

Autodesk User Conference 2016 Powered by cadline



Building & Infrastructure User Conference

Technical Masterclass:
Autodesk Showcase 2017

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Autodesk Showcase

Many of our customers who are already using Autodesk Design Suite do not realise that they have access to Autodesk Showcase. Showcase is a powerful yet incredibly easy to use tool for producing realistic visualisations and sophisticated animations based on models created in many of the Autodesk design products.





Stuart Tanfield

AEC Lead

Meet the Presenter

Hello, my name is Stuart Tanfield, I hold the position of AEC Lead at Cadline. I have spent over 10 years in the AEC industry, with a background in Mechanical & Electrical services, I took the unusual path of originally studying Architecture at University. It was at University where I was first exposed to the digital drawing world, and at the time, it appeared to be a completely alien topic to me.

I spent the early part of my career getting to grips with AutoCAD and developing my skills within an M&E practice. This helped to provide a clear understanding of the software and how it can be practically applied to provide greater efficiencies. As I gained more experience I progressed to a more senior role in an M&E / Architectural environment where I first encountered Revit, back in version 7.1.

Having previously spent 5 years at Cadline as a product specialist, Revit and BIM was an integral part of my day to day role. Taking that knowledge away with me, I joined an M&E design team to aid in the implementation of all things BIM. This provided me with a real insight and great depth of working knowledge around the BIM environment, not just the Revit side, but also areas such as data management.

I re-joined Cadline in November of 2014 and the knowledge I have gained has certainly helped to drive an efficient service around BIM strategies and provide clear guidance on the implementation and execution of the delivery of projects. Software and services are ever evolving and that is one of the best parts about my role, I get to see and work with these products every day, and there is clearly a defined path for the future. A path that will drive efficiencies and the ability to collaborate and improve performance within design teams and into the construction and management phases.

Although BIM has been around for some time now, I believe we really are, in the overall scheme of things, still at the beginning of exploiting its potential. There are still lots of standards to be finalised and methods to be established and the way we work will develop and evolve. Of course BIM may now be the normal approach for many but there are still exciting times ahead as we now look to further engage with this new technology, and leverage its full potential.



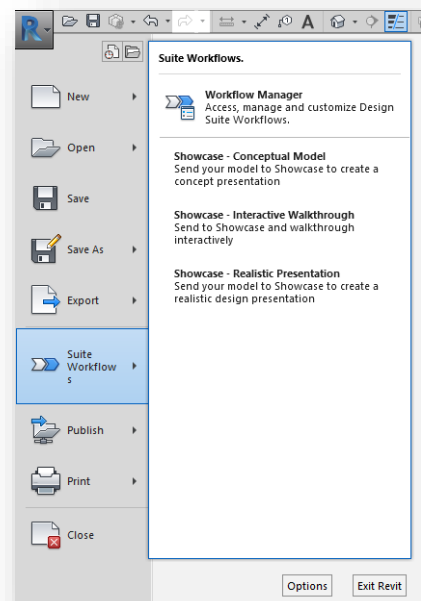
Guidance notes:

Commonly, Autodesk Showcase is a product that lots of customers have, but do not always realise. Showcase ships with the Building Design Suite, but is often overlooked. It’s a great visualisation tool, allowing users to create animations very quickly as well as being able to output images and videos.

There have been many occasions working within Revit, when I felt the need to present something with a more polished result. Often workflows for photorealistic visualisation will utilise 3ds Max. This is fine if you have lots of time set aside to learn the programme, and although Revit can deliver some rather compelling images, Autodesk Showcase can offer a different type of output.

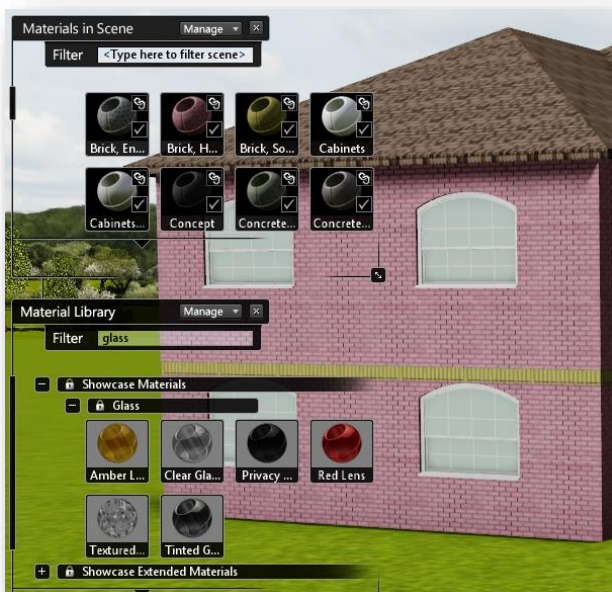
Workflows:

Showcase provides the ability to open a number of different file types, including dwg, rvt and FBX directly. In addition to this, we are able to utilise the Building Design Suite workflows which are hosted in Revit. These allow us to pre-set the visual styles and settings prior to any export.



Materials:

Being able to optioneer with materials can be crucial for presentation. Showcase provides the perfect platform for this. By intelligently selecting objects with particular material sets driven from the model authoring software, we can quickly swap materials across the whole project.



Section Planes:

For a simple animation, cross-section planes are key in producing an effective video showing your building components growing. Creating a plane or a box plane can produce very different results, but both are very effective. We are able to manipulate the position of the planes by rotating them. In addition we can also associate and dis-associate components with different planes. Combining the planes with a behaviour means we are able to define how long we would like the animation to last for.

