

## Space Details

<b>Key:</b>	CARGO
<b>Name:</b>	Cargo
<b>Description:</b>	Uniform J2EE Container Control System
<b>Creator (Creation Date):</b>	bwalding (Aug 14, 2004)
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## Features

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This page last changed on Oct 08, 2005 by [vmassol](#).

- [Configuration](#) — A Configuration specifies how the container is configured
  - [Configuration properties](#) — Properties to configure a container (request port, shutdown port, logging level, threads, etc)
  - [Local Configuration](#) — A configuration for a container that is running on the local machine where Cargo is executing
    - [Existing Local Configuration](#) — Re-use an existing container installation
    - [Standalone Local Configuration](#) — Configures your container in a specific directory
  - [Runtime Configuration](#) — A configuration for a container that is already started
- [Container](#) — A top level interface wrapping a real physical container
  - [Container Classpath](#) — How to configure the executing container's classpath
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  - [Installer](#) — Installs a container
  - [Passing system properties](#) — How to pass system properties that will be available to the container while executing
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- [Debugging](#) — Explain how to perform debugging when something doesn't work in Cargo
- [Deployment](#) — How to deploy components to a container
  - [Deployable](#) — Deployables are archives (WAR, EAR, etc) that can be deployed in the container
  - [Deployer](#) — Performs a hot deployment of a [Deployable](#)
  - [Hot Deployment](#) — Ability to deploy/undeploy Deployables into a running container
  - [JSR88](#) — [JSR88](#)-compliant containers support
  - [Static Deployment](#)
    - [Static deployment of EAR](#) — Deploy an EAR that will be started when the container starts
    - [Static deployment of expanded WAR](#) — Deploy an expanded WAR that will be started when the container starts
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- [Extensions](#) — Extensions are additions to the Cargo core Java API such as build tool plugins, IDE plugins, etc
  - [Ant support](#) — Cargo provides Ant tasks to perform all the operations available from the Java API
  - [IntelliJ IDEA Plugin](#)
  - [Maven1 plugin](#) — Cargo provides a Maven 1 plugin to perform operations available from [Ant support](#).
  - [Maven2 plugin](#) — A Maven 2 plugin that wraps the Cargo Java API
  - [Netbeans Plugin](#)
- [Module API](#) — API to manipulate J2EE archives, including vendor-specific deployment descriptors

## Configuration

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### Explanation

A Configuration specifies how the container is configured (logging, security, data sources, location where to put deployables, etc).



#### Configuration != Installation

The notion of Configuration is different from the notion of Installation. When you install a container, it is usually configured by default too to start and deploy files from where it is installed. However all containers support customizing the configuration and even possibly use a different location where the configuration resides.

([view as slideshow](#))

Configuration inheritance tree

There are 2 main types of Configurations:

- [Local Configuration](#): You use a local configuration when you're using a Local Container. There are 2 local configuration types: [Standalone local configuration](#) and [Existing local configuration](#).
- [Runtime Configuration](#): You use a runtime configuration when you want to access your container as a black box through a remote protocol (JMX, etc). Whereas a local configuration allow you to tune almost all aspects of a container, a runtime configuration only support configuring container properties that can be modified from a distance.

### Configuration features

- [Configuration properties](#) — Properties to configure a container (request port, shutdown port, logging level, threads, etc)
- [Local Configuration](#) — A configuration for a container that is running on the local machine where Cargo is executing
- [Runtime Configuration](#) — A configuration for a container that is already started

### Custom configuration

The Cargo API allows you to plug your own custom configuration implementation.

You can register your configuration against the `DefaultConfigurationFactory` class. It's optional and only required if you want to let users use the `DefaultConfigurationFactory` class to instantiate your configuration. For example you would write:

```
ConfigurationFactory factory = new DefaultConfigurationFactory();
factory.registerConfiguration("containerIdOfAssociatedContainer", ConfigurationType.STANDALONE,
MyCustomConfiguration.class);
```

## Configuration properties

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Properties to configure a container (request port, shutdown port, logging level, threads, etc)

### Explanations

It is possible to set container configuration properties using the Cargo API. These properties are applied to a [Configuration](#).

Using the Java API you can check if a configuration supports a given property by using `{Configuration.getCapability().supportsProperty(String propertyName)}`.

For example if we want to check if the configuration supports setting the port property:

```
boolean isPropertySupported =  
configuration.getCapability().supportsProperty(ServletPropertySet.PORT);
```

There are 2 kinds of properties:

- General properties
- Container-specific properties. See each [container](#)'s page for a list of the custom properties it supports.

General properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.servlet.port	ServletPropertySet.PORT	Integer	Port on which the Servlet/JSP container will listen to	"8280"
cargo.hostname	GeneralPropertySet.HOSTNAME	HOSTNAME	Host name on which the container will listen to	"myserver"
cargo.logging	GeneralPropertySet.LOGGING	"medium" or "high"	Level representing the quantity of information we wish to log	"medium"

### Example using the Java API

Starting Tomcat 5.x on port 8081:

```
Configuration configuration =
    new CatalinaStandaloneConfiguration("target/tomcat5x"));
configuration.setProperty(ServletPropertySet.PORT, "8081");
[...]
```

## Example using the Ant tasks

Starting Tomcat 5.x on port 8081:

```
<cargo containerId="tomcat5x" home="c:/apps/jakarta-tomcat-5.0.29" action="start">
<configuration>
    <property name="cargo.servlet.port" value="8081"/>
</configuration>
</cargo>
```

## Example using the Maven 2 plugin

Starting Tomcat 5.x on port 8081:

```
<build>
<plugins>
<plugin>
<groupId>org.codehaus.cargo.maven2</groupId>
<artifactId>cargo-maven2-plugin</artifactId>
<configuration>
<container>
<containerId>tomcat5x</containerId>
[...]
</container>
<configuration>
<properties>
    <cargo.servlet.port>8081</cargo.servlet.port>
</properties>
</configuration>
[...]
</configuration>
</plugin>
</plugins>
</build>
```

## Local Configuration

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### Explanation

A configuration for a container that is running on the local machine where Cargo is executing.

### Configuration features

- [Existing Local Configuration](#) — Re-use an existing container installation
- [Standalone Local Configuration](#) — Configures your container in a specific directory

## Existing Local Configuration

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### Definition

Re-use an existing container installation

### Explanations

An existing configuration plugs itself onto an existing container installation that exists on your hard disk. This is by opposition to the Standalone Configuration which creates a new container installation from scratch in a directory of your choice.

There are different ways of using an existing configuration:

- By directly instantiating the configuration matching your container. For example:

```
[...]
Configuration configuration = new ResinExistingConfiguration("target/resin3x");
Container container = new Resin3xContainer(configuration);
[...]
```

- By using the `DefaultConfigurationFactory` which automatically maps the right implementation for the container you're using. For example:

```
[...]
ConfigurationFactory factory = new DefaultConfigurationFactory();
Configuration configuration = factory.createConfiguration("resin3x",
    ConfigurationFactory.EXISTING, "c:/apps/resin-3.0.9");

Container container = new Resin3xContainer(configuration);
[...]
```

- By using the `DefaultContainerFactory` which has a constructor for creating a Container and a Configuration at the same time. For example:

```
[...]
ContainerFactory factory = new DefaultContainerFactory();
Container container = factory.createContainer("resin3x",
    ConfigurationFactory.EXISTING, "c:/apps/resin-3.0.9");
[...]
```

### Example using the Ant API

```
<cargo containerId="resin3x" [...]>
  <configuration hint="existing" dir="c:/apps/resin-3.0.9"/>
  [...]
</cargo>
```



## Standalone Local Configuration

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Configures your container in a specific directory

### Explanation

The [standalone configuration](#) allows configuring your container so that it is setup to start in a directory you choose (see the [configuration page](#) for more general explanations).

There are different ways of using a standalone configuration:

- By directly instantiating the configuration matching your container. For example:

```
[...]
Configuration configuration =
    new Resin3xStandaloneConfiguration("target/resin3x");

Container container = new Resin3xContainer(configuration);
[...]
```

- By using the `DefaultConfigurationFactory` which automatically maps the right implementation for the container you're using. For example:

```
[...]
ConfigurationFactory factory = new DefaultConfigurationFactory();
Configuration configuration = factory.createConfiguration("resin3x",
    ConfigurationType.STANDALONE, "target/resin3x");

Container container = new Resin3xContainer(configuration);
[...]
```

### Example using the Ant API

```
<cargo containerId="resin3x" [...]>
    <configuration hint="standalone" dir="target/resin3x"/>
    [...]
</cargo>
```

## **Runtime Configuration**

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This page last changed on Nov 26, 2005 by [vmassol](#).

### **Explanation**

A configuration for a container that is already started. The container could be executing on the same machine as where Cargo is executing or anywhere else. The important part is that Cargo is accessing that container using a remote access protocol and the container is considered as a black box.

## Container

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This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

A top level interface wrapping a real physical container

### Explanation

A container is the base concept in Cargo. It represents an existing container. A container is made of a [Configuration](#). There are 2 types of containers:

- Local Container: This is a container installed on the local machine where Cargo executes. You point to that container by using a path to where it is installed. Local containers can be [started](#) and [stopped](#). A local container is always associated with a [Local Configuration](#).
- Remote Container: This is a container that is running on some other machines. It is not under the control of Cargo and cannot be started/stopped by Cargo. The only thing Cargo can do with a remote container is [deploy](#) to it using a Remote Deployer. A remote container is always associated with a [Runtime Configuration](#).

### Container features

- [Container Classpath](#) — How to configure the executing container's classpath
- [Container Factory](#) — Instantiate a container by name
- [Container Instantiation](#) — Create a container instance
- [Container Start](#) — Start a container that is not already running
- [Container Stop](#) — Stop a running container
- [Embedded mode](#) — Use the Container's Java API to control it and execute it in the same JVM where Cargo is running
- [Installer](#) — Installs a container
- [Passing system properties](#) — How to pass system properties that will be available to the container while executing
- [Standalone mode](#) — Use the container based on its installation

### Container support

## Container Classpath

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

How to configure the executing container's classpath



This feature is only available for local containers

### Explanation

This topic is not about the classpath requirements to run Cargo (see the [Installation](#) page for this); it's about configuring the classpath for the executing container. For most containers, Cargo automatically manages the container's classpath by adding the required container jars to it. However, some containers support being embedded. This is the case of Jetty and the `Jetty4xEmbeddedContainer` implementation class simply starts the container in the running JVM. Thus you'll need to ensure to have the jetty jar + all the other related jars required (jasper-compiler and jasper-runtime jars specifically).

