MagiCAD for AutoCAD
2016.11 UR-1.2 Release notes

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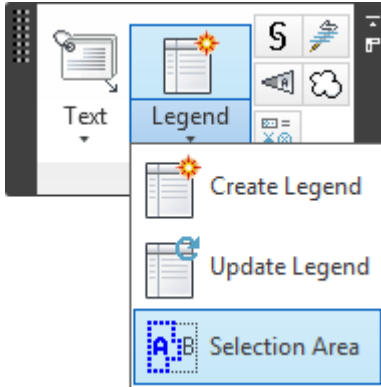# New features

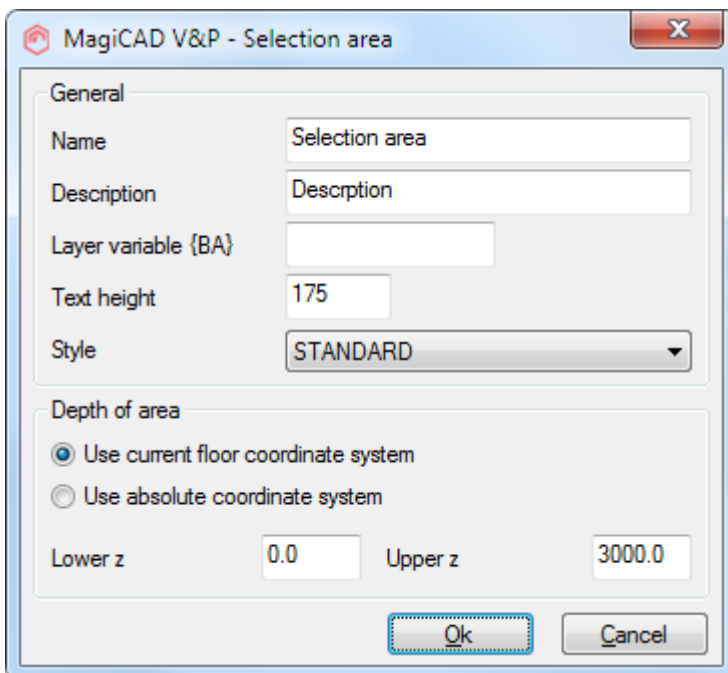## Common features

Pre-defined areas for Legend/Report

There is now a possibility to select an predefined polygonal area for the legends and the reports.

By defining an selection area, you can define an polygonal area. The area can then be used as a filter in the legend, bill of material and report functionalities.

Name	Enter the name for the area. Several areas can also have the same name. In this case In case the areas are overlapping, each device is calculated only once.
Descrption	Enter the edescription
Layer variable	Enter the value for the layer variable BA
Text height and style	Enter the text style and height for the name of the design area.
Depth of the area	Define the dimensions of the design area (height level of the upper and lower surface).

Create legend based on certain layout/viewport

Added possibility the object selection functionality to select the objects which are only visible in the selected layouts.

Support for BCF 2.0

Added support for BCF 2.0 to the BCF Manager. New new features in BCF 2.0 format are
• Can have multiple viewpoints and snapshots per topic
• Viewpoint can be linked to comment
• There is interpreting changes between BCF 1.0<-> 2.0 format, check Topic type and status flag
 In addition the BCF dialog is modeless now. This allows working with other commands and the dialog stays open.

More script commands have been added to modify the project settings

Created new scripts for MCE, VP and Room for disconnecting project, setting origin and angle
• -MAGICAS - change active storey, user has to give storey id of new storey (must be connected to HPV project)
• -MAGICSO - change active storey origin, user has to give new storey origin and angle (must be connected to HPV project)
• -MEDPRJ - disconnect project, just run and it should disconnect MCE project
• -MRCAS - change active storey (room), user has to give storey id of new storey (must be connected to MCR project)
• -MRCSOD - change active storey origin (room), user has to give storey origin and angle (must be connected to MCR project)
• -MRCSOB - change active storey building name, origin and angle (should not be connected to MCR project)

New parameters have been added to dimension text format

The following properties can now be used in VP
• Top of part, WCS
• Center of part, WCS
• Bottom of part, WCS
• Top of part, WCS (with insulation)
• Bottom of part, WCS (with insulation)
The following properties can now be used in electrical
• Top elevation (WCS)
• Bottom elevation (WCS)
• Ins.point elevation (WCS)
• Ref.point elevation (WCS)

Some changes to IFC dialogs which makes it easier to use
• The file selection text changes according to the selected action.
• The file and folder selection dialogs use Explorer-like dialogs.

