

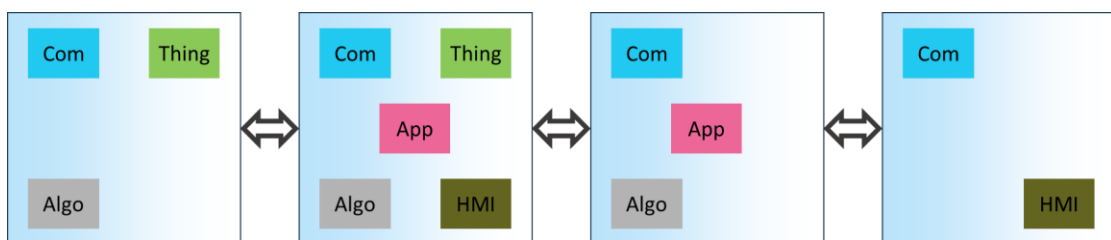
## General

The ViVerse is a software framework designed to help building highly efficient, flexible, distributed automation systems. Its focus is to provide modular building blocks to developers, system integrators and end customers.

## Core characteristics

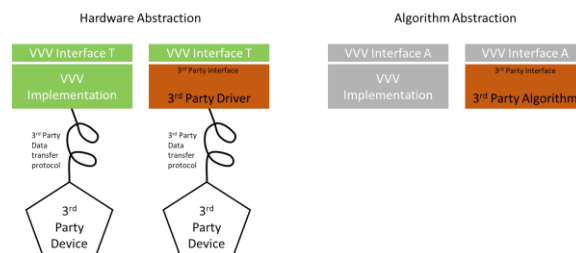
The ViVerse features application-agnostic component containers which do the following:

- Any number of components of these types can be loaded into the container: device-drivers, communication resources, algorithms, applications, and user interfaces. The number and types of the loaded components are given by a configuration or – in the case of device drivers – by auto-detection.
- The components interact with each other within their container and across container and computing node boundaries.
- Any number of component containers can be added to any type of host applications, ranging from command line applications to e.g., MS Office extensions.



## Ecosystem

- Components are organised in packages which can be e.g., application field or manufacturer specific.
- Software components interact based on public feature set specifications (interfaces) which provide abstractions for devices and algorithms. This enables easy component cooperation across package borders.



- Fine grained feature locking based on extensible authentication/authorisation.
- Development is almost fully decentralised, only public common feature set specifications need coordination.

## Languages

- Programmed in C++ 20.
- C layer for language bindings.
- .NET language binding. More language can build on the C-layer.

## Testing

- Unit and interface tests written in C++.
- Distributed system testing support.

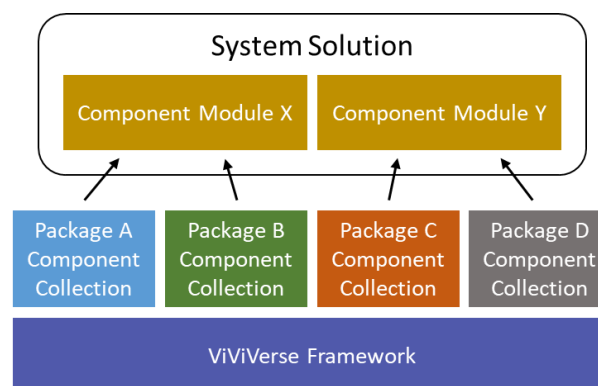
## Availability

The ViViVerse is highly platform independent. It can be used on microcontrollers, embedded and desktop computers and cloud servers. It has been tested on the following platforms:

- Android (available soon)
- Linux (desktop and embedded)
- Microcontrollers (32 bit)
- Windows 10, 11

## System Integration

Application experts can assemble and configure system solutions from any number of component packages using low code tools.



## Licensing

Currently, the ViViVerse is provided as shared code under a commercial license. End customers and developers have access to the full source code, except parts protected by an NDA on request of a third party.

A dual licensing concept (open source and commercial) is under consideration.

## Contact

ViViVerse GmbH  
Friedensgasse 7, 8001 Zurich, Switzerland  
CHE-406.985.544 MWST  
<https://viviverse.com/en>



Hansjoerg Petschko  
+41 76 4112703  
[info@viviverse.com](mailto:info@viviverse.com)