In addition, for all non-embedded container implementations it is possible to add custom jars to the container's execution classpath as shown below.

### Example using the Java API

Starting Orion 1.x with Clover jar added to its classpath. For example if you have instrumented your source code with Clover you'll need to add the Clover jar to the classpath.

```
LocalContainer container = new Orion1xLocalContainer()  
    new OrionStandaloneLocalConfiguration("target/orion1x");  
container.setHome("c:/apps/orion-1.6.0b");  
  
container.setExtraClasspath(new String[] { "libs/clover.jar" });  
  
container.start();
```

### Example using the Ant API

Starting Orion 1.x with some additional classpath entries:

```
<cargo containerId="orion1x" home="c:/apps/orion-1.6.0b" action="start">  
  <extraClasspath>  
    <pathelement location="libs/clover.jar"/>  
  </extraClasspath>  
</cargo>
```

## Container Factory

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This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

Instantiate a container by name

### Explanation

There are 2 solutions to instantiate a container:

- by explicitly creating a new instance of the container itself (see the [Container Instantiation](#) page for more details on creating a container's instance). For example to instantiate a Resin 3.x container:

```
Container container = new Resin3xContainer();
```

- by using the `DefaultContainerFactory` class. The advantage is that you can instantiate the container by name and thus your code can be generic which is nice if you plan to run the same code with different containers. For example, to instantiate a Resin 3.x container:

```
ContainerFactory factory = new DefaultContainerFactory();
Container container = factory.createContainer("resin3x");
```

## Container Instantiation

This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

Create a container instance

### Explanation

A container instance is created by simply instantiating the Java object implementing the container and passing a [Configuration](#) object to it. Each container implementation offers a main Java object wrapping its container and which allows to manipulate the container (start, stop, configure, etc).

The class to use for instantiating a container can be found on each container's documentation page:

- [Generic JSR88](#)
- [JBoss 3.x](#)
- [JBoss 4.x](#)
- [jetty 4.x](#)
- [jboss 1.x](#)
- [Oc4J 9.x](#)
- [Orion 1.x](#)
- [Orion 2.x](#)
- [Resin 2.x](#)
- [Resin 3.x](#)
- [Tomcat 3.x](#)
- [Tomcat 4.x](#)
- [Tomcat 5.x](#)
- [WebLogic 8.x](#)

In addition it's possible to [instantiate a container by name](#).

### Example

```
Container container = new Orion2xLocalContainer(configuration);
[...]
Container container = new Resin3xLocalContainer(configuration);
[...]
Container container = new Weblogic8xLocalContainer(configuration);
[...]
Container container = new TomcatRemoteContainer(configuration);
```

## Container Start

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Start a container that is not already running



This feature is only available for local containers

### Explanation

First you need to create a `Container` instance. This can be done using the [container factory](#) or directly by instantiating a [container](#) implementation class.

Once you have this container instance, starting the container is as simple as calling the `start()` method. Before doing this though you'll need to ensure you have defined the container's `home` (if you're using a container in [standalone mode](#) - It's not required for containers in [embedded mode](#)).

Of course if you wish to statically deploy archives, you'll need to add [deployables](#) to the container.

It is important to note that the `LocalContainer.start()` method will wait until the container is **fully started** before returning.

### Example using the Java API

Starting Resin 3.x with no deployable:

```
LocalContainer container = new Resin3xLocalContainer(  
    new Resin3xStandaloneLocalConfiguration("target/resin3x"));  
container.setHome("c:/apps/resin-3.0.15");  
  
container.start();
```

### Example using the Ant API

Before being able to use the Cargo Ant tasks you need to register them against Ant. This is done by using the Ant `<taskdef>` element. See the [Ant support page](#). The action to start the container is specified using the `action="start"` attribute as shown below.

Starting Resin 3.x with no deployable:

```
<cargo containerId="resin3x" home="c:/apps/resin-3.0.15" action="start"/>
```

## Container Stop

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Stop a running container



This feature is only available for local containers

Note: The stop action waits till the container is fully stopped before returning.

### Example using the Java API

Stopping Orion 1.x:

```
LocalContainer container = new Orion1xLocalContainer(  
    new OrionStandaloneConfiguration("target/orion1x"));  
container.setHome("c:/apps/orion-1.6.0b");  
container.stop();
```

### Example using the Ant API

Stopping Orion 1.x:

```
<cargo containerId="orion1x" home="c:/apps/orion-1.6.0b" action="stop"/>
```

## Embedded mode

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This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

Use the Container's Java API to control it and execute it in the same JVM where Cargo is running

### Explanation

Cargo provides different container implementations. A Container implementation can be either [standalone](#) or [embedded](#). The embedded mode means that Cargo is using directly the container's Java API to control it. If you're using one of the embedded implementation you'll need to ensure that you have the container's jars in your classpath.

Advantages of embbeded mode:

- Faster. There's no need to start a new JVM nor new threads.
- Simpler. There's no need to install the container in a directory

Here is the list of container implementations that support the embedded mode:

- Jetty4xEmbeddedContainer: [Jetty 4.x](#) implementation

## Installer

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This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

Installs a container

### Explanation

An Installer is meant to install a container. There is currently only a single Installer implementation: `ZipURLInstaller` which downloads a zipped container distribution from a URL and which installs it (i.e. unpacks it) in a specified directory. This is useful if you wish to fully automate a container installation without having to ask the user to manually install a container on their machine.

Of course you don't need to use an Installer and you can rely on the fact that whoever is using Cargo already has a container installed on his machine.

### Example

```
Installer installer = new ZipURLInstaller(
    "http://www.caucheo.com/download/resin-3.0.9.zip",
    "target/install");
installer.install();

Container container = new Resin3xContainer(
    new Resin3xStandaloneConfiguration("target/resin3x"));
container.setHomeDir(installer.getHomeDir());
[...]
```

## Passing system properties

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

How to pass system properties that will be available to the container while executing

### Explanations

It is sometime useful to pass system properties to the container that is executing. These properties are then available to the code executing in the container.

### Example using the Java API

Starting Tomcat 3.x with some System properties set in the container JVM:

```
LocalContainer container = new Tomcat3xLocalContainer(  
    new TomcatStandaloneLocalConfiguration("target/tomcat3x"));  
container.setHome("c:/apps/jakarta-tomcat-3.3.2");  
  
Map props = new HashMap();  
props.put("myproperty", "myvalue");  
container.setSystemProperties(props);  
  
container.start();
```

### Example using the Ant API

Starting Tomcat 3.x with some System properties set in the container JVM:

```
<cargo containerId="tomcat3x" home="c:/apps/jakarta-tomcat-3.3.2" action="start">  
  <sysproperty key="myproperty" value="myvalue"/>  
</cargo>
```

## **Standalone mode**

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This page last changed on Nov 26, 2005 by [vmassol](#).

### **Definition**

Use the container based on its installation

### **Explanation**

Cargo provides different container implementations. A Container implementation can be either [standalone](#) or [embedded](#). The standalone mode configures and controls the container from a proper container installation. Most existing container implementations in Cargo use this standalone mode. For example:

- Resin3xContainer
- Tomcat4xContainer
- Orion2xContainer
- etc

## Debugging

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Explain how to perform debugging when something doesn't work in Cargo. Indeed it can happen that the container does not start or stop as expected. Or that some deployable does not deploy fine. Or whatever else! Here is a short list of things you can do to try debugging the problem.

### Redirecting container output to a file

The `Container.setOutput(File)` API allows you to redirect the container console (stdout) to a file. This is the first file you should check in case of problem.

#### Example using the Java API

Starting Tomcat 4.x specifying an output console log file:

```
LocalContainer container = new Tomcat4xLocalContainer()  
    new CatalinaStandaloneLocalConfiguration("target/tomcat4x"));  
container.setHome("c:/apps/jakarta-tomcat-4.1.30");  
  
container.setOutput("target/output.log");  
  
container.start();
```

Use the `container.setAppend(true|false)` method to decide whether the log file is recreated or whether it is appended to, keeping the previous execution logs (by default, the file is recreated at every container start or stop).

#### Example using the Ant API

Starting Tomcat 4.x specifying an output console log file:

```
<cargo containerId="tomcat4x" home="c:/apps/jakarta-tomcat-4.1.30"  
    action="start"  
    output="target/output.log"/>
```

Use the `append="true|false"` attribute for controlling the log file creation behavior.

### Generating Cargo logs

Some Cargo classes support generation of logs. This is implemented through the notion of [`Monitor`](#).

For example to turn on logging monitoring on a `Container` class, you can use:

```
Monitor fileMonitor = new FileMonitor(new File("c:/tmp/cargo.log"), true);
container.setMonitor(fileMonitor);
```

There are several Monitors that are readily available in the Cargo distribution:

- [FileMonitor](#): logs messages to a file
- [SimpleMonitor](#): logs messages to the console (stdout)
- [AntMonitor](#): logs messages using Ant's logging mechanism

## Turning on container logs

Cargo is able to configure containers to generate various levels logs. There are 3 levels defined: "low", "medium" and "high" ("medium" is the default value). They represent the quantity of information you wish to have in the generated log file. You can tune container logging by using the following API:

```
container.setProperty(GeneralPropertySet.LOGGING, "medium");
```

The generated log files will then be found in the Working directory you have specified on the container (through the `container.setWorkingDir()` call).

