

A nighttime cityscape with a network overlay of white lines and nodes connecting various points across the scene. The city lights are visible in the background.

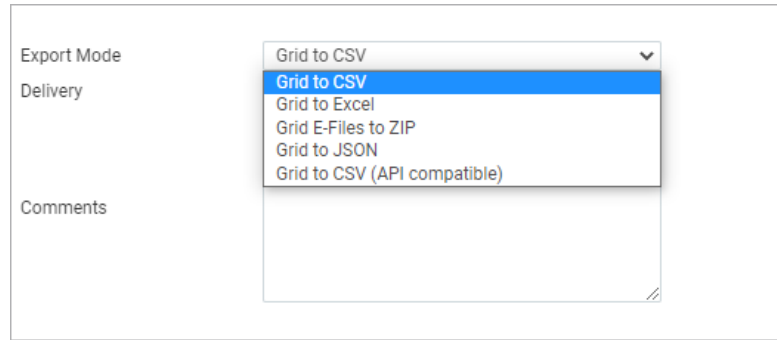
OneVizion

Data Interchange - Exports, Web Calls & API, VizionHub, and DropGrid

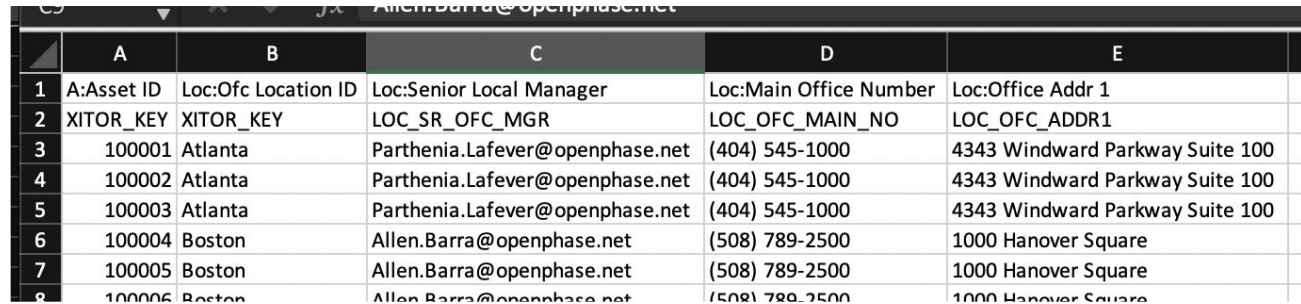
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Exports

- Grid to Excel will contain coloring shown in grid.
- Grid to CSV (API compatible) produces a csv with headings that are in same format as the API expect and XitorConfiguredFieldLoad.
- Also has tracker_id for all tracker types represented in grid for more efficient API calls.
- Grid to CSV has 2 header rows. First row is what user sees (labels).
- Second row is like what standard style imports expect.
- Note that second row might not be unique.



The screenshot shows a web interface with a dropdown menu for 'Export Mode'. The dropdown is open, showing five options: 'Grid to CSV' (highlighted in blue), 'Grid to Excel', 'Grid E-Files to ZIP', 'Grid to JSON', and 'Grid to CSV (API compatible)'. The 'Export Mode' label is to the left of the dropdown. Below the dropdown are labels for 'Delivery' and 'Comments'.



The screenshot shows an Excel spreadsheet with a table of data. The table has 5 columns labeled A through E and 8 rows. The first two rows are headers, and the remaining six rows contain data. The data includes Asset IDs, Locations, Managers, Office Numbers, and Office Addresses.

	A	B	C	D	E
1	A:Asset ID	Loc:Ofc Location ID	Loc:Senior Local Manager	Loc:Main Office Number	Loc:Office Addr 1
2	XITOR_KEY	XITOR_KEY	LOC_SR_OFc_MGR	LOC_OFc_MAIN_NO	LOC_OFc_ADDR1
3	100001	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100
4	100002	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100
5	100003	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100
6	100004	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square
7	100005	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square
8	100006	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square

Exports

- Grid to CSV (API compatible) produces a csv with headings that are in same format as the API expects.
- Headings are in format ready for standard imports.
- Has trackor_id for all trackor types represented in grid for very efficient API calls.



