

<i>Trustworthiness NFRs</i>	<i>Dimensions</i>	<i>Components</i>
Security	Authentication	At the interface level (methods with passwords), semantics (protocol authentication), constraints (password protected component)
	Access Control	At the interface level (only authorized individuals can invoke methods), semantics (protocol authorization), constraints (roles), NFP
	Audit Trail	At the semantics level (logging requests/responses)
	Confidentiality	At the interface level (only expose certain methods), at the types level (only access non-private methods), NFP
	Integrity	At the interface level (methods return expected values), at the semantics level (protocol behaves as expected), NFP
Availability	Non-repudiation	At the semantics level, NFP
	Caching	At the NFP
	Hoarding	At the semantics level (pre-fetching), NFP
	Queueing Remote Procedure Calls	At the semantics level (cache requests and notifications), NFP
	Deployment/Redeployment	At the interface level (redployment interface), at the evolution level (movement of component to another host, changes links) NFP
Reliability	Replica Reconciliation	At the interface level (replication interface), at the evolution level (redundancy and replication of component), NFP
	Code Mobility	At the NFP
	Error Prevention	At the semantics level, constraints level, interfaces level, type level
Fault Tolerance/Survivability	Failure Detection and Removal	At the semantics level, interfaces level
	Reliability Models	At the semantics level, constraints level, interfaces level, FSM, SMP, CDG, EFT models
	Component/Connector Faults/Mismatch	At the interface level, semantics level, constraints level, type level
	Recognition of Threat	At the semantics level, constraints level
	Adaptation/Evolution	Dynamism, Evolution

<i>Connectors</i>		
Security	Authentication	Interface level (methods with passwords), semantics (protocol authentication), constraints (password protected connector), NFP
	Access Control	Interface level (only authorized communicate with components), semantics (protocol authorization), constraints (roles), NFP
	Audit Trail	At the interface level (logging identities/communication), semantics level (logging requests/responses)
	Confidentiality	At the interface level (encryption), at the types level (different connector types allow different types of data), NFP
	Integrity	At the interface level (messages are delivered with expected values), at the semantics level (protocol behaves as expected), NFP
Availability	Non-repudiation	At the semantics level, Non Functional Properties
	Caching	At the NFP
	Hoarding	At the semantics level (handle pre-fetching messages), NFP
	Queueing Remote Procedure Calls	At the semantics level (cache requests and notifications), NFP
	Deployment/Redeployment	At the interface level (redployment interface), at the evolution level (movement of component to another host, changes links) NFP
Reliability	Replica Reconciliation	At the interface level (replication interface), at the evolution level (redundancy and replication of connector), NFP
	Code Mobility	At the interface level (understand how to transport code, and where it needs to be routed to), NFP
	Error Prevention	At the semantics level, constraints level, interfaces level, type level
Fault Tolerance/Survivability	Failure Detection and Removal	At the semantics level, interfaces level, behavioral level
	Reliability Models	At the semantics level, constraints level, interfaces level, DTMG, CFG models
	Component/Connector Faults/Mismatch	At the interface level, semantics level, constraints level, type level
	Recognition of Threat	At the semantics level, constraints level
	Adaptation/Evolution	At the semantics level, constraints level, evolution level

<i>Configurations</i>		
Security	Authentication	Traceability (who is logging in to what components/connectors), constraints , Non Functional Properties
	Access Control	Traceability (who is logging in to what components/connectors), constraints (roles), Non Functional Properties
	Audit Trail	Traceability
	Confidentiality	Compositionality, Constraints, Non Functional Properties
	Integrity	Compositionality, Dynamism, Constraints, Non Functional Properties
Availability	Non-repudiation	Compositionality, Dynamism, Constraints, Non Functional Properties
	Caching	Compositionality, Traceability, NFP (non-func-properties)
	Hoarding	Compositionality, Non Functional Properties
	Queueing Remote Procedure Calls	Compositionality, Non Functional Properties
	Deployment/Redeployment	Compositionality, Refinement/Traceability, Heterogeneity, Evolution, Dynamism, Constraints, NFP (non-func-properties)
Reliability	Replica Reconciliation	Refinement/Traceability, Dynamism, Constraints
	Code Mobility	Compositionality, Heterogeneity, Evolution, Dynamism, Constraints, NFP (non-func-properties)
	Error Prevention	Compositionality, Evolution, Scalability, Refinement, Heterogeneity, NFP
Fault Tolerance/Survivability	Failure Detection and Removal	Constraints, Evolution, Dynamism , inherits from component properties
	Reliability Models	Inherited from Components, Connectors, DTMG, SMP, CDG models
	Component/Connector Faults/Mismatch	Refinement, scalability, evolvability
	Recognition of Threat	Compositionality , understandable specifications
	Adaptation/Evolution	Dynamism, Evolution