When using the Ant tasks, you can specify the log file by using the `log` attribute. For example:

```
<cargo containerId="resin3x" [...] log="target/cargo.log"/>
```

## Deployment

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This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

How to deploy components to a container

### Explanation

The component to deploy must be wrapped with a [Deployable](#). There are 2 ways to deploy a [Deployable](#):

- By doing a [static deployment](#) in a [Local Configuration](#).
- By doing a [hot deployment](#) using a [Deployer](#)

### Deployment features

- [Deployable](#) — Deployables are archives (WAR, EAR, etc) that can be deployed in the container
- [Deployer](#) — Performs a hot deployment of a [Deployable](#)
- [Hot Deployment](#) — Ability to deploy/undeploy Deployables into a running container
- [JSR88](#) — [JSR88](#)-compliant containers support
- [Static Deployment](#)

## Deployable

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Deployables are archives (WAR, EAR, etc) that can be deployed in the container

### Explanation

A Deployable class is a wrapper class around a physical archive. Deployable are constructed by directly instantiating them (e.g. new WAR(...)) or new TomcatWAR(...)) or by using a DeployableFactory (e.g. DefaultDeployableFactory). There are 2 generic deployable classes:

- o.c.c.c.deployable.WAR
- o.c.c.c.deployable.EAR

There are also some container-specific deployables such as:

- o.c.c.c.deployable.tomcat.TomcatWAR
- o.c.c.c.deployable.jboss.JBossWAR

They are there to support container extensions to archives (for example, Tomcat supports context.xml files located in your WAR's META-INF directory, JBoss allows for a jboss-web.xml located in your WAR, etc).

The DeployableFactory interface offers a principal method for creating a Deployable:  
DeployableFactory.createDeployable(String containerId, String deployableLocation, DeployableType type). DeployableType can be DeployableType.WAR or DeployableType.EAR.

Once you have a Deployable instance wrapping your archive, you'll need to deploy it. This can be done either using [Static Deployment](#) or using [Hot Deployment](#).

### Example using the Java API

Deploying a WAR in Tomcat 5.x:

```
Container container = new Tomcat5xContainer(
    new CatalinaStandaloneConfiguration("target/tomcat5x"));
container.setHome("c:/apps/tomcat-5.0.29");

WAR war = new WAR("path/to/my.war");
[...]
```

### Example using the Generic API

```
[...]

DeployableFactory factory = new DefaultDeployableFactory();
WAR war = factory.createDeployable("tomcat5x", "path/to/my.war",
```

```
DeployableType.WAR);
```

## Example using the Ant API

Statically deploying a WAR in Tomcat 5.x:

```
<cargo containerId="tomcat5x" home="c:/apps/tomcat-5.0.29" action="start">
  <configuration>
    <war warfile="path/to/my.war"/>
  </configuration>
</cargo>
```

Note: In the future there will be an Ant task to support [Hot Deployment](#).

## Deployer

This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

Performs a hot deployment of a [Deployable](#)

### Explanation

TODO: Explain differences between local deployers and remote deployers.

You use a Deployer when you wish to deploy a [Deployable](#) into a running container (this is known as [Hot Deployment](#)). To instantiate a Deployer you need to know its class name. A Deployer is specific to a container (you can find the class names on the [container](#) page listing all containers).

The deployment is done using one of the Deployer.deploy(...) APIs. Some deploy(...) signatures accept a DeployableMonitor which is used to wait till the container has not finished deploying. Cargo currently offers a URLDeployableMonitor which waits by polling a provided URL (see below in the example). When the URL becomes available the monitor considers that the Deployable is fully deployed. In the future, Cargo will provide other DeployableMonitor such as a Jsr88DeployableMonitor.

### Example using the Java API

#### Example without using a DeployableMonitor

Hot-deploying a WAR on Resin 3.0.9 without waiting for the deployment to finish:

```
Container container = new Resin3xContainer()  
    new Resin3xStandaloneConfiguration("target/resin3x"));  
container.setHomeDir("c:/apps/resin-3.0.9");  
  
container.start();  
  
DeployableFactory factory = new DefaultDeployableFactory();  
WAR war = factory.createDeployable(container.getId(), "path/to/my.war",  
    DeployableType.WAR);  
  
Deployer deployer = new ResinDeployer();  
deployer.deploy(war);
```

Please note that the Deployer.deploy() method call does not wait for the Deployable to be fully deployed before returning.

#### Example using a URLDeployableMonitor

Hot-deploying an WAR on Resin 3.0.9 and waiting for the deployment to finish:

```
Container container = new Resin3xContainer(
    new Resin3xStandaloneConfiguration("target/resin3x"));
container.setHomeDir("c:/apps/resin-3.0.9");

container.start();

DeployableFactory factory = new DefaultDeployableFactory();
WAR war = factory.createDeployable(container.getId(), "path/to/my.war",
    DeployableType.WAR);

Deployer deployer = new ResinDeployer();
deployer.deploy(war, new URLDeployableMonitor("http://server:port/some/url"));
```

The <http://server:port/some/url> must point to a resource that is serviced by the Deployable being deployed.

## Example using the Ant API

There's currently no Ant task for performing hot deployments.

## **Hot Deployment**

---

This page last changed on Nov 22, 2005 by [vmassol](#).

### **Definition**

Ability to deploy/undeploy Deployables into a running container

### **Explanation**

Cargo offers a [Deployer](#) interface that container implementations can implement to perform hot deployments. At the moment, the following implementations exist:

- ResinDeployer
- JettyDeployer
- JolixDeployer

See the [Deployer](#) page for more information on how to perform a hot deployment. You can also deploy Deployables before the container is started using [Static Deployment](#).

## JSR88

This page last changed on Dec 30, 2005 by [vmassol](#).

### Definition

[JSR88](#)-compliant containers support

### Explanation

#### Warning

JSR-88 support is not ready to be released yet and is not included in Cargo 0.7. We're planning to have it in Cargo 0.8. The explanations below are not up to date either and are going to be modified.

Cargo supports [JSR 88: J2EE Application Deployment](#) API, allowing it to be used with any [JSR88](#)-compliant container.

The core functionality is implemented by the `o.c.c.container.jsr88.JSR88Deployer` class (a [Deployer](#) implementation), which acts as a proxy to the [JSR88](#) `DeploymentManager`. `JSR88Deployer` assumes its container to implement the `o.c.c.container.jsr88.JSR88Container` interface and relies on it for acquiring all the necessary data (like container URI etc.) as a `o.c.c.container.jsr88.JSR88Info` instance.

If the container type is not known until the run-time, a [Generic JSR88](#) container can be used.

**Note:** `o.c.c.container.JSR88Container` does **not** extend the `o.c.c.container.Container` interface.

### Implementation Limitations

1. It is not possible to stop, undeploy or redeploy a deployable that was not deployed with the `JSR88Deployer` being used.

### Example

Manipulating a Geronimo container via [JSR88](#) using strongly-typed API:

```
Configuration configuration = new GenericJSR88Configuration(
    new URI("deployer:geronimo:jmx:rmi:///jndi/rmi://localhost:1099/JMXConnector"));

configuration.setProperty(JSR88PropertySet.USERNAME,
    "system");
configuration.setProperty(JSR88PropertySet.PASSWORD,
    "manager");
configuration.setProperty(JSR88PropertySet.DEPLOYTOOL_JAR,
    "geronimo-deploy-tool.jar");
configuration.setProperty(JSR88PropertySet.DEPLOYTOOL_CLASSPATH,
```

```

"jar-1.jar;jar-2.jar");

Container container = new GenericJSR88Container(configuration);

Deployable deployable = new WAR("test.war");

Deployer deployer = new JSR88Deployer(container);
deployer.deploy(deployable);

```

Manipulating a Geronimo container via [JSR88](#) using generic API:

```

Configuration configuration = (new DefaultConfigurationFactory()).createConfiguration(
    GenericJSR88Container.ID, ConfigurationType.EXISTING,
    new URI("deployer:geronimo:jmx:rmi:///jndi/rmi://localhost:1099/JMXConnector"));

configuration.setProperty(JSR88PropertySet.USERNAME,
    "system");
configuration.setProperty(JSR88PropertySet.PASSWORD,
    "manager");
configuration.setProperty(JSR88PropertySet.DEPLOYTOOL_JAR,
    "geronimo-deploy-tool.jar");
configuration.setProperty(JSR88PropertySet.DEPLOYTOOL_CLASSPATH,
    "jar-1.jar;jar-2.jar");

Container container = new DefaultContainerFactory().
    createContainer(GenericJSR88Container.ID, configuration);

Deployable deployable = new DefaultDeployableFactory().createDeployable(
    GenericJSR88Container.ID, "test.war").getFile(), DeployableType.WAR);

Deployer deployer = new DefaultDeployerFactory().
    createDeployer(container,DefaultDeployerFactory.DEFAULT);
deployer.deploy(deployable);

```

For complete samples, see [CARGO-146](#).

## Static Deployment

---

This page last changed on Nov 22, 2005 by [vmassol](#).

- [Static deployment of EAR](#) — Deploy an EAR that will be started when the container starts
- [Static deployment of expanded WAR](#) — Deploy an expanded WAR that will be started when the container starts
- [Static deployment of WAR](#) — Deploy a WAR that will be started when the container starts

## Static deployment of EAR

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Deploy an EAR that will be started when the container starts

### Example using the Java API

Starting Orion 2.x with an EAR to deploy:

```
Container container = new Orion2xContainer(
    new OrionStandaloneConfiguration("target/orion2x"));
container.setHome("c:/apps/orion-2.0.3");

Deployable ear = container.getDeployableFactory().createEAR(
    "src/data/some.ear");
container.getConfiguration().addDeployable(ear);

container.start();
```

### Example using the Ant API

Starting Orion 2.x with an EAR to deploy:

```
<cargo containerId="orion2x" home="c:/apps/orion-2.0.3" action="start">
  <configuration>
    <ear earFile="src/data/some.ear"/>
  </configuration>
</cargo>
```

## Static deployment of expanded WAR

---

This page last changed on Jul 17, 2005 by [vmassol](#).

### Definition

Deploy an expanded WAR that will be started when the container starts

### Example

```
Container container = new Resin3xContainer(  
    new Resin3xStandaloneConfiguration("target/resin3x"));  
  
Deployable war = container.getDeployableFactory().createWAR(  
    "some/expanded/war/directory");  
container.addDeployable(war);  
  
container.start();
```

## Static deployment of WAR

---

This page last changed on Nov 20, 2005 by [vmassol](#).

### Definition

Deploy a WAR that will be started when the container starts

### Example

Let's see how to use Jetty 4.x (in [embedded mode](#)) with a WAR to deploy in it.