	A	B	C	D	E	F	G	
1	ASSETS.TRACKOR_KEY	TRACKOR_KEY	LOC_SR_OFC_MGR	LOC_OFC_MAIN_NO	LOC_OFC_ADDR1	TRACKOR_ID	ASSETS.TRACKOR_ID	
2	100001	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100	1001641182	1001641569	
3	100002	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100	1001641182	1001641570	
4	100003	Atlanta	Parthenia.Lafever@openphase.net	(404) 545-1000	4343 Windward Parkway Suite 100	1001641182	1001641571	
5	100004	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square	1001641183	1001641573	
6	100005	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square	1001641183	1001641574	
7	100006	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square	1001641183	1001641575	
8	100007	Boston	Allen.Barra@openphase.net	(508) 789-2500	1000 Hanover Square	1001641183	1001641576	

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API

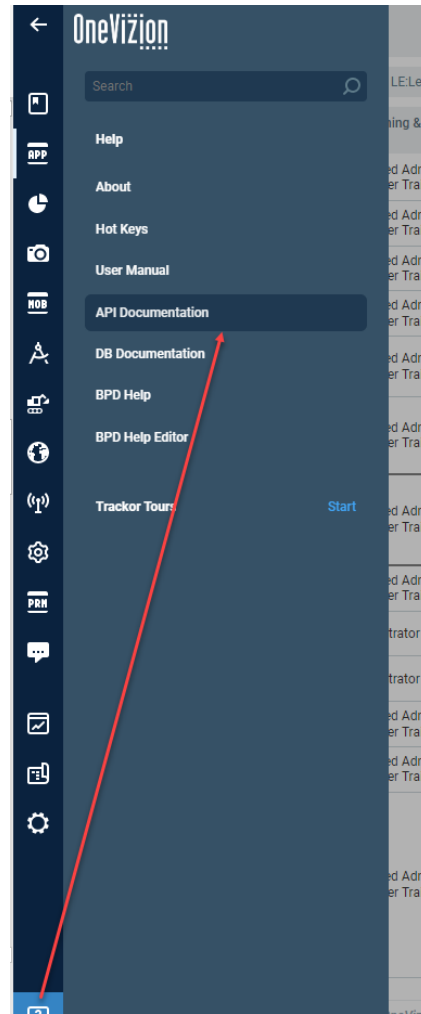
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API Best Practices

How to get to Swagger documentation

Click the Help button in the bottom left corner, then API Documentation.

This will take you to the API Docs where you can read and try out API Calls.



API Best Practices

Make sure you remember to click the authorize button in top left first.



All API endpoints are documented on this page complete with sample json. Be mindful to use Trackor Type name and configured field names and not their labels.

For the "Read Trackor data" endpoint, it's http method is "GET", and it's base URL is listed beside it.

DELETE	/v3/trackor_types/{trackor_type}/trackors	Delete Tracker
GET	/v3/trackor_types/{trackor_type}/trackors	Read Tracker data

Implementation Notes

You should specify either **[filter]** or **[trackor_id]** or CF filters, and either **[view]** or **[fields]**

You can get values of parental fields using "[Trackor Type Name].[CF Name]" as CF name, when "Trackor Type Name" is not set we assume CF belongs to the Trackor Type specified with **[trackor_type]** parameter

When using View Options containing parental fields or explicitly selecting parental fields via **[fields]** parameter, JSON attrib names for parental fields will be in "[Trackor Type Name].[CF Name]" format

When using View Options containing WP Task Date fields, this fields will be ignored.

Endpoint supports paging by providing **[per_page]** and **[page]** parameters. If this parameters isn't defined full list will be returned.

Response Class (Status 200)

OK

Model	Example Value
	<pre>[{ "TRACKOR_ID": "10009689652", "TRACKOR_KEY": "10009689652", "IT_COMPONENT": "Other" }]</pre>

API Best Practices -How to interpret Swagger

When you click "try it out", it performs the call. It is performing it live so test here with test data because the system will be updated/deleted/read etc.

This is the Curl command that performs the exact same API call. Lots of curl documentation on the internet.

Any errors will have a helpful response to guide you to a correct solution.

The screenshot displays the Swagger API interface for a failed request. It includes a table of response messages, a curl command, the request URL, the response body, and the response code.

HTTP Status Code	Reason	Response Model	Headers
400	Invalid JSON provided in request		
403	Calling user doesn't have permissions on certain objects or actions		
404	Some data required for processing is missed		
500	Any other error during request processing		

Try it out! [Hide Response](#)

Curl

```
curl -X GET --header 'Accept: application/json' --header 'Authorization: Basic c3BldHRld2F50lBQ03BwYzQk' 'https://innov
```

Request URL

```
https://innovation.onevizion.com/api/v3/trackor_types/SR/trackors?sort=TRACKOR_KEY%3Aasc&TRACKOR_KEY=1003
```

Response Body

```
You can only sort on fields specified in [fields] parameter. Field [TRACKOR_KEY:asc] not found
```

Response Code

```
404
```

Response Headers

API Best Practices

Loading Documents:

“Trackor Update” endpoint works but you have to base64 encode making the request larger.

