



PEtALS Webconsole User Guide

This document describes the installation and usage of the web monitoring and administration application of PEtALS

PEtALS Team

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Structure of the document

This document describes the installation and the usage of the web console of PEtALS. It's designed for :

- The PEtALS administrator.
- The PEtALS user.

Chapter 1. Pre-requisites

Before installing the webconsole, make sure you have installed :

- A servlet container like [Tomcat](#)
- A PEtALS server up and running. **The webconsole will NOT work with any PEtALS version older than 2.1.**
- Web navigator [Firefox](#) 1.5 or later with Javascript activated.

To make the jUDDI part of the webconsole work, you must have jUDDI installed and running. If you haven't installed jUDDI yet, please follow the instructions [here](#)

Chapter 2. Presentation of the webconsole

The webconsole is made of three part

- **Administration** : allows you to manage life cycles of components, service assemblies and shared libraries. In this section you can start/stop monitoring PEtALS and have several informations about any visible subdomain or server.
- **jUDDI** : in this section you can export any PEtALS service to jUDDI.
- **Monitoring** : Messages exchanges, queues status,...any monitoring information is available in this section.

Chapter 3. Installation

3.1. Installing the application

The webconsole is packaged as a war, you just have to deploy it in your servlet container.

For example, Tomcat users just have to copy the war to the "webapps" directory and wait for Tomcat to deploy the application.

Note : The PEtALS Quickstart distribution *doesn't need any installation step*, the webconsole is directly embedded in PEtALS and can be accessed via <http://localhost:7878>

3.2. Accessing the application

Once deployed, the webconsole can be accessed in your web browser through the address <http://localhost:8080/petals-webconsole/>

Chapter 4. First launch

4.1. Starting the datacollector

The petals webconsole connects to an application that exposes all necessary functions to monitor and administrate PEtALS. This application is named "PEtALS Datacollector" and is, for now, embedded in the webconsole.

The first time you access the webconsole, you will need to configure and start the datacollector before any other action ; ie tell the datacollector which PEtALS to connect to and collect the needed information.

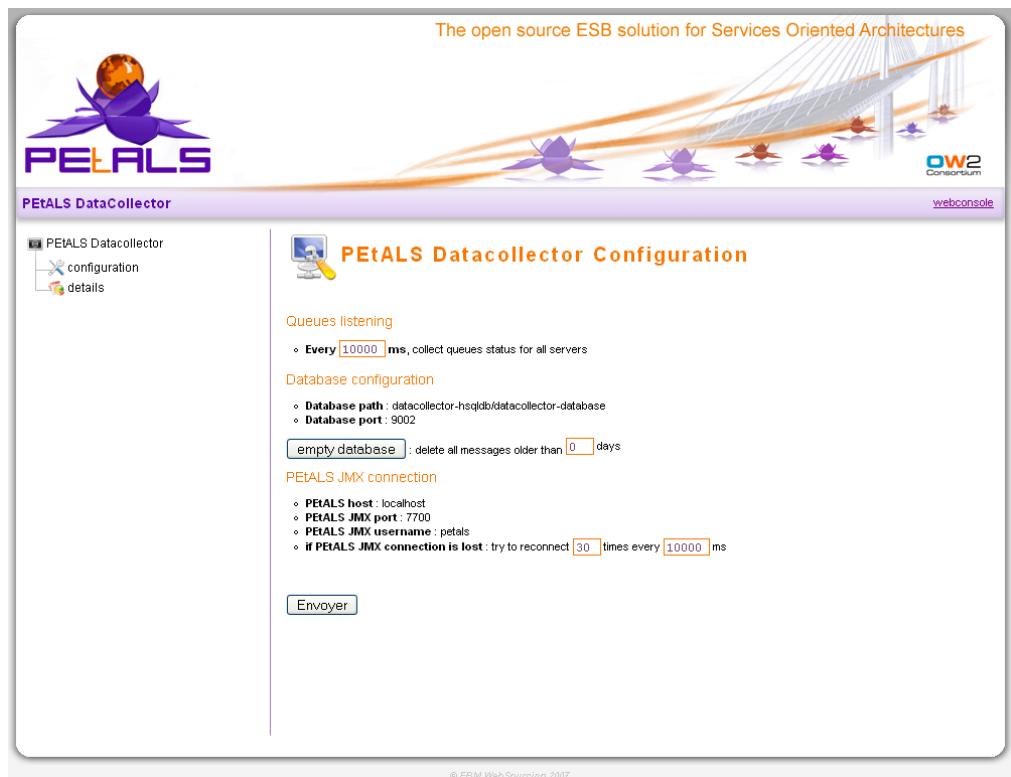
Fill in the form like the screenshot below and click on the submit button to start the datacollector.



