



VE 2021.1.0.0 Release Notes

Release Notes

20/05/2021

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VE 2021 Feature Pack 01 Hotfix 01 Changes

General

Simulation Manager allows tasks to complete [ID-88559]: In environments where there is a lag to complete a simulation and Download results back to the project folder the VE Simulation Manager will allow the copy to complete before completing the Task. This resolves the 'Apache process failed to complete' errors seen in some instances.

ApacheHVAC

Pump energy modelling defaults revised [ID-88362]: Due to an error in pump energy modelling which is highlighted when plant loops operate under very low load conditions some default values have been revised in new ApacheHVAC systems created and in the Prototype libraries as described below. A full solution for the pump energy discrepancy is expected in a future VE update but these values are designed to minimise the impact meantime (it is expected this energy consumption would account for 0.1 - 0.2% of building energy usage on a typical size office building).

The revised Minimum chilled-water flow fraction of 0.3 applies to all cooling sources that have this parameter and can be connected to a water loop (any loop listed below):

- *EWC chillers*
- *EAC chillers*
- *PLC chillers*
- *Generic cooling sources*

The revised Minimum hot-water flow fraction of 0.1 applies to all heating sources that have this parameter and can be connected to a water loop (any loop listed below):

- *HW boiler*
- *PLC boiler*
- *Generic heating sources*

Revised default of 1.0 for Pump Maximum v applies ALL water loop pumps in all cases for which the UI backend code passes this value to apache, including pumps on:

- *CHWL (primary and secondary loops)*
- *CWL*
- *HWL (primary and secondary loops)*
- *HTL*
- *DHW loops*
- *CHWL > Thermal storage loop*

Navigator for ASHRAE 90.1 PRM

Prototype data exterior lighting profile units corrected [ID-88809] The units for the following templates have been updated to be in IP:

- ALL: External lighting (Sun-Sat)
- Exterior Lighting Astronomical & Photosensor Time Switch



ASHRAE 55 Comfort analysis workflow updated [ID-85648]: The ASHRAE 55 “Select spaces in assessment” dialog now defaults to have all spaces unchecked. The user should select the spaces to be analysed for Thermal Comfort using ASHRAE-55. The subsequent Unmet Load Hour test for both the BPRM report and the PRM Compliance report will exclude those spaces that are selected.

Automatic exclusion from the Unmet Load Hours test according to space type [ID-85908]: An “Include in automated Unmet Load Hour testing” checkbox has been added within the Thermal Templates and is editable in BTM, Tabular BTM, Space Data and Tabular Space Data. This box shall be checked by default for all regularly occupied space types and unchecked by default for the typically excluded space types. Any space for which the template has this box unchecked will be excluded from any automated Unmet Load Hours tests in reports generated from 90.1 PRM, NECB, IECC Navigator workflows.

Unmet Load Hours reporting for Zones considers only Master Room [ID-60295]: When the ApacheHVAC network has been modelled using HVAC Zones then reports from 90.1, NECB, IECC Navigators will only assess the Master Room against the zone setpoints for unmet load hours reporting. This is in accordance with ASHRAE and USGBC intention towards assessing unmet load hours in zones. Reports produced from the Navigators will only count these hours in the Master Rooms but if required to check further (slave) rooms served within a Zone then this can be manually done in VistaPro using the range tool.

Navigator for NECB 2017

NECB 2017 TEDI Calculation updated [ID-88272]: The calculation of TEDI on the NECB 2017 Compliance report is revised to report on heating loads rather than energy consumption. Calculation now uses sum of total ApHVAC Heating coil and room units heating load / conditioned floor area.

VE 2021 Feature Pack 01 Changes

ModelIT

Improved unmatched adjacency handling [ID-67156]: Adjacency calculation when modelling or running Rebuild command is improved to avoid Unmatched Adjacency errors due to small surfaces between rooms.

OSM import improved [ID-74025]: OSM import has been made more stable so that the option will work on new VE installations.

Corrected add voids tool [ID-81505]: Prevented the add voids tool from creating 2 RA plenums instead of 1.

Improved undo/redo functionality [ID-86070]: Prevented undo/redo functionality from skipping certain actions e.g. Partition tool.

Component Modeller

Prevented crash when using Divide Space [ID-53071]: Prevented a crash when selecting Divide space in components view.

