



Architect of an Open World™

Orchestra

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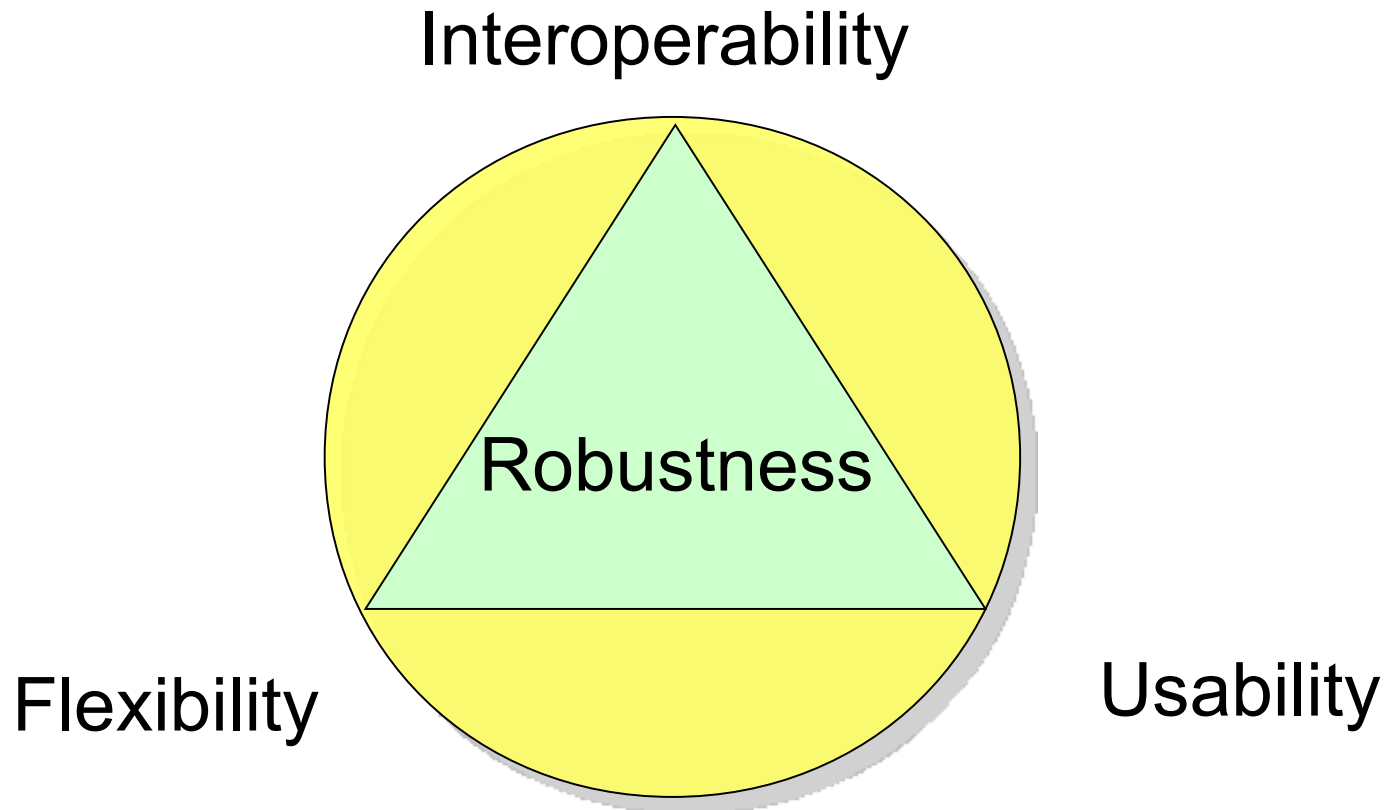
**LIBERATE IT**

# Services composition

- Systems integration process
  - Enterprise process
  - Heterogeneous services aggregation
  - Error and transaction management
  - Complex data
  - SOA context
- To align Information System

