

STI

What's new?

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STI SPIRIT | 2019

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**Note**

The following pages describe the new features of the current version. All new features apply exclusively to SPIRIT, provided the corresponding licensed program sections are available on the user's/customer's computer.

 For more information, please refer to the online help. The new features are listed on the start page and are linked to the respective chapter, where the feature is explained in detail.

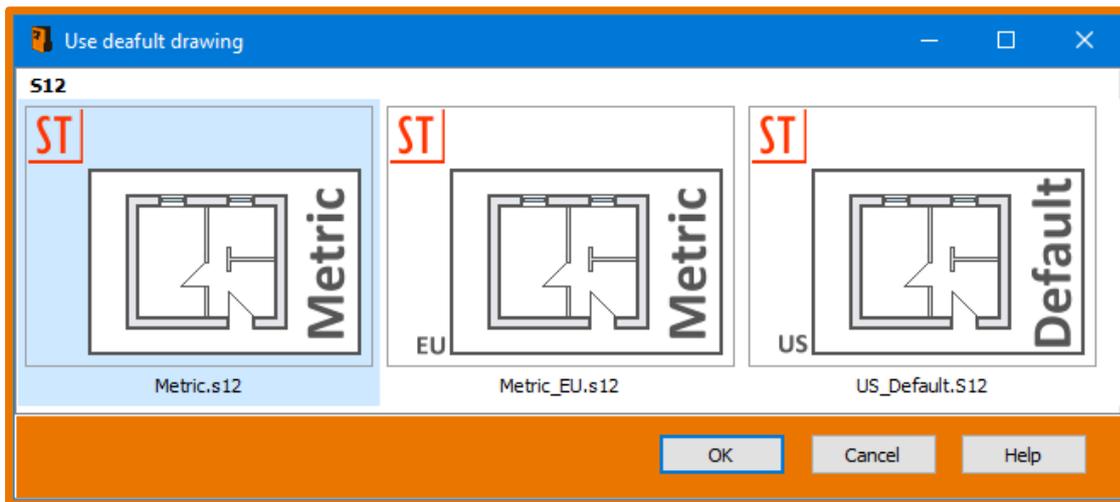
## Adaptations – Selection of the default drawing

Always start with a proper template.

### Description

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New projects mean new drawings or new models. When you create a new drawing, you must first select a default drawing in the new selection dialog. This ensures that you always use a recent template for your new drawing.



New selection dialog with default drawings

A default drawing is a normal, empty drawing that is preset – similar to a template file in a word processing program – with various parameters and settings for grids, text, dimensions, etc. and possibly particular layers or levels. The settings, levels and layers from the default drawing will be applied on the new drawing, e.g. the **Metric** default drawing already contains many layers and a level, as well as suitable settings.

Standard default drawings in SPIRIT are the Metric, Metric\_EU and the US\_Default template. Create your own default drawings and save them in the **050\_Default Files** folder of the SPIRIT data. These templates will then also be listed in the selection dialog.

### Value

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- ✓ All existing default drawings are clearly displayed.
- ✓ You can not create a drawing without selecting a default drawing, which makes drawing and creating models easier.

# Adaptations – Purge drawing

Play it safe at start.

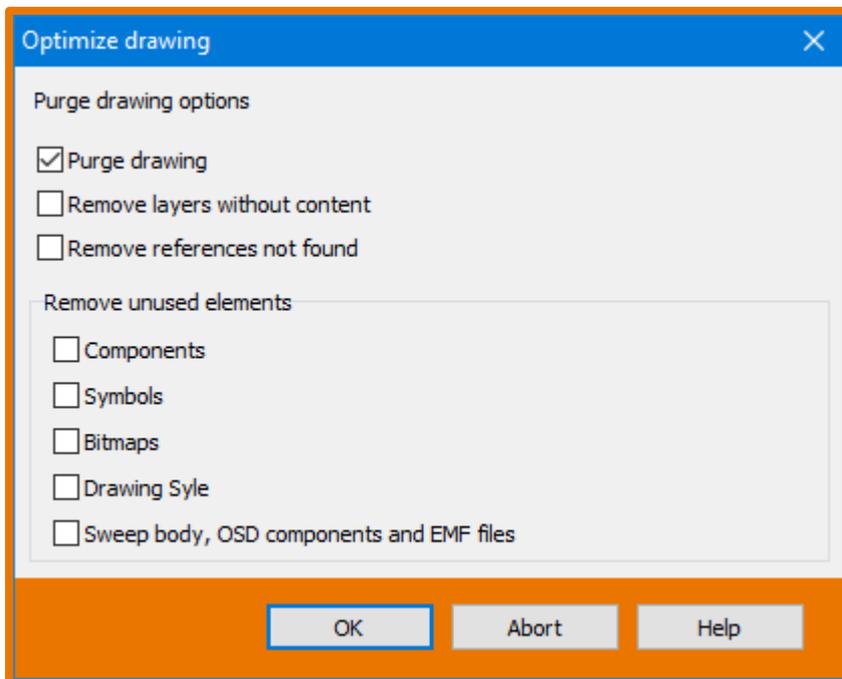
## Description

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Working on drawings and models of ongoing projects with the new software version is everyday life. Therefore, we want to assure that the 'old' drawings are tidy, checked and optimized for further processing.

If you start an older drawing with SPIRIT 2019 for the first time, the new dialog with separate options for optimizing the drawing is displayed. In this dialog you can select several options to compress, clean and reorganize the drawing, e.g. by removing unreferenced elements.

This dialog is also displayed when manually purging a drawing.



New dialog with separate options for optimizing the drawing

## Value

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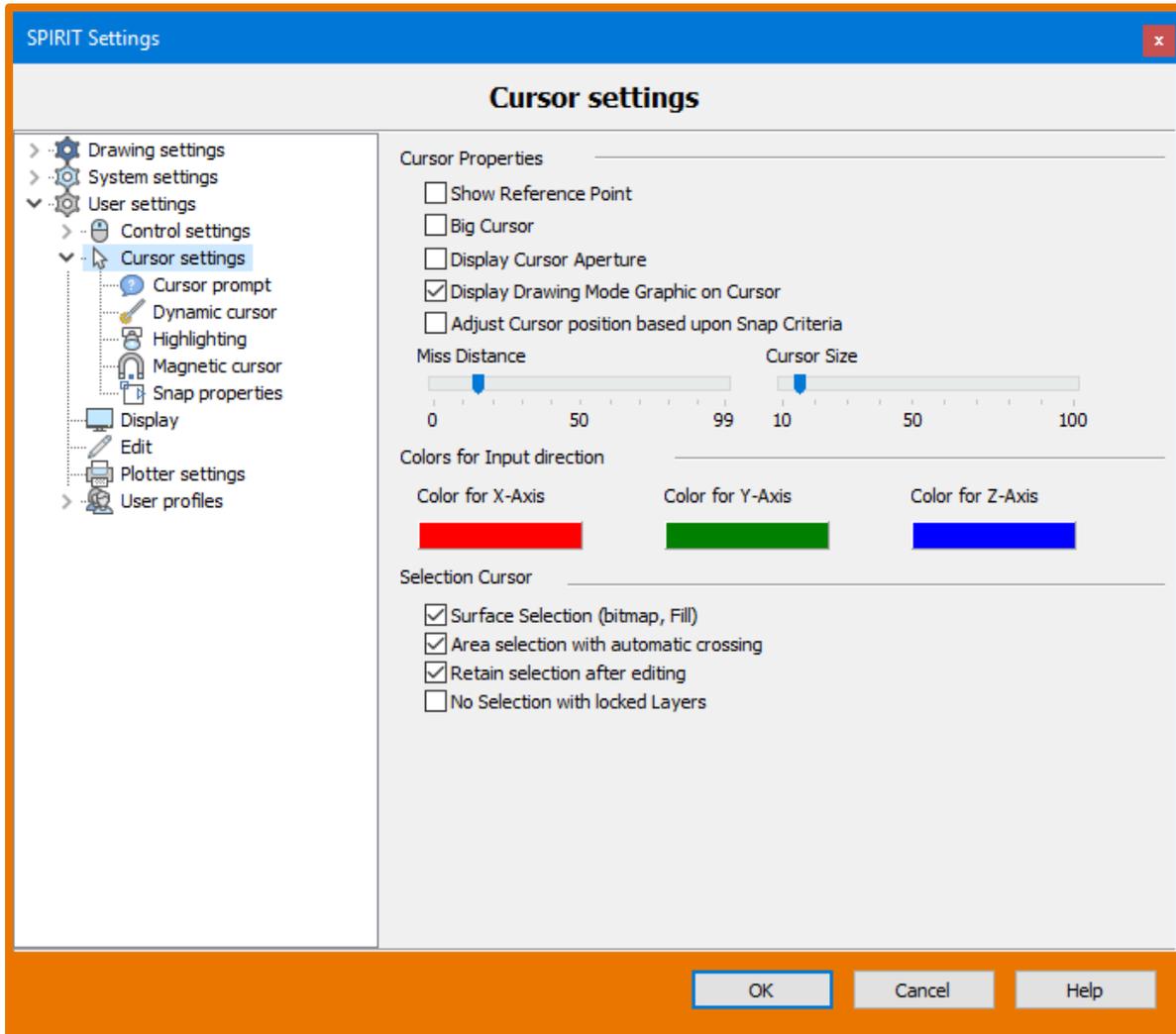
- ✓ Drawings are checked for inconsistencies before editing and corrected and repaired if necessary.
- ✓ Unused elements are removed from the drawings, which minimizes file size.