4.2. Configuring the datacollector

Once started, the datacollector can be configured and administrated through the left menu : click on the left menu to access the configuration panel or the details panel

- **Queues listening** : each X seconds, the datacollector check all queues status and save them to its database if there's a non null value
- **Database configuration** : if there's too many messages saved in the collector database, you can clear all or a part of them thanxs the "empty database" button
- **PEtALS JMX connection** : if the datacollector lost its connection to PEtALS, you can make it try to reconnect X time every X ms. Default is 30 times every 10 seconds



4.3. Accessing the webconsole

Once the datacollector started, you can acces the webconsole : click on the right link "webconsole" in the menubar to go to the console login page.

For now there's only 3 possible accounts:

- **petals/petals** : this user can access all pages without any restriction
- **admin/admin** : this user can only access administration and jUDDI pages
- **monitoring/monitoring** : this user can only access monitoring pages

Chapter 5. PEtALS Administration

5.1. Start / stop Components, service assemblies and shared libraries

The first thing you may want to do is to install a component, a service assembly or a service unit : the administration part of the webconsole allows you to do so in a few clicks. Just click on the selected action in the left menu to open the right panel.

The screenshot shows the PEtALS Admin interface. At the top, there's a banner with the text "The open source ESB solution for Services Oriented Architectures" and the OW2 Consortium logo. Below the banner, the navigation bar includes "PEtALS Admin", "JUDDI Admin", "Monitoring", and "logged in as admin (admin) | log out | datacollector". The main content area is titled "Component Administration For Server 0". It features a sidebar with a tree view showing "PEtALS (standalone)", "subdomain1", and "server 0" with sub-nodes "admin components", "admin service assemblies", and "admin shared libraries". The main panel has two sections: "Upload & install a new component" with a file input field, a "Parcour..." button, and an "Install!" button; and "Deployed components" which lists "petals-sample-clock (Stopped)" and "petals-sample-client (Started)". Each component entry has a set of monitoring icons next to it.

5.2. Start / stop Monitoring

In the left menu, clicking on the domain, the subdomain or the server opens a panel with details about the selected element. On the server panel, you can choose to activate or deactivate monitoring. If you want the messages in PEtALS to be monitored in real time, you must activate the monitoring.

The open source ESB solution for Services Oriented Architectures



PEtALS

PEtALS Admin | jUDDI Admin | Monitoring logged in as admin (admin) | log out | datacollector

PEtALS Administration - Server

server 0

Components:

- petals-sample-clock (*Stopped*)
- petals-sample-client (*Started*)

Monitor the server

- Monitoring status : **true** - Message content shown : **true**
- Start monitoring server 0 **with** messages content
- Start monitoring server 0 **without** messages content
- Stop monitoring server 0

Server properties

server name	0
server version	Petals JBI Container - version: 2.1
server host	localhost
JMX RMI port	3000
JMX JBI port	7700
current state	STARTED
monitoring status	true

