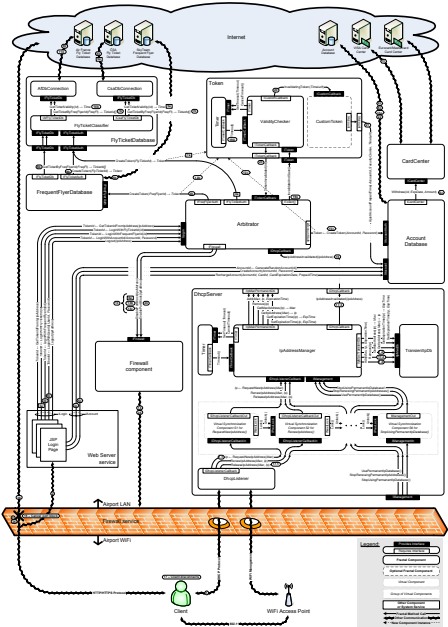


Airport Internet Access Example

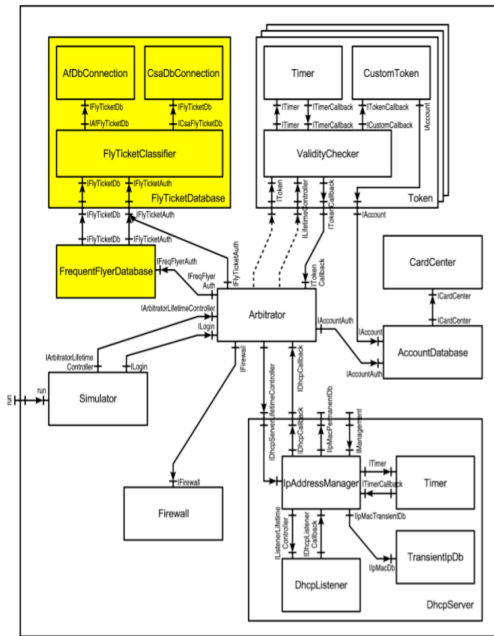
Abdelhakim Hannousse

March 31, 2010

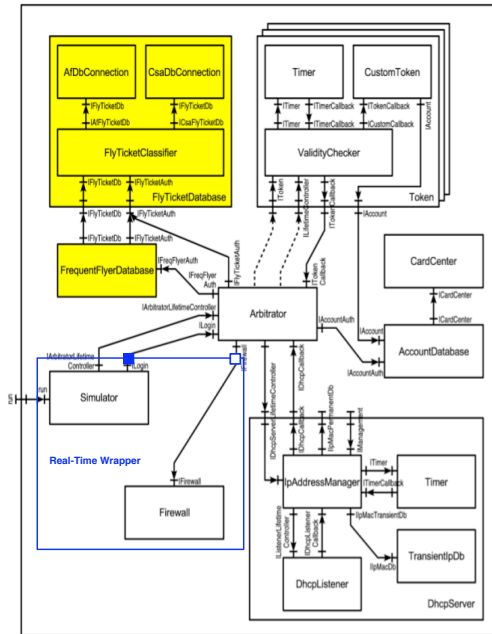
Airport Internet Access Example: Senarios



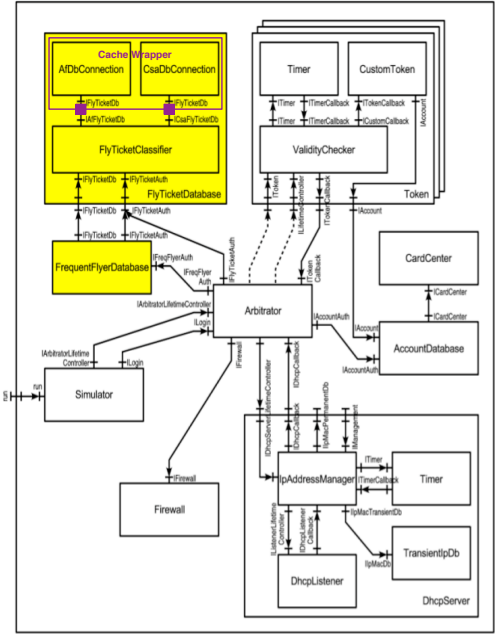
Airport Internet Access Example: Fractal Component Architecture



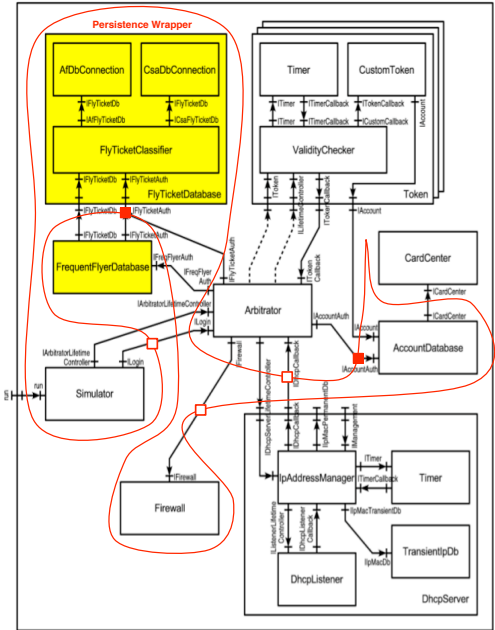
Airport Internet Access Example: Real-Time View



