



THE POWERFUL
DESIGN TOOL FOR
YOUR EMBEDDED HMI.

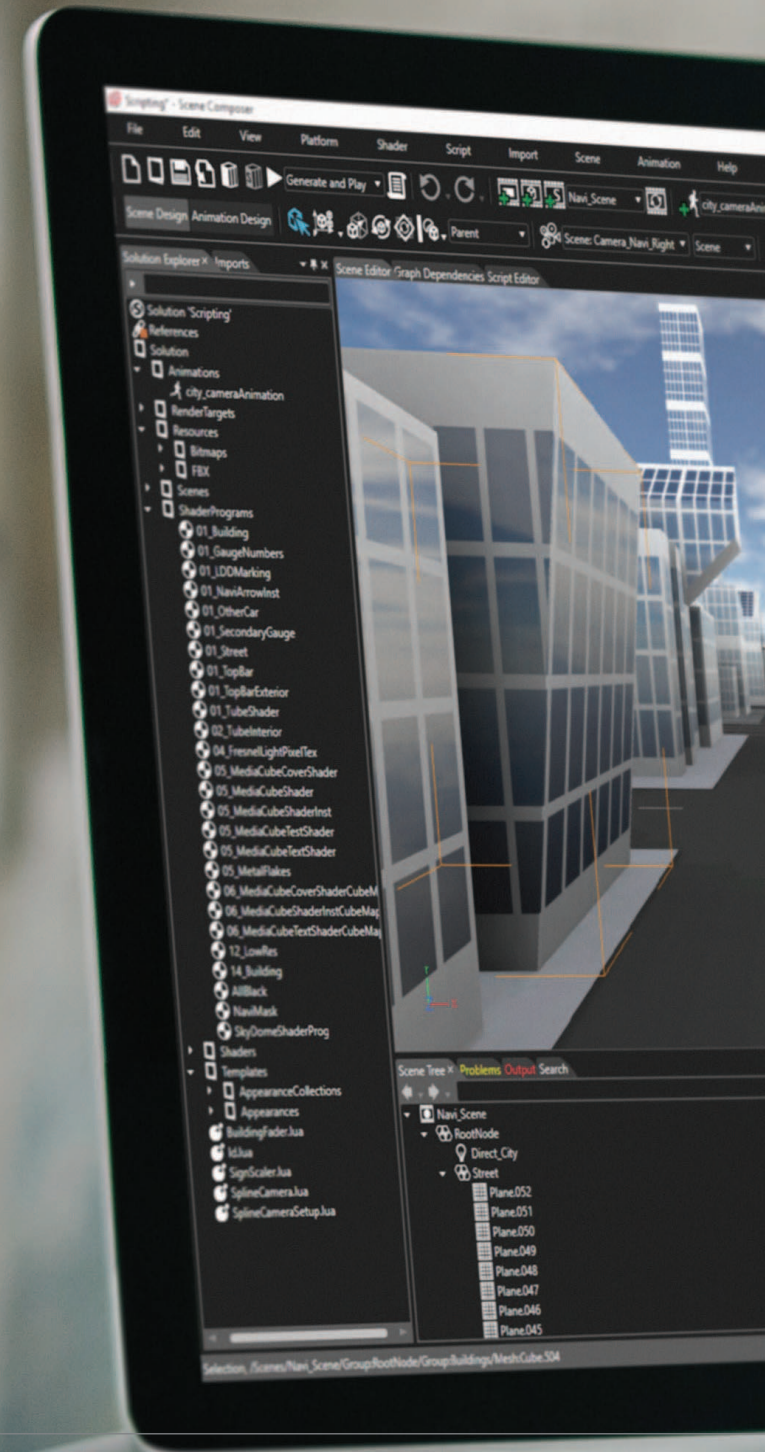
CGI Studio **Scene Composer** is capable of handling 2D and 3D content with ease allowing for creation of modern HMIs including animations and spectacular visual effects. The tool is highly intuitive, supporting both expert and entry level professionals.

CGI Studio Innovative UI Design Tool

Creating brilliant embedded HMIs can be easy. CANDERA's CGI Studio allows the development of unique 2D/3D graphical user interfaces, directly to your hardware of choice and into the market - as fast as possible.

CGI Studio is a scalable and hardware independent software platform enabling the creation of brilliant and customizable HMIs of all kinds for the automotive area and beyond. The open architecture allows deep integration and automatization into

your company's workflow. All this is accomplished with one tool while still retaining the necessities of fast boot-up time, small footprints and the critical automotive standards and regulations of ASIL, MISRA and SPICE.





CANDERA develops embedded software
for functional safety related applications
according to **ISO 26262**.



HMI Design Step by Step

Building a perfect HMI is not a single step, but a process.
We can assist you in every stage of this development chain.

