Specification

A specification is a detailed set of requirements that aim to precisely define an aspect of a software component's operation. From the perspective of the test bed, this would typically either be a content specification, focusing on the data that it produces or processes, or a messaging specification, focusing on the rules and message exchange steps that it needs to follow when interacting with one or more other components.

Conformance

Conformance of a software component to a specification relates to whether or not it meets its defined requirements. The process of conformance testing focuses on a single software component and is the process of ensuring in a measurable, non-ambiguous and repeatable way that the specification's requirements are met.

Domain

A domain in the test bed is the means by which related specifications are grouped together. It allows projects to define multiple specifications as a cohesive whole that may each be tested for conformance individually. Conforming to all specifications within a domain may be mandatory but could also be optional, depending on the project's needs.

Actor

An actor is the term used to identify one participating entity in a specification. This becomes important especially in the case of messaging specifications where multiple participants are typically defined; at least one to send messages and another to receive. When you want to ensure that your software component conforms to a specification you need to select your target actor. Actors in the test bed are key considering that they serve to organise tests and determine what is actually being tested. Each test focuses on a single actor that is identified as the System Under Test (SUT) which is the part your software component needs to play. Other specification actors that are relevant to the test in question are simulated by the test bed to automate and validate the information exchange.

Conformance statement

A conformance statement is the concept that defines the statement (to be tested) that a given software component conforms to a given specification. From the perspective of the test bed this means more specifically that an organisation's system aims to conform to the requirements of a specific actor in the specification. Simply put, the conformance statement links a system to an actor. Conformance statements are important as they encapsulate the goal of the test bed, to allow systems to test for conformance.

System

A system is related to an organisation and represents the actual software component that will be tested. In simple cases an organisation will have a single system and the terms "organisation" and "system" may be conceptually interchangeable. It is often the case however that a single organisation defines multiple systems, each with its own specification conformance needs and testing history. The system in the test bed is actually the point where configuration for your software component is introduced and it is the system that is selected when defining the specifications you aim to test for.

Organisation

An organisation is the concept that maps to a member of the project who is using the test bed to test conformance. Each user belongs to an organisation and its via the organisation that a user can execute tests, inspect results and extract reports. An organisation can have two types of users:

- A user, who is able to execute tests and inspect results.
- An administrator, who is able to execute tests and inspect results, but is also able to manage configuration and the specifications to conform to.

Community

A community is an administrative concept to group together related organisations. A real-world project or user community maps in the test bed to a community, with the project leader acting as the community administrator. A community is the level where such administrators manage organisations and their users, define specifications and tests, and follow up on the overall conformance testing progress. A community is typically linked to a single domain, ensuring that community administrators have full access to manage their domain's specifications and tests, whereas organisation users are presented only with the specifications relevant to their needs.