

# Nikkei Information Systems Co., Ltd.



Nikkei Information Systems Co., Ltd. designs, develops and operates the mission critical information systems for Nippon Light Metal Co., Ltd. and other Nikkei Light Metal groups.

## Market:

**CAD software for construction and building industries (exterior and gardening design).**

## Product:

**3D ACIS® Modeler, HOOPS**

## Challenges:

**Needed fast and efficient 3D technologies to develop next generation building exterior and garden design CAD software.**

## Solutions:

- **ACIS geometry kernel to enable efficient 3D modeling capabilities**
- **HOOPS to improve rendering and graphical display**
- **Application Graphics Manager (AGM) for higher-level routines and program templates**

## Results:

**Technology from Spatial enabled NIS to cost-effectively develop a new version of ExCAD.Zero software that is faster and more compact, satisfying user requirements and providing NIS with a great advantage in the market.**

## COMPANY

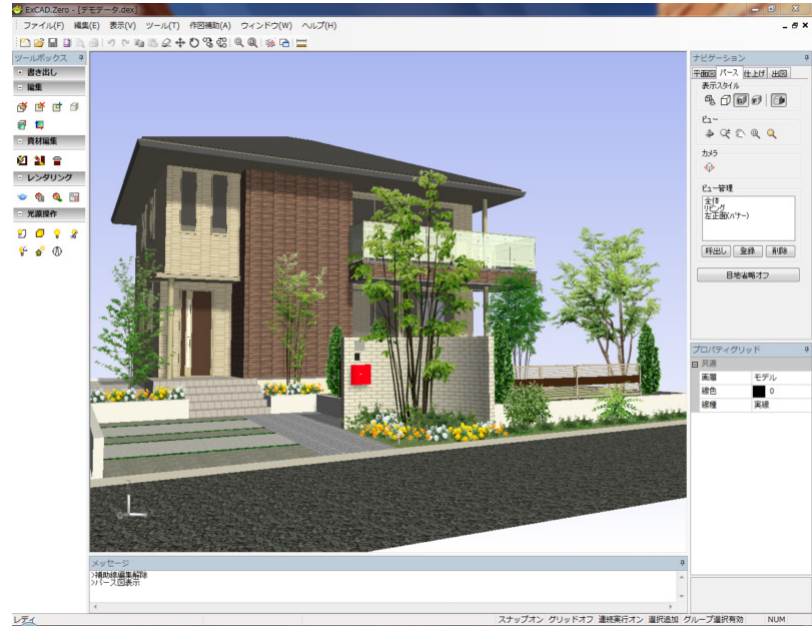
The Computer Systems Division of aluminum manufacturer Nippon Light Metal Co., Ltd. was spun off in 1983 and re-established as Nikkei Information Systems Co., Ltd. (NIS). NIS designs, develops and operates the mission-critical information systems for Nippon Light Metal Co., Ltd. and other Nikkei Light Metal groups. NIS also designs and controls the massive information network for all of the Nikkei Light Metal Groups hubs across Japan.

NIS provides specialized 3D CAD software, ExCAD.Zero, for the construction and building industries, with a focus on building exteriors and garden design. In addition to CAD design, the software features quotation and accounting systems. A key benefit of the software is that it allows the user to generate a turnkey proposal that includes personalized renderings, CAD drawings and estimates.

ExCAD.Zero is sold both through distributors and directly to building suppliers and architectural firms. The software is used primarily by exterior designers and construction dealers and is distinguished from other exterior CAD design software programs by its high speed and high image quality for movement in 3D modeling and graphics functions. NIS has sold more than 3,000 seats; the first version with Spatial components selling 80 seats in the first three months alone.

## CHALLENGE

ExCAD.Zero was developed as an add-in to a general purpose CAD system. With each new release of the CAD system, their development had to adopt the CAD system changes such as new interfaces and environments. In addition, unnecessary functionality slowed down the software, causing performance degradation. In order to be more competitive in the market, NIS needed high-performance and compact 3D technologies with which to develop its next generation software. Another important factor was to reduce the overall cost and to be able to provide the product at a reasonable price relative to the end customer's business size.



## **SOLUTION**

NIS selected Spatial primarily because the company's technology would enable NIS to leverage its existing assets and the development cycle would be shorter than planned.

NIS licensed Spatial's ACIS kernel to incorporate the industry's latest 3D modeling functionality into ExCAD.Zero. Spatial's Application Graphics Manager (AGM) provided higher-level routines and program templates to aid in learning the 3D development environment. NIS also licensed Spatial's HOOPS graphics display engine for the core graphic infrastructure and functionality.

NIS took advantage of Spatial's customer support programs offered in the local language (Japanese), including ACIS and HOOPS basic training, AGM consulting, and other technical support resources.

## **RESULTS**

Licensing Spatial's components enabled NIS to develop the next generation of ExCAD.Zero using the latest 3D technology, more quickly, compactly and economically.

The new version of the exterior CAD design software launches and renders very quickly, and the data size was reduced up to 30% from the previous version, providing NIS with an advantage in the market.

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