Our many years of experience allows us to bring in initial ideas, identify current market trends or check the feasibility, hardware requirements, and potential cost of your existing design. CGI Studio will make your vision come alive and get your HMI market ready.

It is the perfect tool to create individual GUIs with your own design, while including functional safety and multi-language support. Additionally, the CGI Studio environment already includes great tools for testing and fine tuning of your design.



Making Your Ideas Happen

Every great HMI starts with an initial idea.

CANDERA's close customer relationships and valuable feedback from our worldwide client base allows us to assist you in this critical stage of development. We can help you to elaborate a winning concept for your product.





*Do you want to roll your project out worldwide? No problem!
If you need Chinese language support, right to left Arabic layout,
or if you just have some **ASIL requirements** in Europe,
CGI Studio has got your back!*

Walk Before You Run

Already have an idea for an outstanding HMI? Great! Let us assist you in checking important facts like feasibility, cost and hardware requirements.

Our central prototyping tool is the CGI Studio Scene Composer. This main tool allows you to import graphical artwork from your designers and create sceneries as they appear on the target system. Scene Composer also enables the combination of sceneries with business logic and exporting of content to the target hardware.

The seamless integration with tools such as Photoshop Importer and 3DsMax/Cinema4D Importer makes it easy to introduce your personal design or highlight your special corporate identity. CGI Player allows you to emulate and experience your design during development on the PC.



Ready for Action

Is your HMI ready to run? Then CGI Studio can help you to integrate it on your hardware in an efficient and smooth manner.

The Courier Interaction Framework supports you in message handling and data binding between CGI Studio and various external components such as state machines. It is easily integrated into multiple environments with different operating systems and

different application scenarios. CGI Player assists you in viewing and testing your generated HMI on various devices such as host environment, tablet, target hardware and even mobile phones.





CGI Studio includes the powerful messaging and data binding tool **Courier Interaction Framework** for smooth interaction between the HMI application and external data sources. This lets you easily connect to your car data, navigation engines and smartphone platforms (eg. Apple CarPlay, MirrorLink, Google's Android Auto).

Meeting Customers 'Needs

HMI requirements are different in every project. CGI Studio makes it easy to handle HMI specifics and tailor it to your target customer.

If your market is the world, our multi-language tooling will help you to speak the same language as your customers. With CGI Globalization Support and Asset Library Shaper it's an easy task.

Safety is always the most important factor. Creating fantastic HMIs while still retaining ASIL conformity has never been easier than with CGI Studio Candra Safety.

From Good to Great

Optimization is a permanent requirement during the entire development process.

It is necessary to check for bottle necks, run-time performance, hardware utilization, hardware layer usage, frames per second, and much more. With CGI Analyzer, you can make sure that all your HMIs are running smoothly. CGI Analyzer provides an intuitive graphical user interface to easily identify and track down performance bottle necks in HMI applications.





CGI Analyzer is the tool for performance profiling. It helps to identify optimization potential in timing, memory pools, graphics buffers and more.

From Customers to Friends

Do you want your HMI to live forever?
We can make it possible.

Our team assists with updates, trainings and maintenance support of your special product, on an on-site or remote basis depending on preference. We are not just selling a software platform; the goal is to share the HMI

know-how and experience with our customers. We have long-term relationships with nearly all of our customers, some lasting a life-time. We hope the next customer, friend, and partner will be you.

CGI Studio Benefits

CGI Studio allows deep integration and automatization into your company's workflow, due to a versatility of unique preferences.

- **Platform Support**
Native support for all relevant automotive platforms
- **Scalability**
Scalable GUI from low-end 2D up to highly advanced 3D graphics rendering
- **OpenGL ES**
Full support for OpenGL ES 1.1, 2.0, and 3.0 including extensions
- **Workflow**
Seamless automotive workflow from design to target
- **Performance**
Highly optimized for runtime and memory performance
- **Safety**
Integrated functional safety (ISO 26262)
- **Mature**
Proven in many projects for leading OEM and TIER1 customers
- **Efficiency**
Very efficient variant handling for large-scale projects with a lot of different car types







We believe that it is time to bring the driver's attention back onto the road. We see the upcoming trend of **Augmented Reality** and **HuD** becoming a standard feature of the modern car. With built-in warping and low latency rendering of the powerful embedded Candera Render Engine, CGI Studio is the perfect tool for developing dynamic applications like AR-HuDs.

Supported Targets

CGI Studio supports a wide range of well-known platforms.
Check out a few examples below.

Hardware



Software



and many more...

About us

CANDERA GmbH in Linz, Austria, is a leading HMI tool provider and development partner for worldwide automotive and industrial customers.

The company was founded in 2000 in Linz and is a subsidiary of ArtSpark HD Inc. in Tokyo, Japan. CANDERA operates in a self-sufficient manner providing a product range developed entirely at the location in Linz, Austria. CANDERA supports its customers with the CGI Studio tool environment

as well as provision of software services mainly in the areas of HMI development and embedded software. CANDERA's activities are driven by its close customer relationships and strong concentration on customers' needs.





