DATA MINING

FOR ACS LOGs FILES

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Until now

- FSM and software design understanding.
  - Defining partition criteria.
  - Communication interface.
  - Hierarchical structure.
- Comparison of SCXML implementations.
- Actual documentation understanding.

FSM software design understanding.

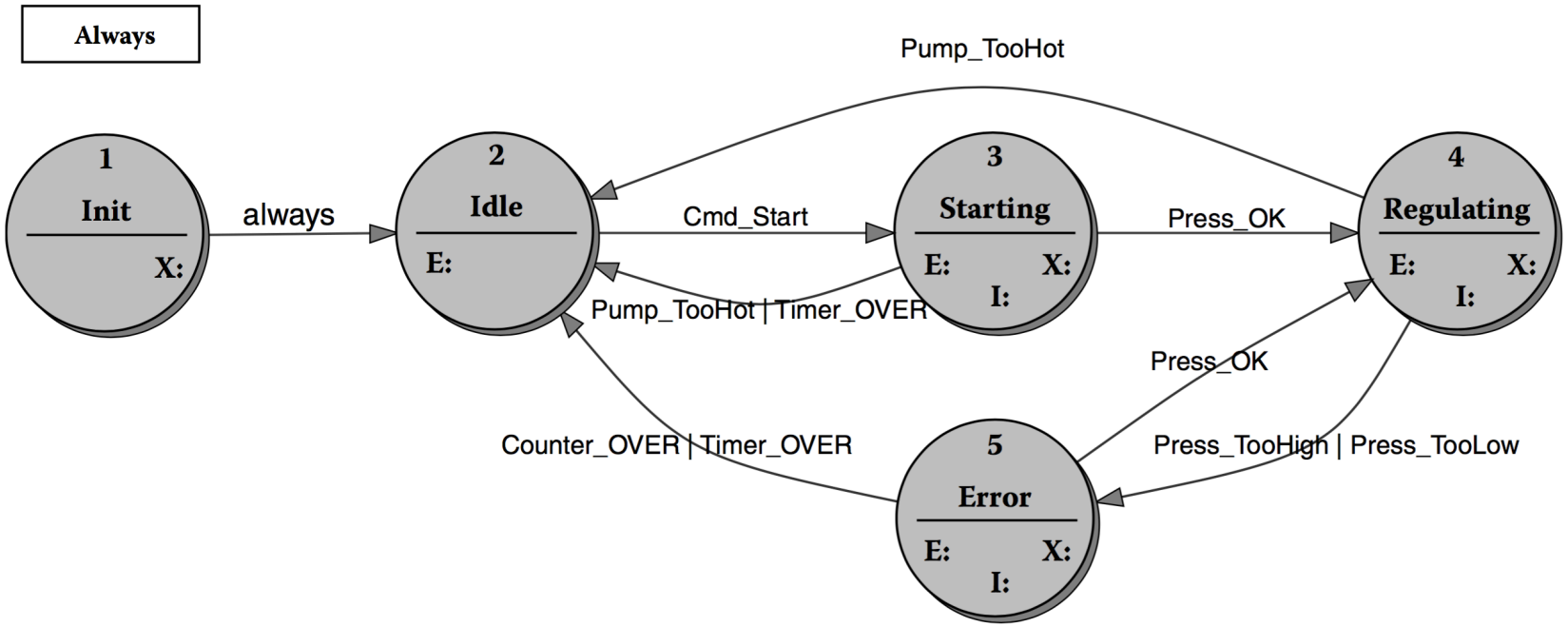


Figure 8.17 Pressure supervision state machine: the state transition diagram.