*Note: Unlike the other containers, the Jetty integration does not require the Jetty container to be installed. You simply need to add the Jetty jar (`org.mortbay.jetty.jar`), the Servlet API jar (`servletpapi.jar`), and the Tomcat Jasper jars (`jasper-compiler.jar`, `jasper-runtime.jar`) to your classpath. Thus the `home` property has not effect.*

```
Container container = new Jetty4xEmbeddedContainer()  
    new JettyStandaloneConfiguration("target/jetty4x"));  
  
Deployable war = container.getDeployableFactory().createWAR(  
    "src/data/some.war");  
container.getConfiguration().addDeployable(war);  
  
container.start();
```

## Extensions

---

This page last changed on Nov 18, 2005 by [vmassol](#).

### Definition

Extensions are additions to the Cargo core Java API such as build tool plugins, IDE plugins, etc

### Explanation

Cargo's core provides a Java API to manipulate containers. In addition the Cargo project also provides extensions to the Cargo's core that make using Cargo easy from your preferred tools. Namely those are:

- [Ant support](#) — Cargo provides Ant tasks to perform all the operations available from the Java API
- [IntelliJ IDEA Plugin](#)
- [Maven1 plugin](#) — Cargo provides a Maven 1 plugin to perform operations available from [Ant support](#).
- [Maven2 plugin](#) — A Maven 2 plugin that wraps the Cargo Java API
- [Netbeans Plugin](#)

## Ant support

This page last changed on Dec 30, 2005 by [vmassol](#).

### Definition

Cargo provides Ant tasks to perform all the operations available from the Java API

### Explanation

Before using the Ant API you need to register the Cargo Ant tasks into Ant. This is done in the following manner:

```
<taskdef resource="cargo.tasks">
  <classpath>
    <pathelement location="${cargo-core-uberjar-0.7.jar}"/>
    <pathelement location="${cargo-ant-0.7.jar}"/>
  </classpath>
</taskdef>
```

### Example

Here's a full example showing how to deploy a WAR, and expanded WAR and an EAR in an Orion 2.x container. Please note that the `output` and `log` attribute are optional. The `property` elements allow you to tune how the container is configured. Here we're telling it to start on port 8180 and to generate the maximum amount of logs in the container output file.

```
<taskdef resource="cargo.tasks">
  <classpath>
    <pathelement location="path/to/cargo.jar"/>
  </classpath>
</taskdef>

<cargo containerId="orion2x" home="c:/apps/orion-2.0.3" output="target/output.log"
      log="target/cargo.log" action="start">
  <configuration>
    <property name="cargo.servlet.port" value="8180"/>
    <property name="cargo.logging" value="high"/>
    <war warfile="path/to/my/simple.war"/>
    <war warfile="path/to/my/expandedwar/simple"/>
    <ear earfile="path/to/my/simple.ear"/>
  </configuration>
</cargo>
```

## [IntelliJ IDEA Plugin](#)

---

This page last changed on Dec 30, 2005 by [vmassol](#).

### Credits

[Hendrik Schreiber](#) has written a [IntelliJ IDEA 4.5.4](#) plugin for Cargo.

### Installation

You can easily install it through IDEA's plugin manager or download it from our [download page](#) and install it manually. Please note that version 0.1 of the plugin will *only* work with IntelliJ IDEA 4.5.4.

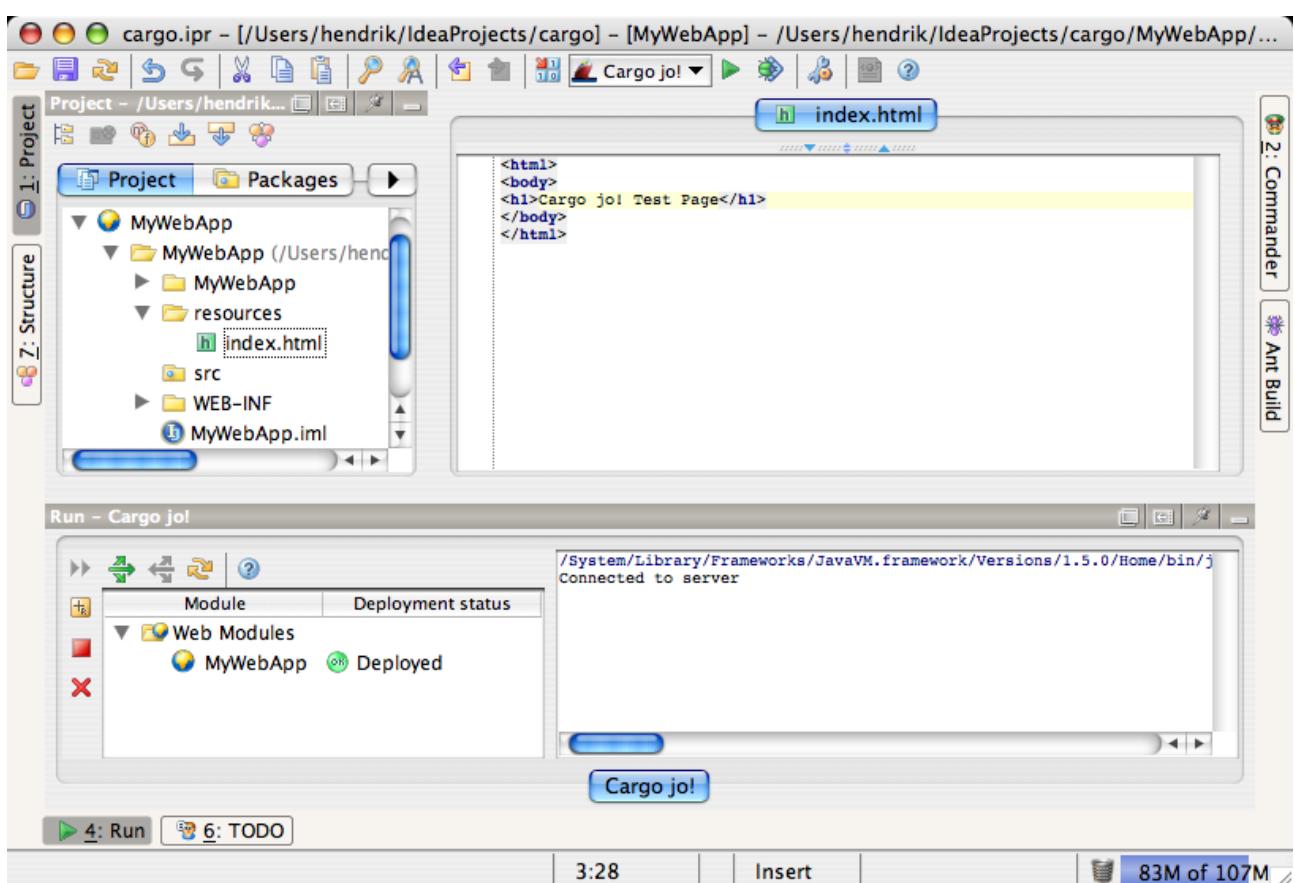
You can download and manually install a working snapshot version for IntelliJ IDEA 5.0.2 or greater from [here](#).

### Features

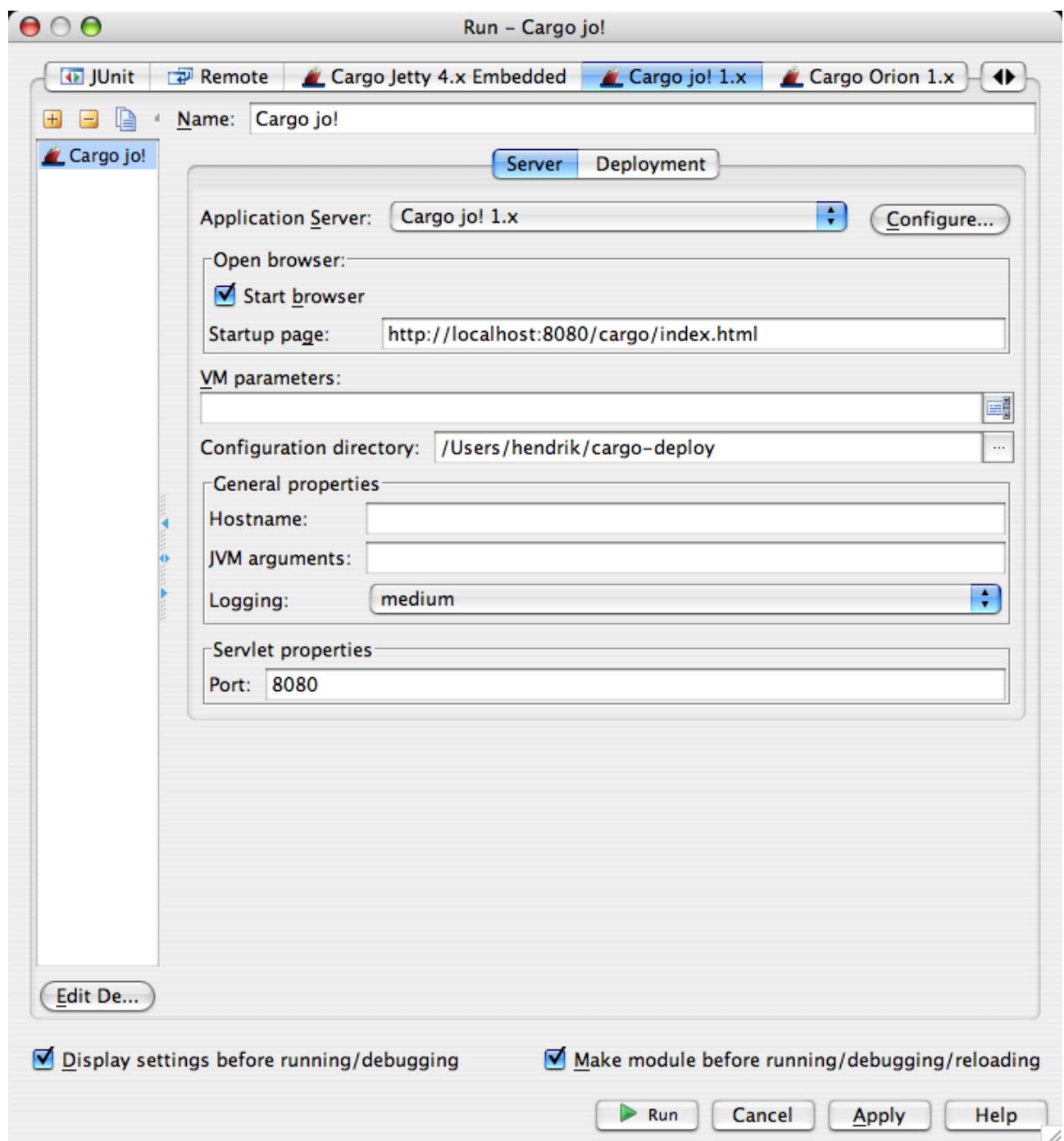
- WAR and EAR deployment to local, standalone containers
- Seamless integration with the IntelliJ IDEA application server API
- Support for Cargo 0.6/IntelliJ IDEA 4.5.4

### Screenshots

A running container



An example for a Cargo Config/Run dialog.