Apache

Prevented Tabular Space Data dialog from appearing in preview [ID-17860]: The tabular space data dialog no longer incorrectly shows as open when the preview of VE is viewed from the task bar.

Improved DHW consumption range validation [ID-83519]: Improved range validation for consumption field of DHW zones.

ApPro

System profile name corrected [ID-72992]: The System profile Absolute 'Constant -15' is correctly named (previously had been displayed as 'Constant -30')

Model Viewer 2

Corrected animation toggle button in model Viewer 2 [ID-29247]: Animation toggle button now correctly shows the animation toggle state.

IDV Corrected make windows opaque option [ID-37640]: Make windows opaque toggle now correctly makes windows opaque while in exploded view when using input data visualisation tool.

General

Improved meter conflict resolver [ID-82691]: Meter conflict resolver now displays correctly when trying to remove an in-use meter.

Prevented crash when upgrading models [ID-84490]: A crash has been prevented when upgrading certain models.

ApLocate

Design Weather Data message displayed fully [ID-46410]: Error shown when design weather data is edited outwith range is improved to show the full message.

Exporting calendar files has been corrected [ID-73698]: Calendar files now export correctly to the location specified by the user.

Constructions Database

Prevented error on ASHRAE 90.1 import [ID-84967]: ASHRAE 90.1 constructions can now be successfully imported from the CDB library.

ApacheHVAC

Coil type rules are enforced to prevent conflict [ID-64818]: Extra checks are added to prevent mixing coil types in multiplexed systems (previously this could manifest as a failure to run system loads calculations during sizing).

Pump heat gain excluded from Fluid Cooler derived values [ID-69902]: Fluid Cooler on Heat Rejection tab of Chilled Water Loop excludes any pump heat gain when Design leaving Temperature and Range are derived.

User library import correction [ID-79740]: Import of components to a multiplex from the user library is improved so that the components are recognised as being part of the system multiplex and have correct system parameters options enabled.

Constant and Variable air volume Fan behaviour corrected [ID-79741]: The option to set a fan to be Variable Air Volume or Constant is reinstated after addition of custom fan curve option. The interface on the fan component, via System Parameters system level toggle and when Demand Controlled Ventilation is specified now correctly sets the Fan to use the Variable Air Volume curve.

Label in EAC chiller dialog corrected [ID-80362]: Label now refers to 'Compressor heat gain to condenser coil'.

Prototype systems updated [ID-80526]: Addition of logical AND connection from the Cooling Airflow controller to the OA economizer MAT reset controller. This was added so that when all zones are in heating mode, the economizer mode will be fully shut off. Changes applied to basic VAV and FPB systems.

Prevented zone level parameters from being read-only [ID-82424]: When editing in Zones Tabular Edit the zone level parameters no longer can be locked to read only.

Improved HVAC system import preview window [ID-83225]: And connections are now shown in the import preview window.

Improved system parameters dialog for Hot Water Loop [ID-83661]: Hot water loop and circuit drop down in system parameters is available to set for heating coil.

Corrected HVAC visual inconsistency [ID-83868]: AND/OR connections are now displayed correctly when loading networks via 'Load most recent network' preference.

Improved Room unit handling [ID-86532]: Improved handling of room units outside of multiplexes to prevent memory error during room loads sizing calculation.

Loads Reports

Improved loads report aggregations [ID-71437]: The Room and System Loads report now more accurately calculates wall area and area weighted thermal transmittance.



Corrected capacities in system sizing report [ID-82858]: Cooling and heating capacities are now more accurately reported in system sizing report.

Room and Zone loads xls output shows peak times [ID-85377]: Room and Zone loads excel report now reports the correct peak time for cooling.

ApacheSim

Cooling Energy includes Unitary Cooling Systems [ID-65122]: ApacheHVAC networks that include coils served by Unitary Cooling Systems are simulated with this energy reported under Cooling Energy in the End Uses and Meters section.

Thermal Storage Pump reporting corrected [ID-73151]: Energy consumed by Pumps on Thermal Storage system is correctly reported under the Pumps energy end use.

VistaPro

ASHRAE 55 PMV Direct Solar calculation corrected [0083763]: Calculation of PMV under ASHRAE 55 2017 Direct Solar Method is corrected to account for radiation calculated to be incident on the occupant.

