

1 Software Defective Fix Count (SDFC)

1.1 General Description and Title

The Software Defective Fix Count (SDFC) measurement is used to record the number of defective fixes encountered by a customer for a specific product or product line. Defective fixes often have greater resource, schedule or customer impact than other types of software problems.

1.2 Purpose

Software Defective Fix Count is the count of the software fixes that are determined to be defective during the measurement period. Customers are concerned with the quality of the software and the impact of remediating problems caused by defective fixes.

1.3 Applicable Products

This measurement applies to any software delivered to a service provider for a product that uses the standard software scorecard.

1.4 Detailed Description

a) Terminology

The TL 9000 Measurement Handbook Glossary includes these definitions:

- General Availability Phase
- Software Fix
- Software Release

The Software Supplier Scorecard Introduction Document includes this definition:

- Measurement Period

b) Counting Rules

- 1) Defective software fixes found in the generally availability phase of the software release, by the customer in a production or test environment are counted.
- 2) Defective software fixes are counted once per customer and reported on a scorecard specific to that customer.
- 3) When software fixes are packaged together, only the fixes that are identified as defective shall be counted as defective.
- 4) Each defective software fix is counted once regardless of the number of times that fix is replicated across machines/processors at customer site(s).
- 5) If several separate software fixes are provided to affect a single change, such as covering different parts of the code, and these fixes are separately identifiable to the customer, they shall each be counted separately.
- 6) Defective software fixes Identified across multiple releases are counted separately.
- 7) A defective software fix meets one or more of the following criteria:
 - Within the first 12 months of the fix release date:
 - o the fix cannot be installed or
 - o the fix does not correct the intended problem or
 - o the fix is withdrawn because of a potential or actual problem with the intended fix.
 - Within the first 6 months of fix release date, there is a critical or major problem that is a side effect found to be attributable to the fix.
- 8) A defective software fix shall be counted in the measurement period during which the fix was first found defective by the customer.

c) Counting Rule Exclusions

- 1) Defective software fixes associated with problems found in software that is not in the General Availability Phase are not counted.
- 2) Defective software fixes found at the supplier or by another customer are not counted.
- 3) After the initial report by a customer on a software release, the same defective software fix will not be counted again on that software release.

d) Calculations and Formulas

The SDFC measurement records the number of defective fixes that were found in the measurement period subject to the counting rules.

Table 1-1 SDFC Notation

Identifier	Definition
SDFC	Number of defective fixes reported by a customer in the measurement period

e) Reported Data and Format

- 1) Data shall be reported at the end of each measurement period. Interim reports may be provided if agreed upon by the supplier and customer.
- 2) The supplier shall have the capability to provide the cumulative number of defective software fixes reported by the customer by software release.
- 3) The SDFC measurement shall be reported by counting the defective software fixes of all in-service software releases in the customer's lab and production environments.

1.5 Sources of Data

The customer shall report all software problems to the supplier.

The supplier shall analyze the problems and determine which meet the definition of a defective fix.