## Downloads

## Maven1 plugin

This page last changed on Dec 26, 2005 by [vmassol](#).

### Definition

Cargo provides a Maven 1 plugin to perform operations available from [Ant support](#).

#### Maven 2 plugin

This page is dedicated for the Maven 1 plugin. There's also a [Maven2 plugin](#)

### Installation

To automatically install the plugin, type the following on a single line:

```
maven plugin:download  
-DgroupId=cargo  
-DartifactId=cargo-maven-plugin  
-Dversion=X.X(.X)
```

where X.X(.X) is the release number you want to install (0.6 is the first available).

### Plugin goals

goal	description
<b>cargo:start</b>	Starts all containers defined by the <a href="#">cargo.containers</a> property
<b>cargo:startAndWait</b>	Starts all containers defined by the <a href="#">cargo.containers</a> property and wait for user's input. Without this, Maven stops and the started containers stop as the JVM exits
<b>cargo:stop</b>	Stops all containers defined by the <a href="#">cargo.containers</a> property

### Plugin properties

Property name	Required?	Description	Default
<b>cargo.containers</b>		A list of containers ids that specifies on which containers to apply the goal. If this property is empty the Maven plugin will do nothing. You must define for each containerName the	<i>empty</i>

		<a href="#">corresponding settings</a> .	
<b>cargo.zipUrlInstaller.&lt;installerId&gt;.installUrl</b>		URL from where the container archive can be downloaded.	<i>empty</i>
<b>cargo.zipUrlInstaller.&lt;installerId&gt;.installDir</b>		The path where the container will be downloaded and extracted.	<i>empty</i>
<b>cargo.proxy.host</b>		Proxy hostname (IP or server name).	<code> \${maven.proxy.host}</code>
<b>cargo.proxy.port</b>		Proxy port.	<code> \${maven.proxy.port}</code>
<b>cargo.proxy.user</b>		Proxy username.	<code> \${maven.proxy.user}</code>
<b>cargo.proxy.password</b>		Proxy password.	<code> \${maven.proxy.password}</code>
<b>cargo.proxy.excludehosts</b>		A list of hosts to bypass the proxy on (if any). These should be separated with the vertical bar character ' '. Only in Java 1.4 does FTP use this list.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.containerId</b>		The container id. Valid values are: jol1x   resin2x   resin3x   orion1x   orion2x   oc4j9x   tomcat3x   tomcat4x   tomcat5x   weblogic8x.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.home</b>		The path where the container is installed.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.zipUrlInstaller</b>		The id of a <a href="#">zipUrlInstaller</a> .	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.output</b>		The path for the file to which output of the container should be written.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.log</b>		The path for the cargo log file.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.timeout</b>		Timeout (in milliseconds) to wait to see if the container is started/stopped.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.deployables</b>		A list of deployable Ids. Each deployable must be defined using the <a href="#">deployables settings</a> .	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.config.type</b>		The type to differentiate	<i>empty</i>

		the configuration from others for the specified container. Currently the only type supported by cargo is : standalone.	
<b>cargo.container.&lt;containerName&gt;.config.dir</b>		The home directory for the configuration of the container.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.config.standalone.host.ip</b>	<b>cargo.container.&lt;containerName&gt;.config.standalone.http.port</b>	Servlet/JSP container will listen to.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.config.standalone.host.name</b>	<b>cargo.container.&lt;containerName&gt;.config.standalone.host.port</b>	which the container will listen to.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.config.standalone.logging.level</b>	<b>cargo.container.&lt;containerName&gt;.config.standalone.logging.level</b>	logging the quantity of information we wish to log. Valid values are low   medium   high.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.config.standalone.other.arguments</b>		used when starting/stopping containers.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.start.output</b>		The path for the file to which output of the container should be written when it starts.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.start.log</b>		The path for the cargo log file when the start action is called for this container.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.stop.output</b>		The path for the file to which output of the container should be written when it stops.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.stop.log</b>		The path for the cargo log file when the stop action is called for this container.	<i>empty</i>
<b>cargo.container.&lt;containerName&gt;.sysproperties</b>		<p>A list of system properties to be passed to the container, separated by space. Each property is described in a sub property. Example:</p> <pre>cargo.container.tomcat.sysproperties = sysprop1 sysprop2</pre>	<i>empty</i>

		sysprop1 = foo sysprop2 = bar	
<b>cargo.container.&lt;containerName&gt;.config.standalone.orion.port</b>	server. (Orion 1x, 2x or Oc4j 9x)	<i>empty</i>	
<b>cargo.container.&lt;containerName&gt;.config.standalone.tomcat.shutdown.port</b>	which this server waits for a shutdown command. (Tomcat 4x or 5x)		
<b>cargo.deployable.&lt;deployableId&gt;.type</b>	Deployable type : war   ear.	<i>empty</i>	
<b>cargo.deployable.&lt;deployableId&gt;.file</b>	Absolute path to the deployable file (or the expanded webapp directory).	<i>empty</i>	



### Be Careful

Exactly one of `cargo.container.<containerName>.home` and `cargo.container.<containerName>.zipUrlInstaller` must defined.

## Samples

### All properties sample (incoherent settings)

```

cargo.containers = myresin,myorion,myjetty
cargo.zipUrlInstaller.myresin.installUrl = http://www.caucho.com/download/resin-3.0.9.zip
cargo.zipUrlInstaller.myresin.installDir = ${maven.build.dir}/installs
cargo.proxy.host = myproxy.mycompany.com
cargo.proxy.port = 1080
cargo.proxy.user = vmassol
cargo.proxy.password = somepassword
cargo.proxy.excludehosts = fozbot.corp.sun.com\|*.eng.sun.com
cargo.container.myresin.containerId = resin3x
cargo.container.myresin.home = c:/apps/resin/
cargo.container.myContainer.zipUrlInstaller = myContainerInstallerId
cargo.container.myContainer.output = ${maven.build.dir}/myContainer/logs/container.log
cargo.container.myContainer.log = ${maven.build.dir}/myContainer/logs/cargo.log
cargo.container.myContainer.timeout = 120000
cargo.container.myContainer.deployables = myEarId, myWarId
cargo.container.myContainer.config.type = standalone
cargo.container.myContainer.config.dir = ${maven.build.dir}/myContainer/config
cargo.container.myContainer.config.standalone.servlet.port = 8280
cargo.container.myContainer.config.standalone.hostname = myserver
cargo.container.myContainer.config.standalone.logging = high
cargo.container.myContainer.config.standalone.jvmargs = -Xmx64m -Xms2m
cargo.container.myContainer.start.output =
${maven.build.dir}/myContainer/logs/container-start.log
cargo.container.myContainer.start.log = ${maven.build.dir}/myContainer/logs/cargo-start.log
cargo.container.myContainer.stop.output =
${maven.build.dir}/myContainer/logs/container-stop.log
cargo.container.myContainer.stop.log = ${maven.build.dir}/myContainer/logs/cargo-stop.log
cargo.container.myContainer.config.standalone.orion.rmi.port = 25791
cargo.container.myContainer.config.standalone.tomcat.shutdown.port = 8205
cargo.deployable.myDeployableId.type = war

```

```
cargo.deployable.myDeployableId.file = ${maven.war.build.dir}/${maven.war.final.name}
```

## Minimal settings to start and stop a container

Example with tomcat already installed:

```
<preGoal name="cargo:start">
  <ant:mkdir dir="${maven.build.dir}/myTomcat/config"/>
</preGoal>

cargo.containers = myTomcat

cargo.container.myTomcat.containerId = tomcat5x
cargo.container.myTomcat.home = C:/Programs/web/jakarta-tomcat-5.0
cargo.container.myTomcat.config.type = standalone
cargo.container.myTomcat.config.dir = ${maven.build.dir}/myTomcat/config
cargo.container.myTomcat.config.standalone.servlet.port = 8280
cargo.container.myTomcat.config.standalone.logging = high
```