“Upload Efile data” endpoint is more efficient and loads binary file directly with less stress on webserver but you cannot update other fields in same call.

If you are loading very large files such as greater than 500MB, make sure to check “upload files directly to AWS S3” on field definition. But don’t use this attribute where you load photos because you don’t get EXIF attributes.

Python Support:

OneVizion has a library that can be installed on any platform using “pip install onevizion” making integrations easier.

Examples can be found at <https://github.com/Onevizion/api-samples>

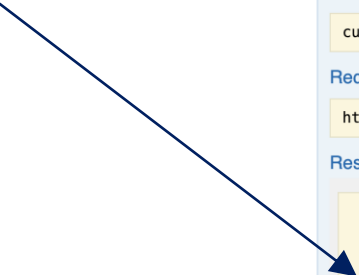
More examples will be loaded over time.

Development "Best Practices"

You can see the response body, code and headers of a successful API call.

With the successful curl, request URL, request body and headers, you have everything you need to write an interface to OneVizion.

If you use python, there are examples online and well tested libraries.



```
Try it out! Hide Response
Curl
curl -X GET --header 'Accept: application/json' --header 'Authorization: Basic c3BldHRld2F501BQ03BwYzQk' 'https://innov
Request URL
https://innovation.onevizion.com/api/v3/trackor_types/SR/trackors?TRACKOR_KEY=1003
Response Body
[
  {
    "TRACKOR_ID": 1001652384,
    "TRACKOR_KEY": "1003"
  }
]
Response Code
200
Response Headers
{
  "pragma": "no-cache",
  "date": "Wed, 29 May 2019 22:20:51 GMT",
  "x-content-type-options": "nosniff",
  "server": "Apache-Coyote/1.1",
  "x-frame-options": "DENY",
  "content-type": "application/json;charset=UTF-8",
  "cache-control": "no-cache, no-store, max-age=0, must-revalidate",
  "transfer-encoding": "chunked",
  "connection": "keep-alive",
  "x-xss-protection": "1; mode=block",
  "x-total-count": "1",
  "expires": "0"
}
```

A nighttime cityscape with a network overlay of white lines and nodes connecting various points across the scene.

OneVizion

VizionHub

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VizionHub

VizionHub allows Administrators to manage (configure and deploy) modules deployed on the OneVizion® platform.

A code module that is deployed on the OneVizion platform via Modules Library.

Examples can be a code module that can send SMS Notifications via Amazon SNS service or a code module that synchronizes records between your OneVizion platform and your system of choice.

The module itself will be managed in a Git-compatible repository.

