

# MIREVI MotionHub

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Hochschule Düsseldorf  
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Fachbereich Medien  
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MIREVI MotionHub (MMH) is a middleware for merging body tracking data from different systems into one coordinate space in real-time in order to combine and use their individual benefits.

MMH offers support for several body tracking systems and encompasses a game engine plug-in that connects the MMH with Unity by means of a standardized protocol. The plug-in allows for the usage of a single type of skeleton for any body tracking system and, therefore, facilitates the switch between different body tracking systems during app development significantly.

MotionHub is developed at the research lab [MIREVI](#) from the [University of Applied Sciences Düsseldorf](#) within the scope of the project [HIVE](#).

## Acknowledgements

The project [HIVE](#) is sponsored by the [German Federal Ministry of Education and Research](#) (BMBF) under the project number 16SV8182.

## Requirements

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At the moment the middleware is only supported on Microsoft Windows operating systems.

- This Version of MotionHub was tested on Microsoft **Windows 10 64 bit**.

### Minimum Computer Requirements

- Seventh Gen Intel i5 Processor
- NVidia GeForce GTX 1070
- 4 GB Memory
- 6 GB Storage

## Documentation

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The user, developer and API documentation including a class graph can be found in the `doc` folder.

## Supported Systems

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MMH currently supports the listed body tracking systems.

| Supported Systems            |
|------------------------------|
| <a href="#">Azure Kinect</a> |
| <a href="#">OptiTrack</a>    |

# Setup and Building

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The [CMake](#) System is used to generate Build Files and download all required dependencies. Please use the `CMakeLists.txt` file for generating.

- MMH is developed with Microsoft **Visual Studio 2017**. ([CMake](#) has only been tested with this IDE.)

Please Note that we use the Framework Qt for the UI. To build the project you need the [Qt Visual Studio Tools](#) and for editing `.ui` files you need [Qt Designer](#).

## Authors

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## Build with

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- [Qt](#)
- [Eigen](#)
- [OSC Pack](#)
- [TinyXML](#)

## License

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Pending