

Cloud Computing with Visualization of Dynamic Workflow Execution

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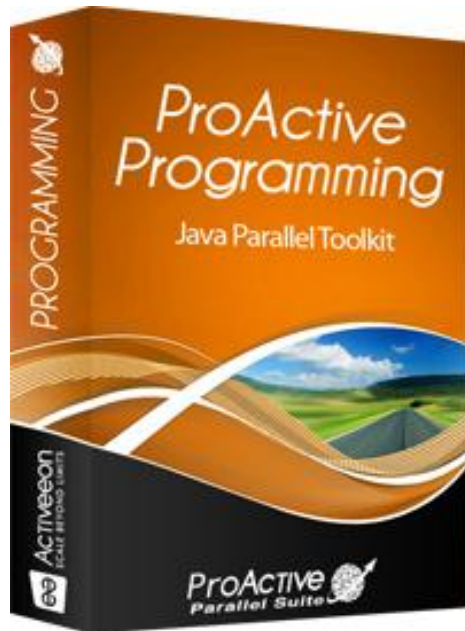
Cloud computing à l'INRIA

- ❑ Institut National de Recherche en Informatique et Automatique (INRIA)
 - Equipe OASIS
- ❑ ActiveEon
- ❑ Middleware ProActive
- ❑ Cloud PACA Grid
 - Cloud Computing (SaaS)

➤ Cloud computing à l'INRIA

ProActive Parallel Suite et architecture interne
Workflow, une histoire de tâches et de jobs

