Errata for *Towards an I/O Conformance Testing Theory for Software Product Lines based on Modal Interface Automata*

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Our publication titled *Towards an I/O Conformance Testing Theory for Software Product Lines based on Modal Interface Automata* [1] requires the following corrections.

Section 2.1, page 4. Definition 3 needs to be changed as follows.

Definition 3. *Let Q be an IOLTS, $p \in Q$, $P \subseteq Q$, and $\sigma \in (I \cup O \cup \{\delta\})^*$.*

- $init(p) := \{\mu \in (I \cup O) \mid p \xrightarrow{\mu}\}$,
- p *is* quiescent, *denoted by* $\delta(p)$, *iff* $init(p) \subseteq I$ *and* $\nexists p' \in Q : p \xrightarrow{\tau} p'$,
- $p \,\mathbf{after}\, \sigma := \{q \in Q \mid p \xrightarrow{\sigma} q\}$,
- $Out(P) := \{\mu \in O \mid \exists p \in P : p \xrightarrow{\mu}\} \cup \{\delta \mid \exists p \in P : \delta(p)\}$, *and*
- $Straces(p) := \{\sigma \in (I \cup O \cup \{\delta\})^* \mid p \xrightarrow{\sigma}\}$, *where* $q \xrightarrow{\delta} q$ *iff* $\delta(q)$.

Section 4.1, page 7. Definition 9 needs to be changed as follows.

Definition 9. *Let Q be a MIA over I and O, $p \in Q$, $P \subseteq Q$, $\sigma \in (I \cup O \cup \{\delta_\Box, \delta_\Diamond\})^*$, and $\gamma \in \{\Box, \Diamond\}$.*

- $init_\gamma(p) := \{\mu \in (I \cup O) \mid p \xrightarrow{\mu}_\gamma\}$,
- p *is* may-quiescent, *denoted by* $\delta_\Diamond(p)$, *iff* $init_\Box(p) \subseteq I$ *and* $\nexists p' \in Q : p \xrightarrow{\tau}_\Box p'$, *and* p *is* must-quiescent, *denoted by* $\delta_\Box(p)$, *iff* $init_\Diamond(p) \subseteq I$ *and* $\nexists p' \in Q : p \xrightarrow{\tau}_\Diamond p'$,
- $p \,\mathbf{after}_\gamma\, \sigma := \{q \in Q \mid p \xrightarrow{\sigma}_\gamma q\}$,
- $Out_\gamma(P) := \{\mu \in O \mid \exists p \in P : p \xrightarrow{\mu}_\gamma\} \cup \{\delta_\gamma \mid \exists p \in P : \delta_\gamma(p)\}$, *and*
- $Straces_\gamma(p) := \{\sigma \in (I \cup O \cup \{\delta\})^* \mid p \xrightarrow{\sigma}_\Diamond\}$, *where* $q \xrightarrow{\delta} q$ *iff* $\delta_\gamma(q)$.

References

[1] L. Luthmann, S. Mennicke, and M. Lochau. Towards an I/O Conformance Testing Theory for Software Product Lines based on Modal Interface Automata. In *FMSPLE'15*, volume 182 of *EPTCS*, pages 1–13. Open Publishing Association, 2015.