ASHRAE 55 Comfort calculation updates [0083089]: ASHRAE 55 Comfort calculations updated to include ASHRAE 55 2017 Addendum B and incorporate algorithm from CBE tool

Operative Temperature (ASHRAE) added [0083188]: When ASHRAE 55 Comfort Analysis is performed the Operative Temperature calculated per ASHRAE is output to the room variables list.

OpenEI Tariff Tools updates [79807]: Tariff Tool labels updated to make each input clearer, rat dialog saves user changes, electrical energy usage and charge is output hourly to app file, off-peak rates used for holidays.

SunCast

Improved saving solar analysis results [ID-83792]: Solar analysis can now be saved correctly without error or crash occurring.

Horizontal angle taken into account for solar visualisation [ID-85655]: The horizontal-vertical transition angle in ModellIT is now accounted for in solar visualisation.

Navigator for NECB 2017

Navigator for NECB 2017 added [ID-72769]: A new Navigator to support National Energy Code of Canada for Buildings is added.

Note: requires a new licence key to access under Compliance Navigators section.

Navigator for ASHRAE 90.1 PRM

Improved compliance reports [ID-29271]: Compliance reports now have character limits imposed on their fields to prevent overflow.

Tariff action moved in workflow [ID-80288]: The tariff data section has been moved into the costs section of the workflow so that the required simulation files are available in the project.

Corrected BPRM report currency setting [ID-81261]: BPRM report now displays the correct currency chosen for the project.

Improved the PRM elevators and refrigerators dialogs [ID-81993]: Dialogs now use the correct unit depending on the project unit setting. Number of refrigerators scaling has been corrected.

PRM 2016 baseline HVAC systems corrected [ID-82815]: Corrected the 2016 PRM baseline HVAC systems to be able to set baseline system pressure drop adjustment value.

ASHRAE 90.1 2016 BPRM Report Renewables correction [ID-84307]: BPRM Report Energy Cost and Consumption by Energy type table corrected so that Proposed Total and Energy Cost correctly counts any Renewables while Baseline does not.

Improved space group creator [ID-84662]: Spaces assigned through the space group creator are now applied the correct templates in PRM navigator.

Lighting gains now split correctly [ID-84663]: Lighting gains now split correctly in 90.1 2010 PRM navigator when lighting controls have been specified.

LPD values corrected [ID-86029]: When generated from Navigator for ASHRAE 90.1 2016, 2013 or IECC 2012 the assignment of lighting power density to spaces and calculation of Room-Cavity Ratio is corrected.

RadianceIES

Dynamic Analysis for CBDM improved [ID-65506]: Dynamic analysis options and settings for Climate based Daylight Modelling (ASE, sDA, UDI) improved to allow more accurate fast analysis. Robustness improved to allow calculations to complete without error on different user systems where the RadianceIES calculation was prone to exit before the simulation was complete previously.

Calculation quality options changed from Dynamic to offer CBDM (fast) and CBDM (ref) options to allow initial early analysis and more detailed results to be generated for 365 days assessments.

Default grid spacing reduced to be 0.25m grid when choose dynamic analysis so that CBDM outputs are compliant with global standards.

WPgrid results now correctly labelled [ID-77742]: Prevented the pass/fail colouring of the WP grid view being inverted.

Prevented sky errors when processing sDA results [ID-80001]: Errors with sky models have been prevented when processing sDA results (previously manifested as error generating 10k lux/sunny sky).

Radiance method sDA calculation blind control improved [ID-80759]: When running sDA calculations using Radiance method an additional ASE calculation is performed with ambient bounces set to 1 in order to judge direct radiation on the working plane to apply blind up/down control logic.

Prevented backup files from being batch processed on Dynamic Results tab [ID-87714]: Prevented backup files from being processed when the 'apply to all' option is selected.

If required to process backup files from previous calculations then these can be selected and manually processed.

Import/Export BIM Navigator

Support added for Revit systems [ID-57840]: Revit HVAC systems information included in gbXML files can be imported to VE via the Import/Export BIM Navigator workflow and when creating a new project from a BIM file. A new option is included in Preferences >> BIM Import settings to choose to include this or not and when imported they are mapped to a set of corresponding ApacheHVAC networks with spaces/zones in the model assigned.



VE Compliance

BRUKL area reported consistently [ID-85554]: ApacheSim BRUKL report corrected to ensure Actual and Notional Building show correct building floor areas for all model scenarios.