# Adaptations – Settings cleared up

System, User, Drawing – Have an eye on every setting.

## Description

The SPiRiT settings are now divided into 3 categories: **drawing**, **system** and **user** settings. This gives you an initial overview of which setting has an effect on which area in SPiRiT.



SPiRiT settings

## User settings

The user settings are stored in the user profile (see next paragraph). In a user profile, each user can define their personal settings and use them at different workstations. Thus, these settings are detached from the drawing.

For example, in the past the display of the cursor aperture was saved in the drawing. If a colleague now opened the drawing on his workstation who usually works without a cursor aperture turned on,

this was now active because it was stored in the drawing. The option had to be turned off again in the settings.

### **System settings**

The system settings, for example the path settings, are usually set once after installation and apply to the local computer or for the network installation.

### **Drawing settings**

Drawing settings, for example the color of the screen background, are saved together with the drawing file. Initially, they will be taken from the template file.

### **Value**

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- ✓ Clear segmentation of the SPIRIT settings.
- ✓ You know what the individual settings relate to.

## Adaptations – User profiles

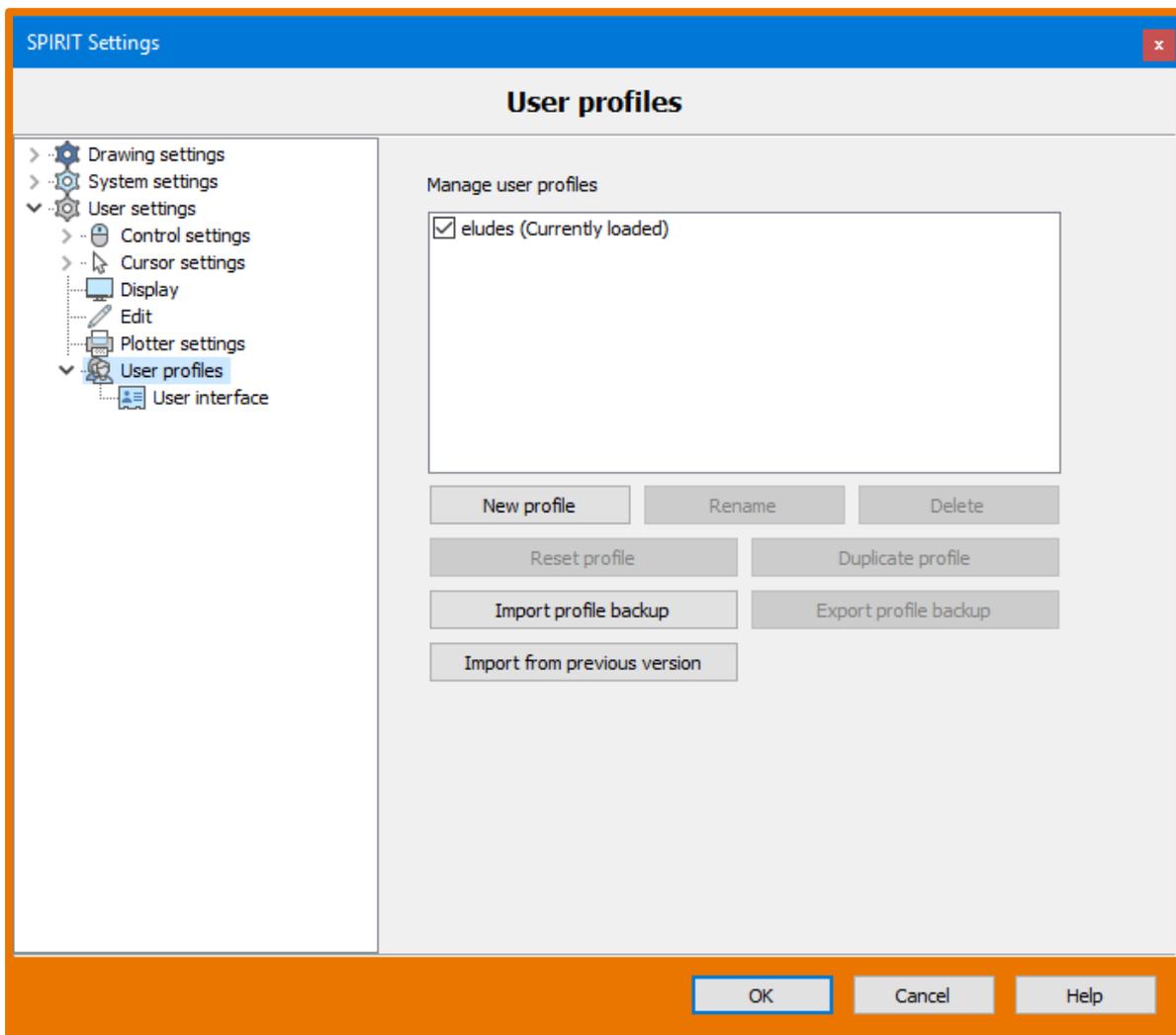
Everyone works with their own settings and interface.

### Description

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With user profiles, a user can manage several independent user settings and transfer them to other computers. A user profile contains the following data in addition to the user settings:

- The arrangement of the elements on the interface.
- The position and contents of the toolbars.
- The layout files.
- Own definitions of shortcut keys.

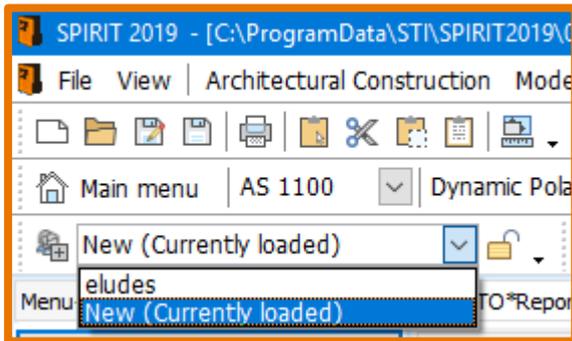


User settings > User profiles

In the user settings you can create, rename and delete user profiles. You can also create a profile backup at any time, which you can use to upload your profile to other workstations. In this way the user profiles allow different colleagues in a workplace to work with their respective personal settings.

If you once more want to work with the default settings, you can reset your user profile.

In the user profiles toolbar, the currently used user profile is displayed and can be changed here. The user interface can be locked here, which is also stored in the user profile.



## Value

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- ✓ Profiles can easily be taken over to different workstations.
- ✓ Work with your personal settings at every workstation.
- ✓ The standard user interface of SPIRIT is available at any time.
- ✓ All personal settings are stored centrally.

