PD has 2 (or more) Person records with the same primary email address:
 - The first PD Person record will successfully sync with HS
 - Subsequent PD Person records will not sync, and custom PD field “HubSpot Sync Issues” will be set to “Duplicate primary email address”
 - Be aware that if this issue is resolved within PD by changing the email address of the other PD Person, in order for the integration to re-sync this PD Person to HS a change of some sort will need to be made to this PD Person (e.g. clear the “HubSpot Sync Issues” field)
- If PD Person has an invalid email address:
 - Custom PD field “HubSpot Sync Issues” will be set to “Invalid primary email address”
- If PD Person has a blank email address:
 - Custom PD field “HubSpot Sync Issues” will be set to “Blank primary email address”
- If PD Person has an email address that is not a duplicate within PD, but is assigned to a different HS Contact
 - Custom PD field “HubSpot Sync Issues” will be set to “Primary email address applied to different HubSpot Contact”
 - How can this happen? Consider a PD Person that has primary email address set to bob@somewhere.com and is then sync'd to HubSpot. If the PD email address is later cleared from this PD Person, the bob@somewhere.com address will be left on the HS Contact (for reasons detailed above). If a new PD Person is later created, and has email address set to bob@somewhere.com this is not a PD duplicate, however we cannot apply this email address as the email address is already in use in HS
 - Be aware that if this issue is resolved within HS by changing the email address of the other HS Contact, in order for the integration to re-sync this PD Person to HS a change of some sort will need to be made to this PD Person (e.g. clear the “HubSpot Sync Issues” field)

When a sync issue is detected an email will be sent to by the integration to email address **TBA**. Further, a shared PD filter “HubSpot Sync Issues” will provide a grid view of all Persons that currently have sync issues.

2.6. Handling Record Deletions

Record deletions will not be automatically propagated between HS and PD.

2.7. System Access Details

HubSpot: OAuth2 authentication using account integration.lumen@trujay.com

Pipedrive: Pipedrive API key from account julie@lumenlearning.com

IntegrateHQ: Account access email as integration.lumen@trujay.com

Credentials for above accounts are securely stored in an encrypted vault with access restricted as-per Trujay standard operating practices.

3. Field Mappings

Pick-list Style Fields

Certain HS/PD field types restrict values that can be entered to a configurable set of values. PD calls these “Single option” / “Multiple options” and HS calls these “Single checkboxes” / “Multiple checkboxes” / “Radio select” / “Dropdown select” fields.

For these field types PD will be assumed to be the “master”, meaning that when new options are to be made available for these pick-list fields they will be added (by a human) to PD and the integration will copy them across to HS.

When attempting to sync fields of these types between HS and PD, the integration will make use of the “display name” to match options rather than the system specific “internal id”. It does this as internal id’s within PD and HS have a different structure that does not match. This has the following implications:

- If the integration cannot find an option in HS, the integration will assume this is a new option and so automatically create that option
- If the display name of an existing option is changed in either PD or HS, a human should immediately change the display name in the other system to match (if not, the integration will assume it is new and so automatically create it in HS system – which will cause confusion!

The integration will never delete option values from PD/HS.

The following pick-list style fields are referenced by this integration:

Pipedrive	HubSpot
Organizations >> Bookstore	Companies >> Bookstore
Organizations >> Live Customer	Companies >> Live Customer
Organizations >> LMS	Companies >> LMS
Organizations >> Platform Integration	Companies >> Platform Integration
Organizations >> Solutions in Use	Companies >> Solutions in Use
Persons >> Discipline	Contacts >> Department - CRM Categories
Persons >> Relationship	Contacts >> Relationship
Deals >> Academic Term	Deals >> Academic Term
Deals >> Payment Model	Deals >> Payment Model
(* all stages from all Deal Delivery pipelines)	Deals >> Pipeline Delivery Stage

PD Organizations to HS Companies [2019-05-08 mapping checked]

Pipedrive Name / {ID}	HubSpot Name / {ID}
Id {id}	Pipedrive Id {pipedrive_id}
HubSpot Id {10921d85be7a27715871d450fe8cf79fed05f461} Set by the integration when it links Org to Company	Id {companyId}
Name {name}	Name {name}
Owner {owner_id* (map to HubSpot Owner Id)}	Company Owner {hubspot_owner_id}
Apartments/suite no {address_subpremise}	Street Address 2 {address2}
House number & Street/road name {address_street_number + " " + address_route}	Street address {address}
City/town/village/locality {address_locality}	City {city}
State/county {address_admin_area_level_1}	State/Region {state}
Country {address_country}	Country {country}
ZIP/Postal code {address_postal_code}	Postal Code {zip}
Last activity date {last_activity_date}	Last PD activity date {last_pd_activity_date}
Follett Region {b0878fa99fdb7349428c1d2b0670cbdd9d2b5268}	Follett Region {follett_region}
Undergrad FTE {3252c47d9dbb3ea8df531199a7094f6a62d2429d}	Undergrad FTE {undergrad_fte}
Bookstore {aaa9181036622c636f4c680158ff0115388b1941}	Bookstore {bookstore}
Live Customer {ae2babf7047307258873f4edf4a7d55bb0046464}	Live Customer {live_customer}
LMS {e38396718d4fecbbfca446de61d65ecc875fc595}	LMS {lms}
Platform Integration {24d4f0016a64d52904d7d6001958c0916b14c560}	Platform Integration {platform_integration}
Solutions in Use {a1fb1aad1dbcd0281d4fa8d85ee8aed11877cc16}	Solutions in Use {solutions_in_use}
System {2afc692da323fd179ae8010144910baa21f1f42}	System (* this includes e.g. SUNY detail) {system}

