VE Python API – Class hierarchy with methods:

Methods in italics are static

IESVE module

VEProject
air_exchanges() list
apache_systems() list
archive_project(..)
casual_gains() list
create_profile(...)
daily_profile()
daily_profiles() list
register_content(...)
deregister_content(..)
get_display_units()
get-macro_fly_opening_by_id(..)
get_macroflos_opening_types() list
get_version()
group_profile()
group_profiles() dict
profiles() list
save_profiles() bool
thermal_templates(...) list

get_current_project() veidj

ImportGBXML
import_file(....)

VELocate
close_wea_data()
open_wea_data() bool
get() dict
save_and_close()
set(..)
set_max_dry_bulb(..)
set_max_wet_bulb(..)
set_min_dry_bulb(..)

WeatherFileReader
open_weather_file(..) int
close()
get_results(...) numpy

Room groups
assign_rooms_to_group(...)
create_grouping_scheme(..) int
create_room_group(...)
get_grouping_schemes() list dict
get_room_groups(..) list dict

MV2
take_snapshot(....) jpeg

IECC
get_site_permit_Software() dict
get_owner_agent() dict
get_designer_contractor() dict
set_owner_agent(..)
set_site_permit_Software(.)
set_designer_contractor(.)

Apachesim
get_options() dict
reset_options() bool
run_compliance_simulation() bool
run_loads_sizing()
run_simulation() bool
set_hvac_network(.)
set_options(.) bool
show_simulation_dialog() bool
sitsht(..)

VERenewables
get_chp_data() dict
get_pv_data() list dict
get_pv_data_by_ID() dict
get_pv_type_by_ID() dict
get_pv_type() list dict
get_wind_data() dict
set_chp_data(.)
set_pv_data(..)
set_pv_data_type(..)
set_wind_data(.)

VESankey
__init__()
add_connections(...)
add_column_names(...)
add_node_colours(.)
add_node_columns(.)
add_node_names_vs_order(.)
clear()
generate_sankey()
recommended_ratio() real
save_png(.)
save_svg(.)
set_title(.)
set_units_str(.)
set_weight_width_ratio(.)

PRM
get_thermal_comfort_room_categories_data() list
set_thermal_comfort_room_categories_data(.)
get_unmet_load_hour_parameters(.) dict
set_unmet_load_hour_parameters(.)
get_site_permit_software(.) dict
get_owner_agent() dict
get_designer_contractor() dict
get_florida() dict
set_florida(..)
set_owner_agent(..)
set_site_permit_Software(..)
set_designer_contractor(..)

ResultsReader
open()
open_apx_data(.) int
close()
get_all_apache_system_results(.....) dict numpy
get_all_component_process_results(.....) dict numpy
get_all_opening_results(.....) dict numpy
get_all_process_results(.....) dict numpy
get_all_results(.....) dict numpy
get_all_room_results(.....) dict numpy
get_all_surface_results(.....) dict numpy
get_all_weather_results(.....) dict numpy
get_apache_system_results(.....) numpy
get_apache_systems_list() list
get_component_objects_list() list
get_component_process_results(.....) list
get_conditioned_zones() tuple
get_hvac_component_results(.....) numpy
get_hvac_node_results(.....) numpy
get_opening_results(.....) numpy
get_peak_results(..) dict
get_process_list() list
get_process_results(.....) numpy
get_process_variables(..) list
get_results(.....) numpy
get_room_geometry_details_list(..) list dict
get_room_geometry_details(..) dict
get_room_ids() list
get_room_list() list
get_room_results(.....) numpy
get_surface_results(.....) numpy
get_energy_uses(.) dict
get_energy_sources(.) dict
get_energy_meters(.) dict
get_energy_results(.....) numpy
get_energy_results_ex(.....) numpy
get_units() dict
get_variables(s) list
get_weather_results(.....) numpy

TariffsEngine
init(.....) bool
SetComparisonProfile(.)
GetUtilityNamesAndIDs() list
GetSelectedCurrency() tuple
GetSupplierForUtility(.) list
GetTariffsForSupplier(..) list
GetTariffName(..) str
GetSelectedTariffName(.) str
GetTariffCurrency(index..) str
GetRatesTimeSeries(....) numpy
CompareWithTariff(..)
ComputeWithFlatRate(..)
GetProposedNetCost(.) float
GetBaselineNetCost(.) float
Improvement() float
AcceptChanges() str