Our Vision

Openness, ease of use,
best performance - CGI Studio
combines these three major
properties in one tool.

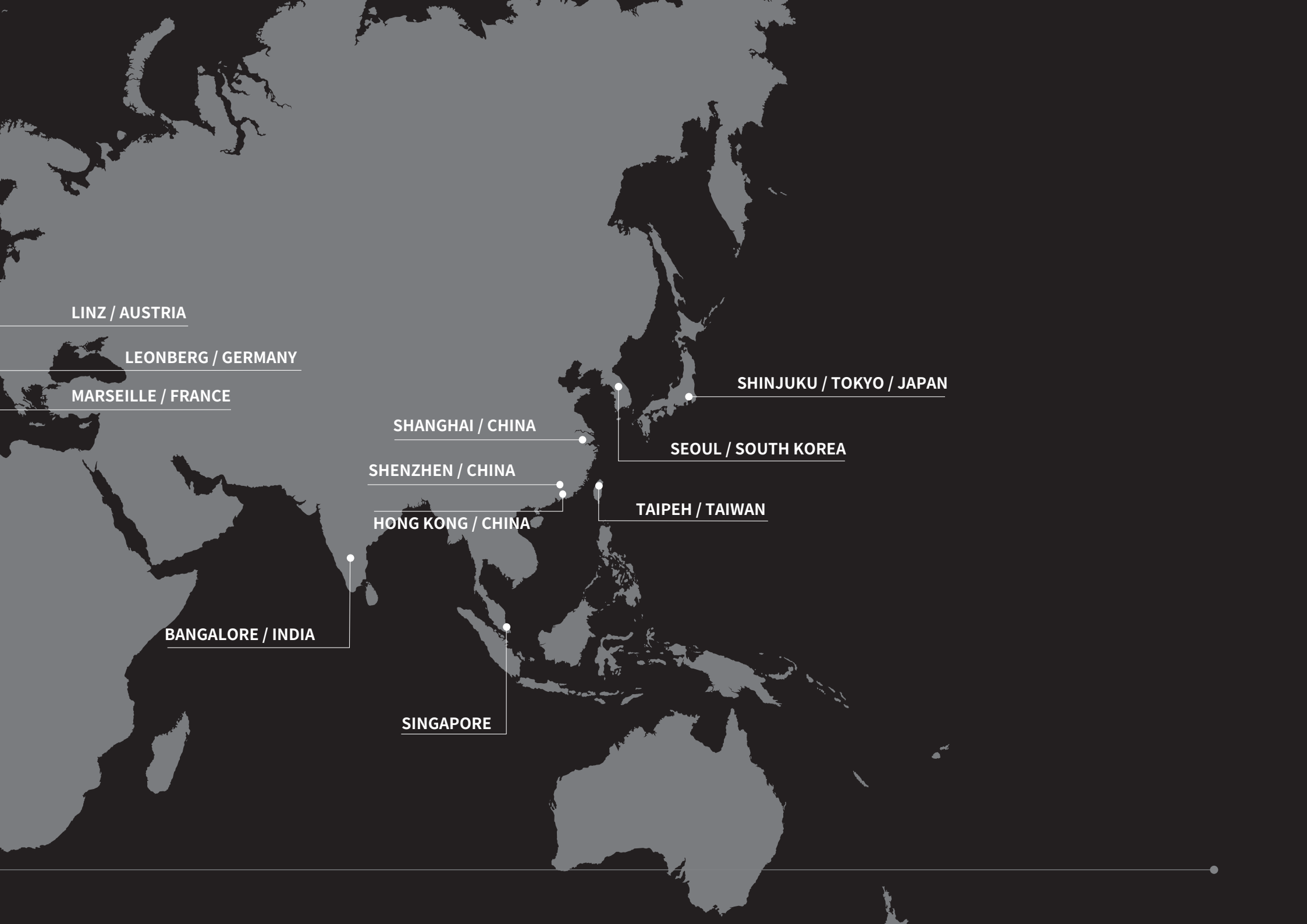
Based on this concept we concentrate
all our activities to provide complete
HMI solutions for the automotive
market. We develop these solutions
in a way to be reused also in other
industries.



DETROIT / USA

Candera Worldwide

Our global network helps us to provide customers worldwide with CGI Studio. Our team assists with updates, trainings and maintenance support of your special product, not only remote but also on-site.



LINZ / AUSTRIA

LEONBERG / GERMANY

MARSEILLE / FRANCE

SHANGHAI / CHINA

SHENZHEN / CHINA

HONG KONG / CHINA

BANGALORE / INDIA

SINGAPORE

TAIPEH / TAIWAN

SEOUL / SOUTH KOREA

SHINJUKU / TOKYO / JAPAN

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