OneClick LCA

One Click LCA units corrected [ID-83573]: QTY_TYPE units output to OneClickLCA corrected so that they can be uploaded to the project in metric or ip.

VE 2021 Hotfix 02 Changes

ApacheSim

Corrected PV detection in Apache [ID-81583]: Freestanding PV panels placed in ModelIT are now correctly identified in Apache electricity generators and simulation.

ModelIT

MacroFlo opening type can be assigned using the 'Select opening by criteria and assign fabric' tool [ID-81892]: Changing the MacroFlo opening type from the default option is now correctly assigned via the 'Select opening by criteria and assign fabric' tool.

Crash prevented when using room partition tool [ID-81925]: A crash has been prevented when using Undo function after partitioning a room.

Licence Keys

Network licence performance improved [ID-]: Performance of VE startup and operation is improved when connected to network licences. Logging is added to system report for troubleshooting purposes.

Activation Code shown in system report [ID-]: System Report generated via Help menu >> Troubleshooting is updated to show current Activation Code beside PIN.

ApacheHVAC

Chiller Curve data maintained when select new performance curve [ID-82992]: When a Chiller curve is changed to a new selection the performance data is correctly written to apache for simulation.

Room unit controls simulate correctly [ID-83325]: Room units (e.g. Radiators) specified with on/off or Proportional Controls behave correctly in apache simulations.

MicroFlo

Supply Diffuser recognised in simulation [ID-83238]: General supply diffuser boundary conditions now correctly recognised in internal simulation.

Navigator for ASHRAE 90.1 PRM

BPF corrected on 90.1 2016 PRM Reports [ID-84280]: The BPRM and PRM Compliance reports now use correct Building Performance Factor set from Building Area Type selection on Navigator and project Climate Zone.

VE Compliance

Thermal Template can be assigned via Tabular Space Data [ID-82928]: Thermal template assignments made through Tabular Space Data now set correctly.

Note: in VE Compliance templates of ApHVAC methodology and NCM may not be assigned to spaces, an Apsys template from the project should be selected.

VistaPro

Updated labels in ASHRAE 55 report [ID-83182]: The ASHRAE 55 Comfort output sheet now correctly shows Adaptive Comfort Method in the header of the relevant results table.

Comfort variables reinstated [ID-83605]: Standard Comfort variables are reinstated when viewing simulation results files.

Predicted Mean Vote, Percentage People Dissatisfied, Comfort Index and Standard Effective Temperature are calculated for each room using the Room Data >> Comfort tab inputs for CLO, MET and nominal air speed (previously had been using fixed values approach).

Standard variables use a single value for CLO, user can choose Fixed input method and specify a single value else average of Max and Min is used. CLO variable is added to standard comfort variables to see value used in these calculations.

ASHRAE comfort outputs are unaffected and continue to use room data comfort settings, Comfort Analysis button on toolbar can be used to access these variables and output reports.

VE 2021 Hotfix 01 Changes

Navigator for ASHRAE 901. PRM

90.1 2016 BPRM Report Table 1.8.1 correction [ID-82200]: Table 1.8.1 sum of Energy Consumption no longer includes Peak demands values.

90.1 2016 BPRM Report Table 1.8.2(b) shows PCI values [ID-82266]: Table 1.8.2(b) Proposed Cost Index is populated for all models.

90.1 2016 PRM Compliance Report Costs improved [ID-82278]: PRM Compliance report is improved to ensure script consistently uses tariffs as input on VistaPro tariff interface via 90.1 PRM Navigator action.

90.1 2016 Baseline WWR applied per building type [ID-82241]: The Baseline building is generated with correct window areas matching chosen Building Types.

90.1 2016 Florida sizing error corrected [ID-82243]: Generation and sizing of the HVAC systems via HVAC Wizard no longer gives the error “Must load HVAC system first” at end of sizing routine for baseline system.

VE Compliance

Reference Building Simulation runs with SunCast link on [ID-81847]: Reference Building uses correct shading file name so simulations with SunCast link on can run without error using Parallel Simulation Manager route.

Section 6 Simulation runs with SunCast link on [ID-82600]: Correction to allow Section 6 simulation to run with SunCast link on, previously when user changed building location an error would appear ‘Latitude or longitude in shading file differs from that specified in site data’.