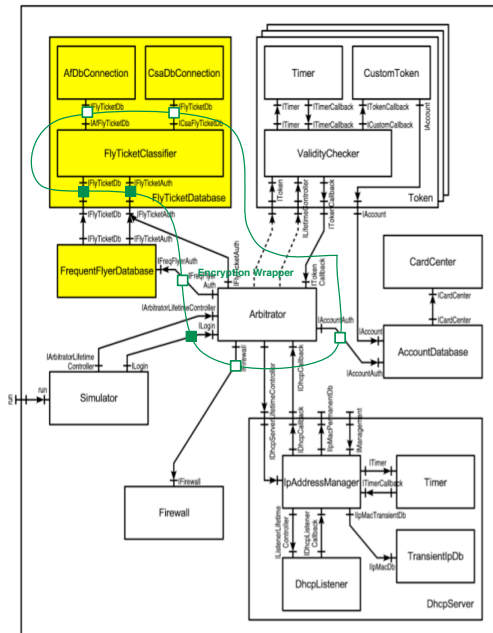
Airport Internet Access Example: Cache View



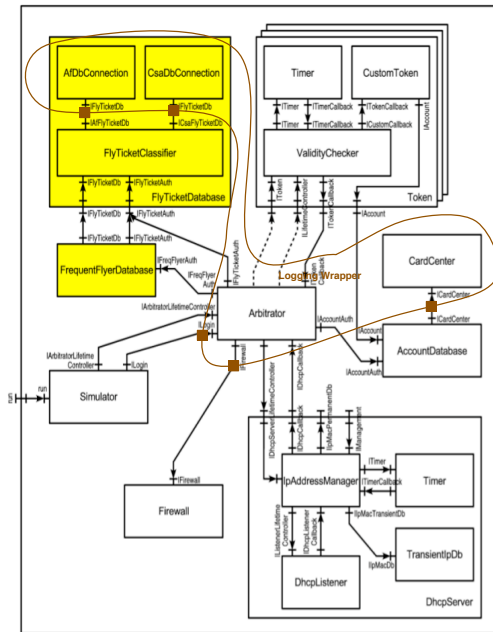
Airport Internet Access Example: Persistence View



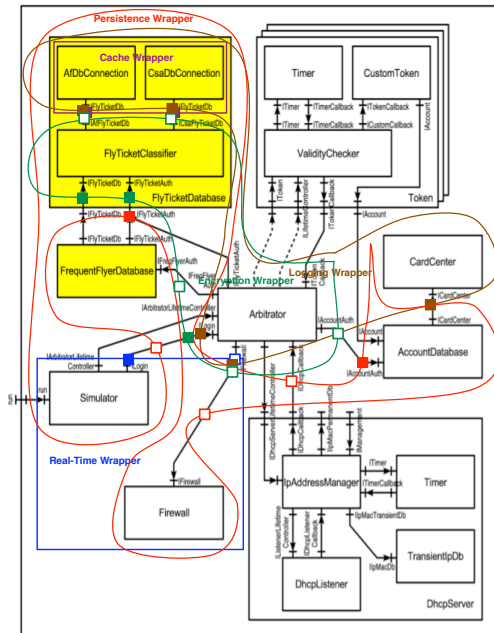
Airport Internet Access Example: Encryption View



Airport Internet Access Example: Logging View



Airport Internet Access Example: Crosscutting Views



VIL Language

$s \in \text{Selector} ::= * \mid \overline{cname} \mid s[\text{pred}]$

$e \in \text{Exp} ::= s \mid \mathbf{child} \ s \mid \mathbf{descendant} \ s \mid \mathbf{parent} \ s \mid \mathbf{ancestor} \ s \mid \mathbf{share} \ s \mid \mathbf{path} \ s_1 \ s_2$
 $s_1 \oplus s_2 \mid s_1 \otimes s_2 \mid s_1 \ominus s_2 \mid s_1 / s_2$

$v \in \text{View} ::= \mathbf{view} \ e \mid \mathbf{req} \ e \mid \mathbf{prov} \ e \mid v_1 \ \mathbf{except} \ s \mid v_1 \sqcup v_2 \mid v_1 \sqcap v_2 \mid v_1 - v_2$

$w \in \text{Weaver} ::= \mathbf{singleton} \ cname \ \bar{v} \mid \mathbf{mult} \ cname \ \bar{v} \mid \mathbf{nesting} \ \overline{cname} \ v \mid \mathbf{cond} \ \overline{cname} \ v \mid \dots$

Different wrapper instances maybe used for each component, for example, when the wrapper behavior does not depend on states that are updated when different interfaces of different components are intercepted.