## Adaptations – Importing the user interface

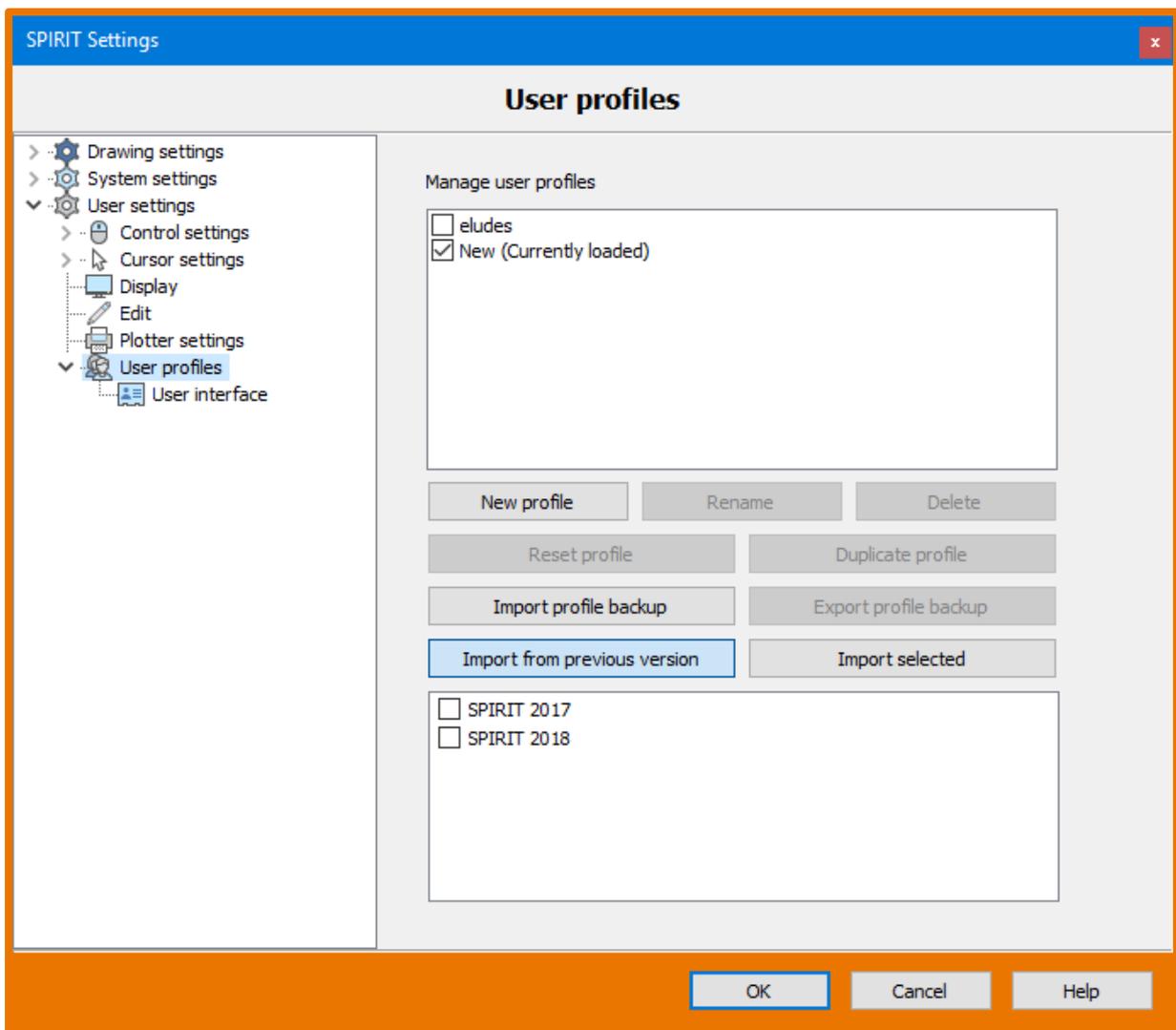
No longer need for the Desktop Copy tool.

### Description

Importing the user interface from a previous version is now carried out by means of creating a new user profile. Previously you had to use the external tool **Desktop Copy** to transfer the data from an older SPIRIT version. Transferring the data required some knowledge of path setting in the program preferences.

From this version it is sufficient to click two buttons:

- **Import from previous version:**  
Clicking the button will detect and display the SPIRIT installations as of version 2017.
- **Import selected:**  
For each selected version, a new profile is created and displayed in the list of user profiles.



User settings > User profiles > Import from previous version

The newly created profile gets the name of the respective SPIRIT version and can then be renamed as desired. Please note that only Spirit installations from version 2017 onwards are considered.

**Value**

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- ✓ The tedious gathering of the individual files for interface, dockable dialogs and system files is a thing of the past.
- ✓ Your previous interface can be quickly and easily imported into the current SPIRIT version.

## Adaptations – 4K interface

Always properly scaled and razor-sharp.

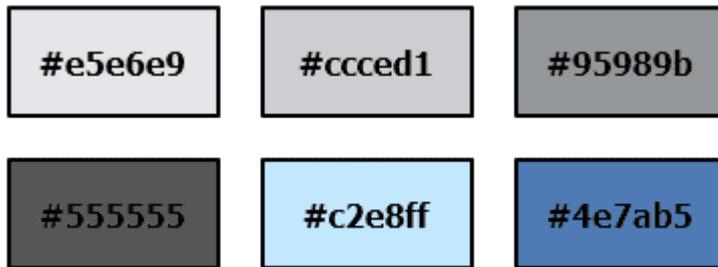
### Description

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4K monitors are no longer a rarity in many offices today. That's why SPIRIT 2019 supports high-resolution monitors. The familiar components of the interface, such as the menu overview, tool bars and icon bars, are displayed correctly on high-resolution monitors (4K) and provide a brilliant user interface.

For the higher resolutions of a 4K monitor, all icons were created in new resolutions. The large icons can be enabled in the user settings (User profiles > user interface).

In terms of color, the SPIRIT 2019 interface is inspired by the color concept of Microsoft Office®, which uses the following color values:



Even if you do not use a 4K monitor, SPIRIT 2019 supports the Windows display settings. If you change the value for the windows display setting **Change the size of text, apps, and other items**, SPIRIT's interface changes accordingly. Note, however, that the interface does not appear pixelated only on a high-resolution monitor.

### Value

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- ✓ The SPIRIT user interface is readable and usable on high-resolution monitors.
- ✓ The interface adapts to the Windows display settings for **Scale and layout**.

## Adaptations – Connecting AVANTI

The smart auto-focus. SPIRIT focuses on your selection.

### Description

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An essential strength of the digital quantity determination with SPIRIT and AVANTI lies in the traceability of the measurements. A position in the item quantity list of AVANTI can be traced back to the drawing or the model. You decide whether to display only a single element or all elements of a position in the plan or model.

The elements are visually highlighted and the drawing is zoomed to the elements, so you do not have to search for the elements in the drawing.

### Value

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- ✓ You can check quantities from AVANTI in SPIRIT much faster
- ✓ You no longer have to search for the elements in the drawing.
- ✓ You stay in the workflow and avoid careless mistakes.

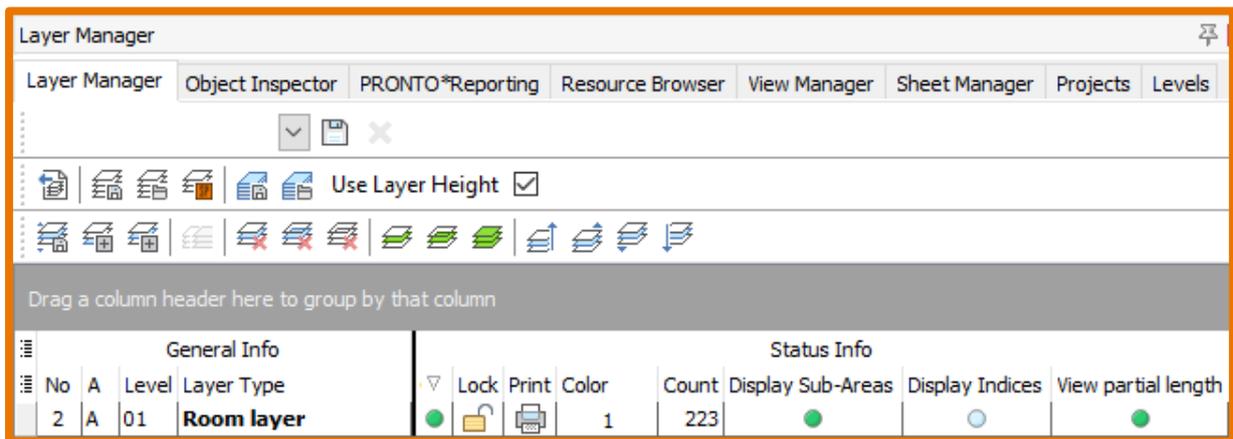
## Documentation – Partial length of polylines

More than just the sum of the single parts.

### Description

In SPIRIT you will find different quantities for all elements. In the evaluation, these are listed on the respective element. For example, you can see the respective quantity of the area on the polyline or the room. Polylines are now automatically broken down into partial subareas, which can also be displayed in the drawing.

Whether partial lengths, sub areas or indices are to be displayed in the drawing area is up to you alone. The new partial lengths can be easily switched on and off in the **Layer Manager**. As always, you can set the visual appearance in the SPIRIT settings: **Drawing settings > Reporting and room stamp > Subarea and index**. You can set the color, font type, text size and the distance to the element.



In AVANTI, the partial lengths are also automatically documented as soon as polylines or the volume of areas are transferred from SPIRIT. The calculation of the partial lengths is documented in the item quantity list of AVANTI.