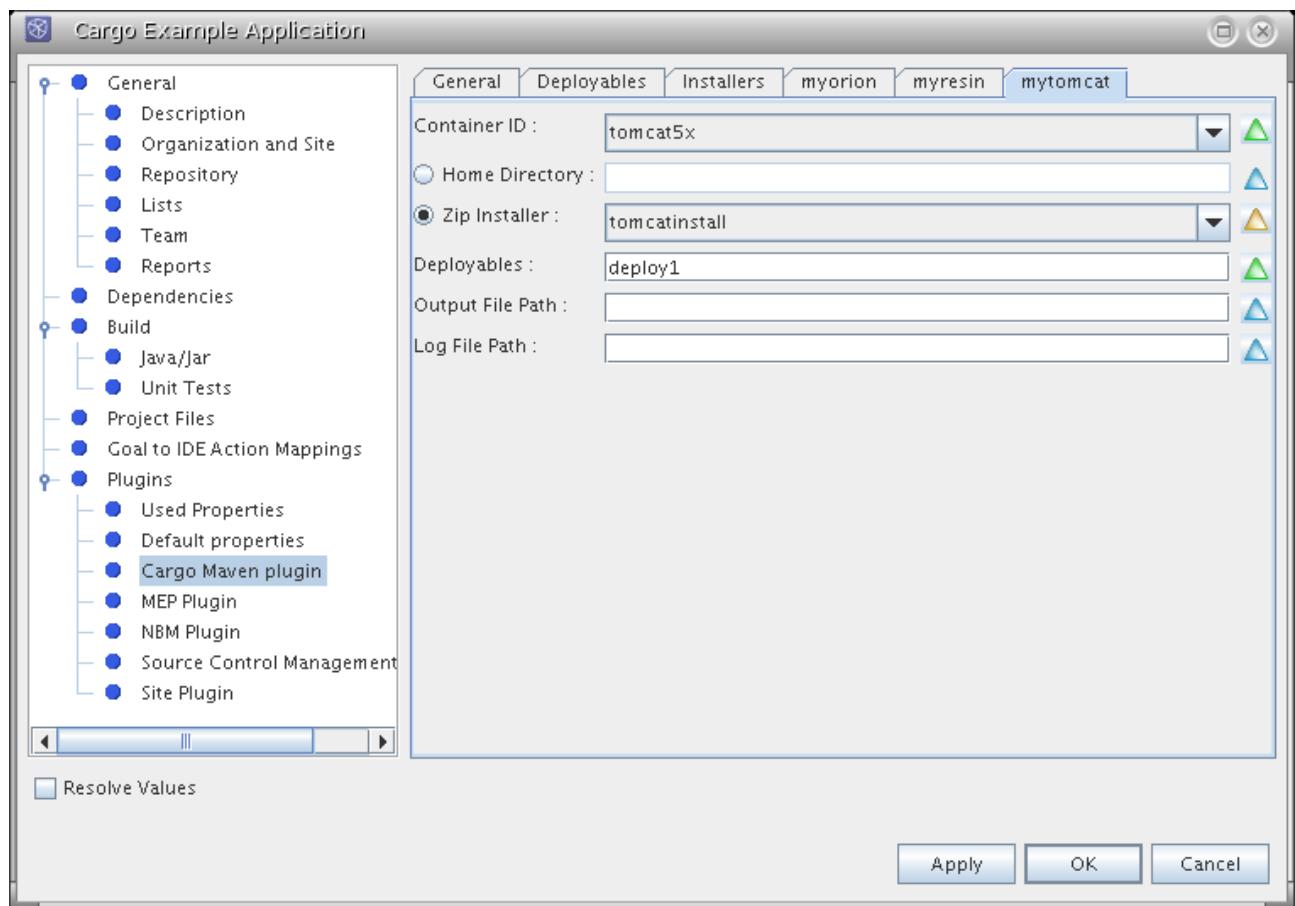
## IDE support

### Netbeans

There's a Netbeans module working with [Mevenide](#) for Netbeans. The module adds a panel into the Maven project's customizer. It eases the setup of the Maven plugin properties and visualizes the current settings.

The current version of the module is 1.0, it works with Mevenide 0.8.1 and later and Netbeans 4.1 and Netbeans 5.0 beta. It can be downloaded [here](#). After download, start Netbeans and install the module through the AutoUpdate Center.

Sample screenshot



## Maven2 plugin

This page last changed on Dec 30, 2005 by [vmassol](#).

A Maven 2 plugin that wraps the Cargo Java API

### Functional tests

The usage of Cargo for executing functional tests on a container do not need this m2 plugin. You should directly use the Cargo Java API from your Java unit test classes (JUnit, TestNG, etc), as described on <http://tinyurl.com/btmwa>.

## Installation

The Cargo m2 plugin is currently hosted on a [private repository](#) on codehaus. This repository is currently not synced to ibiblio so you'll need the following <pluginRepository> definition in your pom.xml if you want to use the Cargo plugin:

```
<pluginRepositories>
  <pluginRepository>
    <id>cargo m2 release repository</id>
    <url>http://cargo.codehaus.org/dist2</url>
    <releases>
      <enabled>true</enabled>
    </releases>
  </pluginRepository>
  <pluginRepository>
    <id>cargo m2 snapshot repository</id>
    <url>http://cargo.codehaus.org/dist2-snapshot</url>
    <releases>
      <enabled>true</enabled>
    </releases>
  </pluginRepository>
</pluginRepositories>
```

## Features

As usual the best way to learn to use a tool is through examples. We have several [sample projects](#) that we use as our internal functional tests suite. We'd really recommend that you check them out. In addition here are the typical uses cases coverer by the plugin:

- [Start/stop a container](#)
- [Deploy to a running container](#)
- [Generate container configuration deployment structure](#)

Goals	Description
<code>cargo:start</code>	Start a container and optionally deploy <a href="#">deployables</a> (WAR, EAR, etc)
<code>cargo:stop</code>	Stop a container
<code>cargo:deploy</code>	Deploy a J2EE archive to a running container

The configuration elements are described in the [configuration](#) section.

## Start/stop a container

Ability to start/stop a container (possibly deploying some deployables to it as it starts). In this scenario Maven 2 is used as a convenience to easily and quickly start a container.

### Example of a minimalist configuration:

```
[...]
<build>
  <plugins>
    <plugin>
      <groupId>org.codehaus.cargo</groupId>
      <artifactId>cargo-maven2-plugin</artifactId>
    </plugin>
  </plugins>
</build>
[...]
```

Yes, you've read it right, there's no `<configuration>` element! When you use this setup the Cargo m2 plugin will use a Jetty container by default. You can start the container with `mvn cargo:start` and stop it with `mvn cargo:stop`.

### Example of a lightweight configuration:

```
[...]
<configuration>

  <!-- Container configuration -->
  <container>
    <containerId>tomcat5x</containerId>
    <home>c:/apps/jakarta-tomcat-5.0.30</home>
  </container>

  <!-- Configuration to use with the container -->
  <configuration>
    <dir>${project.build.directory}/tomcat5x</dir>
  </configuration>

</configuration>
[...]
```

This minimal configuration allows you to configure a default Tomcat 5.x [standalone configuration](#) (when the configuration type is not defined as above, the plugin will use a standalone configuration by default) in  `${basedir}/target/resin`.

### Example of a full-fledged m2 configuration:

```
[...]
<configuration>

  <!-- Container configuration -->
  <container>
    <containerId>orion2x</containerId>
```

```

<home>c:/apps/orion-2.0.5</home> or
<zipUrlInstaller>
  <url>http://www.orionserver.com/distributions/orion2.0.5.zip</url>
  <installDir>${java.io.tmpdir}/cargoinstalls</installDir>
</zipUrlInstaller>
<output>${project.build.directory}/orion2x/container.log</output>
<append>false</append>
<log>${project.build.directory}/orion2x/cargo.log</log>
</container>

<!-- Configuration to use with the container or the deployer -->
<configuration>
  <type>standalone</type>
  <dir>${project.build.directory}/orion2x</dir>
  <properties>
    <cargo.servlet.port>8080</cargo.servlet.port>
    <cargo.logging>high</cargo.logging>
  </properties>

  <deployables>
    <deployable>
      <groupId>war group id</groupId>
      <artifactId>war artifact id</artifactId>
      <type>war</type>
      <properties>
        <context>optional root context</context>
      </properties>
    </deployable>
    <deployable>
      <groupId>ear group id</groupId>
      <artifactId>ear artifact id</artifactId>
      <type>ear</type>
    </deployable>
    [...]
  </deployables>
</configuration>
</configuration>
[...]

```

This example shows the usage of a standalone configuration for configuring Orion 2.x. Note that it's possible to define [deployables](#) in the `<configuration>` element and they'll be deployed before the container starts (this is what we call [static deployment](#)). We have also defined some [configuration properties](#) to tell Cargo to configure Orion 2.x to start on port 8080 and to output highly verbose logs (useful for debugging).

If you have a container that is already installed and configured, say with other deployables already in there, you may want to use an [existing configuration](#). This done by specifying `<type>existing</type>`. In that case you won't be able to control the configuration from Cargo (like port to use, logging levels, etc) as it'll be defined externally.

## Deploy to a running container

Cargo supports [deploying](#) to an already running container. This feature is called hot deployment). You call it by using the (`cargo:deploy`) goal (e.g. `mvn cargo:deploy`).

Note that you can also do [static deployment](#) by simply defining the deployables to deploy in the `<configuration>` element as shown above. In that case the deployables will be deployed before the container starts.

## Not all containers have a Deployer implemented

We haven't finished implementing Deployers for all containers yet. Please [check](#) if your favorite container has it implemented. If not you'll need to deploy your deployables by defining them in a standalone local configuration as shown in the [start/stop a container](#) use case above.

## Using a local deployer

A local [deployer](#) is a deployer that deploys deployables on a local container (i.e. a container installed on the same machine where the deployer is executing). Thus you'll need to use a local container id in <containerId>. You can check that by reviewing the supported [container list](#) and selecting the container you wish to use.

### Example of doing a local deploy to an existing configuration:

```
[...]
<configuration>

    <!-- Container configuration -->
    <container>
        <containerId>resin3x</containerId>
        <home>c:/apps/resin-3.0.9</home> or
        <zipUrlInstaller>
            <url>http://www.caucheo.com/download/resin-3.0.9.zip</url>
            <installDir>$\{basedir}/target/install</installDir>
        </zipUrlInstaller>
    </container>

    <!-- Configuration to use with the container -->
    <configuration>
        <type>existing</type>
        <properties>
            [...]
        </properties>
    </configuration>

    <!-- Deployer configuration -->
    <deployer>
        <type>local</type>
        <deployables>
            <deployable>
                <groupId>war group id</groupId>
                <artifactId>war artifact id</artifactId>
                <type>war</type>
                <properties>
                    <context>optional root context</context>
                </properties>
                <pingerURL>optional url to ping to know if deployable is done or not</pingerURL>
            </deployable>
            <deployable>
                <groupId>ear group id</groupId>
                <artifactId>ear artifact id</artifactId>
                <type>ear</type>
                <pingerURL>optional url to ping to know if deployable is done or not</pingerURL>
            </deployable>
            [...]
        </deployables>
    </deployer>

</configuration>
[...]
```

In addition, if your project is of type <packaging>war</packaging> or <packaging>ear</packaging> the generated artifact will be automatically added to the list of deployables to deploy. You can control the

location of the artifact by using the `<deployableLocation>` element (it defaults to  `${project.build.directory}/${project.build.finalName}.${project.packaging}`). In addition if you want to wait for the deployment to be finished you can specify a `<pingURL>` (none is used by default). Here's an example:

```
<plugin>
  <groupId>org.codehaus.cargo</groupId>
  <artifactId>cargo-maven2-plugin</artifactId>
  <configuration>
    <deployableLocation>${project.build.directory}/${project.build.finalName}.${project.packaging}</deployableLocation>
    <pingURL>http://localhost:port/mycontext/index.html</pingURL>
    [...]
```

## Using a remote deployer

A remote [deployer](#) is a deployer that deploys deployables on a remote container (i.e. a container that is running and that has been started externally from Cargo). Thus you'll need to use an id for a remote container in `<containerId>` and a [runtime configuration](#).

