

[Available software/Solutions. List of Applications with free rental license]

©Required softwares

<p>© UC-win/Road <i>Virtual Reality · VR Simulation</i></p>
<p>It allows the representation of urban area such as land feature, road, and buildings in 3D virtual reality, and the space can be freely simulated with mouse operation. The various condition including traffic vehicle, people, signal control, and sunlight can be simulated so that the planning and design can be studied. The overview of landscape and surrounding environment, and road can be studied by importing the architecture and civil structural objects created by Allplan in 3DS and linking with UC-win/Road. The linkage with each analysis software such as traffic stream analysis, crowd analysis, and flood analysis allows the visualization of analysis result.</p> <p>※Required software. UC-win/Road Advanced is available for rental license.</p>
<p>© Allplan (Architecture/Engineering) <i>BIM solution with integrated architecture and civil design, 3D CAD software with BIM</i></p>
<p>The skeleton and reinforcement can be represented in 3D and edited directly by importing the design data of structures created by UC-1 “Bridge pier design” and “Abutment design” in Allplan format or IFC format.</p> <p>The 2D bar arrangement drawing (plan view, section view) and rebar bending schedule that reflects the bar arrangement after it has been edited, and member quantity table can be created.</p> <p>※Required software. The license of Allplan Campus for students is provided. The copy or scanned image of student identification card is required. Please send it as an attached file to the following E-mail address when you apply for the rental license.</p> <p>E-mail :bim@forum8.co.jp</p>
<p>VR-Studio (R) <i>Large scale, Multi VR</i></p>
<p>It supports large projects such as those that include wide range of terrain data. VR data of large sized urban area and traffic network of over 100Km can be created.</p>
<p>Engineer' s Studio (R) <i>3D plate dynamic non-linear analysis</i></p>
<p>3D Finite Element Method (FEM) analysis program developed in-house from pre-process, calculation engine, to post-process. Each part of structures is modeled in plate element and the non-linear behavior of structures can be analyzed.</p>
<p>UC-win/FRAMe (3D) <i>3D frame static and dynamic non-linear analysis</i></p>
<p>It allows the analysis of geometric non-linear/material nonlinear analysis with dynamic/static load, and the latest interface excels in general linear analysis and elastic analysis.</p>
<p>UC-1 Series (Bridge pier design, Abutment design) <i>Civil design CAD</i></p>
<p>The software can design works consistently from design calculation of bridge pier with reinforced concrete, reversed T-type abutment, and gravity type abutment to the creation of drawings. The drawings including general drawings, bar arrangement drawings, assembling drawings, rebar bending schedule, reinforcement schedule are generated as a whole. It supports simplified editing function, file export in DXF, SXF, and DWG format.</p>
<p>UC-1 for SaaS <i>Cloud service for architecture and civil design software</i></p>
<p>Cloud service for civil design software such as UC-1 Series, RC section, FRAMe 2D, Engineer' s Studio® and clerical work software for civil design</p>
<p>DesignBuilder <i>Building energy calculation</i> ※Available for 30 days</p>
<p>The simulation of environmental related issue of the building under construction such as light, temperature, and CO2 discharge is possible. It is useful for energy saving design.</p>
<p>AdvanceSteel/AdvanceConcrete <i>3D steel structural and concrete structural CAD</i> ※Available for 30 days</p>
<p>AdvanceSteel is 2D/3D steel structural CAD with many functions required for steel structure design including shaped steel, bolts, stairs, outer wall, and ladder. The efficiency of modeling work of steel structures is largely improved by this product.</p>

AdvanceConcrete® allows the automatic creation of drawing, member list, and NC file.
OSCADY/TRANSYT <i>Planning of traffic light and intersection/Traffic stream analysis</i> ※Some functions such as the number of nodes are restricted.
The software for optimization of traffic signal, traffic signal control in traffic network. The flow of signal phase and queue length of congestion can be simulated.
xpswmm <i>Flood analysis system (Design of sewage network, flood analysis)</i> ※Available for 30 days ※Some functions such as the number of nodes are restricted.
For this theme, it is useful in creating a water storage reservoir underground above pedestrian deck and analyzing the flood of Shibuya river.
EXODUS Evacuation Analysis Support Service <i>Evacuation analysis</i> ※Simplified analysis service with BIM data is provided.
Not only can it model evacuation flow, it can also simulate the flow and behavior of people in an emergency and in non-emergency situation. The result of an analysis on the path where the arranged human models took and the time required for them to travel that path can be visualized by animation with numerical data. The people's flow and crowd behavior in the station and commercial facility in non-emergency situation can be analyzed. The result data can be imported into UC-win/Road and realistic flow of people can be simulated in VR. The calculation method of evacuation analysis software "EXODUS" is approved as the certified evacuation calculation method by Tokyo Fire Department.
Multiframe <i>Civil Design CAD</i>
This software allows the creation and effective analysis of a variety type of complex structure including large scale structure and tall building. Ver.12 supports for the stereo analysis using plate elements.
Analysis support service of wind and thermal fluid (Provisional) ※
Simplified analysis service with BIM data is provided
It is scheduled to provide the analysis and simulation support service with general-purpose fluid analysis tool "OpenFOAM" using supercomputer. The complex fluid flow including turbulent fluid and heat transfer can be simulated.