Ventilation and piping
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The radiator type of unconnected radiator can now be changed with the Find&Replace function

Electrical
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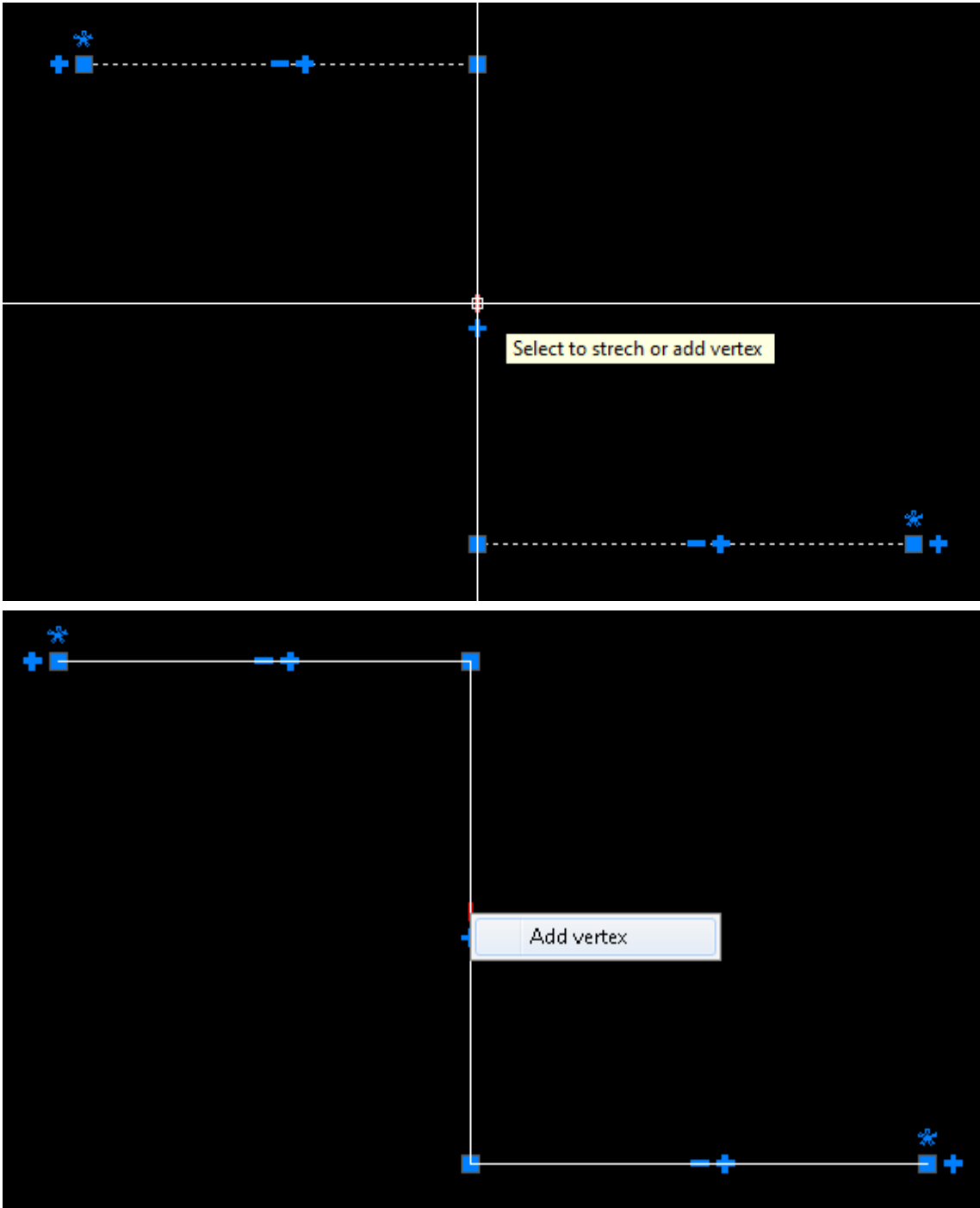## Create legend based on certain layout/viewport