### Value

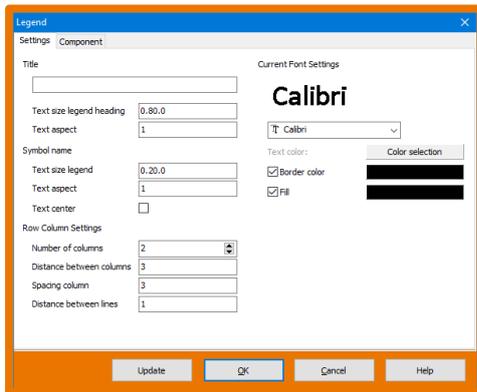
- ✓ You create measurements for lengths and circumferences with proof of partial lengths.
- ✓ Your measurements are more comprehensible for room areas.
- ✓ You will receive fewer questions about the quantity check.

# Documentation – Legend

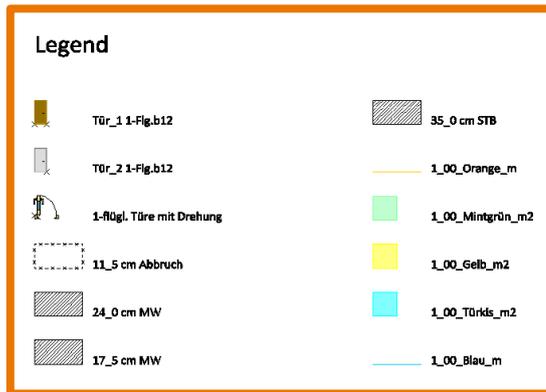
The legend for components, symbols and drawing styles

## Description

For an automatic explanation of drawing objects, the new legend is available in SPIRIT 2019. The components, symbols or drawing styles you use can be clearly and comprehensibly summarized in a legend and placed on the plans. The new function also supports you with some helpful customization options so that you can present and describe the selected content as an example.



Left: Dialog – Legend



Right: Legend in a plan

In addition, you can display a quantity for each element in the legend. Choose between length, area, number or volume, the appropriate quantity for you. If manual input is required, you can also add your own text.

## Value

- ✓ Automatically create a legend for better documentation.
- ✓ Direct indication of the respective total quantity per element.

# Documentation – New Report Service

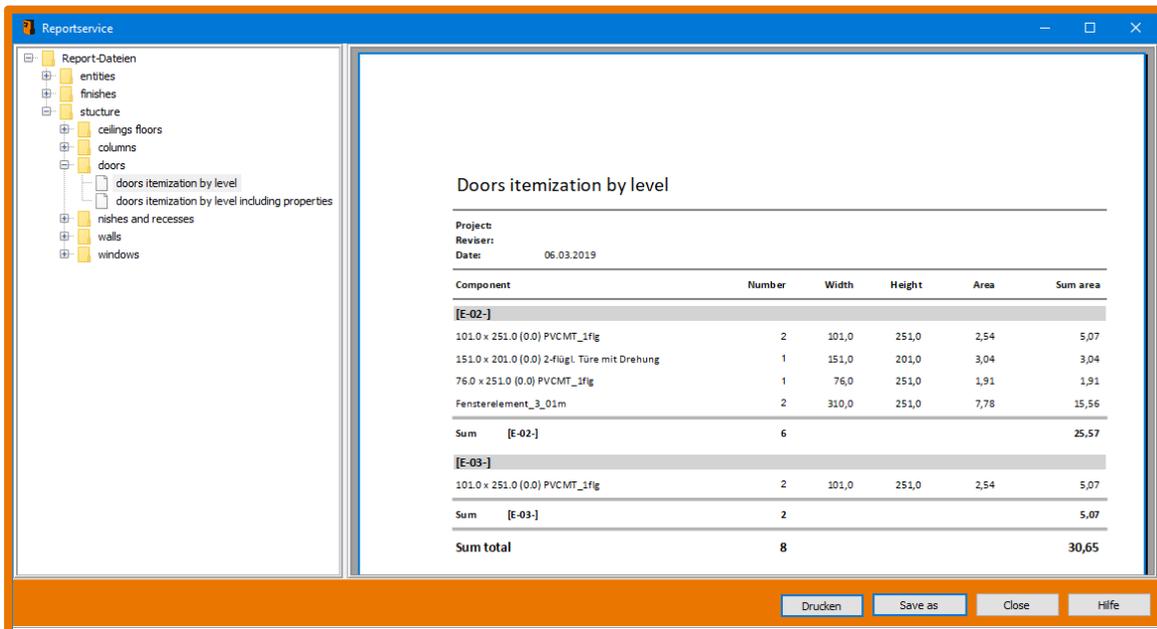
New reports available.

## Description

Many new reports are available in SPIRIT 2019: The output of the reports has been renewed and is now performed via a separate service. The new reports are available in the evaluation.

## Reports in Pronto Reporting

The new report dialog is called up directly in the toolbar of the SPIRIT evaluation. The evaluation (Pronto Reporting) is a dockable dialog. The data to be evaluated are first summarized in the background and transferred to the service. Once the data has been evaluated, the Reportservice dialog opens and you can select the desired report in the selection tree.



Reportservice

## Which data will be evaluated?

The data to be evaluated can be restricted to elements of the visible (active) layers and to ZAC elements (components). If you do not enable any of these options, all the data of the drawing or model is provided to the report service:



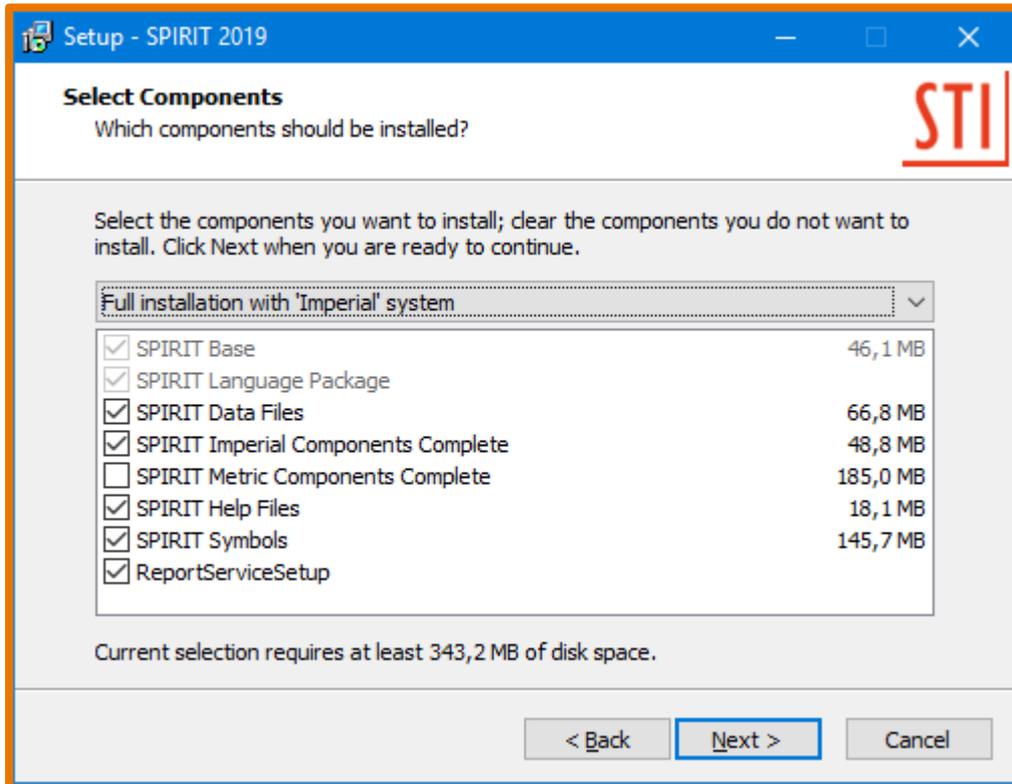
Button for starting the report service | Options for restricting the data

## Where are the reports stored?

The reports are stored in the folder **220\_Forms** of the SPIRIT data.

## Installation of the SOFTTECH report service

When selecting **Full installation ...** at the SPIRIT 2019 setup, the new report service is automatically installed with SPIRIT.



SPIRIT 2019 – Setup: Full installation with 'Imperial' system

### Value

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- ✓ The new report service is faster and offers more reports.
- ✓ You get practical reports for direct distribution to third parties.
- ✓ All reports can be printed out directly.
- ✓ All popular formats are supported.
- ✓ The reports are customizable. Talk to your sales manager.