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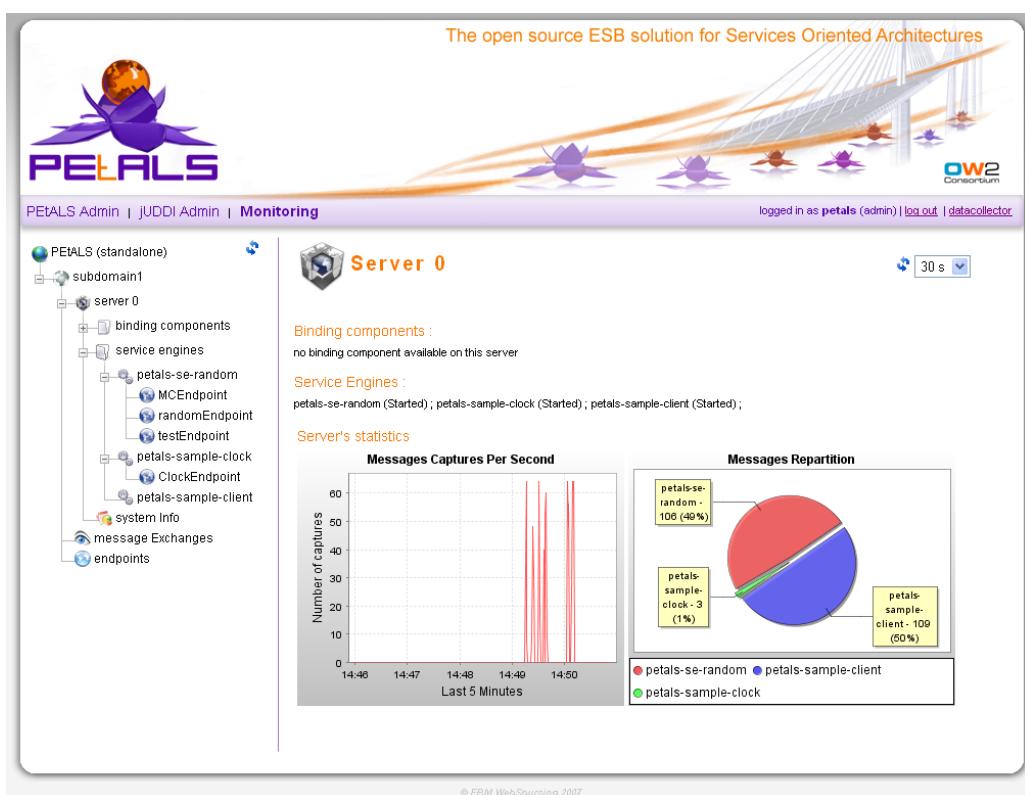
Chapter 6. Monitoring