PD Persons to HS Contacts [2019-05-08 mapping checked]

Pipedrive Name / {ID}	HubSpot Name / {ID}
Id {id}	Pipedrive Id {pipedrive_id}
HubSpot Id {of7f2899a562ca7250a58bb58060befdco2dbe5b} Set on initial link to HS	Id {vid}
HubSpot Sync Issues (* set by integration) {a222f4a80890c69321oeda89543d8351eafb305d}	(not applicable)
First Name {first_name}	First Name {firstname}
Last Name {last_name}	Last Name {lastname}
Organization {org_id}	Company (*association via id lookup) {associations.associatedCompanyIds[o]}
Email (* primary) {email.value}	Email {email}
Phone (* primary) {phone.value}	Phone number {phone}
Owner {owner_id* (map to HubSpot Owner Id)}	Contact owner {hubspot_owner_id}
Job Title {e3b28d883ee3cc67b11716de2eb35ed7bb4c0583}	Job Title {jobtitle}
Last activity date {last_activity_date}	Last PD activity date {last_pd_activity_date}
Street/road name (Postal Address) {postal_address_street_number + " " + postal_address_route}	Street Address {address}
City/town/village/locality (Postal Address) {postal_address_locality}	City {city}
State/county {postal_address_admin_area_level_1}	State/Region {state}
Country (Postal Address) {postal_address_country}	Country {country}
Zip/Postal Code (Postal Address) {postal_address_postal_code}	Postal Code {zip}
Discipline {d8025b38f37cfe8be438c239f9a368770616a340}	Department - CRM Categories {department_crm_categories}
Relationship {e84d4be4125ac18319c853ba45d1481444d5d966}	Relationship {relationship}

PD Deals to HS Deals

PD and HS manage deal stages differently, plus the way the sales team manages deals through PD pipelines differs to the approach sought by the marketing team in HS:

- In PD, “Won” and “Lost” status do not form part of the pipeline stage, whereas in HS these statuses form part of the continuum of deal stages, and

- In PD, as a result of the way the teams report & manage product/service delivery, the sales team only flag deals as “Won” after the close of the period in which the deal is delivered (e.g. Fall 2019). From a marketing perspective deals are considered “Won” once they reach a PD pipeline status of “Committed”. Delaying the flagging of them as such in HS would impact marketing activities

Consequently, stages on HS Deals will not be a direct mirror of the PD stage:

- HS Deals will be placed into HS Pipelines of the same name as the PD Pipeline
- HS Deals will be marked as “Closed Lost” when the PD Deal status is set to “Lost”
- HS Deals will be marked as “Closed Won” when the PD Deal is not set to “Lost” and any of the following are true:
 - The PD Deal is in the “Committed” stage of a PD “Growth” pipeline
 - The PD Deal is in a “Delivery” pipeline
 - The PD Deal is set to “Won”
- HS Deals will have a custom HS property “Pipedrive Delivery Stage” that, for PD Deals in a Delivery stage, will be set to the PD Deal stage
 - for deals not in a PD “Delivery” pipeline the HS “Pipedrive Delivery Stage” value will be blank

Deal Pipeline and Stage configuration will be replicated “as is” from PD to HS, with extra “Closed Won” and “Closed Lost” stages added to each HS Pipeline.

PD allows for multiple product lines to be attached to each Deal, however in the Lumen PD configuration each Deal will have a single product line. Hence in the field mappings below details of the ‘first’ product line from each Deal can safely be saved to the HS Deal as properties.