## Printing/Plotting – Area selection

For fast, scalable prints.

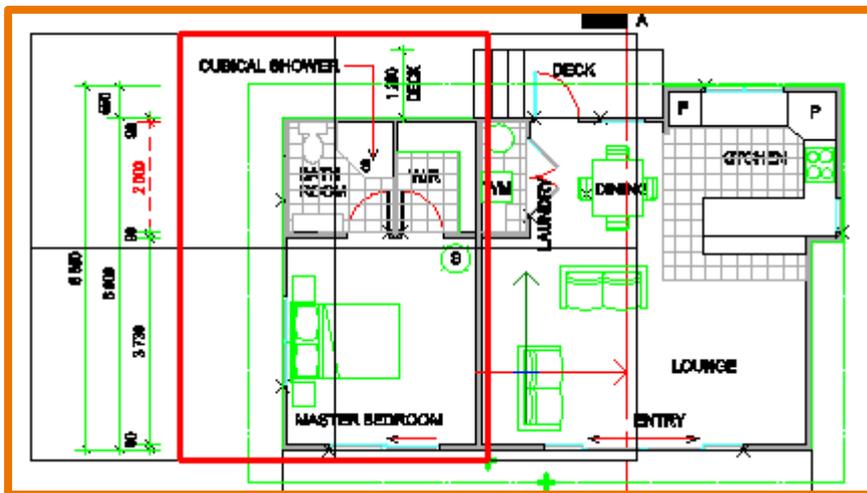
### Description

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Drawings, drawing parts or detailed printouts should be made as easy and flexible as possible. The SPIRIT area selection does exactly that. Everything you select in your area is put on paper. It uses your previously defined paper size and simply adjusts the selected area to the paper size. So, if you do not care for a full-scale illustration, this is the right output.

The area selection can be found under **Sheets / Presentation > [S9] Plotter > [S1] Area**.

When printing an area selection, the line width of the printout is affected by the active plot scale.



Only the selected area (red rectangle) is printed.

Of course, you still have the ability to create true-to-scale output. Simply select the desired paper size and place the resulting print area on your drawing with the function **Quick Layout**. So, you decide yourself whether you want to print to scale or not.

### Value

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- ✓ Create a quick, easy and uncomplicated printout from your SPIRIT drawing.
- ✓ The plot scale has a direct influence on the look of your printout.

# Functions – Polyline rectangle

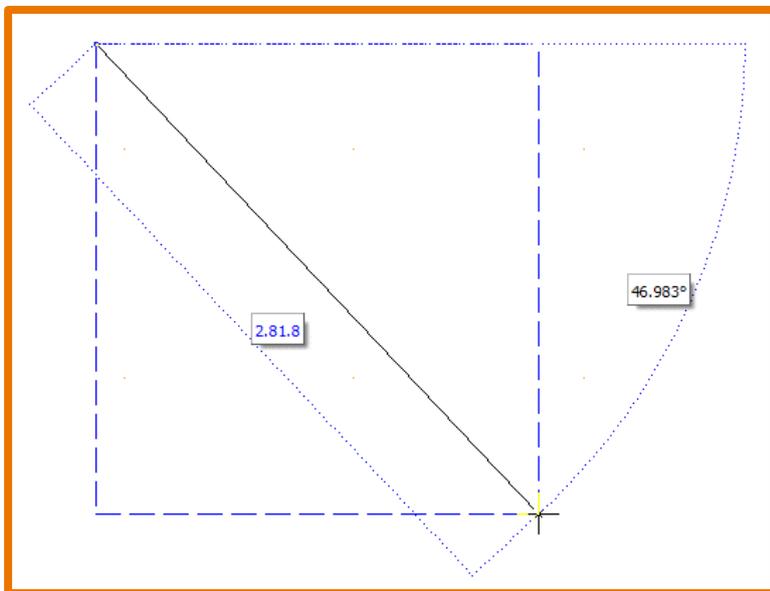
Now it's an intuitive and fast tool.

## Description

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The drawing or coloring of rectangular rooms or areas requires some effort first. If you do not use the contour search functionality, it takes a few clicks before this simple basic geometry is drawn. In SPIRIT 2019 we have optimized the input of rectangles for you.

In SPIRIT 2019, the **Rectangle** function does not necessarily have to be active when working with polylines, rooms or roofs, etc. Switching between a rectangle input and a polygon is automatically detected by SPIRIT. This keeps you in your workflow and you do not have to interrupt it with a tool change.



Draw rectangle with 2 clicks.

In addition, the cursor assists you in creating rectangles - if the input is not reasonable, for example, areas of zero length or width, SPIRIT will tell you.

## Value

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- ✓ You benefit from improved input when drawing rectangles in all affected functions.
- ✓ Rectangles can be created easier and faster.

## Functions – 2D dimensioning

Be more flexible at 2D dimensioning with prefix, suffix and scale factor.

### Description

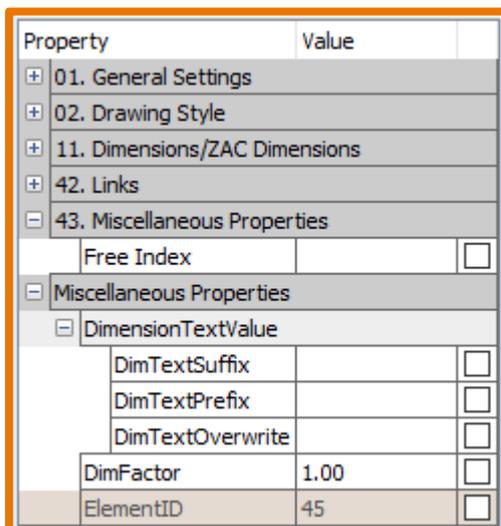
Additional text input, custom dimensioning or dimensioning references with different scales, all this is now possible with the new 2D dimensioning of SPIRIT.

### Prefix and suffix

In the menu overview and in the object inspector you now have the option of adding a prefix or a suffix to the displayed dimension. The respective text is appended before or after the dimension value and is part of the dimension line.

### Overwrite dimension text

There are a variety of situations in which it may happen that the displayed dimension value must be adapted. Be it drawing deviations, detail dimensions, dimension lines whose values has been shortened, etc. Similar to prefix and suffix, the option **DimTextOverwrite** is available in the dimension menu and in the Object Inspector. The manually entered numerical value is then displayed on the respective dimension line. The real dimension value is still be available in the object inspector.



Object Inspector with the new properties prefix, suffix etc.

## Dimension scaling

In order to offer maximum flexibility when layouting with different scales on a plan, it is now possible in SPIRIT to specify a dimension scaling. This frees you to change dimension lines by a scaling factor. An already scaled detail can be dimensioned directly with the correct dimension value.

For example, if you have a floor plan in the scale 1: 100 and add a section that is enlarged by a factor of 5 as a reference again, then this section is in the scale 1:20. If you insert a dimension into the enlarged section, the values do not match the scale of the drawing. With the **DimFactor**, you can now adjust the dimension of the referenced drawing accordingly, in this example the factor  $1/5 = 0.2$ .

### Value

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- ✓ You save several work steps with prefix and suffix.
- ✓ You no longer have to explode the dimension if you need to complete texts or change values.
- ✓ The dimension remains as an object.
- ✓ Scale references can be sized correctly.

# Functions – Magnetic cursor

The new way to snap.

## Description

The most commonly used function in drawing is without question the object snap. Unconsciously and naturally, every SPIRIT user uses the snap functions. In SPIRIT there are three ways to use the snap points on an object. These are: The middle mouse button, the shortcut key [y] and the magnetic cursor. These three functions now behave almost identically, which is most noticeable with the new magnetic cursor.

## The new magnetic cursor

The magnetic cursor in SPIRIT 2019 has been completely redesigned. The magnetic cursor sensibly snaps to the respective point on the object before the click and displays it accordingly with the respective symbol. If you click with the left mouse button, the cursor jumps to the snap point that was previously displayed.

## Work fluidly with the snap point ,Nearest'

The shortcut key [s] for switching the magnetic cursor on and off as well as the shortcut key [Shift] + [x] for calling the object snap points allow a fluent and constructively clean drawing. The reworked snap point ,Nearest' plays a major role in SPIRIT 2019, offering a constructive added value in drawing in connection with the likewise reworked construction lines. The ,Nearest'-snap now runs smoothly on every object and every construction line, so that every point can be caught exactly. The snap point ,Nearest' is subordinated to the other activated snap points, so that the desired point can be snapped at any time.

## Context bar Object Snap

To provide you a direct access to the object snap and the snap points, a new icon bar has been implemented in SPIRIT.