### Example of doing a remote deploy using a runtime configuration:

```
[...]
<configuration>

  <container>
    <containerId>tomcat5x</containerId>
    <type>remote</type>
  </container>

  <configuration>
    <type>runtime</type>
    <properties>
      <cargo.tomcat.manager.url>http://localhost:8080/manager</cargo.tomcat.manager.url>
      <cargo.tomcat.manager.username>username</cargo.tomcat.manager.username>
      <cargo.tomcat.manager.password>password</cargo.tomcat.manager.password>
    </properties>
  </configuration>

  <deployer>
    <type>remote</type>
    <deployables>
      <deployable>
        <groupId>war group id</groupId>
        <artifactId>war artifact id</artifactId>
        <type>war</type>
        <properties>
          <context>optional root context</context>
        </properties>
        <pingURL>optional url to ping to know if deployable is done or not</pingURL>
      </deployable>
      [...]
    </deployables>
  </deployer>
</configuration>
[...]
```

As you can see the information to connect and do the deployment to the remote container is specified in the runtime configuration (`cargo.tomcat.manager.context`, `cargo.tomcat.manager.username` and `cargo.tomcat.manager.password`). The properties to define are deployer-dependent. (TODO: Add link to reference documentation for specific remote deployers once it exists...)

## Generate container configuration deployment structure

Ability to create a fully working custom configuration and possibly package some deployables in it. Then deliver this configuration as an artifact (`cargo:package`).

TODO

## Configuration

Top level configuration elements	Description
<container>	TODO
<configuration>	TODO
<deployer>	TODO

container elements	Description
<containerId>	TODO
<zipUrlInstaller>	TODO
<output>	TODO
<append>	TODO
<log>	The path to a file where logs will go to. If this element is not specified then all logs will be redirected to the Maven 2 console

TODO

## Tips

- [Starting multiple containers conditionally](#)

## Starting multiple containers conditionally

Maven 2 supports the notion of [profiles](#) which can be used with Cargo to decide for example when to run tests on a specific container. Here's how you could use the Cargo m2 plugin to that effect:

```
<project>
[...]
<profiles>
  <profile>
```

```

<id>tomcat5x</id>
<build>
  <plugins>
    <plugin>
      <groupId>org.codehaus.cargo.maven2</groupId>
      <artifactId>cargo-maven2-plugin</artifactId>
      <executions>
        <execution>
          <id>tomcat-execution</id>
          <!-- Ideally this would be bound to some integration-test-prepare phase but
              that do not exist yet. See http://jira.codehaus.org/browse/MNG-1628 -->
          <phase>package</phase>
          <goals>
            <goal>start</goal>
          </goals>
          <configuration>
            <wait>false</wait>
            <container>
              <containerId>tomcat5x</containerId>
              <zipUrlInstaller>
                <url>http://www.apache.org/dist/jakarta/tomcat-5/v5.0.30/bin/jakarta-tomcat-5.0.30.zip</url>
                <installDir>${installDir}</installDir>
              </zipUrlInstaller>
            </container>
            <configuration>
              <dir>${project.build.directory}/tomcat5x/container</dir>
            </configuration>
          </configuration>
        </execution>
      </executions>
    </plugin>
  </plugins>
</build>
</profile>
<profile>
  <id>orion2x</id>
  <build>
    <plugins>
      <plugin>
        <groupId>org.codehaus.cargo.maven2</groupId>
        <artifactId>cargo-maven2-plugin</artifactId>
        <executions>
          <execution>
            <id>orion-execution</id>
            <!-- Ideally this would be bound to some integration-test-prepare phase but
                that do not exist yet. See http://jira.codehaus.org/browse/MNG-1628 -->
            <phase>package</phase>
            <goals>
              <goal>start</goal>
            </goals>
            <configuration>
              <wait>false</wait>
              <container>
                <containerId>orion2x</containerId>
                <zipUrlInstaller>
                  <url>http://www.orionserver.com/distributions/orion2.0.5.zip</url>
                  <installDir>${installDir}</installDir>
                </zipUrlInstaller>
              </container>
              <configuration>
                <dir>${project.build.directory}/orion2x/container</dir>
              </configuration>
            </configuration>
          </execution>
        </executions>
      </plugin>
    </plugins>
  </build>
</profile>
</profiles>
</project>

```

Then to start the tomcat 5.x container you would type `mvn -P tomcat5x integration-test`. if you want to start both containers you would type `mvn -P tomcat5x,orion2x integration-test`.

If you want to define a profile as the default you can use the `<activation>` element with an activation strategy. For example if you want a profile to be always on, use:

```
<profiles>
  <profile>
    <id>tomcat5x</id>
    <activation>
      <activeByDefault>true</activeByDefault>
    </activation>
  [...]
```

TODO: Show how to share configuration data between profiles (this should work by defining the default config data in the `<build>` element).

## Netbeans Plugin

---

This page last changed on Nov 22, 2005 by [vmassol](#).

### Credits

[Milos Kleint](#) has started working on a [Netbeans](#) plugin for Cargo.

**Update:** The initial version was released as part of [Mevenide for Netbeans 0.7](#).

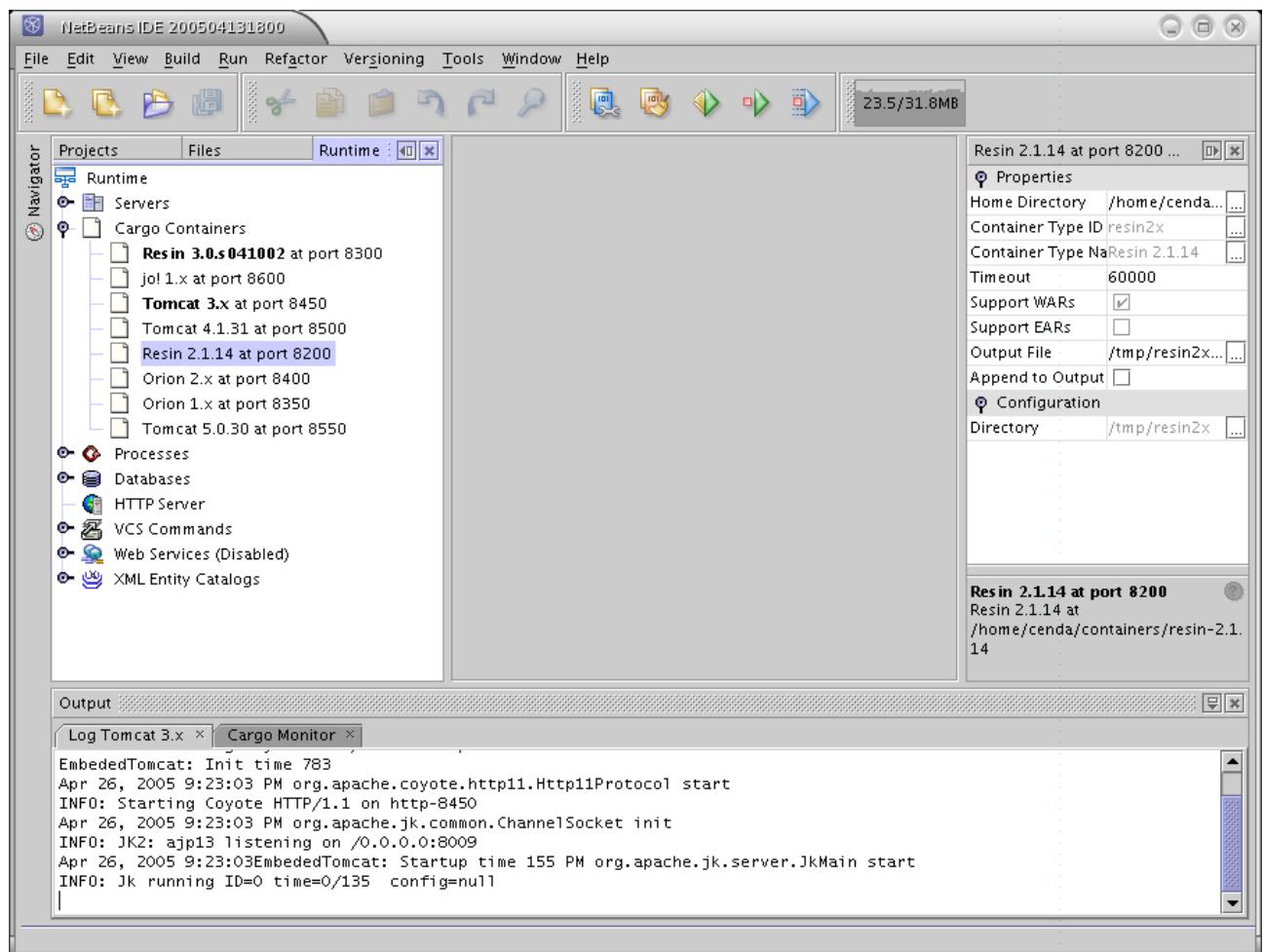
### Features

- Addition/removal of container definitions
- Persistence across IDE sessions.
- View container/cargo logs
- WAR deployment for Maven project type (from [Mevenide](#))

Also considered for future:

- Support for Netbeans Ant project types.
- Use maven/ant cargo definitions when deploying project.

Here's a first screenshot of it in action:



## Module API

This page last changed on Nov 22, 2005 by [vmassol](#).

### Definition

API to manipulate J2EE archives, including vendor-specific deployment descriptors

### Explanation

This API is located in the `org.codehaus.cargo.module` package and is used internally by the Cargo Java API. You can also use it yourself if you need to manipulate (read/write) J2EE archive files.

It also supports merging two `web.xml` files into one.

See the [Javadoc](#) for more details on the API.

