**CBTA (Component Based Test Automation)**

SAP Solution Manager(SolMan) is a module of SAP that provides functionalities like integrated content, methodologies, tools etc. to implement, operate, monitor and support an enterprise’s SAP solution.  SAP solution manager manages the SAP and Non-SAP solutions in the IT landscapes of an organization. It supports the underlying IT infrastructure and business processes. It is a powerful tool for SAP Basis administrators.

CBTA is a test automation tool present in **SAP Solution Manager (SAP SolMan).** The tool helps in creation of modular test cases which are made of components.

The user can record a transaction or a SAP web application as a normal business user, subsequently, CBTA would create a modular test in SAP Solution Manager.

**CBTA supports UI technologies by SAP test tools**: SAP GUI, CRM Web-Client, Fiori

**Current Version:** SAP Solution Manager 7.2

The CBTA generated tests are made of default and screen components.

**Default screen components**: The default components typically signify user actions.

**Screen Components**: These represent a screen or sub-screen which does the input for application under test.

**CBTA has following features:**

* You can record tests.
* You maintain tests via shared components.
* You can maintain changed screen components.
* Fast repair of damaged test scripts.
* Managing screen components and their parameters.
* Using the test data container (TDC) to define several sets of data.
* Using system data containers (SDC) to define on which system under test the tests are executed.

Some terminologies to be known are,

1. **SUT (System Under Test)**:

          SUT is the managed system which is to be tested. In SUT Management, the following details are maintained

* Technical RFC destination (looks like TST\_<SID>\_<CLNT>)
* Business user (i.e. Tester Profile)
* Base URL / HTTP destination in case of non-ABAP systems.

2. **SDC (System Data Container)**

          SDC defines the systems on which the automated test cases are recorded or executed. A system is defined as follows

* Operational function (eg: CRM,ERP)
* Technical role (eg: Development system, Production system)

3. **TDC (Test Data Container)**

          TDC is a central repository for all test data. It contains the information of parameters, attributes and variants.