***Service Oriented Architecture***

# Choices criteria



# Orchestra : Presentation

- Service composition solution
- Full LGPL
- Current version 4.6.1

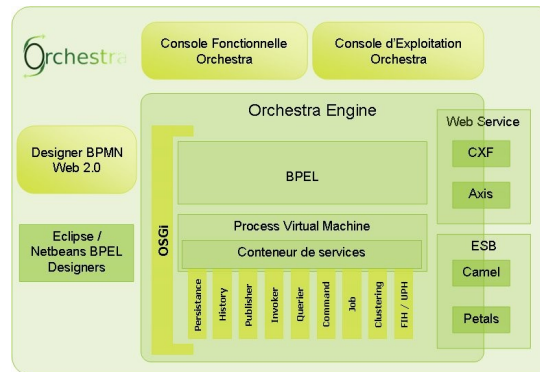


## Overview

Orchestra is a complete solution to handle long-running, service oriented processes. It provides out of the box orchestration functionalities to handle complex business processes. It is based on the OASIS standard BPEL (Business Process Execution Language). Orchestra's objectives:

- Improvement and control of processes
- Services interaction
- Productivity and agility of the company

Orchestra is fully Open Source and is downloadable under the **LGPL License**.



## The new version of Orchestra is available!

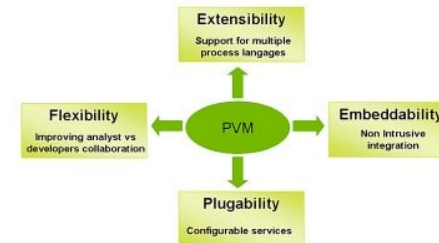
Orchestra v.4 has an innovative architecture:

- Generic engine : The Process Virtual Machine
- BPEL 2.0 support
- Web 2.0 based process console
- Graphical BPEL designer

This new architecture allows Orchestra to be more efficient, more adaptable on functional needs, and more dynamic!

[Download Orchestra now !](#)

## The Process Virtual Machine



**N**ovaOrchestra solution is build on top of The Process Virtual Machine (PVM). The PVM is a revolutionary

# Orchestra : Interoperability

## - Inter application interoperability



- WS \*
- Presto
- FTP
- Mail
- JMS
- File
- Etc...