VECdbDatabase
get_projects() dict

current_database()
get_project_type_string() str

VECdbProject
create_construction(.) veidj
get_construction() veidj
get_construction_IDs() list
get_number_of_constructions_in_category()
get_category_string() str
get_class_string() str

VECdbConstruction
add_layer(..)
delete_layer(..)
get_default_resistances()
get_g_values() dict
get_layers() list
get_properties() dict
get_review_summary_string() str
get_u_factor()
insert_layer(..)
set_const_class() enum
set_f_factor(..)
set_properties(.) dict

VECdbLayer
get_id()
get_material() str
get_review_summary_string(..) str
get_properties(.) dict
set_properties() dict

VECdbMaterial
get_review_summary_string() str
get_properties() dict
set_properties() dict

HVACNetwork
get_component_by_id()
get_controller_by_id()
get_multiplex_by_id()
get_multiplex_on_prototype_system_by_id()
get_system_by_id()

load_network()

HVAC NetworkObject

SystemParameters
get_schedules() dict
get_system_parameters() dict
get_zone_temperature_humidity_equip() dict
get_zone_ventilation_exhaust() dict
get_zone_loads_airflows() dict
get_zone_airflows_turndown_engineering(..) dict

EnergySources
get_all_energy_sources() list
get_energy_source_by_id() dict
get_energy_meter(..)

VEEnergyMeter
get() dict

HVACAbstractController
HVACController
HVACTimeSwitchController
HVACAbstractController WithSensor
HVACControllerWith DifferentialSensor
HVACControllerWithSensor

HVACAbstractComponent
HVACAbstractBoiler
HVACBoiler
HVACEnhancedBoiler
HVACAbstractChiller
HVACChiller
HVACElectricChiller
HVACPLCPChiller
HVACEACChiller
HVACEWCChiller
HVACAbstractDX CoolingSystem
HVACDXCoolingInstance
HVACDXCoolingSystem
HVACAbstractHeatPump
HVACHeatPump
HVACHeatPumpInstance
HVACAbstractWater AirHeatPump
HVACWaterAirHeatPump
HVACWaterAirHeatPump Instance
HVACAirFilter
HVACAirToAirHeat EnthalpyExchanger
HVACAmbientHeat RejectionDevice
HVACCoolingTower
HVACDryFluidCooler
HVACChilledCeiling
HVACChilledWaterLoop
HVACCombinedHeat AndPower
HVACComponent
HVACCondenserWater Loop
HVACCoolingCoil
HVACDamper
HVACDamperSplitter
HVACDedicatedWaterside Economizer
HVACDirectActingHeater
HVACDirectActingHeater Room
HVACDuct
HVACFan
HVACGenericCooling Source
HVACHeatSource
HVACGenericHeatSource
HVACHotWaterLoop
HVACHeatTransferLoop
HVACHeatingCoil
HVACInlet
HVACJunction
HVACMultiplex
HVACOutlet
HVACPCMBattery
HVACPlenum
HVACPreCoolingLoop
HVACPrototypeSystem
HVACPump
HVACSystemCurve
HVACRadiator
HVACRoom
HVACRoomUnit
HVACSourceDependent Room
HVACChilledCeilingRoom
HVACRadiatorRoom
HVACSolarAirCollectorBIST
HVACSolarWaterHeater
HVACSprayChamber
HVACSteamHumidifier
HVACThermalDuct Properties
HVACThermalStorageLoop
HVACThermalStorageTank
HVACUnitaryCooling System
HVACWaterLoopHeat Recovery
HVACWaterSourceLoop
HVACWaterWaterHeat Exchanger
HVACWaterWaterHeat Pump

VEModel
assign_thermal_template_to_rooms(..)
get_assigned_profiles_list(..) list
get_bodies_list(..) list
get_bodies_and_idb_list(..) dict
suncast ()

VEThermalTemplate
add_air_exchange(.)
add_gain(.)
apply_changes()
get() tuple
get_air_exchanges() list
get_apache_systems() dict
get_casual_gains() list
get_room_conditions() dict
remove_air_exchange(.)
remove_gain(..)
set(..) dict
set_apache_systems(..) dict
set_room_conditions(..) dict

VEProfile
get_data() list
set_data() bool
is_absolute() bool
is_group() bool
is_modulating() bool
is_compact() bool
is_freeform() bool
is_weekly() bool
is_yearly() bool
is_graphable() bool
load_data(..)
save_data(..)