VistaPro

ASHRAE 55 MRT output is consistent (ip units) [ID-83183]: ASHRAE 55 Comfort output MRT (Mean Radiant Temperature) is corrected so that value shown on charts is consistent in ip units (previously value would increase each time the variables was reselected in VistaPro while viewing on a chart)

VE 2021 Changes

ApacheHVAC

HVAC System Design Wizard [ID-]: System Design Wizard can be accessed via Apache, ApacheHVAC or compliance Navigators. Offers simple interface to generate new systems by specifying rooms/zones then select airside options, plant equipment and finally option to autosize and generate reports ready for energy simulation.

Advanced Air to Air Heat Pump model added [ID-]: An advanced air to air heat pump for heating and cooling is added.

Traditional simple heat pump type also retained for consistency on existing projects.

Free Convection model on Cooling Tower/Fluid Cooler added [ID-]: An option to specify free convection is added to cooling tower/fluid cooler on chilled water loop. Specific as an initial air flow fraction that will operate in free mode with no fans power consumption.

Fan Controls updates [ID-]: Added capability for zone-level recirculation fans to operate only when associated compressor operates (as in heat pumps, zone-level AC, etc.) via new "Cycle on with terminal unit compressor" control option in the System Parameters.

Updated defaults for humidity control and setpoints [ID-76906]: New defaults have been set for humidity control and setpoints.

Dehumidification option is set to "Per system-level dry-bulb or dew-point control only" and info pop up is added to clarify modelling options on System Parameters.

Negative room loads do not result in negative airflows from system parameters [ID-12768]: When cooling/heating design zone loads change to a negative value, the design airflow correctly limits to a 0, not a negative value.

Corrected the default HVAC link via the Room/zone sizing step using the System Prototypes & Sizing navigator [ID-15776]: The default link has now been set to proposed instead of being set to 'None'.

DHW dialog retains Pump description edits [ID-29269]: The DHW dialog now correctly updates when the description is changed within the pump curve edit dialog (explicit mode).

Corrected Zone Airflow Distribution dialog interface [ID-35388]: Zone Airflow Distribution dialog columns can now be resized.

Corrected the conversion of Setpoint values in the data table when using IP units [ID-40433]: Setpoint values are now converted correctly in the data table when using IP units.

Offsets applied on controller when negative value specified [ID-43642]: When controller variation is set to profile and setpoint offset is applied as negative value the correct adjustment is applied.

Range validation improved when exit chilled water loop dialog [ID-45846]: Chilled water loop dialog now accepts the default values when cancel edits.

Added minimum size to data table dialog [ID-63320]: Added minimum width to tabular edit data table dialog to prevent erroneous errors.

Prevented a crash when opening corrupted models [ID-65901]: Prevented a crash caused by the chilled water loop of certain models which held an invalid value. User can edit the loop and correct the highlighted issue.

Prevented a rounding error when changing to IP units [ID-66856]: Prevented an error from occurring due to an incorrect rounding in IP units of the flow rate.



Number of primary circuit pumps now correctly updated [ID-74005]: The number of primary circuit pumps is now correctly updated when a new chiller is added on chilled water loop and default setting (dedicated chiller pumps) is selected.

Prevented fan end use from being populated with duplicate entries [ID-74832]: Prevented fan end use for chilled water loops from being populated with duplicate entries when switching tabs.

Corrected secondary pump DT being incorrectly set [ID-77502]: Pump power dialog is now correctly updated for the secondary circuit of a Chilled water loop when editing the associated DT.

Apache simulation settings are correctly saved when accessed through the HVAC System Wizard [ID-77757]: Apache simulation options are now correctly saved when set via the HVAC System Wizard.

Systems generated via HVAC System Wizard sizing calculation corrected [ID-77930]: The sizing calculation of DOAS systems is improved to avoid design calculation failure related to an error on Heat Transfer Loop so that error no longer interrupts system loads calculation step.

ApacheSim

Comfort Settings added to Space Data [ID-]: To support thermal comfort calculations (TM52, ASHRAE 55) a Comfort tab is added to Space Data and Building Template Manager to allow settings Clo, Met and variables specific to ASHRAE 55 Adaptive thermal comfort and direct solar radiation calculations.

Improved error reporting when invalid weather file is used for Apache simulation [ID-50810]: Added a new error message when a simulation is run without a valid weather file selected so that multiple messages do not appear.

Error with ordinal use indexing corrected [ID-70062]: Improved error in calculation of ApacheHVAC heat transfer loop that resulted in apache simulation error.