## - Standards

- WS-BPEL 2.0 => Full Process – No code !
- BPMN

***Orchestra : Connecting Systems***

# Orchestra : Flexibility

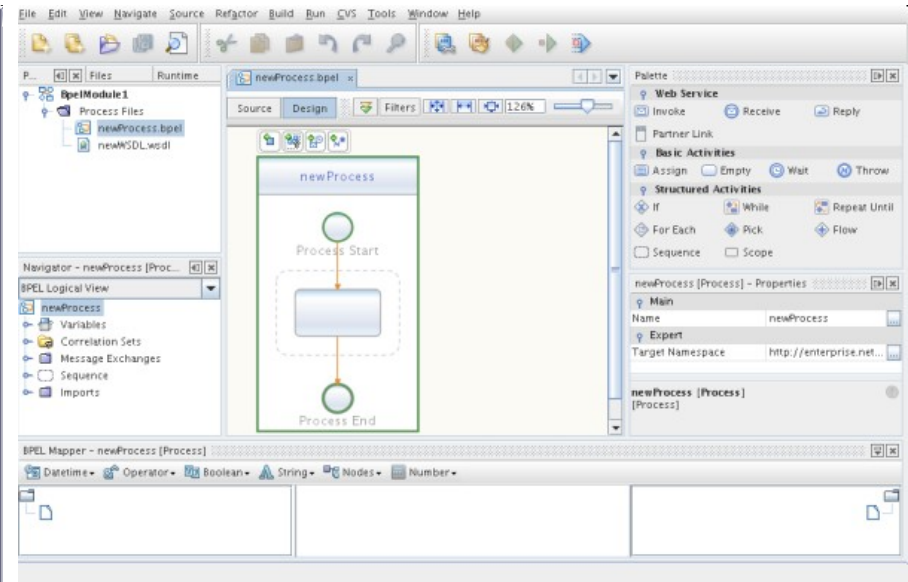
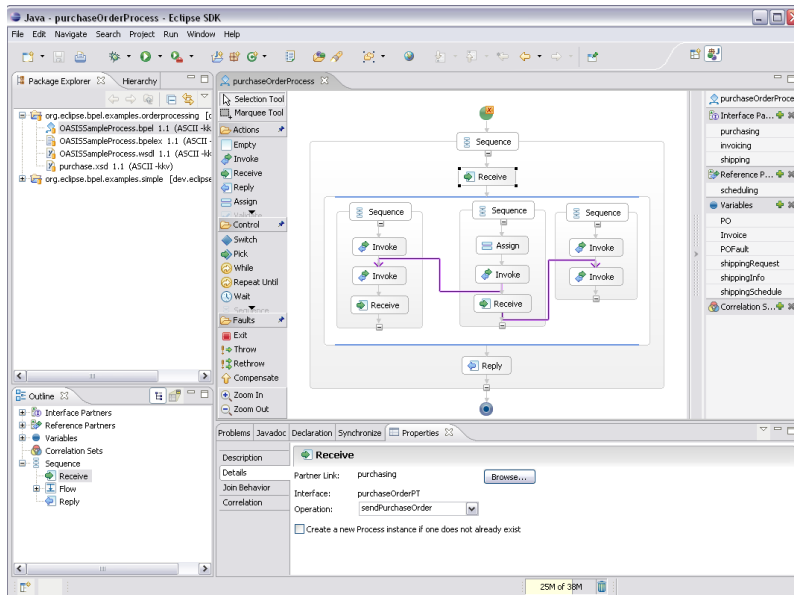
- Multi platform / multi database
  - Tested in continuous integration
- Intern flexibility
  - All is service
    - Configurable
    - Extensible
- Versioning