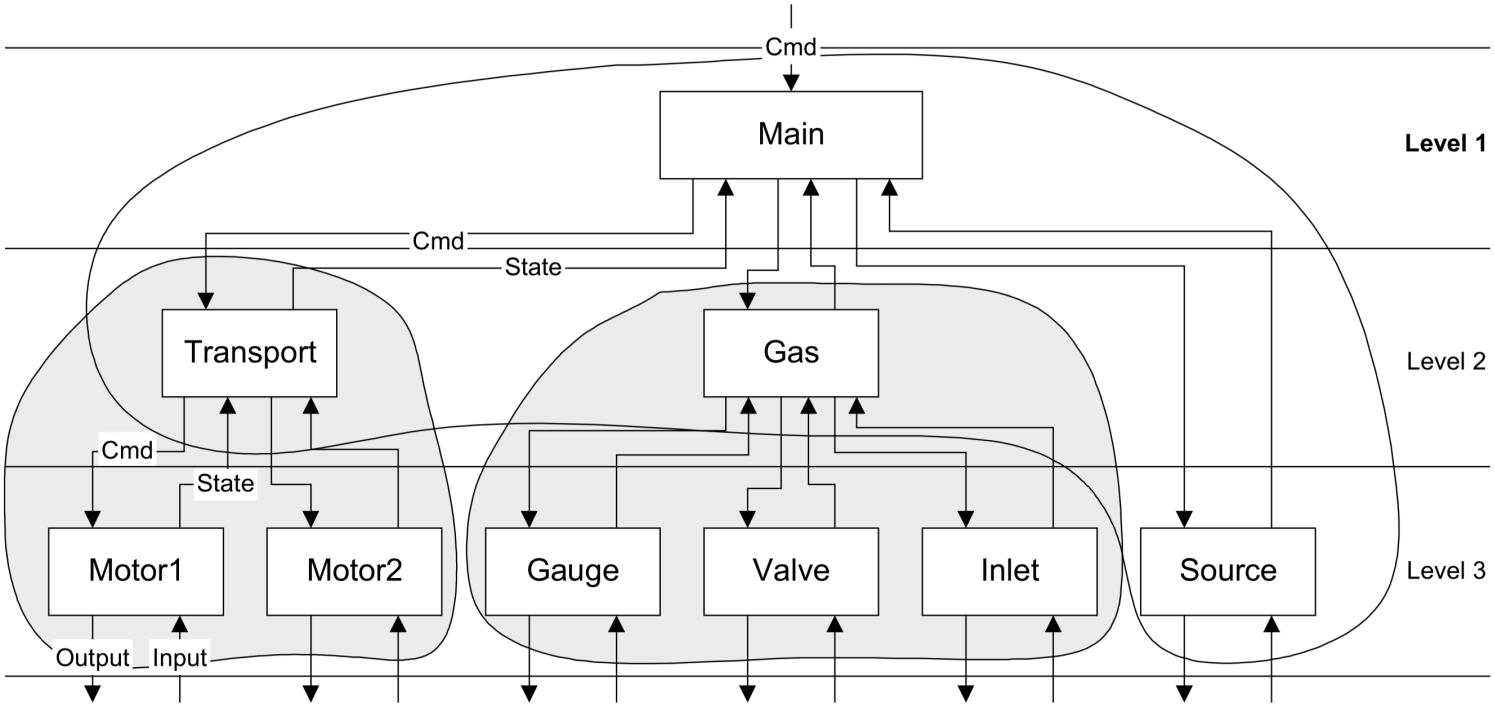