Apache results description is now correctly saved when closing [ID-73550]: Apache results description is now correctly saved after user edit when selecting "Save and close" in the simulation settings dialog.

Prevented a stall in simulation for certain models [ID-74723]: An improvement is made to apache simulation when encountering an edge case in calculation of ApacheHVAC Hot Water Loop DHW Heat Exchanger so that simulation does not stall on first timestep.

APLocate (Weather)

Updated ASHRAE design day temperature variation profile to fit 2009 curve [ID-66653]: The ASHRAE design day temperature variation profile has been updated.

ASHRAE Loads

Loads calculation can be run for heating or cooling only [ID-15764]: An issue has been resolved which prevented running a calculation when only one option (heating or cooling) has been selected when analysis type: ApacheHVAC Room and HVAC Zone loads has been selected.

Heating/Cooling Loads calculation settings only displayed when relevant [ID-16402]: When the heating/cooling loads checkbox is unticked, the settings for either the heating/cooling loads are disabled.

Loads Report

Improved CIBSE load calculations to deal with large room area [ID-55693]: The CIBSE load calculations have been improved to better handle exceptionally large floor areas.

Prevented layout error causing system loads report generation to fail [ID-71526]: The system loads reports can now be successfully generated when ApacheHVAC plant equipment exceeds the page size.

ApPro (Profiles)

Cancel option improved when creating new profile [ID-9272]: When a profile is newly created, clicking cancel no longer retains the new profile and now correctly deletes the profile.

Corrected compact profiles default holiday times [ID-29219]: Default holiday hours have the correct default times assigned to them. These are now inactive as standard and set as below;

System occupied - 08:00 > 18:00

System extended - 06:30 > 18:30

Day group labels are now displayed correctly for Compact profiles [ID-76806]: Day group labels are now correctly shown in the compact profile editing dialog.

Constructions

Prevented commas from being written incorrectly in the internal shading device dialog [ID-74021]: Commas are now written in correctly for formulas for the raising and lowering of shading devices.

FlucsPro/FlucsDL

Improved zoom functionality for drawing a task area [ID-14670]: Improvements have been made to the zoom in and out tool to ease functionality when drawing a task area.

Reports show correct reflectance values [ID-42369]: User edited reflectance values in FlucsPro are now correctly shown in reports.

Translucent shades not supported in FlucsDL calculations [ID-50643]: Prevented translucent shades from being displayed in FlucsDL as they are not supported.

MacroFlo

Wind pressure coefficients limits increased [ID-73397]: Wind pressure coefficient range has now been increased for the range -10 to 10.

VE Scripts/api

Improved VEScripts editor [ID-34346]: VEScripts editor now saves scroll position on all open tabs when switching between scripts.

VEScripts dialog loads correctly [ID-49164]: Prevented the VEScripts dialog from flashing when first opened with open tabs.

Corrected typo in VEScripts API [ID-51247]: Corrected a typo in the VEScripts API (the previous spelling is still supported).

Prevented a crash in the model summary sample script [ID-53429]: Prevented a crash in the model summary script when run with an unsaved project.

Improved VEScripts go to line functionality [ID-58577]: VEScripts go to line functionality now correctly goes to the error line when double clicking the error message.

Corrected macroflo.py sample script [ID-73010]: macroflo.py sample script has now been updated to run without error.

Improved error reporting for FFD csv [ID-75258]: Improved error checking and reporting for incorrect headers in the FFD csv file.

General

Full meter paths are now shown when being assigned [ID-29509]: Full meter paths are now shown in the meter dialog and in meter dropdowns rather than each path element.

Collapse all now does not collapse to model node [ID-32851]: The collapse all option in the model browser has been modified to only collapse displayed groups and not up to model level.

Removed obsolete menu items for Compliance modules [ID-34089]: Removed obsolete menus for NECB, PRM and IECC Compliance modules.

HVAC zone view added to all Compliance modules [ID-34258]: HVAC zone view has been enabled for all compliance modules except for UK & Ireland.

Improved project overwriting [ID-38655]: When a project is overwritten by a new one all files relating to the previous project are removed.

Project notepad wraps text [ID-50705]: Text now wraps to the size of the textbox making it easier to read.

Keys/Licence System

Improved error checking in request licence dialog [ID-65368]: Improved error checking and reporting in request licence dialog for unsupported characters.