*Agile Information System*



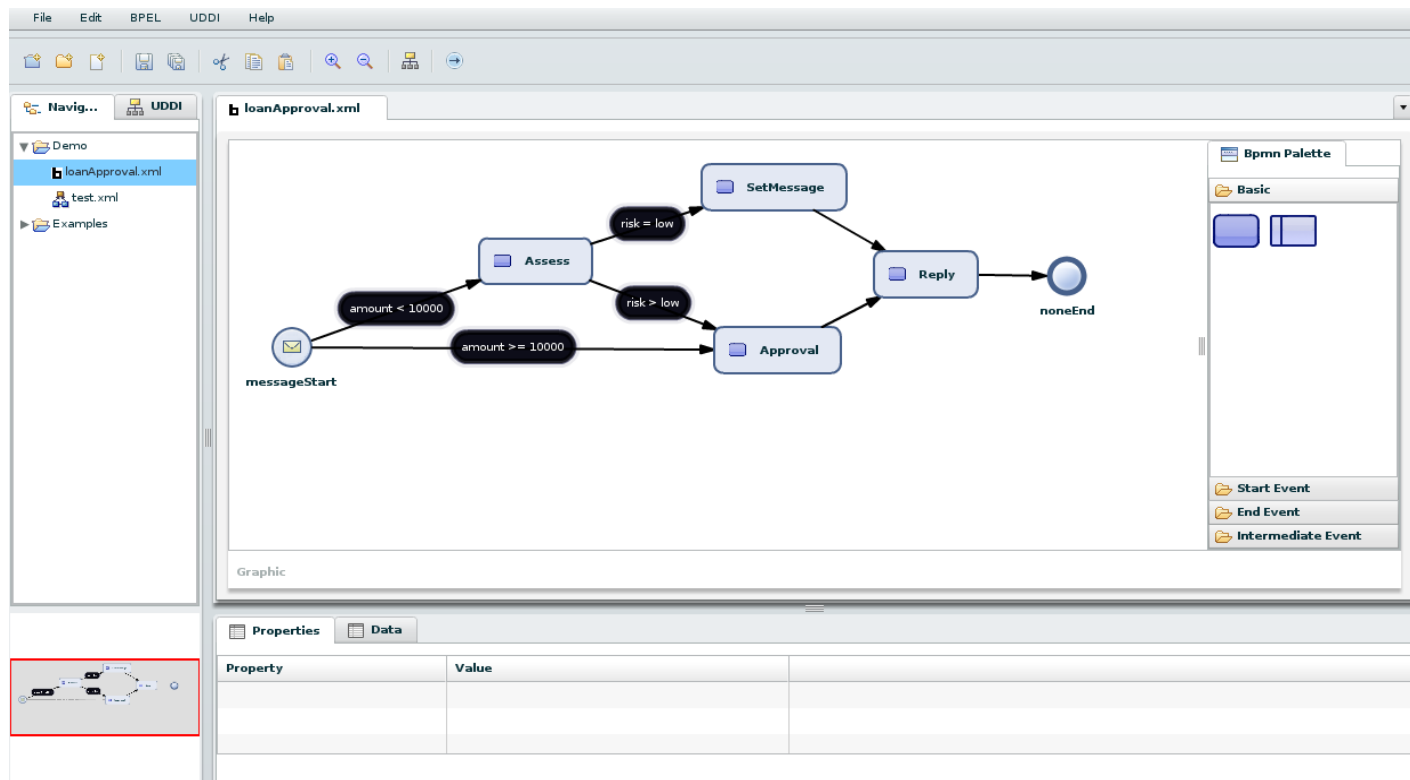
# Orchestra : Usability

## - Design



# Orchestra : Usability

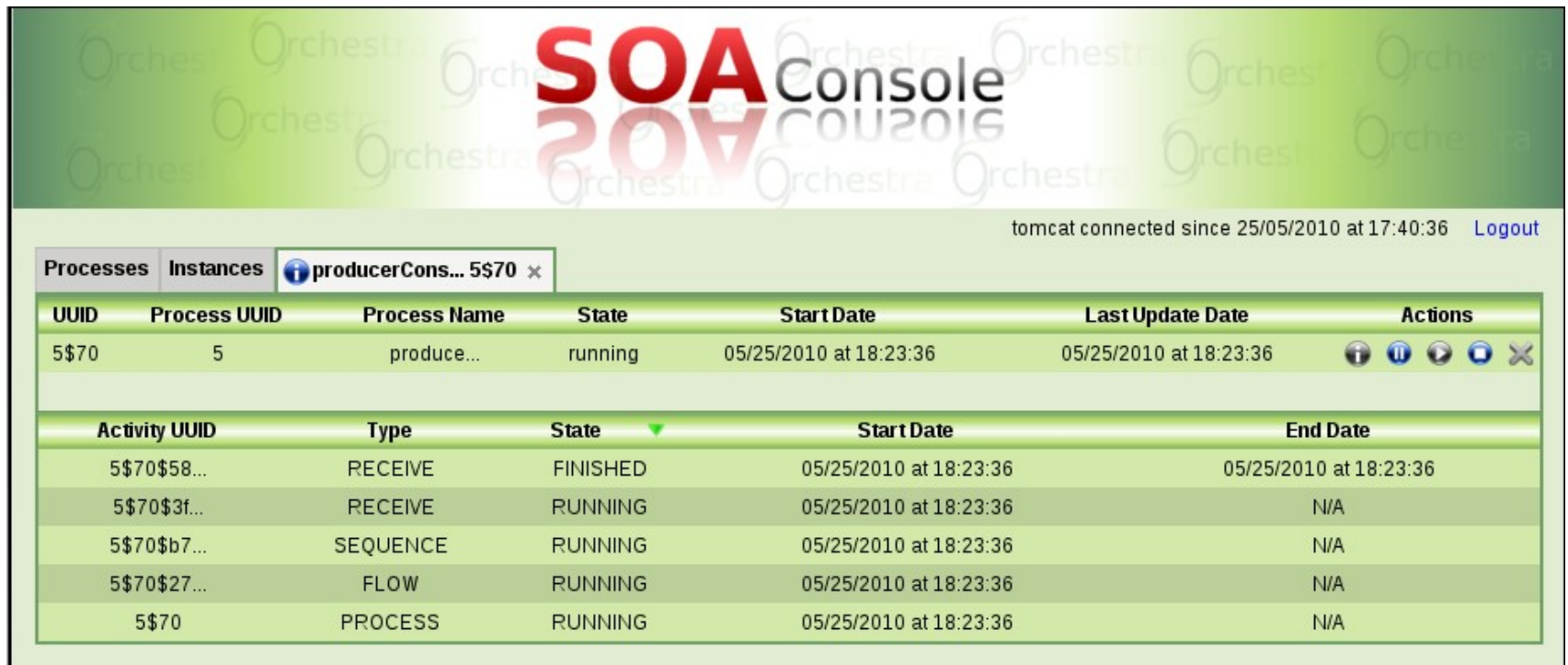
## - Design










# Orchestra : Usability

## - Administration / Monitoring



The screenshot displays the SOA Console interface. At the top, the text "SOA Console" is prominently displayed in red and black. Below this, a status bar indicates "tomcat connected since 25/05/2010 at 17:40:36" and a "Logout" link. The main content area is divided into two tabs: "Processes" and "Instances". The "Instances" tab is active, showing a search bar with the text "producerCons... 