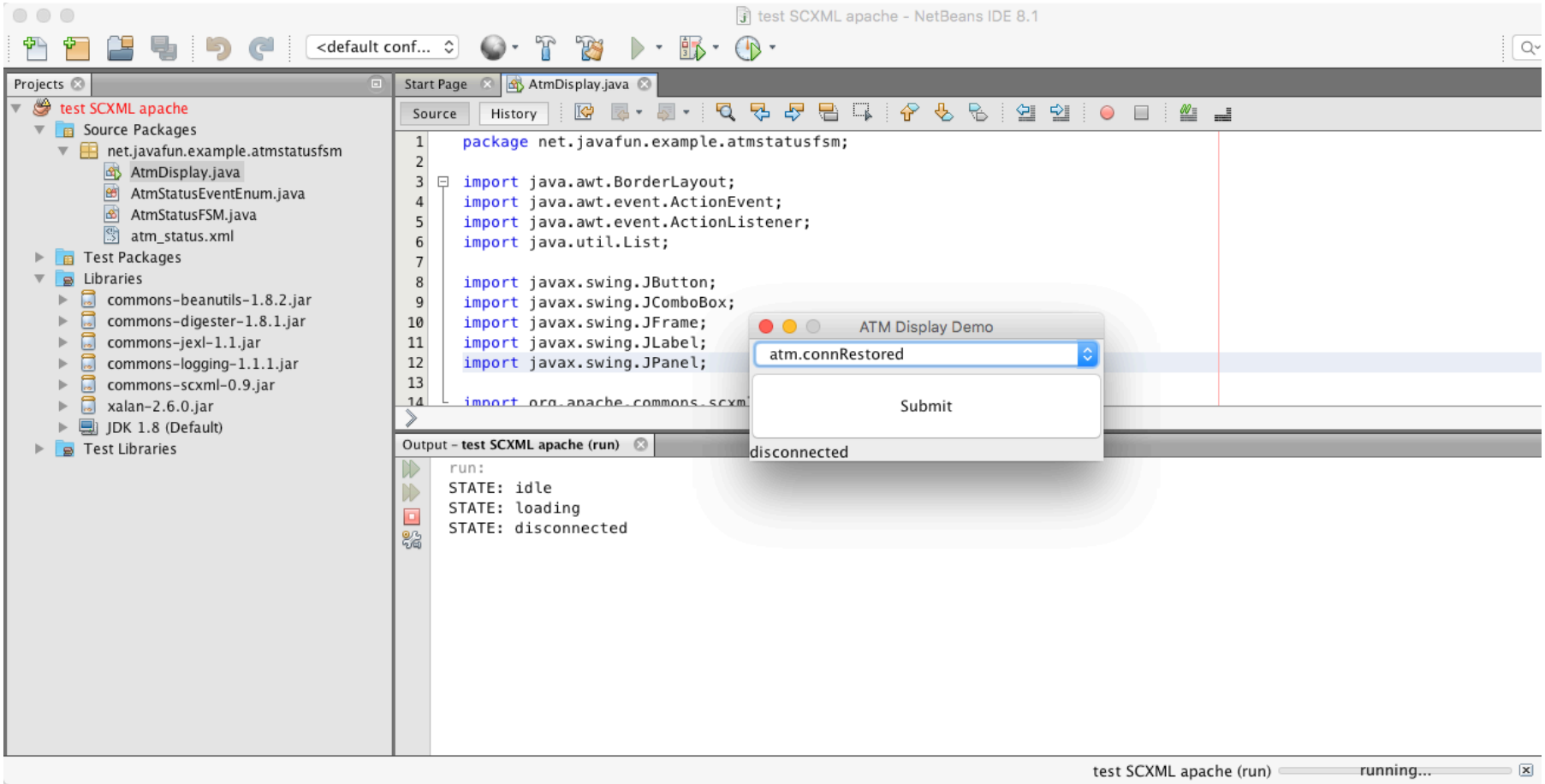