ProActive Parallel Suite et architecture interne

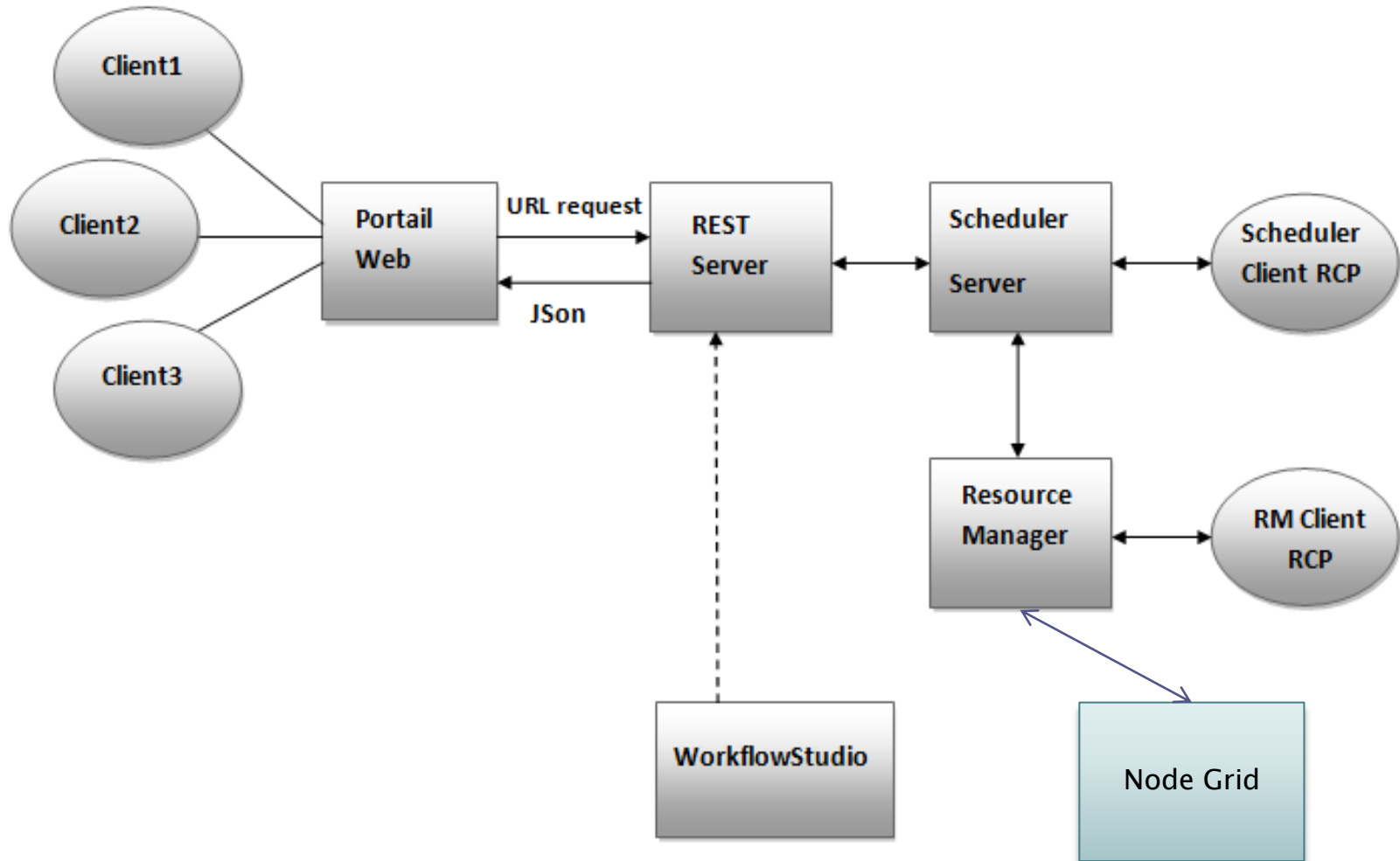


Cloud computing à l'INRIA

➤ ProActive Parallel Suite et architecture interne

Workflow, une histoire de tâches et de jobs

ProActive Parallel Suite et architecture interne

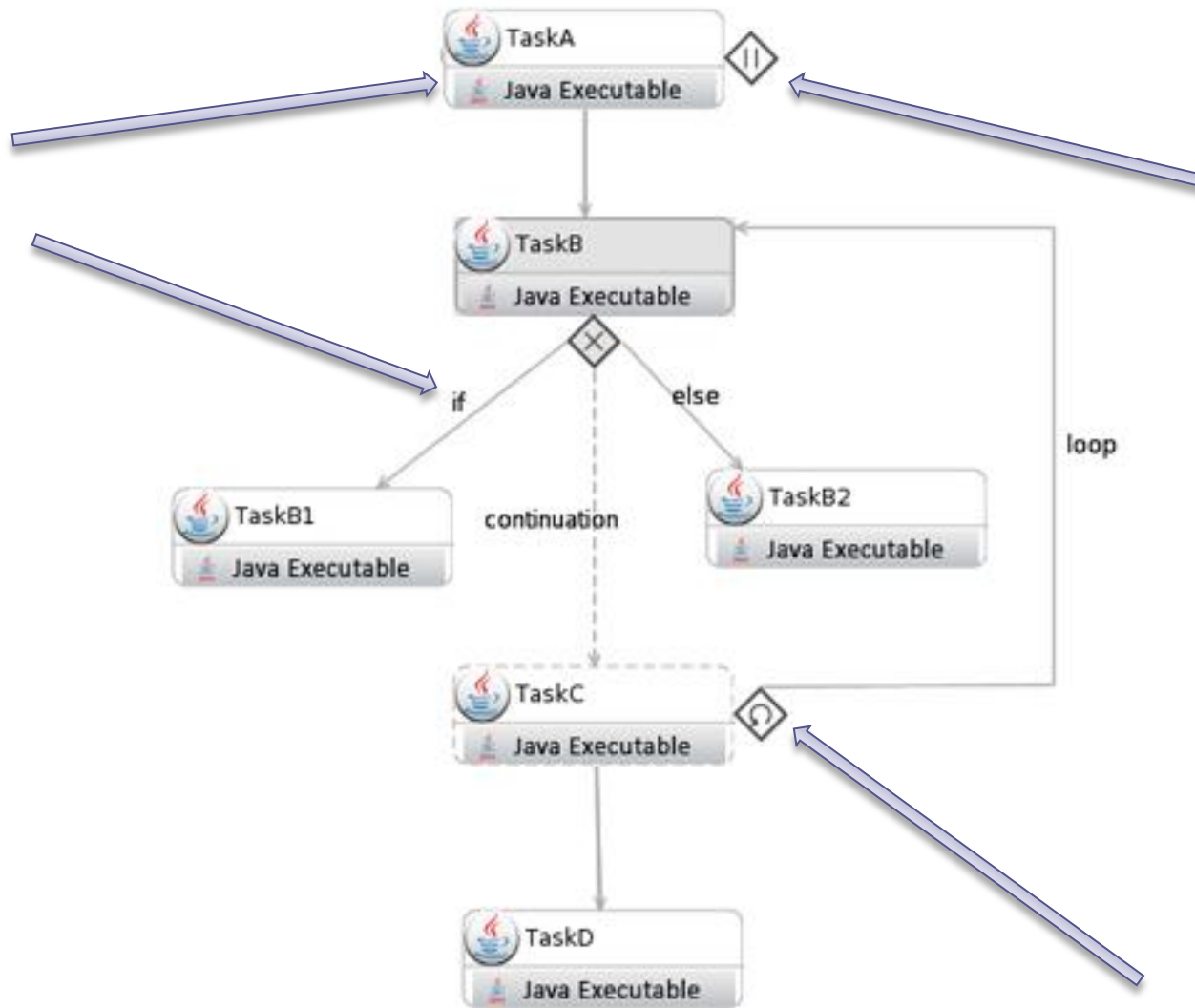


Cloud computing à l'INRIA

➤ ProActive Parallel Suite et architecture interne

Workflow, une histoire de tâches et de jobs

Workflow, une histoire de tâches et de jobs



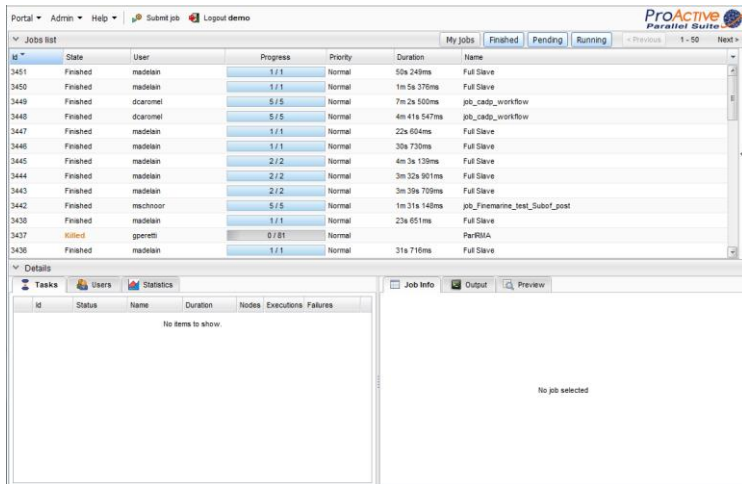
ProActive Parallel Suite et architecture internet

➤ Workflow, une histoire de tâches et de jobs

Visualisation de workflow

Visualisation de workflow

Avant

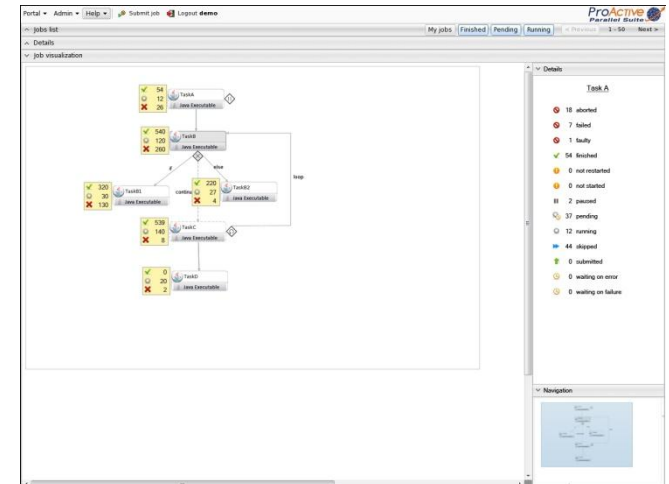


The screenshot shows the ProActive portal interface. At the top, there are navigation links: Portal, Admin, Help, Submit job, and Logout demo. Below this is a 'Jobs List' section with a table containing columns for ID, State, User, Progress, Priority, Duration, and Name. The table lists several jobs, most of which are in a 'Finished' state. Below the table, there is a 'Details' section with tabs for Tasks, Users, and Statistics. The 'Tasks' tab is active, showing a table with columns for ID, Status, Name, Duration, Nodes, Executions, and Failures. The table is currently empty, displaying 'No items to show.' Below the table, there is a 'Job info' section with tabs for Job info, Output, and Preview. The 'Job info' tab is active, showing 'No job selected.'

