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Ingenuity for life

BIM technology becomes a game changer along the building lifecycle

<http://siemens.com/desigocc>

Have you ever had an X-ray of a building?

In most cases probably not. But in these unprecedented times, with an ongoing pandemic that is changing our way of life, the need to look into details, to analyse and create safe and secure environments – and especially the buildings around us – is becoming more and more important. Then, maybe the right way to move on is to secure and leverage the full potential of our buildings by increasing their transparency and by monitoring their performance and capabilities.

For example, how would a medical doctor perform a diagnosis?

The first step would be to identify the pain, to collect relevant data and to examine the patient. In some instances, additional tests would be required, such as X-rays, MRIs or other imaging techniques, this being a time-consuming process. Now imagine being a medical doctor and getting a complete diagnosis just by looking at the patient standing in front of you.

You can now immediately start to help him or her.

"The expert" in the building

Similar to a medical doctor examining and helping a patient, a building operator has to analyse his building and proactively take decisions that help steering the building into the right direction to become highly secure, energy-efficient and attractive for its occupants and owners. Using a building management platform, the building operator ensures fine-tuning of all parameters according to regulations, of remote operations if necessary, of fast reaction and notification management, and many more actions that contribute efficiently to instructing the building on how to perform. These can play a vital role for the well-being of the occupants.

Buildings are talking, generating data every second

Now imagine a world of transparency. On the one hand, we already have many operational buildings that use IoT equipment today, generating enormous amounts of data every moment. On the other hand, we can start from the design phase of a building, where the specification team sets up the building virtually, shaping

its behavior, and where construction only begins after the virtual building meets all expectations and specifications. This means that we can plan and construct buildings with greater insight, and we can leverage data aimed at optimizing building operations.

In this new world of virtual building models, integrated workflows that seamlessly connect the design to the operating phase are important. For example, it can be a significant advantage for a specification team or solution partner to have equipment details such as name, type, location, vendor information, mounting details, etc., already organized in data models before commissioning a building management system.

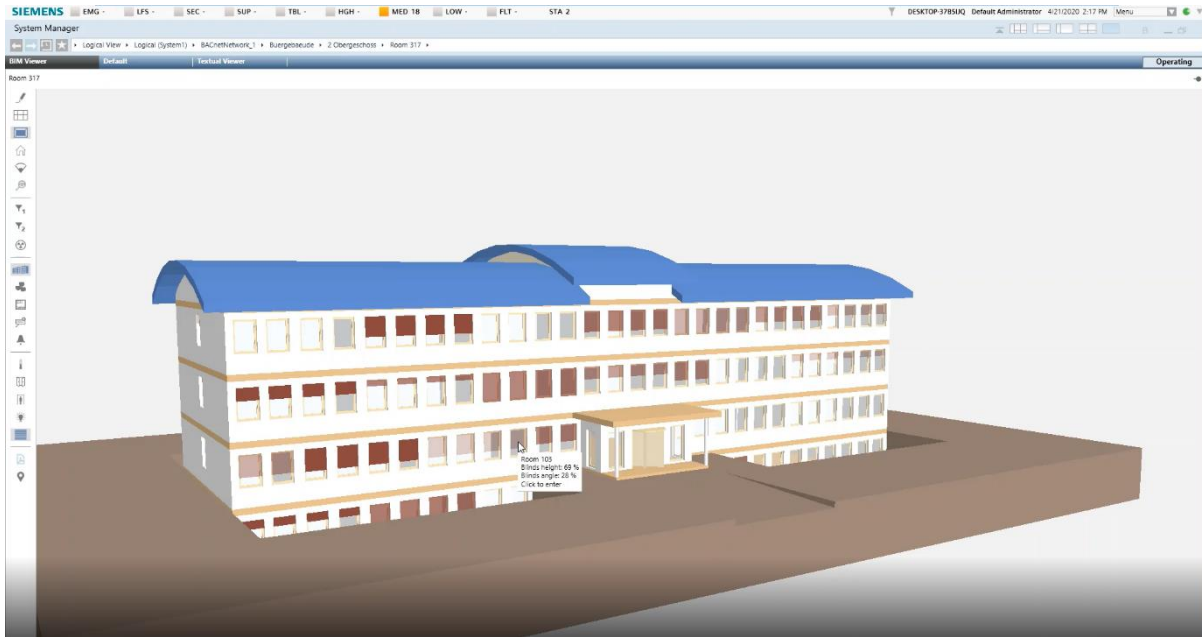


For all these needs Siemens Smart Infrastructure has the answer

Desigo CC is the building management platform that allows you to digitally transform your building into a highly performing asset. With the power generated by BIM technology and Desigo CC's powerful BIM Viewer, Siemens introduces a new way of working that optimizes the engineering and operating workflows, improving

collaboration between all stakeholders during the planning phase and operation lifecycle of a building.

This helps solution partners cut engineering time and allows building operators to limit the physical presence at a site to the minimum possible. Moreover, thanks to consistent workflows, all information can be directly integrated and visualized with a few clicks – a game-changing feature!



With the BIM Viewer, Desigo CC users gain access to advanced functionalities:

- Display of visual and data information from building automation equipment, such as room controllers, field devices, etc., in a 3-D view
- Display of 3-D model of the building, rotate it, zooming in and out and navigating through doors, windows, and staircases
- Selection of BIM equipment and provision of current (runtime) values and status properties including navigation from system object to BIM object and commanding
- Display of 2-D floorplans with various room statuses represented as colored carpets
- Display of statuses for Room Automation in a 3-D BIM view (e.g. room energy status, window states, temperature status, or blind positions)
- Display of datasheets and/or other documentation of the selected equipment or field devices, provided relevant properties are present in the BIM data
- Showing the location of the building in Google maps (where applicable)
- Use of efficient workflows for customized data mapping



Supporting building operators

In all these situations, BIM Viewer creates a kind of X-ray image of the building, helping the building operator to identify and analyse crucial points and to solve them fast, thus creating a safe, secure, and comfortable environment.

For more information, visit:
<http://www.siemens.com/desigocc>



About the author Stamatis Stamatopoulos

Stamatis has always been passionate in learning new skills and in exploring agile workarounds when tackling a problem. He studied electrical and computer engineering at the National Technical University of Athens and joined Siemens in 2006 as a project engineer. There he gained experience in building technology, product and solution sales as well as consulting business. Since 2018, he is managing the global portfolio developments for management station software at Siemens Smart Infrastructure, Global Headquarters in Zug, Switzerland. Stamatis is driven by the challenge of providing solid solutions that create state-of-the-art environments. He is a fan of holistic development plans for every aspect of human life.

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