Context bar – Object Snap

## User settings magnetic cursor

The snap properties and magnetic cursor settings are user settings and can be set and saved individually in the user profile. New are the options to set the color for the snap points and the delay of the construction lines help points.

**Value**

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- ✓ All three object snap methods behave uniformly.
- ✓ The next available snap point is displayed when using the magnetic cursor.

# Functions – Construction lines

The new way to snap.

## Description

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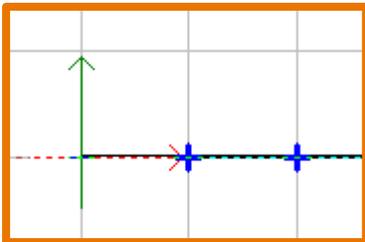
Together with the magnetic cursor also the handling of the construction lines was improved. The largest change relates to the setting of a construction lines help point and the associated display of the construction lines.

### Delay for setting of construction lines help points

Construction lines should support drawing and only be displayed if you want it or need it. Therefore, the construction lines help points are only set to the respective snap point, if you mark this with the help of the mouse (search radius). This is done by mouse over the respective snap point. The duration until the help points are displayed, can be defined with the setting **Construction lines help point delay**.

### Deleting construction lines help points

Construction line help points are displayed as a cross in the color of the snap points. The maximum number of help points displayed at the same time can be set in the user settings. All construction line help points can be removed by pressing the [Esc] key or individually by mouse over the help point according to the delay.



Construction lines help points in **blue** color

### Construction lines and snap point 'Nearest'

If the snap point 'Nearest' is activated, you can always snap on the construction line, the cursor moves along the construction line. You do not need to hold down the [Shift] key as in earlier releases.

## Value

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- ✓ Construction lines are activated by you.
- ✓ New section and construction points make drawing easier.

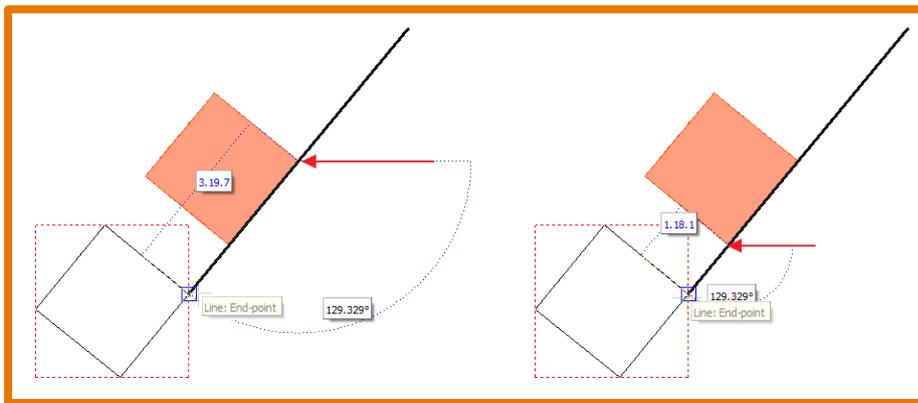
# Functions – Reference point and dynamic input methods

Additional keystroke combination for setting a reference point.

## Description

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Another small change with much impact is the new definition of a reference point. If one of the dynamic input methods is currently used, the reference point can also be set with the key combination [Shift] + [Ctrl]. The values at the cursor then refer to the new reference point immediately.



Left: Standard starting position

Right: New reference point (red arrow)

## Value

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- ✓ Faster drawing, construction and modeling through direct reference point input.
- ✓ The new reference point is displayed directly when using a dynamic input method.

# Functions – Empty layers in Layer Manager

Please remove everything.

## Description

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In the Layer Manager, there are various functions for managing the layers. A new feature will be added with SPIRIT 2019. Empty layers without content can be deleted directly with one click.



Delete Layers – Delete selected layers from drawing.



Delete Layer Content – Delete only the contents of the selected layer.



Remove layers without content – Deletes all layers that have no content.



Toolbar of the layer manager

## Value

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- ✓ Layers without content are removed with one click.
- ✓ Speeds up the cleaning up of the layer structure.

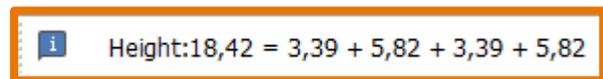
## Functions – Length +

Measure accumulated lengths in no time at all.

### Description

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With the function **Length +**, several distances can be measured directly in succession. Also, the selection function can be used to select specific elements. After completing the function, the total length is calculated and the calculation approach is displayed in the info bar.



Info bar of function Length +

With the function **To Drawing** you can also set the determined length value as text in the drawing area.

### Value

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- ✓ Easily add and subtract any distances.
- ✓ Measuring of a clicked total length.

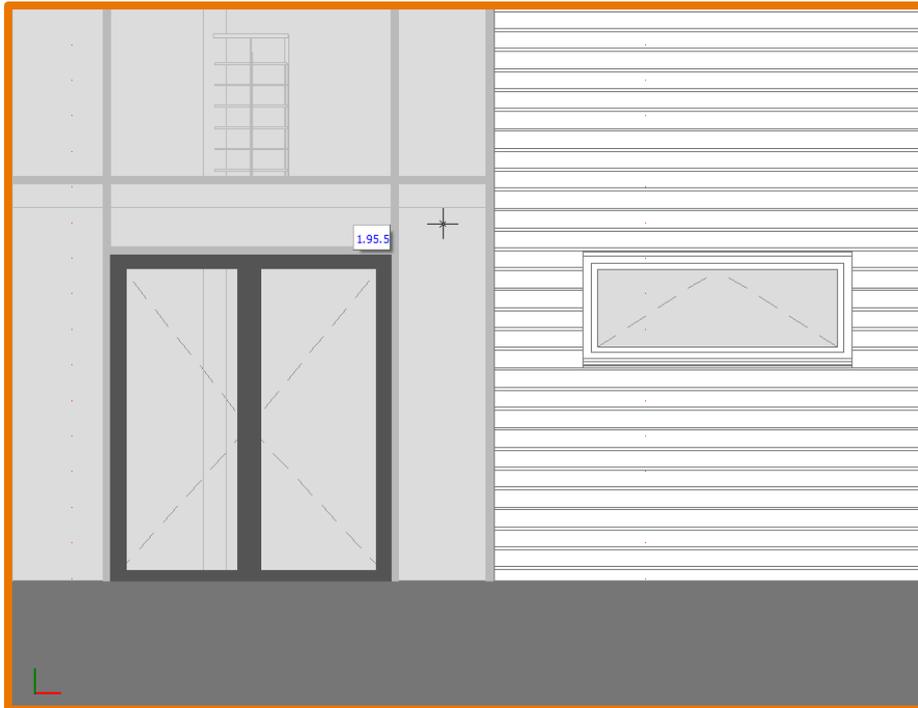
## Functions – Dynamic measurement

Dynamic display of the measurement at the cursor.

### Description

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Measuring in SPIRIT now supports the dynamic input methods. When using the measurement functions, you will already see the desired measurement result at the cursor.



The Length is displayed dynamically at the cursor.

Thus, the measurement results are available both in the info bar and directly in the drawing area. In addition, the measurement results are copied to the clipboard so that you can work directly with the measured values if necessary.

### Value

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- ✓ The measurement results are displayed directly on the drawing area.
- ✓ The view while working remains on the drawing area.

## Functions – ST 3D-Viewer

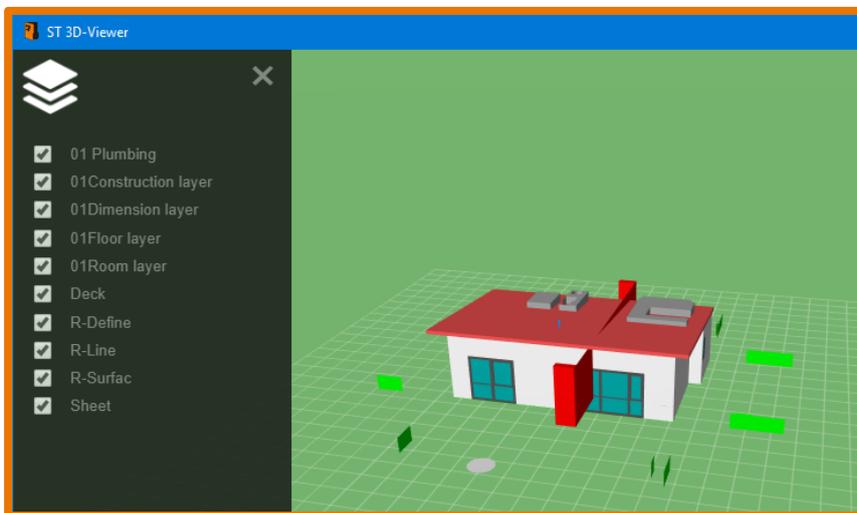
More control in the 3D model.

