

What is Model-Based Testing?

Model-based testing is a software testing technique in which the test cases are derived from a model that describes the functional aspects of the system under test.

It makes use of a model to generate tests that includes both offline and online testing.

Model-Based Testing - Importance:

- Unit testing won't be sufficient to check the functionalities
- To ensure that the system is behaving in the same sequence of actions.
- Model-based testing technique has been adopted as an integrated part of the testing process.
- Commercial tools are developed to support model-based testing.

Advantages:

- Higher level of Automation is achieved.
- Exhaustive testing is possible.
- Changes to the model can be easily tested.

Disadvantages:

- Requires a formal specification or model to carry out testing.
- Changes to the model might result in a different set of tests altogether.
- Test Cases are tightly coupled to the model.