Master Templates

Improved Master Template Wizard to prevent unresponsive dialog [ID-79924]: Improved the Master Template Wizard to prevent the dialog become unresponsive after repeated clicks.

Navigator for ASHRAE 901. PRM

Navigator for ASHRAE 90.1 2016 [ID-]: Navigator for ASHRAE 90.1 2016 App G PRM and Prescriptive methods added. Approved for Florida Building Code 2020 (when location/state is set to Florida)

Note: requires a new licence key, you can refresh your licence to check if this is already available on your account, else contact sales@iesve.com.

Updated descriptions for PRM 2013 Baseline Systems [ID-19353]: Descriptions have been added to 2013 baseline systems via the Import Systems dialog.

Whole building method Infiltration calculation corrected [ID-77077]: When choosing to set Infiltration via whole building method from Navigator action the correct values are applied to rooms based on user selection.

Space/room group assignment only lists rooms [ID-29215]: An improvement has been made which filters out Shades and Adjacent Buildings by default, stopping them from being listed for space/room group assignment via the PRM navigator.

Removed duplicate WWR rows in BPRM report [ID-32840]: Removed duplicate data rows in the proposed vs baseline design table.

BPRM report to refers to LEED 2012 [ID-43345]: BPRM reports for 2010 and 2013 now correctly reference LEED 2012.

Corrected prototype template "Space: Religious building" [ID-47950]: The Space: Religious building template now correctly has the correct proposed power density.

Data centre energy now correctly reported in PRM compliance report [ID-69348]: The data centre end use energy is now correctly reported within the PRM compliance report

Improved error reporting for PRM exterior lighting dialog [ID-69516]: Improved error reporting for categories that do not have an end use.

Prevented script error (hanging) when generating Florida compliance report [ID-75224]: An error preventing generation of the Florida compliance report has been prevented for certain models.

Baseline reheat energy adjustment now available for Florida report [ID-79928]: The baseline reheat energy adjustment option is now available for the Florida compliance report.

Prototype data can now be correctly imported with composite layers [ID-75778]: Corrected an issue that was preventing constructions from being imported when they contained composite layers.

VE Navigator for LEED v4

Prevented erroneous error message in LZCT dialog [ID-54014]: Prevented an incorrect error message being displayed when opening the LZCT dialog from the Navigator for LEED.

VE Navigator for One Click LCA

Register link in OCL navigator now opens browser in the foreground [ID-45012]: Corrected the OCL navigator to open the browser for the register link in the foreground.

One Click LCA report now more accurately outputs PV generated electricity [ID-80029]: PV generated electricity is now correctly reported in the One Click LCA report.

NECB Navigator

Reference fan sizing step removed from NECB navigator [ID-33444]: Reference fan sizing step has been removed from the NECB navigator as it is redundant.

Removed 0 degree only option from the HVAC wizard when accessed from NECB navigators [ID-51072]: Removed the redundant 0 degree only option from the HVAC wizard when accessed via the NECB navigators.

ModelIT

Improvements to the preview navigation on SHP/GML import [ID-14705]: Improvements have been made to make the preview navigation more intuitive, with enhancements to the zoom and pan controls.

Enhanced the instruction shown in the preview window on SHP/GML import [ID-14706]: The import instruction has been refined to make it clearer on actions that can be performed.

Colour thumbnail updates when a new colour is assigned for a space [ID-18266]: When selecting a new colour for a space, the thumbnail of the newly assigned colour correctly changes.

Improved gbXML import [ID-44735]: Prevented VE from freezing when importing problem XML files.

Prevented translucent shades from being turned off with local shades [ID-50626]: Prevented the local shades toggle from turning translucent shades on and off.

Prevented a mismatch of freestanding PV panel count between ModelIT and Apache [ID-56996]: Added the capability to remove freestanding PV panels that had become corrupted and were visible in Apache but had no geometry associated.

Prevented a crash from occurring with freestanding PV panels [ID-60765]: A crash has been prevented when manipulating freestanding PV panels.

Copied PV panels are now correctly recognised by Apache [ID-77965]: Copied PV panels are now correctly identified by Apache in the electricity generators dialog.

Prevented glazed partitions being added to adjacent buildings [ID-58885]: Prevented glazed partitions from being added to attached adjacent buildings.

Prevented openings from being added to adjacent building/local shade [ID-59442]: Prevented openings from being added to adjacent buildings and local shades.