Figure 9.4 A hierarchical system of state machines.

Comparison of SCXML implementations.

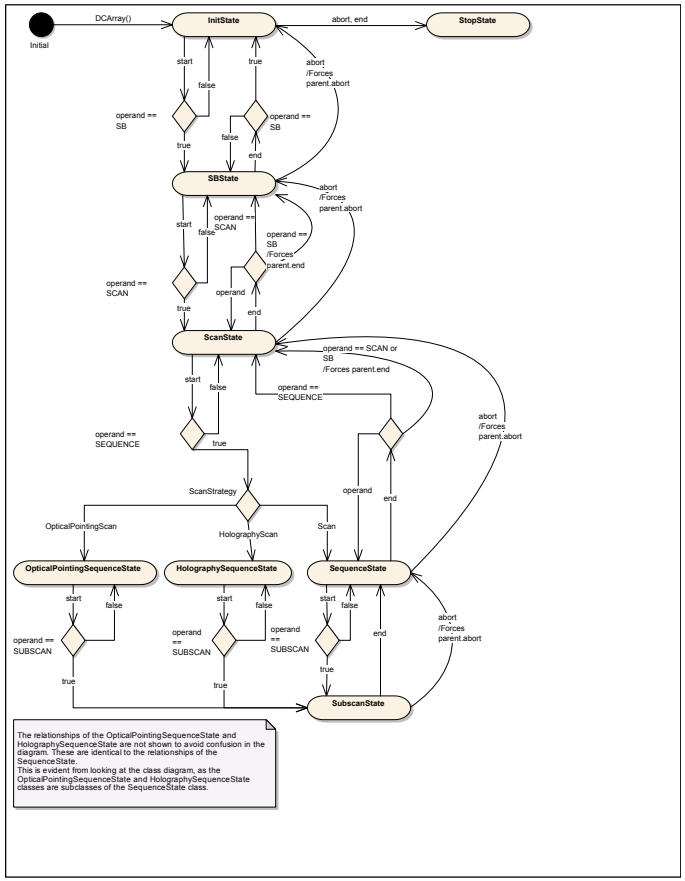
Implementation	Language	Standard	Documentation	License	Active
scxmlcc	C++	SCXML	Poor	GPL v3	✓
Apache Commons SCXML	Java	SCXML	Good	Apache License	✓
PySCXML	Python	SCXML	Poor	GPL v3	
SCION	JavaScript	SCXML	Sufficient	Apache License	✓
uSCXML	C++	SCXML	Sufficient	? - OpenSource	✓
QM	C++	UML	Good	Privative	✓
NSF	C++	UML	Sufficient	Comercial	✓
Meta State Machine (MSM)	C++	UML	Good	Boost Software License	✓


test SCXML apache - NetBeans IDE 8.1
Projects
test SCXML apache
Source Packages
net.javafun.example.atmstatusfsm
AtmDisplay.java
AtmStatusEventEnum.java
AtmStatusFSM.java
atm_status.xml
Test Packages
Libraries
commons-beanutils-1.8.2.jar
commons-digester-1.8.1.jar
commons-jexl-1.1.jar
commons-logging-1.1.1.jar
commons-scxml-0.9.jar
xalan-2.6.0.jar
JDK 1.8 (Default)
Test Libraries
Start Page
AtmDisplay.java
Source
History
package net.javafun.example.atmstatusfsm;
import java.awt.BorderLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.List;
import javax.swing.JButton;
import javax.swing.JComboBox;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
ATM Display Demo
atm.connRestored
Submit
disconnected
Output - test SCXML apache (run)
run:
STATE: idle
STATE: loading
STATE: disconnected
test SCXML apache (run)
running...

Actual documentation understanding.

Event	Publisher	
DataCapturerStartedEvent	DataCapturer	Published after DataCaptu
ExecBlockStartedEvent	Array	Signals the start of the SB.
ScanStartedEvent	ObservingMode	Signals the start of the Sca
SubscanStartedEvent	ObservingMode	Signals the start of the Sub
SubScanProcessedEvent	DataCapturer	Published at the end of eac
SubScanSequenceEndedEvent	DataCapturer	Published at the end of eac to the Scan, not the sequer
ScanProcessedEvent	DataCapturer	Published at the end of eac
ScanEndedEvent	ObservingMode	Signals the end of the Scar
ScanReducedEvent	DataCapturer	Published after each TELC results (e.g. focus, bandpa
ExecBlockEndedEvent	Array	Signals the end of the SB.
ExecBlockProcessedEvent	DataCapturer	Published after all the resu
ASDMArchivedEvent	DataCapturer	Published after the process

Events



State Machine

On schedule

Defining objectives and planning	**DONE**
Studying kibana, logtash and elasticsearch	**DONE**
Definition of the problematic	**DONE**
Analyze the observation process, and design a UML diagram.	**DOING**
Search, compare(Comparative table) and define a Implementation of state machine model and the standard to use.	**DOING**
Develop a State Machine Model for the observation process of high level operations including hardware configurations	**TO DO**
Design a architecture (Class Diagram and Activity Diagram) of the implementation	**TO DO**
...	**TO DO**

Questions

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