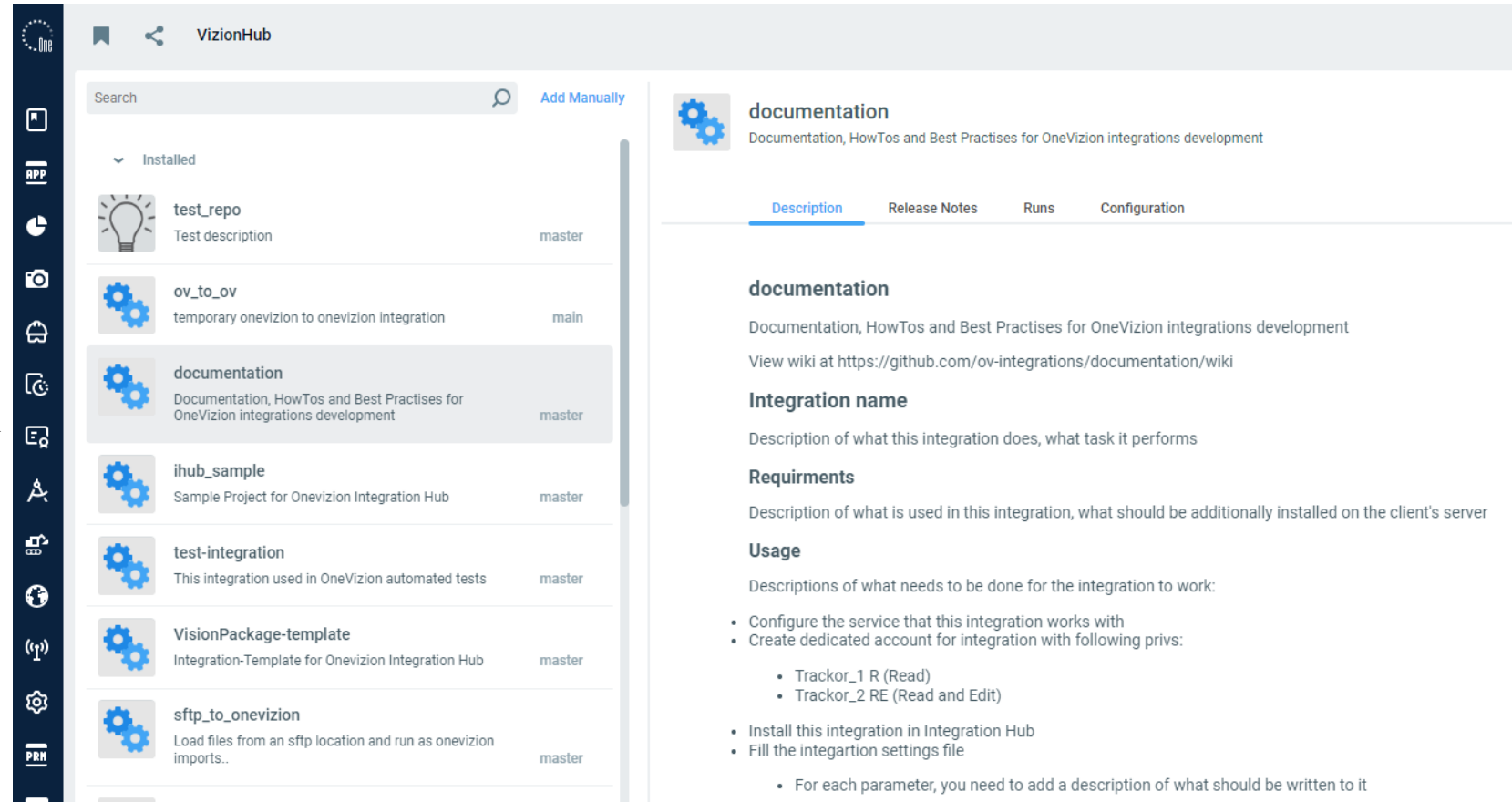
The screenshot displays the VizionHub interface. On the left is a dark sidebar with navigation icons. The main content area is titled 'VizionHub' and features a search bar and an 'Add Manually' button. Below this is a list of installed modules:

Module Name	Description	Version	Branch
sftp_to_onevizion	Load files from an sftp location and run as onevizion imports..		master
FCCDB	FCC Database Integration for Onevizion intHub	2.0.3	
test_repo	Test description		master
sms-notification	Integration for SMS Notifications		master
VisionPackage-template	Integration-Template for Onevizion Integration Hub		master
ihub_sample	Sample Project for Onevizion Integration Hub		master

The right-hand panel shows the details for the selected 'VisionPackage-template' module. It includes tabs for 'Description', 'Runs', and 'Configuration'. The 'Description' tab is active, showing the title 'module-template' and the text: 'Template repository to create new modules' and 'Follow [style guidelines](#) when write Python code'.

Administrators can add Modules from a pre-configured repository (Add) or by explicitly providing the repository link (Add Manually)

When System Parameters ModuleLibraryRepositoryAccount and ModulesLibraryToken are configured, users can add modules from this Account, when they click on the 'Add' button.



The screenshot displays the VizionHub interface. On the left is a vertical navigation sidebar with icons for Home, APP, and various system functions. The main content area is titled 'VizionHub' and features a search bar and an 'Add Manually' button. Below this is a list of installed modules:

Module Name	Description	Branch
test_repo	Test description	master
ov_to_ov	temporary onevizion to onevizion integration	main
documentation	Documentation, HowTos and Best Practises for OneVizion integrations development	master
ihub_sample	Sample Project for Onevizion Integration Hub	master
test-integration	This integration used in OneVizion automated tests	master
VisionPackage-template	Integration-Template for Onevizion Integration Hub	master
sftp_to_onevizion	Load files from an sftp location and run as onevizion imports..	master

The 'documentation' module is selected, showing its details on the right. The details page includes tabs for 'Description', 'Release Notes', 'Runs', and 'Configuration'. The 'Description' tab is active, displaying the following information:

- documentation**
Documentation, HowTos and Best Practises for OneVizion integrations development
- View wiki at <https://github.com/ov-integrations/documentation/wiki>
- Integration name**
Description of what this integration does, what task it performs
- Requirments**
Description of what is used in this integration, what should be additionally installed on the client's server
- Usage**
Descriptions of what needs to be done for the integration to work:
 - Configure the service that this integration works with
 - Create dedicated account for integration with following privs:
 - Tracker_1 R (Read)
 - Tracker_2 RE (Read and Edit)
 - Install this integration in Integration Hub
 - Fill the integartion settings file
 - For each parameter, you need to add a description of what should be written to it

VizionHub

The integration run page contains each run and its associated logs are available by clicking the "Runs" button.

The screenshot displays the VizionHub interface. On the left, a sidebar lists installed integrations: ov-monitoring, slack-notification, sms-notification, FCCDB, WebsiteOutage (selected), ihub_sample, sms-notification2, and module-template. The main content area shows the 'WebsiteOutage' integration details, including a description and a 'Runs' button highlighted with a red box. Below this, a table lists the execution history of the integration.

Process ID	Module Run ID	Status	Start time	Finish time	Error Message	Module Name
1004753860	2879342	Executed without Errors	08/21/2022 00:00:00	08/21/2022 00:00:08		WebsiteOutage
1004759072	2881490	Executed without Errors	08/22/2022 00:00:00	08/22/2022 00:00:08		WebsiteOutage
1004764358	2883625	Executed without Errors	08/23/2022 00:00:00	08/23/2022 00:00:07		WebsiteOutage
1004769715	2885795	Executed without Errors	08/24/2022 00:00:00	08/24/2022 00:00:07		WebsiteOutage
1004775084	2887970	Executed without Errors	08/25/2022 00:00:00	08/25/2022 00:00:07		WebsiteOutage
1004780383	2890126	Executed without Errors	08/26/2022 00:00:00	08/26/2022 00:00:09		WebsiteOutage
1004785654	2892292	Executed without Errors	08/27/2022 00:00:00	08/27/2022 00:00:06		WebsiteOutage
1004790891	2894465	Executed without Errors	08/28/2022 00:00:00	08/28/2022 00:00:07		WebsiteOutage
1004796128	2896610	Executed without Errors	08/29/2022 00:00:00	08/29/2022 00:00:08		WebsiteOutage
1004801415	2898749	Executed without Errors	08/30/2022 00:00:00	08/30/2022 00:00:08		WebsiteOutage
1004806780	2900921	Executed without Errors	08/31/2022 00:00:00	08/31/2022 00:00:08		WebsiteOutage



OneVizion

DropGrid

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DropGrid

DropGrid® is a data import tool that can be used to either build a new Trackors, tabs, and reports, or to import data into a pre-existing Trackor.

DropGrid works best when:

- the data is a rectangular block (i.e. Excel spreadsheet, access data table, CSV file or similar type of data)
- the spreadsheet contains the values to build the configuration in OneVizion that the data is imported into.

The DropGrid tool can create the following configuration elements:

- create or use existing Trackor®
- create new fields based on the headers of the Excel first row
- create a default tab layout based on the order of the columns in the Excel Spreadsheet
- create an Import based on the spreadsheet
- create a Report based on the spreadsheet
- create menu access items
- create a Trackor View that uses the order of the spreadsheet columns
- if latitude and longitude fields are detected create a fully configured google map and/or a google public map
- **It is important to make sure the data in the spreadsheet is consistent, meaning that the data in the columns match the appropriate data type. For instance, a date column has only dates, number columns have only numbers, etc... If a specific comment is required in a field and the data type for the field is not text, DropGrid will import this as a comment attached to that field, but not a value within itself.**

DropGrid

Things to Consider Before Using Dropgrid

Ensure you have proper permissions: Users who do not have full admin rights may have the ability to create new data structures using DropGrid, but lack the permissions necessary to see the structures which they have created. This can sometimes result in the DropGrid process running smoothly, but the user being unable to find the Tracker they just created. In these instances, it is likely your user account lacks appropriate permissions.

Verify DropGrid Worked Via the Tracker Browser: Once completing the DropGrid wizard, you should see your new Tracker located within the Tracker Browser

Pre-Stage Your Tracker: DropGrid works best when you have first staged the Tracker, and instead use DropGrid to simplify the process of importing the data into an empty Tracker already placed where you want it logically within the Tracker Browser.