5\$70 x". Below the search bar is a table with the following columns: "UUID", "Process UUID", "Process Name", "State", "Start Date", "Last Update Date", and "Actions". The table contains one row of data. Below this table is another table with columns: "Activity UUID", "Type", "State", "Start Date", and "End Date". This second table contains five rows of activity data.

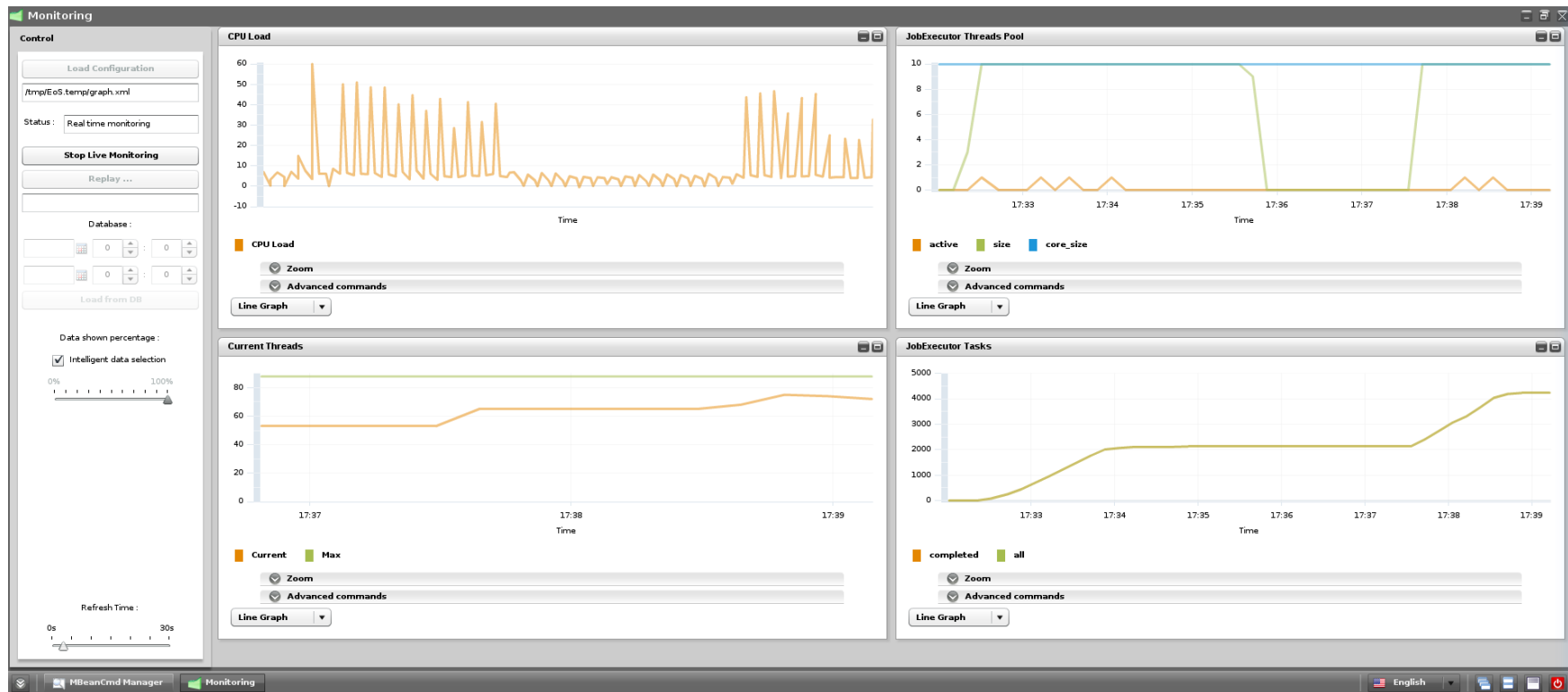
UUID	Process UUID	Process Name	State	Start Date	Last Update Date	Actions
5\$70	5	produce...	running	05/25/2010 at 18:23:36	05/25/2010 at 18:23:36	    