External wall area now correctly reported after space has been scaled [ID-65498]: External wall area is now correctly calculated after an object has been scaled.

Surfaces can be placed at surface level [ID-77541]: Openings can now be correctly placed at surface level view in ModelIT.

RadianceIES

Dynamic results multi-view option added [ID-]: Option to quickly select any dynamic results output on WP Grid tab and show all similar outputs for other rooms on Model Viewer 2.

Window labels drawn on workspace [ID-]: Option to draw window labels on model workspace for;

- sDA allows to view window groups which correspond to the different simulations and results outputs
- VSC allows to view the window index numbers matching to results grid.

Sensor table updates per selection [ID-22434]: The sensor table correctly updates/clears the sensor data for a selected room, depending on if the room has sensor data or not.

Corrected IP unit conversion for WP height and grids fields [ID-46090]: IP units are now correctly converted for use in the WP height and grid fields.

Working Plane interface improved [ID-66997]: Working plane height can be set from menu and RadianceIES view interfaces. When workspace is refreshed then view will reflect user settings.

Glare can now be analysed regardless of file location [ID-71791]: Glare can now be analysed regardless of where the luminance image has been saved.

SunCast

Solar altitude results are automatically displayed [ID-47362]: Solar altitude results are now automatically loaded when solar shading calculations complete.

Prevented a crash from occurring when running Solar exposure [ID-57002]: Prevented a crash when attempting to run a solar exposure analysis without a valid Apache licence.

Note: licence is required to be purchased for this analysis.

Improved missing surfaces reporting in SunCast [ID-57987]: SunCast will report problematic surfaces which may not be drawn correctly when images are generated.

Prevented a shading file error running solar visualisation calculation [ID-69401]: Prevented a shading file error for certain models and improved user feedback on fixing the error.

VE Compliance

Scottish accreditation scheme list is now displayed correctly [ID-76844]: Scottish accreditation scheme names are now displayed correctly within the dropdown list.

Connected spaces now have correct height written out after SBEM compliance simulation [ID-79603]:

Prevented an incorrect height being used for connected spaces when running an SBEM compliance simulation.

Note: as of VE 2019.3 64-bit SBEM is included for all VE-SBEM routes and so user should avoid connecting spaces when using this version as it has a higher rooms limit which can run all level 3 buildings.

VistaPro

Comfort outputs enhanced to include ASHRAE 55: 2013 & 2017 [ID-]: The Comfort option on VistaPro is extended to offer csv summary outputs for TM52, ASHRAE 55 Analytical method, Adaptive method and direct solar radiation method.

Select spaces to analyse then click Thermal Comfort option on toolbar to choose standards you wish to assess.

Note Comfort settings are now applied per room on the Comfort Tab of space data.

When applied additional outputs such as PMV for the chosen method are added to room variables.

Blind state added as an output variable [ID-]: State of a blind (up or down) is output for windows that have local external and/or internal shading devices specified as part of their construction. This is an opening level variable.

Improved functionality using VistaPro Table [ID-15816]: An improvement has been made to allow scrolling via the wheel mouse in the Table window.

End use energy reporting corrected for electric air-cooled chiller [ID-18548]: When network is served by electric air-cooled chiller the end use reporting is corrected so that space cooling and heat rejection are in the correct categories.

Description on a results file retained when Save As project to a new name [ID-29178]:

Resolved an issue with the description on a results file not being retained when a new copy of the project is saved via Save Project As.

Default weather file retained when refresh results [ID-29184]: Issued resolved stopping the default weather file disappearing when refreshing the Files section in VistaPro.

Default variable selection changed [ID-34020]: A default variable is no longer automatically selected when a category is selected by the user.



Apache simulation results file description is now correctly updating when altered [ID-67531]: Results file description is now correctly updated when altered by the user.

XY Plots update from Selected Dates preference [ID-34565]: Settings >> Chart Preferences option is read by XY Plot. When unticked the vista view will be locked to yearly view and when ticked will show only selected date range.

Improved variable selection when viewing baseline model [ID-61062]: Room variables are now correctly selected when selecting a room with the baseline model.

Updated unit labels in OpenEI Tariff tool [ID-77674]: Unit labels have been corrected in the OpenEI Tariff Tool.
Power Adjustment is \$/kWh/%
Daily rate input is \$/day
Correction to G-PPPS label