VEApacheSystem
air_supply() dict
apply_ncm()
auxiliary_energy(.) dict
bivalent_systems_ncm() dict
controls() dict
cooling(..) dict
cooling_ncm() dict
general_ncm() dict
heating() dict
heating_ncm() dict
hot_water(.) dict
metering_provision_ncm() dict
set_air_supply(.)
set_auxiliary_energy(.) dict
set_bivalent_systems_ncm() list dict
set_controls(.)
set_cooling(.)
set_cooling_ncm(.) dict
set_default()
set_general_ncm(.) dict
set_heating(.) dict
set_heating_ncm(.) dict
set_hot_water(.) dict
set_metering_provision_ncm(.) dict
set_name(.)
set_solar_water_heating(.) dict
set_solar_water_heating_ncm(.) dict
set_system_adjustment_ncm(.) dict
set_system_controls_ncm(.) dict
set_ventilation_ncm(.) dict
solar_water_heating(.) dict
solar_water_heating_ncm(.) dict
system_adjustment_ncm() dict
system_controls_ncm() dict
ventilation_ncm() dict

air_supply_cond_names() list
aux_energy_method_names() list
cooling_mech_names() list
defaults() str
fuel_names() list
insulation_names() list

VEMacrofio
get() dict
set() dict

VEBody
assign_construction_to_surface(..)
assign_opening_type_to_opening(...)
get_areas_list() dict
get_assigned_constructions_list() list tuples
get_assigned_profiles_list() list tuples
get_index_of_body()
get_surfaces_list() list
get_room_data(..) list
select_()

VEComponentProcess
get_name() str
get_system_inputs() list dict
get_waste_heats() list dict
get_material_inputs() list dict
get_material_outputs() list dict
get_energy_inputs() list dict
get_heat_outputs() list dict
get_miscellaneous() list dict
get_product() str

VERoomdata
get_air_exchanges() list
get_apache_systems() dict
get_bldg_regs() dict
get_general() dict
get_internal_gains() list
get_ncm_lighting() dict
get_room_conditions() dict
get_trans_solar_collectors() list
set_all(...)
set_apache_systems(.) dict
set_bldg_regs(.) dict
set_collector_area(..)
set_general(.) dict
set_ncm_lighting(.) dict
set_room_conditions(.) dict

VESurface
get_adjacencies() list
get_areas() dict
get_constructions() list
get_openings() list
get_opening_by_id()
get_opening_totals() dict
get_properties() dict
move() list

VEAdjacency
get_properties() dict
get_construction() dict

VEGeometry
get_macrofio_id() str
get_properties() dict
move_opening(..)

centre_to_origin()
get_building_orientations()
get_ext_windows(.)
get_wwr() list
remove_doors(..)
remove_holes(..)
remove_openings_below_area_threshold.)
set_body_opening_type(.)
set_colour(.)
set_percent_doors(.)
set_percent_glazing(.)
set_percent_holes(.)
set_percent_wall_glazing(.)

VESuncast
get_results(.....) list
get_sun_up_down() list
get_solar_altitudes(..) list

Airexchange
get_data() dict

Infiltration
NaturalVentilation
AuxiliaryVentilation

CasualAgain
get_data() dict

EnergyGain
LightingGain
People Gain

DailyProfile
GroupProfile
CompactProfile
FreeformProfile

RoomAirexchange
get_data() dict

Infiltration
NaturalVentilation
AuxiliaryVentilation

RoomInternalGain
get_data() dict

RoomPowerGain
RoomLightingGain
RoomPeopleGain