

## FOKUS Connected and Hybrid TV Test Suite

Test framework and device capability database for HbbTV, OIPF and CE-HTML compliant devices

### At a Glance

The Fraunhofer FOKUS addresses the demand for standard compliance and application interoperability by providing the FOKUS Connected and Hybrid TV Test Suite. The solution offers a comprehensive tool that supports both the product development process for manufacturers of new hybrid TV sets and set-top boxes, as well as providers of CE-HTML and HbbTV applications in the development of applications and portals. In addition to web and TV standard conformance testing, the system allows load and performance features to be tested.



### Connected and Hybrid TV Landscape

Internet-enabled TV sets and set-top boxes are taking the CE market by storm. Today almost any up to date TV device is shipped with internet capability. Simultaneously, the number of devices and different versions of hardware and software is growing rapidly.

Current Internet-enabled TV devices use different web-based standards and proprietary solutions. Device manufacturers have to constantly update their products to conform to specifications and standardization activities are still ongoing. Providers and developers of TV applications have to cope with the same fragmented landscape, which is an issue when they intend to develop interoperable solutions.

Our mission is to drive towards interoperable solutions and standard compliance for TV devices and applications by providing the necessary tools with our experience in TV-related standardization activities and interactive solutions.

With the FOKUS Connected and Hybrid TV Test Suite, a solution is presented, which offers conformance tests to web standards (e.g. W3C), TV-related standards such as CE-HTML, HbbTV or OIPF, as well as standard unrelated features like load and performance indicators.

To address the needs of content providers, a device database that is associated with the FOKUS Connected and Hybrid TV Test Suite, allows features and capabilities of TV devices to be reviewed or automatically detected. This common capability exchange mechanism improves the interoperability of TV applications across various TV devices. Furthermore, the time to develop device-specific adaptations is reduced.

### Features and Components

The test framework manages the execution of test cases and collects their results in a common database for future utilization. Various test execution modes are available, including filter options to run single, groups of, or all test cases of a test suite. Moreover, the execution order can be varied by using sorting options. The results are logged by the test framework and can be reviewed via a web interface (e.g. in order to overview the results of a test run, percentage of passed tests etc.).