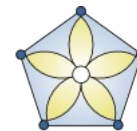
Activity UUID	Type	State	Start Date	End Date
5\$70\$58...	RECEIVE	FINISHED	05/25/2010 at 18:23:36	05/25/2010 at 18:23:36
5\$70\$3f...	RECEIVE	RUNNING	05/25/2010 at 18:23:36	N/A
5\$70\$b7...	SEQUENCE	RUNNING	05/25/2010 at 18:23:36	N/A
5\$70\$27...	FLOW	RUNNING	05/25/2010 at 18:23:36	N/A
5\$70	PROCESS	RUNNING	05/25/2010 at 18:23:36	N/A

# Orchestra : Usability

## - Exploitation



Powered by JASMINE



# Orchestra : Usability

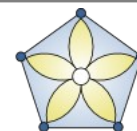
The screenshot displays the SOA Console interface, which is part of the Orchestra Administration suite. The interface is divided into several sections:

- SOA Console (Left Panel):** Contains navigation icons for SOA Console, SOA Designer, Monitoring, MBeanCmd Manager, and Orchestra Web Site.
- Monitoring (Main Panel):** Shows the status of the monitoring service as "Stopped". It includes controls for "Load Configuration", "Start Live Monitoring", and "Replay ...". There are also input fields for "Database" and a "Load from DB" button.
- SOA Console (Right Panel):** Displays the "SOA Console" title and a table of processes. The table has columns for UUID, Name, Namespace, Deployment Date, Undeployment Date, State, and Actions. Below the table is a "Deploy a process:" section with a file selection button and an "Upload" button.

UUID	Name	Namespace	Deployment Date	Undeployment Date	State	Actions
1	approval	http://orchestra.ow2.org/loanApproval/approval	05/26/2010 at 18:00:27	N/A	deployed	
2	riskAssessment	http://orchestra.ow2.org/loanApproval/riskAsses...	05/26/2010 at 18:00:29	N/A	deployed	
3	loanService	http://orchestra.ow2.org/loanApproval/loanService	05/26/2010 at 18:00:31	N/A	deployed	

*All in one !*

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# Orchestra : Robustness

- Version 4
  - Exists since 2005
- Clustering
- Restart after crash
- High performance

*Unbreakable*



# Conclusion

- Systems integration solution
- Process... just process
- Fully LGPL
- Robust, Flexible et Interoperable

[\*http://orchestra.ow2.org\*](http://orchestra.ow2.org)