ID	State	User	Progress	Priority	Duration	Name
3451	Finished	madelain	1 / 1	Normal	50s 249ms	Full Slave
3450	Finished	madelain	1 / 1	Normal	1m 5s 370ms	Full Slave
3449	Finished	dcaromel	5 / 5	Normal	7m 2s 500ms	job_casp_workflow
3448	Finished	dcaromel	5 / 5	Normal	4m 41s 547ms	job_casp_workflow
3447	Finished	madelain	1 / 1	Normal	22s 604ms	Full Slave
3446	Finished	madelain	1 / 1	Normal	30s 730ms	Full Slave
3445	Finished	madelain	2 / 2	Normal	4m 3s 139ms	Full Slave
3444	Finished	madelain	2 / 2	Normal	3m 32s 901ms	Full Slave
3443	Finished	madelain	2 / 2	Normal	3m 39s 709ms	Full Slave
3442	Finished	michoor	5 / 5	Normal	1m 31s 148ms	job_fmeharthe_test_Subot_post
3438	Finished	madelain	1 / 1	Normal	23s 651ms	Full Slave
3437	Failed	goneth	0 / 0	Normal		ParRMA
3436	Finished	madelain	1 / 1	Normal	31s 716ms	Full Slave



Après



Workflow, une histoire de tâches et de jobs
➤ Visualisation de workflow
Organisation prévisionnelle du travail

Avant

Portal ▾ Admin ▾ Help ▾ | Submit job Logout demo **ProActive**
Parallel Suite

Jobs list My jobs | Finished | Pending | Running | < Previous | 1 - 50 | Next >

Id ▾	State	User	Progress	Priority	Duration	Name
3451	Finished	madelain	1 / 1	Normal	50s 249ms	Full Slave
3450	Finished	madelain	1 / 1	Normal	1m 5s 376ms	Full Slave
3449	Finished	dcaromel	5 / 5	Normal	7m 2s 500ms	job_cadp_workflow
3448	Finished	dcaromel	5 / 5	Normal	4m 41s 547ms	job_cadp_workflow
3447	Finished	madelain	1 / 1	Normal	22s 604ms	Full Slave
3446	Finished	madelain	1 / 1	Normal	30s 730ms	Full Slave
3445	Finished	madelain	2 / 2	Normal	4m 3s 139ms	Full Slave
3444	Finished	madelain	2 / 2	Normal	3m 32s 901ms	Full Slave
3443	Finished	madelain	2 / 2	Normal	3m 39s 709ms	Full Slave
3442	Finished	mschnoor	5 / 5	Normal	1m 31s 148ms	job_Finemarine_test_Subof_post
3438	Finished	madelain	1 / 1	Normal	23s 651ms	Full Slave
3437	Killed	gperetti	0 / 81	Normal		ParIRMA
3436	Finished	madelain	1 / 1	Normal	31s 716ms	Full Slave

Details Job Info | Output | Preview

Tasks | Users | Statistics

Id	Status	Name	Duration	Nodes	Executions	Failures
No items to show.						

No job selected

Après

Portal Admin Help Submit job Logout demo ProActive Parallel Suite

jobs list My jobs Finished Pending Running < Previous 1 - 50 Next >

Details

job visualization

```
graph TD; TaskA[TaskA] --> TaskB[TaskB]; TaskB --> TaskB1[TaskB1]; TaskB --> TaskB2[TaskB2]; TaskB1 --> TaskC[TaskC]; TaskB2 --> TaskC; TaskC --> TaskD[TaskD]; TaskC -- loop --> TaskB;
```

