IVI Layer Management

In the automotive domain, most HMI systems use their own window manager implementation. Many applications (e.g. navigation, reverse camera) are implemented standalone and therefore one service is used to composite all applications to final image on the screen Layer Manager. The goal of this work package is to define a common API and provide a proof-of-concept implementation for the IVI Layer Management Service. The service improves the existing vendor-specific layer management implementations which have the following features:

- Fixed number of hardware layers
- Hardware accelerated compositing
- Platform dependent
- Number of layers not extensible during runtime
- Vendor-specific implementation
- No standardized interface
- Hardware dependent
- No change during runtime possible

The IVI Layer Management has the following Enhancements:

- Well-defined interface
- Standardized compositing
- Convenient and consistent access to hardware accelerated modules
- Separation of HMI and Layer Management
- Dynamically Extensions during runtime
- Low integration complexity
- Reduced dependency on hardware