

ISO/IEC 26566:2026-05 (E)

Software and systems engineering - Methods and tools for product line texture

Contents

Page

- Foreword..... v
- Introduction..... vi
- 1 Scope..... 1
- 2 Normative references..... 1
- 3 Terms and definitions..... 1
- 4 Reference model for product line texture..... 2
 - 4.1 Overview..... 2
 - 4.2 Constituents of reference model for product line texture..... 2
- 5 Product line texture management..... 6
 - 5.1 General..... 6
 - 5.2 Product line texture planning..... 6
 - 5.2.1 Principal constituents..... 6
 - 5.2.2 Identify product line texture strategies..... 7
 - 5.2.3 Assign responsibility for product line texture operationalization..... 7
 - 5.2.4 Define success measures for product line texture operationalization..... 7
 - 5.2.5 Estimate resources required to operate product line texture..... 8
 - 5.2.6 Document product line texture plans..... 8
 - 5.3 Product line texture enabling..... 9
 - 5.3.1 Principal constituents..... 9
 - 5.3.2 Enable product line texture facilitators..... 9
 - 5.3.3 Provide guidance for product line texture operationalization..... 10
 - 5.3.4 Enable a measurement environment for quantifying product line texture operationalization..... 10
 - 5.4 Product line texture managing..... 11
 - 5.4.1 Principal constituents..... 11
 - 5.4.2 Review product line texture operationalization status with success measures..... 11
 - 5.4.3 Control issues on product line texture operationalization..... 12
 - 5.4.4 Perform corrective actions on product line texture operationalization..... 12
- 6 Product line texture operationalization..... 13
 - 6.1 General..... 13
 - 6.2 Product line texture for requirements..... 13
 - 6.2.1 Principal constituents..... 13
 - 6.2.2 Analyse common rules and constraints in requirements engineering..... 14
 - 6.2.3 Define textures in requirements..... 14
 - 6.2.4 Formulate textures in requirements..... 14
 - 6.2.5 Verify textures in requirements..... 15
 - 6.3 Product line texture for design..... 15
 - 6.3.1 Principal constituents..... 15
 - 6.3.2 Analyse common rules and constraints in design..... 16
 - 6.3.3 Define textures in design..... 16
 - 6.3.4 Formulate textures in design..... 17
 - 6.3.5 Verify textures in design..... 17
 - 6.4 Product line texture for realization..... 17
 - 6.4.1 Principal constituents..... 17
 - 6.4.2 Analyse common rules and constraints in realization..... 18
 - 6.4.3 define textures in realization..... 18
 - 6.4.4 Formulate textures in realization..... 18
 - 6.4.5 Verify textures in realization..... 19
 - 6.5 Product line texture for testing..... 19
 - 6.5.1 Principal constituents..... 19

6.5.2	Analyse common rules and constraints in testing	20
6.5.3	Define textures in testing	20
6.5.4	Formulate textures in testing	20
6.5.5	Verify textures in testing	21
6.6	Product line texture for after compilation	21
6.6.1	Principal constituents	21
6.6.2	Analyse common rules and constraints of after-compile-time activities	22
6.6.3	Define textures of after-compile-time activities	22
6.6.4	Formulate textures of after-compile-time activities	22
6.6.5	Verify textures of after-compile-time activities	23
6.7	Product line texture for configuration	23
6.7.1	Principal constituents	23
6.7.2	Analyse common rules and constraints in configuration	24
6.7.3	Define textures in configuration	24
6.7.4	Formulate textures in configuration	24
6.7.5	Verify textures in configuration	24
7	Product line texture support	25
7.1	General	25
7.2	Conformance to product line texture	25
7.2.1	Principal constituents	25
7.2.2	Objectively assure the conformance of textures in relevant domain engineering processes	26
7.2.3	Objectively assure the conformance of textures in relevant application engineering processes	26
7.2.4	Communicate quality and non-compliance issues of product line textures	27
7.3	Change management of product line texture	27
7.3.1	Principal constituents	27
7.3.2	Identify changes in product line texture	28
7.3.3	Analyse the impacts of changes on domain engineering artefacts	28
7.3.4	Analyse the impacts of changes on application engineering artefacts	28
7.3.5	Record and communicate the change status of product line textures	29
7.4	Traceability of product line texture	29
7.4.1	Principal constituents	29
7.4.2	Establish trace links between textures in domain artefacts	30
7.4.3	Establish trace links between textures and application artefacts	30
7.4.4	Integrate trace links in textures into other trace links in product line development lifecycle	30
	Annex A (Informative) Exemplary product line textures	31
	Bibliography	32