Administrators will need the following Security Group

User - U:Security Groups ▼ Unsaved Filter ▼

drop X Security Group ▼

Security Group	Type	Description	Privileges				
			Read	Edit	Add	Delete	None
ADMIN_DROPGRID	Data Ingestion	"DropGrid" page	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DropGrid - Creating Mappings

1. Determine if you want to create a new Tracker Type or use existing.
2. For each column, DropGrid determines a column's label and field name. It will also interrogate the data and make a best guess on data type. You can change it easily.
3. If the type is drop-down, it will create V-table and load in all choices from spreadsheet.
4. Key can be from a column

Test Company.xlsx → Test Company

Field Mapping 1 Tracker Type [Create New] Label Test Company Prefix TE Primary Key [Key Generation] 4

Is Import Column?	2	2	2	2	2	2	2
Field Label	Number	Name	Address	City	County	State	Longitude
Field Name	TE_NUMBER	TE_NAME	TE_ADDRESS	TE_CITY	TE_COUNTY	TE_STATE	TE_LONGITUDE
Data Type	Tracker Selecto	Text	Text	Text	Text	Drop-Dow	Longitude
Related Tracker Type	Switches						
Sample Data from Excel file	A(1)	B(2)	C(3)	D(4)	E(5)	F(6)	H(8)
1	Number	Name	Address	City	County	State	Longitude
2	HV120	Fallsburg - TEST	11963 Pleasant Valley f	Frazeysburg	Licking	OH	-82.2658

DropGrid

After run, DropGrid will have created a Tracker Type, Menu Item and assigned it, created the fields and added them to the tab, created a Default data import like the import wizard, created view/filter options, a Report and imported the data.

The screenshot displays the DropGrid interface during the 'Verification and completion' phase. At the top, a progress bar shows four steps: 'Upload File', 'Tracker/Fields', 'Tab/View', and '4 Verification'. Below this, the file 'Test Company.xlsx' is shown with a dropdown menu set to 'Test Company'. The user 'srhodes' is logged in, and the timestamp is '10/12/2018 15:08:38'. The main content area is titled 'Verification and completion' and contains a list of items with their status:

Item	Value	Status
Tracker Type	Test Company	CREATED
Menu Items	2 of 2	Completed
Config Field	15 of 15	Completed
Import	DropGrid_Imp_10013526	CREATED
Config Tab	General Info	UPDATED
View Option	2 of 2	Completed
Filter Options	3 of 3	Completed
Report	DropGrid Test Company 121020180311_4m4q4	CREATED
Import Data	0 of 2	In Progress

DropGrid - Errors

Test Company.xlsx → Test Company

srhodes
10/12/2018 15:08:38

Verification and completion

✓	Tracker Type	Test Company	CREATED
✓	Menu Items	2 of 2	▼
✓	Config Field	15 of 15	▼
✓	Import	DropGrid_Imp_10013526	CREATED
✓	Config Tab	General Info	UPDATED
✓	View Option	2 of 2	▼
✓	Filter Options	3 of 3	▼
✓	Report	DropGrid Test Company 121020180311_4m4q4	CREATED
i	Import Data	2 of 2 With Warnings	▲
i	Import Excel Data	251 of 251	Import Log
✓	Configure Mapper		Tracker Browser Mapping

Click on import log to get normal import log for errors.

Click Tracker Browser to get a grid pre-set to the Tracker Type.

DropGrid - Errors

If there were errors in the import, it will create a global filter called Import Errors.

The errors will have a green triangle in the upper right designating that it has a comment.

The screenshot shows a data table with columns: TE:Latitude, TE:Longitude, TE:AGL, TE:AMSL, TE:FAA Study, TE:FCC Regulation, TE:Status, and TE:Tower Photo. The 'TE:FCC Regulation' column contains two rows with values 'Under Development'. A green triangle icon is visible in the upper right corner of the first 'Under Development' cell. The table is filtered by 'G:Import Errors'.

TE:Latitude	TE:Longitude	TE:AGL	TE:AMSL	TE:FAA Study	TE:FCC Regulation	TE:Status	TE:Tower Photo
41.30540000	-77.61900000	195	888	2014-AEA-4406-OE	Under Development	Under Development	File Name Size
39.66560000	-86.21650000	195	856	2014-AGL-7222-OE	Under Development	Under Development	

Comments - TE:FCC Regulation

10/12/2018 19:11:24 [srhodes](#) X

DropGrid data import error:
ORA-01722: invalid number

Cell: L74
Value: Pending

Right click on the cell and choose comments to see the error.