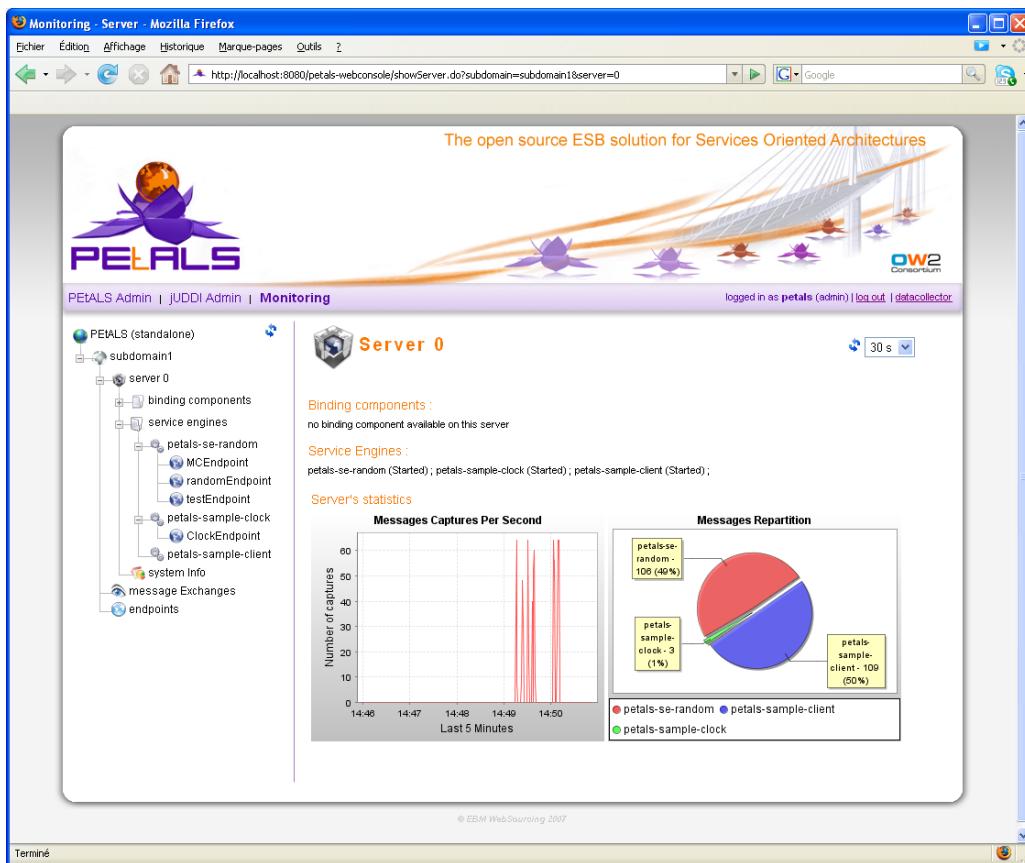
6.1. Various statistics

The monitoring part offers various statistics on every subdomain, servers, components, endpoints...just click on an item in the left menu to display charts about it.

usually, there's two charts displayed

- **Messages Captures Per Second** : Each time a message go through a component, a capture of this message is saved. For example, each **InOnly** message exchange will have **6** captures (in, out, done counted for each component)
- **Message Repartition** : Message Exchanges repartition, depending on the selected element. for example, a domain will have the message repartition chart by server.





6.2. Entity details

Appart from message traffic, monitoring pages offers several information about the selected entity

- component : name, description, state, type, objectName, *list of endpoints* and *queues status*
- endpoint : interface, service, endpoint, component, server and *associated wsdl*

6.3. System information and queues

This section provides several about the system PEtALS is running on and about the different PEtALS queues.

The screenshot shows the PETALS Monitoring interface. At the top, there's a banner with the text "The open source ESB solution for Services Oriented Architectures" and the OW2 Consortium logo. Below the banner, the navigation bar includes "PETALS Admin | JUDDI Admin | Monitoring" and "logged in as petals (admin) | log out | datacollector".

The main content area is titled "System Information". It contains several sections:

- Summary:**
 - Uptime : 2 hours 51 minutes
 - Process CPU Time : 31,718 secs
- Threads:**
 - Live Threads : 44
 - DaemonThreads : 31
 - Peak : 46
 - Total started : 186
- Memory:**
 - Current heap size : 4 624 264 bytes
 - Maximum heap size : 1 065 484 268 bytes
 - Init heap size : 0 bytes
 - Committed Memory : 8 486 912bytes
 - Objects pending for finalization : 0
- Operating System:**
 - Total physical memory : 1 609 973 760 bytes
 - Free physical memory : 1 609 973 760 bytes
- Components queues:**
 - display detailed queues informations for each component
 - display queues status for all components

At the bottom left, there's a tree view of the system structure:

```

PETALS (standalone)
  +-- subdomain1
    +-- server 0
      +-- binding components
      +-- service engines
        +-- petals-se-random
          +-- MCEndpoint
          +-- randomEndpoint
          +-- testEndpoint
        +-- petals-sample-clock
          +-- ClockEndpoint
        +-- petals-sample-client
      +-- system Info
      +-- message Exchanges
      +-- endpoints
  
```

This screenshot shows the "Queues status for server 0" section of the PETALS Monitoring interface. The left sidebar is identical to the first screenshot, showing the system structure.

The right panel displays the status of three queues:

Queue Name	Status
petals-se-random	local : 0 [empty]
petals-sample-client	local : 0 [empty]
petals-sample-clock	local : 0 [empty]
	30 s [refresh icon]

6.4. Messages Exchanges

If you want to see what's transiting in PEtALS, you're in the good section.