### Description

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The ST 3D-Viewer provides more control over the 3D model. By adding the layer control, you can now influence the visibility of the model in the ST 3D-Viewer.

In the upper left area, the layer display is switched on when the mouse cursor points to the icon. All layers that are switched on in the layer manager and contain at least one element are then displayed alphabetically. In this list, each layer can be switched individually, so that for example only the ground floor is visible.



ST 3D-Viewer in SPIRIT with list of active layers

Also, in the options under **Behavior** there are two new functions available:

- **Invert Scrolling:**  
Inverts the zoom-in with the scroll wheel.
- **Bottom Plane Panning:**  
Activated, the model is only moved on ground level.

The viewer is not only available in SPIRIT, but also in the latest version V1.2 on the SOFTTECH website at <http://viewer.softtech.de:3000/> for free use.

### Value

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- ✓ Visibility of the model can be switched via the layers.
- ✓ Variants on different layers can be made available to the client.

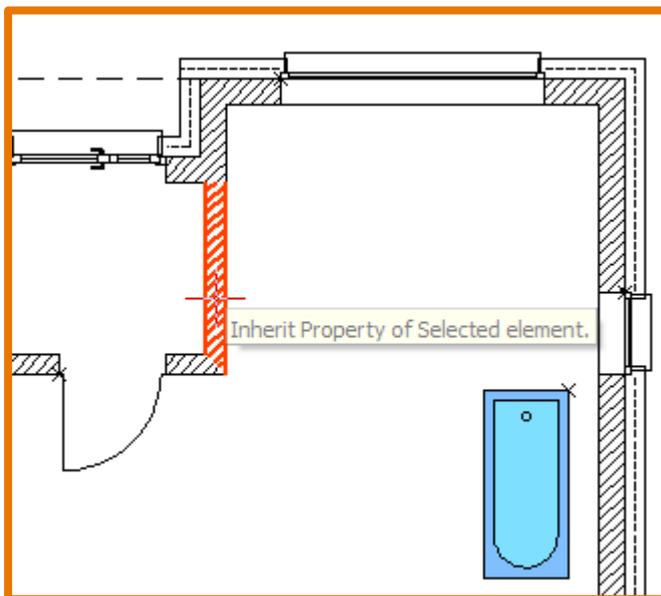
## Functions – Highlighting objects when using the eyedropper

See in advance what is picked up.

### Description

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The eyedropper is a useful tool in SPIRIT and summarizes several functions in one step. After selecting the eyedropper tool, the cursor changes to eyedropper mode. Now the objects are highlighted before the selection so that you can see from which object you take over the object properties (such as object type, layer, color, etc.). With the following click the properties are taken over and the cursor changes as usual into the respective menu of the object type.



Highlighted wall in eyedropper mode

### Value

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- ✓ You can see in advance which object properties are copied.
- ✓ No selection of a 'wrong' object as a starting point for new objects.
- ✓ Faster working with fewer clicks.

## Functions – Plan as a new drawing

Save plans and print layouts as a separate drawing.

### Description

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A drawing file can grow strongly in content over the duration of a project. The plans and print layouts are the visible results of your work. With the new **Export plan / view** function, you always have the option to save the currently set plan or the print layout in a new separate drawing file in S12 format. In the new drawing, the active plan or print layout is created automatically and only the contents (layers) of the plan or the print layout are copied.

This function is available in the dockable dialog View Manager and Sheet Manager.

### Value

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- ✓ Fast possibility to save individual plans as S12 file.
- ✓ Reduces the S12 file to the desired plan.
- ✓ Fast swapping of the plans and print layouts created in SPIRIT for further processing.

## Functions – Pasting Images

Paste directly in the correct aspect ratio with just one click.

### Description

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Image files in SPIRIT are polylines with a corresponding image fill. If you place an image in the SPIRIT drawing using the **Insert > Image** function, SPIRIT 2019 can automatically take the corresponding aspect ratio of the image into account. If the option **Drop image directly** in the Menu-Navigator is active, you just need to define the position of the image in your SPIRIT drawing area.

### Value

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- ✓ One-click pasting of images.
- ✓ No more drafting of a rectangle.

## Functions – Arrow / Leader

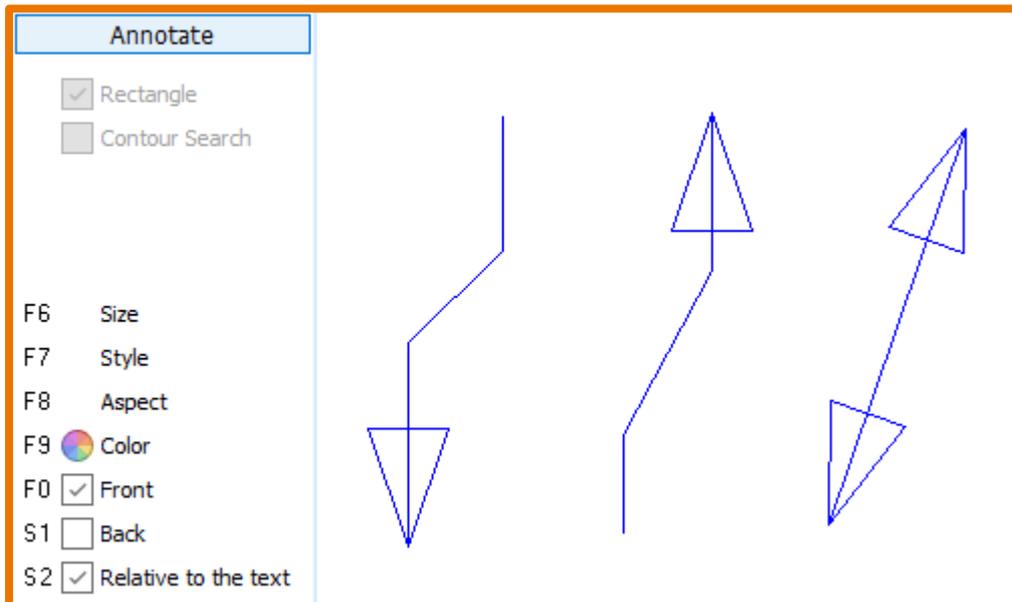
Better handling with the arrow function.

### Description

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The SPIRIT function **Leader** in the Annotate menu now creates a polyline as an arrow element. This allows you to adjust the arrow at any time later with the known polyline functionality.

Another change to the arrow function affects the position of the arrowhead. With SPIRIT 2019, you can specify whether the arrowhead should be displayed at the end, at the beginning or on both sides.



Menu-Navigator – Annotate > Leader

### Value

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- ✓ Drawing of arrows is more flexible.
- ✓ Arrows are easier to edit.

# PRONTO Reporting – Finishes hierarchy

The room assignment in the drawing now also corresponds to the evaluation.

## Description

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In earlier versions rooms were always connected to a level. In the Finishes hierarchy of the evaluation it was possible to define blocks and zones as additional structural elements and to allocate the rooms.

In SPIRIT 2019, you now define the structure directly at the room element. Thus, the room object in the drawing is assigned directly and the evaluation only needs to be updated. The Finishes hierarchy is now created only from the room objects in the drawing.

## The Room menu

In the room menu there is a new menu item **[F2] Finishes**. In this dialog, you create your own hierarchy. Create blocks and zones and select the desired assignment. In each SPIRIT drawing the default values **\* Block \*** and **\* Zones \*** are already available.

## The Object Inspector

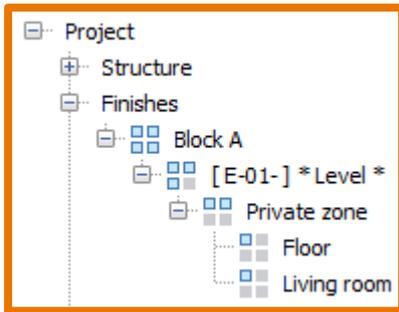
Also, in the Object Inspector you now have the properties of blocks and zones available. If you select a room, you will get the information of the room assignment under item 37. Rooms / Quantities of the Object Inspector.

37. Rooms / Quantities	
Perimeter	9.05.0
Room File	C:\ProgramData\SOFTTE...
Order	E-02-. 1
Block	No Block
Levels	E-02-
Zone	No Zone
RoomID	No Zone
Room Number	1,01

Object Inspectors - 37. Rooms / Quantities

## Finishes hierarchy in the evaluation

In the SPIRIT evaluation, the Finishes hierarchy is created cleanly using the room assignments.