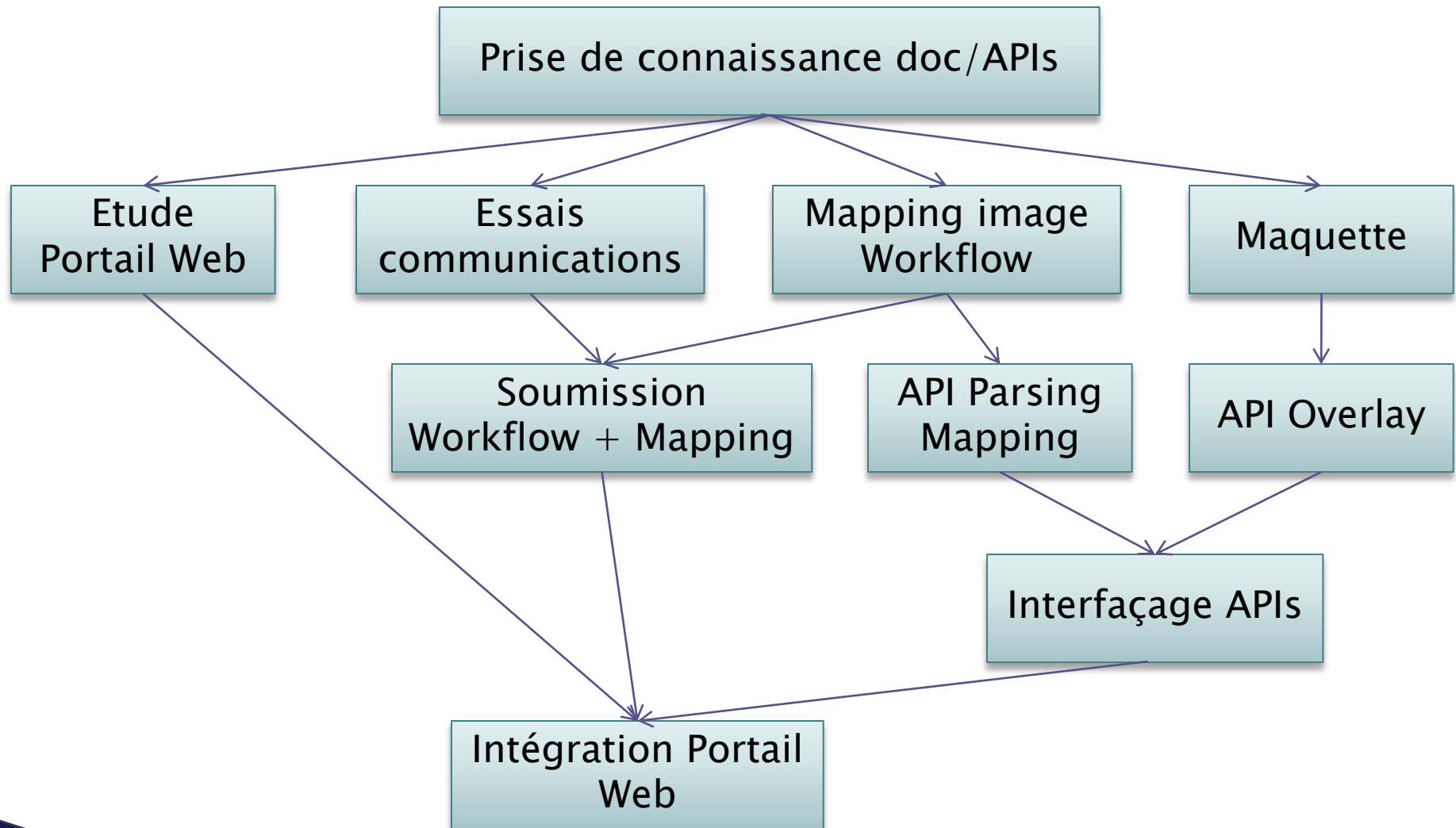
Task	Finished	Running	Failed	Aborted	Skipped	Waiting on error	Waiting on failure	Submitted	Not started	Not restarted	Paused
TaskA	54	12	26	0	0	0	0	0	0	0	0
TaskB	540	120	260	0	0	0	0	0	0	0	0
TaskB1	320	30	130	0	0	0	0	0	0	0	0
TaskB2	220	27	4	0	0	0	0	0	0	0	0
TaskC	539	140	8	0	0	0	0	0	0	0	0
TaskD	0	20	2	0	0	0	0	0	0	0	0

Task A

- 18 aborted
- 7 failed
- 1 faulty
- 54 finished
- 0 not restarted
- 0 not started
- 2 paused
- 37 pending
- 12 running
- 44 skipped
- 0 submitted
- 0 waiting on error
- 0 waiting on failure

Navigation

Organisation prévisionnelle du travail



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Visualisation de workflow

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Questions ?