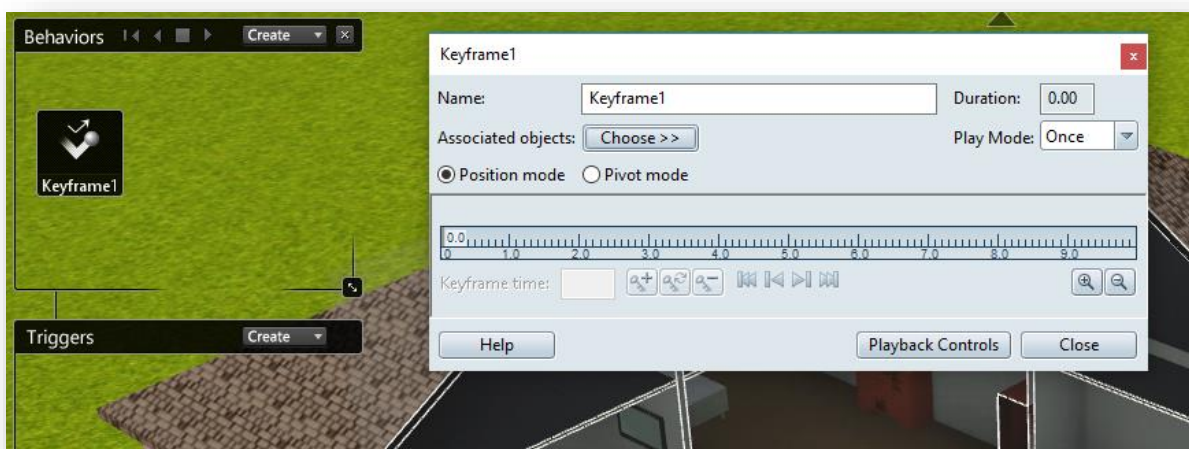


Behaviours

Behaviours aid in the creation of our animations. We are able to use the Keyframe animation or the Turntable animation. Keyframe animations capture object movement, vertically and horizontally. Turntable animations provide the facility to rotate items. Linking a Keyframe animation to a Cross-Section plane helps to define how we want to move our components.

Shots

Showcase is often used to generate animations due to its simplicity, however, still images can often be a key requirement. Shots are used to create still camera views of our model. Once we have created the shots, we can choose to render these using the raytrace render engine, or simply place these within our animation. In addition we are able to publish them and if required, insert into our Revit project.



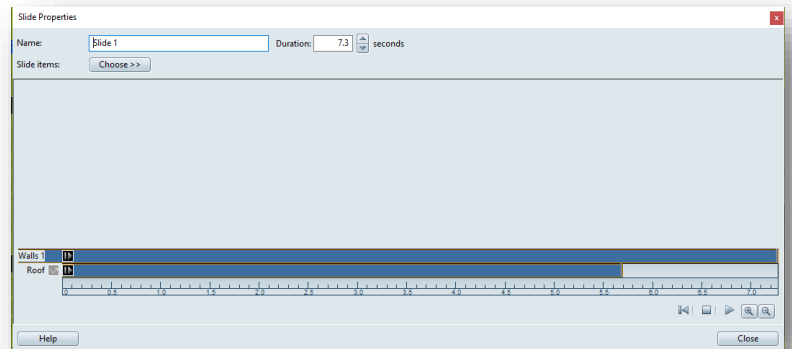
Storyboard

The Storyboard is where we finally pull all of our shots, behaviours etc. together to prepare for the final output. We are able to view the properties of the storyboard and drag each component around to create a timeline of activities. Once we have these in the right place we are finally able to produce our outputs.



Publishing

Now we have populated the storyboard, we can choose the required output. This may be a still image or a movie file. We are even able to produce a file which facilitates an interactive experience for the recipient as a web presentation.



Additional Tips:

There are additional features available in Autodesk Showcase. Using the Alternatives functions, Showcase can provide useful functionality when portraying your designs.

Visibility Line-up:

Visibility lineups are used when we want to show the model with selected items hidden. We can add as many as we like, and each can reveal more items.

Material Line-up:

Using the material line-up, we can start to apply different finishes to different components, to provide the customer with potential options for finishes. These can be placed into your storyboard where the model will reflect the materials applied at the correct times.

Positional Line-up:

The positional line-up option enables the user to move their components into different positions. By moving the object required and then clicking on the Positional Line-up tool, Showcase adds a variation. For each subsequent positional line up added, Showcase records the model variation.



Triggers:

Triggers can be used to create an interactive presentation. A trigger is assigned to an object and a specific animation or action. When the user selects the the object assigned to the trigger within the model, the animation or action is initiated. An example could be a revolving door. It is possible to assign a rotating motion to the door so that when a user clicks on the door it revolves through 360 degrees, simulating the real world behaviour.

Keyboard Shortcuts:

Often, using keyboard shortcuts mean we are able to perform tasks quicker than finding the icon. Below are a list of shortcuts I tend to use when using Showcase...

M – Materials

X – Cross-Section

B – Behaviours

T – Shots

U - Storyboard

V – Visual Styles

H – Show object handle

Ctrl+Alt+Shift+Left Mouse Click – Reposition Orbit centre

I hope you are now encouraged to use Autodesk Showcase and explore the possibilities of the presentational outputs.