Added possibility in the object selection functionality to select the objects which are only visible in the selected layouts. This makes it possible to create a symbol legend e.g. from a single layout and update it automatically after that.

"Check duplicate positions" - functionality has bee added to the Report tool in

Added "Check duplicate positions" options to report dialogs of MagiCAD electrical.

Edit switchboard areas, switchboard borders, cables and conduits (add / remove vertex)

It is now possible to add / remove vertexes to / from switchboard areas, switchboard borders, conduits and cables. Select a line / area active, click on a grip and use the right-click menu to add / remove a vertex.

Select to strech or add vertex

Add vertex

Resolved issues

Common features

[Fixed in 2016.11 UR-1.1] Selection sets in IFC Export
Selection sets lost model drawing selections if the file name/path contained national characters such as å, ä, ö.

[Fixed in 2016.11 UR-1.1] Property set for builderswork openings named wrong
The name of the property set meant for builderswork openings was falsely renamed to correspond with the object name in MagiCAD. Implementers agreements state that the name should be **Pset_ProvisionForVoid** so that should be used no matter what the name is in different applications. This has now been fixed to the `MagiCADSettings.XML` file.

Some errors have been corrected to the report tool
• An unnecessary extra line was added when the text had "\r\n" line break.
• The text height for MText entity was calculated incorrectly.

Running index did not work with converted objects
Running Index data was not copied when a labeled object was converted to MagiCAD object.
Now it is possible to set running index also to the custom objects.

Ventilation and piping

[Fixed in 2016.11 UR-1.2] Parameter "Center of part, absolute, with sign" returned incorrect value
When dimension text format contained parameter "Center of part, absolute, with sign" the returned value was offset from the floor
not the absolute height level as it should be. This is corrected.

Component insulation
• When a valve is removed and the pipes around the valve have an insulation, then the gap is also insulated.
• The valve inherits the insulation from the pipe where it is installed.
• It was possible to add insulation to duct/pipe when a partial insulation was not removed. This is corrected.

Some manifolds which were created with a plugin did not work with 2016.11
Dimension lines are no longer erased from the manifold when the pipes are drawn from it.
Some corrections to handling of the manifolds which are created with plugin. The problems were related to the manifolds which had separate outlet and inlet manifolds and were packaged as one object.

The size of a rectangular outlet was incorrect in the report
The size of a rectangular outlet from a circular duct was incorrect in the report. For example a 200x100 outlet from 200 duct was shown as "200/200".
The format of the size of a rectangular tee has been changed.
The format of the various sizes are now similar in all the places and some formats have been changed
Now they are shown as follow
• Circular T-branch D=400, side branch D=125, is shown 400/125
• Rectangular T-branch 600x400, side branch D=200, is shown 600x400/200
• Rectangular T-branch 600x400 to 300x200, side branch 200x100, is shown 600x400/200x100/300x200
• Outlets with circular main duct are shown with the duct diameter first.
• Outlets with rectangular main duct does not show the main duct size at all.

Connections were not removed from the connection box when it was copied and pasted
When a connection box with the ducts connected to it was copied and pasted, the connections remained in the box. This meant that the calculation did not work anymore, since they were interpreted as open ends by MagiCAD.
Copying the box with a copy command worked correctly. Now the copy/paste is also working correctly.

The insulation information was missing from the fittings in the ventilation&piping report
The insulation information was missing from the fittings in BOM. This works correctly now.