TODO: details needed re- PD “Invoice” pipeline

2019-05-16 mapping checked

Pipedrive Name / {ID}	HubSpot Name / {ID}
Id {id}	Pipedrive Id {pipedrive_id}
HubSpot Id {8c7ccf884cd3b02424f22c1c3058eb18326448ea} Set on initial link to HS	Id {dealId}
Deal title {title}	Deal name {dealname}
Organization {org_id}	Company (*association via id lookup) {associations.associatedCompanyIds[o]}
Contact person {person_id}	Contact (*association via id lookup) {associations.associatedVids[o]}
Stage & Status (“won”/ “lost”) {stage_id} & {status}	Deal stage (* via lookup with logic) {pipeline} {dealstage}

Stage & Status (“won”/ “lost”) <i>{stage_id} & {status}</i>	Pipedrive Delivery Stage (* via custom logic) <i>{pipedrive_delivery_stage}</i>
Deal value <i>{value}</i>	Amount <i>{amount}</i>
Deal Product Name <i>{product[o].name}</i>	Product Name <i>{product_name}</i>
Deal Product Price <i>{product[o].item_price}</i>	Product Price <i>{product_price}</i>
Deal Product Quantity <i>{product[o].t.quantity}</i>	Product Quantity <i>{product_quantity}</i>
Deal Product Discount <i>{product[o].discount_percentage}</i>	Product Discount <i>{product_discount}</i>
Deal created <i>{add_time}</i>	Create date <i>{createdate}</i>
Won time OR Lost Time <i>{won_time lost_time}</i>	Close date <i>{closedate}</i>
Owner <i>{user_id* (map to HubSpot Owner Id)}</i>	Deal owner <i>{hubspot_owner_id}</i>
Academic Term <i>{70b0f0f201b4b6ffa59ef807doc4acu6da7533}</i>	Academic Term <i>{academic_term}</i>
Payment Model <i>{2ebod431d7ec6134f4142b97bd1b012fbe7fcc5d}</i>	Payment Model <i>{payment_model}</i>

HS Contacts to PD Persons

PD field values will only be written to if they are blank - PD data will not be overwritten with values from HS.

Go to -> mapping checked!

HubSpot Name / {ID}	Pipedrive Name / {ID}
Id {vid}	HubSpot Id {of7f2899a562ca7250a58bb58060befdco2dbe5b}
Company (* associated HS Company) {associatedcompanyid*} Company "Name" used to find correct PD Org by "Name"	Organization {org_id}
[Company*].Address (* from associated HS company above) {c.address + " " + c.address2 + " " + c.city + " " + c.state + " " + c.zip + " " + c.country}	[Organization*].Address (* associated org) {address} Address only set in PD if it is blank
(not applicable)	Owner (* set by integration, refer to logic) {owner_id}
Email {email}	Email (* primary, work) {email}
First name & Last name (* join) {firstname + " " + lastname}	Name {name}
Follett Store # {follett_store_}	Follett Store # {85142744f1c01c6120f30de357c435ec7198eb39}
Job Title {jobtitle}	Job Title {e3b28d883ee3cc67b11716de2eb35ed7bb4c0583}
Phone Number {phone}	Phone (* primary, work) {phone}
Street Address & City & State/Region & Postal Code & Country {address + " " + city + " " + state + " " + zip + " " + country}	Postal Address (* full string, not parts) {postal_address}
Department - CRM Categories {department_crm_categories}	Discipline {d8025b38f37cfe8be438c239f9a368770616a340}
Relationship {relationship}	Relationship {e84d4be4125ac18319c853ba45d1481444d5d966}
Original Source {hs_analytics_source}	HubSpot Original Source {2aaf82f66cbbc704d066374a631485of31332d30}

4. Other Project Discussions/Tasks

CHANGE: Create new PD Deal when HS Contact, not in PD, reaches SQL stage

Note: more detail re- this has been captured in an email for review by Tom

When HS Contact reaches SQL stage the integration should create a new PD Deal (as well as the PD Person)

- 2 new PD Deal pipelines will be created by Tom - “Customer Lead” and “New Business Lead”
- The “Live Customer” value of the PD Organization that the new PD Person is associated with will be used to determine the PD pipeline to place the PD Deal into:
 - Assign to “Customer Lead” pipeline if “Live Customer” value is “Live”
 - Else assign to “New Business Lead” to pipeline
- Need to work through other field values to be applied to the new PD Deal, e.g. name, correct deal stage, value, other?
- This is a one time PD Deal creation; after creation data from this PD Deal will flow back to HS as per all other deals

CHANGE: Adjust current PD Deals to reflect prior point

Update existing PD Deals to make use of the 2 new Pipelines as outlined in last point

- Write a single use script to manipulate all deals that are currently in the (TBA “New Lumen Leads”?) pipeline and move these deals into the new “Customer Lead” or “New Business Lead” pipelines based on the “Live Customer” value of the PD Organization that the PD Deal is associated with
- The Deal stage of these Deals will remain unchanged (i.e. only the pipeline will change) – this requires that the new - “Customer Lead” and “New Business Lead” pipelines contain all stages that are defined in the stages the deals currently reside in

===

Below are other project related tasks previously discussed and recorded here to ensure they do not get forgotten:

- HS Companies: there are multiple duplicate Company records (by name), aim to clean this up by deleting duplicate records or re-naming to be unique prior to enabling the PD to HS sync
 - Lumen are working on this
- PD Organizations: as per HS Companies, aim to resolve the org name duplicates
 - Lumen are working on this
- PD Persons: as per HS Companies, aim to resolve 660 email duplicates

- Lumen are working on this