In this example, Floor and Living room are both in the Private **zone** in **Block A**

### BLZR

The abbreviation (BA1) and the name (\* Block \*) are displayed below the structure tree and can be renamed here. The abbreviation is used in the updatable schedule for the column BLZR (block, level, zone, room).

### Changing the hierarchy

Since the hierarchy is now created directly by the respective room, you must change the assignment of a room in the Object Inspector under item **37. Rooms / Quantities**. For example, there you can change the assignment from zone 1 to zone 2.

You can also copy the properties block and zone to other rooms with the Object Inspector.

### Value

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- ✓ No deviating structure between evaluation and drawing (rooms).
- ✓ A clear process to the definition of the Finishes hierarchy.
- ✓ The Finishes hierarchy is always created correctly.
- ✓ The updatable overview BLZR is always filled correctly.
- ✓ The room defines the Finishes hierarchy through its properties.
- ✓ Adjustments to the Finishes hierarchy are done directly at the room.

# Interfaces – IFC Attributes

Transfer all the information you want to IFC.

## Description

In SPIRIT, you define any number of properties (attributes) on a component or drawing style, depending on the information density and purpose, using the **Object Attributes** function. These object attributes are then available in the drawing or in the model at the respective object. You can display the properties you specify through the object stamps in the drawing.

## Object attributes and IFC

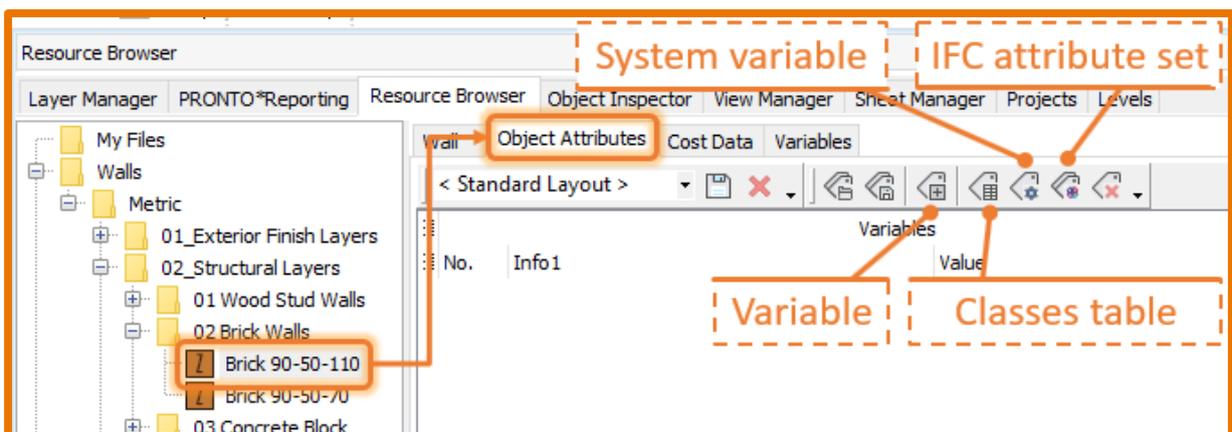
As of version SPIRIT 2019, the object attributes are transferred to the IFC model file for all components. As a result, the object attributes you have defined are also retained in the IFC model.

## IFC\_Psets

In SPIRIT 2019 we have extended the object attributes for you. The so-called standard attribute sets, psets (Property Sets) can now also be attached to a component using the object attributes. There is a separate general property package (PSetWallCommon, PSetDoorCommon, etc.) for each object or component that can be transferred to IFC via SPIRIT, which can contain different numbers of attributes. Components such as doors, windows, rooms also have additional attribute sets, such as the glass properties or specific manufacturer information. You can view the standard attribute sets on the buildingSmart website. The attribute sets are stored in folder ..\52\_Entity Stamp\IFC\_PSets.

## Adding Psets

Psets are displayed on the tab page **Object Attributes** of the respective component.



Object attributes tab of a wall component

Whether you pre-equip your components with empty attribute sets and then define them piece by piece when you use them in the model, or add the corresponding attribute sets to the components used in the Projects dialog, is your personal preference.

### Enter values for IFC attribute sets

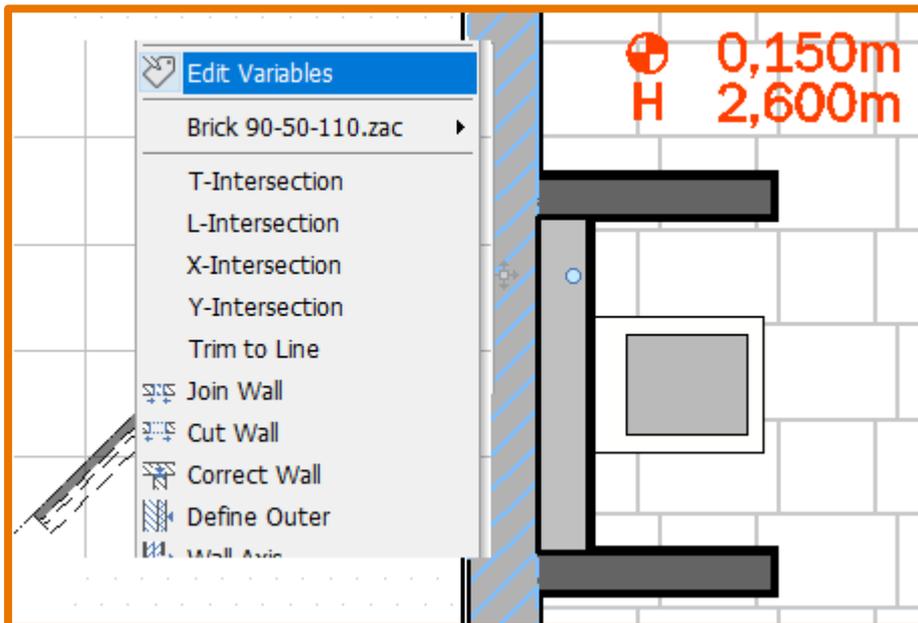
The IFC attribute sets contain different numbers of attributes. These individual attributes are determined by simple text or value entries. Standard are also queries that are to be defined as true or false. These can be defined using small checkboxes that come from the standard attribute set.

Info1	Value
: Pset_WallCommon	
AcousticRating	45dB
Combustible	<input type="checkbox"/>
Compartmentation	<input checked="" type="checkbox"/>
ExtendToStructure	<input checked="" type="checkbox"/>
FireRating	F90

Example of a wall component with the **PSet\_WallCommon**

### Copying attributes

If you use components or drawing styles with object attributes, these are defined or adjusted via the context menu of the respective object using the **Edit Variables** function.



Context menu on a wall component



### Format Paintbrush in the **Edit Variables** dialog

In the **Edit Variables** dialog you can use the **Format Paintbrush** function to copy already defined attributes to other components / drawing styles.

### **PSet\_SpiritDimensions**

When exporting a drawing to IFC, an additional PSet\_SpiritDimensions is written to the IFC file. Here are the original quantities of the drawing objects as in SPIRIT included.

#### **Value**

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- ✓ All defined component properties are retained during IFC export.
- ✓ Defined properties for components can be communicated via IFC file.
- ✓ Standard features of BuildingSmart can be used.
- ✓ All attributes are available as variables (@property@) for object stamps.
- ✓ All SPIRIT quantities of a component are available separately in the IFC file.

# Interfaces – Improved PDF Import

The new PDF import is faster, better and more user-friendly

## Description

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The PDF plans you receive about your projects must be quickly and easily incorporated. This is enormously important for the daily work. Of course, you have often found qualitative differences when viewing your PDF files in a viewer. This is because a PDF file can contain different information. This often depends on the different applications that generate the PDF plans. In SPIRIT, you import PDF plans for example as a simple image file, or as a vector file and vector reference, depending on the quality of the file you want to import.

We have emphasized that the import works fast and looks great. The best option is therefore to convert the PDF file in a 'vector reference'. In this case, the presentation of the PDF plan on the SPIRIT drawing area is almost identical to the presentation using a PDF viewer. In addition, you draw lightning fast and accurate, because you can snap on objects on the PDF plan.

In addition, coloring the imported files is easy. The **PDF display snap lines** function now colorizes the imported PDF plan in the selected hue.

## Value

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- ✓ The presentation of PDF files in SPIRIT is first-class.
- ✓ The import of PDF files is very fast.
- ✓ You work very well with large PDF files (zooming, panning).