A sewer device showed open ends in a strange place when the part property line was used.
> In case the sewer had multiple inlets and one outlet, some open connections were shown in a strange place. They were shown AutoCAD origin.
> This is corrected

The part property line didn't work for all the parts.
> At least the custom object, the labelled object, the distribution box, the shunt, the ODC and the OSC were not handled.
> Custom object, labelled object, distribution box, shunt, other duct component, other sewer component and integrated reductions were not handled.

Improvements to the builderswork openings
> In case there is a connector inside the wall, eg a fitting partially penetrates into the wall, the previous version sometimes made too big openings.

The part propertied dialog doesn't show (zero) results for the unconnected connections for the manifold.

Mirroring did not work correctly for the asymmetric products
> Now the asymmetric products like eccentric reducers are handled correctly by reselecting the product when mirroring.

Logic of "Add to BOM" is different in BOM and MagiCAD Export
> When an object is created with "Set MagiCAD data to AutoCAD object" tool and user has left "Add to BOM" unchecked, the objects are not listed to BOM which is the correct behaviour.
> However the objects were listed in MagiCAD Export which is an incorrect behaviour.
> MagiCAD Export now works in the same way as BOM

Supply/Extract symbol changed the color when a "plug type" cleaning cover was added to the end of the duct.
> The and some other objects are now drawn with the correct color and line type.

Some IFC properties could not be shown if the pipe reduction was connected to a T-branch.
> Now the size list is shown correctly in property palette and part properties for the T-branch, X-branch, N-branch, reduction and integrated reduction.
> Now the integrated reduction has the same properties in the property palette and part properties as the normal reduction.

Corrections to IFC export
> • IFC export doesn't unnecessarily warn about missing number of elements
> • If "Convert to MagiCAD object" is used for blocks, they are now grouped correctly in all the cases.
> • Now the connection sizes are now shown correctly for the sewer and the other sewer devices in the property palette and IFC Export.

Options were unavailable when the other pipe devices was being installed
> When other pipe device is selected and ready to be installed, the user could not get *"Options"* dialog open.
> A possibility to select "Options" for the other pipe device is now available.

The top alignment of T-branch ("Y"tee) works incorrectly with Chinese and Russian templates
> This works correctly now.

A minor problem with underlining/overlining multiline dimension texts
> When the first/last row was empty (the value of the selected parameter is empty), the first/last line were not overlined/underlined.
> This works correctly now.

Dimension text showing dimensions incorrectly
> Updated the component selection so that its size can be correctly chosen with both BxH and HxB sizes (like 800x500 or 500x800)

The domestic water flow was not calculated for the substation products
> If a substation product is installed from a product database, calculation stopped with an error message "Topology error" and a lots of parts were shown in the report. This happened even though the system was drawn correctly. However the calculation worked perfectly fine with the general substations.

Corrected an error, when only the cold water branch was calculated from a substation product.

The handling of the pressure drop in the climate beam dialog has been modified

If the climate beam has an adjustable pressure drop on the air connection, the user can now lock the pressure drop and enter its value.

If the pressure drop is locked, it is shown the part properties dialog. If it is not locked, the calculated pressure drop is shown.

Impossible to connect pipes to radiator without drawing bend

Corrected some cases when the pipes were not connected to the radiator when they should have been connected.

Electrical

[Fixed in 2016.11 UR-1.1] AutoCAD's stretch command not working as expected on electrical cables

The new vertex editing features introduced in UR-1 made AutoCAD's stretch command work unexpectedly on cables. When trying to stretch only from grip points in the middle of cables the end points of the cables were also stretched. This lead into broken connections and false presentation. The problem has now been fixed in the "after check" that is done when performing AutoCAD commands on MagiCAD objects.

When the prompt variables were added into electrical text model, the edit field were not activated until user reselected the text model

Edit boxes were not updated after editing and creation of new text. This is corrected.

The dimension texts of the cables are not moved when cable itself is moved with some other objects

If there is a cable which is connected to a device, circuit symbol or lighting track + a dimtext connected to the cable, the dim text did not move with the cable if the cable is moved.

This is corrected and the dimension text moves with the cable.

Cable connection to packet's end point worked incorrcetly when connection angle and distance was used

Correted an error when the cable could be connected outside of the cable packet.