The messages Exchanges part of the webconsole allows you to :

- list all monitored messages exchanges

- see detailed information for each message exchange

Just click on the message Exchange item in the left menu and browse the message list. You can then select a message and get details about this message like the operation, the pattern, the content, ...



The open source ESB solution for Services Oriented Architectures

PETALS Admin | JUDDI Admin | Monitoring

logged in as petals (admin) | log out | datacollector

Message Exchanges list

id	involves	status	start time	mep
petals:uid:B67611A5B5FC97D3619681106230540106	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:11.015	InOnly
petals:uid:B67611A5B5FC97D3619681042636983105	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.953	InOnly
petals:uid:B67611A5B5FC97D3619681038578366104	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.953	InOnly
petals:uid:B67611A5B5FC97D3619680746382570103	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.656	InOnly
petals:uid:B67611A5B5FC97D3619680618404853102	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.531	InOnly
petals:uid:B67611A5B5FC97D3619680482446512101	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.390	InOnly
petals:uid:B67611A5B5FC97D3619680354447841100	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.265	InOnly
petals:uid:B67611A5B5FC97D361968022646481699	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.140	InOnly
petals:uid:B67611A5B5FC97D361968012248037198	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:10.031	InOnly
petals:uid:B67611A5B5FC97D361967997815811797	petals-se-random petals-sample-client	done	15 févr. 2008 14:50:09.890	InOnly

0 1 2 3 4 5 6 7 8 9 10

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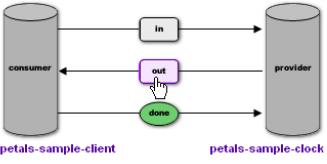
The open source ESB solution for Services Oriented Architectures

PETALS Admin | JUDDI Admin | Monitoring

logged in as petals (admin) | log out | datacollector

Message Exchange details

id	petals:uid:63E78A6D7A48095102240989462141133
start time	14 févr. 2008 16:08:18.437
duration	31 ms
status	done
mep	InOut
server / service / endpoint / operation	0 / (http://petals.ow2.org)ClockService / ClockEndpoint / time



duration: 0 ms

message type	in
start time	14 févr. 2008 16:08:18.437
duration	0 ms
content	<text>hi !</text>

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6.5. Endpoints

The endpoints section displays several informations about all endpoints for a subdomain

The open source ESB solution for Services Oriented Architectures

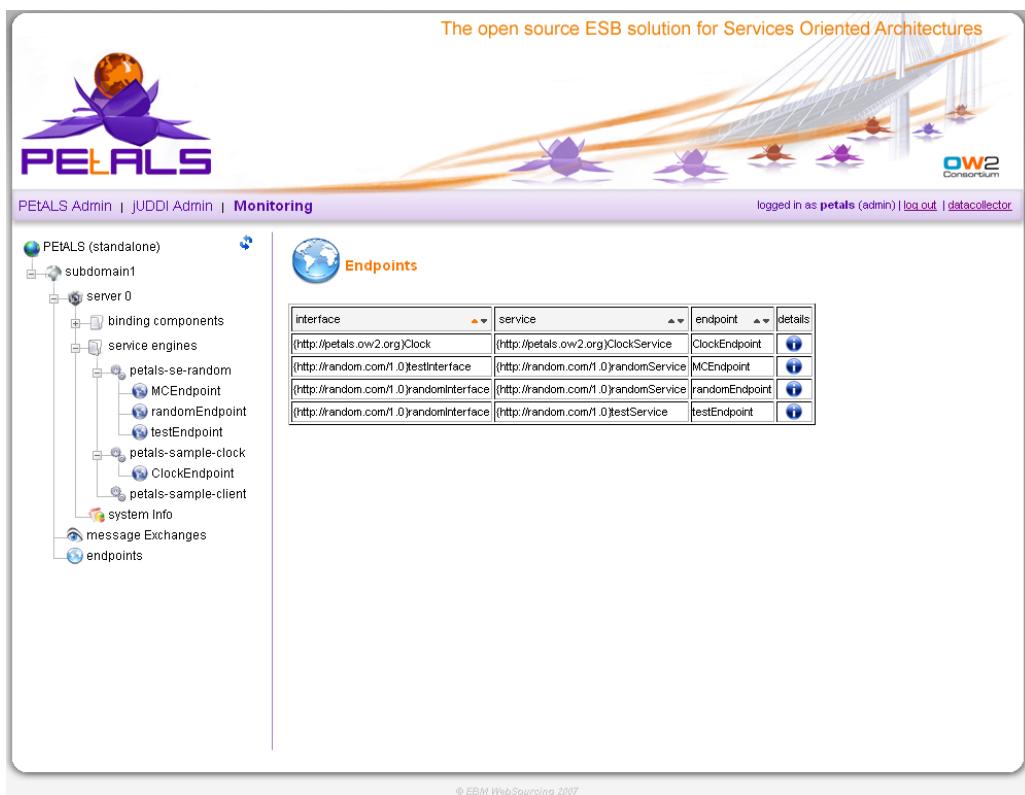
PETALS Admin | JUDDI Admin | **Monitoring**

logged in as **petals** (admin) | [log out](#) | [datacollector](#)

Endpoints

interface	service	endpoint	details
(http://petals.ow2.org)Clock	(http://petals.ow2.org)ClockService	ClockEndpoint	edit
(http://random.com/1.0)testInterface	(http://random.com/1.0)randomService	MCEndpoint	edit
(http://random.com/1.0)randomInterface	(http://random.com/1.0)randomService	randomEndpoint	edit
(http://random.com/1.0)randomInterface	(http://random.com/1.0)testService	testEndpoint	edit

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The screenshot shows the PETALS Webconsole Monitoring page. At the top, there's a banner with the PETALS logo and the text "The open source ESB solution for Services Oriented Architectures". Below the banner, the navigation bar includes links for PETALS Admin, JUDDI Admin, and Monitoring, along with a log in status for "petals (admin)". On the right side of the header, there's a link to "datacollector" and the OW2 Consortium logo. The main content area has two sections: a left sidebar titled "PETALS (standalone)" which contains a tree view of service components like "subdomain1", "server 0", "binding components", "service engines", and "message Exchanges"; and a right panel titled "Endpoints" which displays a table of four entries with columns for interface, service, endpoint, and details. The footer of the page includes the copyright notice "© EBM WebSourcing 2007".

Chapter 7. jUDDI

The jUDDI part of the application allows you to export PEtALS services to a jUDDI registry. For this, you must have jUDDI installed and deployed (for this, please report to the installation section).

The screenshot shows the PETALS Admin interface with the following details:

- Header:** The open source ESB solution for Services Oriented Architectures, PETALS logo, and OW2 Consortium logo.
- Navigation:** PETALS Admin | JUDDI Admin | Monitoring. Logged in as **petals (admin)**.
- Left Sidebar:** A tree view of service components under PETALS (standalone):
 - subdomain1
 - server 0
 - binding components
 - service engines
 - petals-se-random
 - MCEndpoint
 - randomEndpoint
 - testEndpoint
 - petals-sample-clock
 - ClockEndpoint
 - petals-sample-client
- Right Panel:** JUDDI Administration - Add a PETALS Service

Exporting petals-se-random/MCEndpoint to jUDDI

businessEntity	<input type="text" value="myBusinessEntity"/>	Add new BusinessEntity
businessService	<input type="text" value="myServiceEntity"/>	Add new ServiceEntity
bindingName	<input type="text" value="petals-se-random"/>	
bindingAccessUrl	<input type="text" value="jbi://petals-se-random/MCEndpoint.random"/>	
bindingDescription	<input type="text"/>	
interfaceWsdlUrl	<input type="text" value="jbi://petals-se-random/MCEndpoint.random"/>	
interfaceWsdlDescription	<input type="text"/>	

Buttons: Save