### Example

```
File warFile = new File("/path/to/simple.war");
WarArchive war = new DefaultWarArchive(warFile);

// Verify existence of class inside the WAR
assertTrue(war.containsClass("test.Test"));

// Verify version of the Servlet specifications used in web.xml
WebXml webXml = war.getWebXml();
assertEquals(WebXmlVersion.V2_3, webXml.getVersion());

// Add a context-param element in web.xml
Element contextParamElement =
    createContextParamElement(doc, "param", "value");
webXml.addContextParam(contextParamElement);
assertTrue(webXml.hasContextParam("param"));

[...]
```

## News

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This page last changed on Nov 20, 2004 by [vmassol](#).

[\*\*Confluence RSS Feed \(rss\\_2.0\)\*\*](#)

**(The 15 most recent creations of or modifications to blogposts in space Cargo.)**

## Roadmap

---

This page last changed on Apr 25, 2005 by [vmassol](#).

### General directions

- Continue adding container support for dynamic deployments
- Support for [JSR88](#) for containers who support it. We can use the [JSR88](#) API to provide a common way of performing deployment/undeployment of WAR/EAR files in target containers.

More information on JSRs potentially useful for Cargo:

- [JSR88](#): This specification defines standard APIs that will enable any deployment tool that uses the deployment APIs to deploy any assembled application onto a J2EE compatible platform. The API will address the three-stage deployment process:
  - Installation - move the properly packaged components to the server
  - Configuration - the resolution of all external dependencies declared by the application
  - Undeployment - removal of the application from the server
- [JSR77](#): The Specification proposes a standard management model for exposing and accessing the management information, operations, and parameters of the Java 2 Platform, Enterprise Edition components. The management model will:
  - Allow rapid development of management solutions for J2EE
  - Provide integration with existing management systems
  - Enable a single management tool to manage multiple vendor implementations of the platform
  - Enable a specific implementation of a platform to use any compliant management tool

### Tasks already planned to be implemented

See the [JIRA roadmap](#).

## What for

---

This page last changed on Apr 29, 2005 by [vmassol](#).

Here are some possible use cases for Cargo:

- To start containers for integration and functional tests
- To start containers for applications that require a container to be started (Plugins for IDEs, etc)
- As a framework to manipulate J2EE Module file including container-specific descriptors. For example it can be useful if you wish to implement the JSR88 client side
- To generate container configurations for deployment. For example you may have an application running on Tomcat 5.x and you may want to package a fully working configuration (server.xml, webapps/ dir with your WAR files in there, etc).

## Javadocs

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This page last changed on Jul 17, 2005 by [vmassol](#).

- [Javadoc for Core Util API](#)
- [Javadoc for Core Module API](#)
- [Javadoc for Core Container API](#)
- [Javadoc for Core Generic API](#)
- [Javadoc for Ant API](#)

## Installation

---

This page last changed on Nov 14, 2005 by [vmassol](#).

### Java API

Cargo offers primarily a Java API. It is meant to be embedded in your application. You'll need a JDK 1.4+ and the following jars in your classpath:

- [Ant 1.5.4](#) or greater
- [Xerces 2.4.0](#) or greater

### Ant

If you use the Cargo Ant tasks, you'll also need to add those jars to the <taskdef> definition (see the [Ant support](#) page).

### Maven

To use the Cargo plugin for Maven you'll need to install it (see the [Maven1 plugin](#) page).

## Tested on

This page last changed on Nov 21, 2005 by [vmassol](#).

In this section you can find the test status of the different containers for the different Cargo releases.

Add your own experiences by reporting the configurations that you have tested. You can do this by opening a [JIRA issue](#). Make sure you choose a `Test` issue type so that it finds its way on this page! Please also ensure to report your JDK in the `Tested on JDks` field.

### Cargo 0.7

jira.codehaus.org (2 issues)			
Summary	Assignee	Reporter	Status
<a href="#">Test on JBoss 4.0.2</a>	Arnaud Heritier	Arnaud Heritier	Closed
<a href="#">Test on Resin 3.0.15</a>	Mark Hobson	Vincent Massol	Closed

### All Cargo versions

jira.codehaus.org (11 issues)			
Summary	Assignee	Reporter	Status
<a href="#">Test on WebLogic 8.1 SP3</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on OC4J 9.0.4</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Tomcat 5.5.3-snapshot</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Resin 3.0.9</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Orion 2.0.5</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Tomcat 4.1.31</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Orion 2.0.4</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Resin 3.0.9</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on Resin 2.1.16</a>	Vincent Massol	Vincent Massol	Closed
<a href="#">Test on JBoss 4.0.2</a>	Arnaud Heritier	Arnaud Heritier	Closed
<a href="#">Test on Resin 3.0.15</a>	Mark Hobson	Vincent Massol	Closed

## Containers

---

This page last changed on Nov 22, 2005 by [vmassol](#).

List of supported containers and the extensions that are implemented for each container (Java API, Ant tasks and Maven plugins). The specified version is the Cargo version where the feature was first made available. Click on a container's name to see a detailed list of features it supports.

Container	Java API(version)	Ant tasks(version)	Maven 1 plugin(version)	Maven 2 plugin(version)
<a href="#">JBoss 3.x</a>	✓ 0.7	✓ 0.7	✓ 0.7	✓ 0.7
<a href="#">JBoss 4.x</a>	✓ 0.7	✓ 0.7	✓ 0.7	✓ 0.7
<a href="#">Jetty 4.x</a>	✓ 0.1	✗ ???	✗ ???	✗ ???
<a href="#">jo! 1.x</a>	✓ 0.5	✓ 0.5	✓ 0.5	✓ 0.7
<a href="#">OC4J 9.x</a>	✓ 0.3	✓ 0.3	✓ 0.5	✓ 0.7
<a href="#">Orion 1.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Orion 2.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Resin 2.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Resin 3.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 3.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 4.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 5.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">WebLogic 8.x</a>	✓ 0.3	✓ 0.3	✓ 0.5	✓ 0.7

We also encourage you to report success and failures on different versions of those containers in the [Tested on](#) section.

## Generic JSR88

This page last changed on Nov 26, 2005 by [vmassol](#).

### Supported Features

**Note: JSR-88 support is experimental and should not be used right now. No tests are contained in the Maven build.**

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✗	✗	✗	
<a href="#">Container Stop</a>	✗	✗	✗	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.jsr88.GenericJSR88Container	✗	✗	This is a Remote Container.
<a href="#">Container Factory</a>	✓ "genericjsr-88"	✗	✗	
<a href="#">Container Classpath</a>	✗	✗	✗	
<a href="#">Debugging</a>	✗	✗	✗	
<a href="#">Passing system properties</a>	✗	✗	✗	
<a href="#">Standalone Local Configuration</a>	✗	✗	✗	
<a href="#">Existing local configuration</a>	✓ o.c.c.container.jsr88.GenericJSR88ExistingConfiguration	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✗	✗	
<a href="#">Static deployment of expanded WAR</a>	✓	✗	✗	
<a href="#">Static deployment of EAR</a>	✓	✗	✗	
<a href="#">Standalone mode</a>	✗	✗	✗	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✗	✗	✗	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.jsr88.JSR88Deployer	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✓	✗	✗	
<a href="#">Hot Deployer - start()</a>	✓	✗	✗	
<a href="#">Hot Deployer - stop()</a>	✓	✗	✗	

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✗	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✗	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.jsr88.user	<a href="#">JSR88PropertySet.USERNAME</a>	String	Username to use when acquiring a <a href="#">JSR88</a> DeploymentManager.	"user"
cargo.jsr88.password	<a href="#">JSR88PropertySet.PASSWORD</a>	String	Password to use when acquiring a <a href="#">JSR88</a> DeploymentManager.	"password"
cargo.jsr88.deploytool	<a href="#">JSR88PropertySet.DESTROY_TOOL_JAR</a>	String	JAR file to load the <a href="#">JSR88</a> deployment tool from.	"deploy-tool.jar"
cargo.jsr88.deploytool	<a href="#">JSR88PropertySet.DESTROY_TOOL_CLASSPATH</a>	String	Extra classpath necessary for the <a href="#">JSR88</a> deployment tool ( <b>not the container itself</b> ) to function. Semicolon-separated.	"jar-1.jar;jar-2.jar"

## JBoss 3.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.jbossJBossContainerInstantiation	✓ <cargo o.c.c.container.jbossJBossContainerInstantiation = jboss3x	✓	
<a href="#">Container Factory</a>	✓ "jboss3x"	✓ <cargo containerId="jboss3x" cargo.containers = jboss3x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.jboss.JBossStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✓ o.c.c.container.jboss.JBossExistingLocalConfiguration	✓	✓	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	N/A	N/A	N/A	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.jboss.JBossDeployer	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - start()</a>	✗	✗	✗	

<a href="#">Hot Deployer - stop()</a>	✗	✗	✗	
---------------------------------------	---	---	---	--

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## JBoss 4.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓	✓ <cargo o.c.c.container.jbosssta...>	✓	<small>JBoss 4.0.1+blends standard containers = jboss4x</small>
<a href="#">Container Factory</a>	✓ "jboss4x"	✓ <cargo containerId="jboss4x">	✓	<small>cargo.containers = jboss4x</small>
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓	✓	✓	<small>o.c.c.container.jboss.JBossStandaloneLocalConfiguration</small>
<a href="#">Existing local configuration</a>	✓	✓	✓	<small>o.c.c.container.jboss.JBossExistingLocalConfiguration</small>
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	N/A	N/A	N/A	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✓	✗	✗	<small>o.c.c.container.jboss.JBossDeployer</small>
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - start()</a>	✗	✗	✗	
<a href="#">Hot Deployer - stop()</a>	✗	✗	✗	

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## Jetty 4.x

This page last changed on Nov 26, 2005 by vmassol.

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✗	✗	
<a href="#">Container Stop</a>	✓	✗	✗	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.jetty.Jetty4xEmbeddedLocalContainer	✗	✗	
<a href="#">Container Factory</a>	✓ "jetty4x"	✗	✗	
<a href="#">Container Classpath</a>	✓	✗	✗	
<a href="#">Debugging</a>	✓	✗	✗	
<a href="#">Passing system properties</a>	✓	✗	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.jetty.JettyStandaloneLocalConfiguration	✗	✗	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✗	✗	
<a href="#">Static deployment of expanded WAR</a>	✓	✗	✗	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✗	✗	✗	
<a href="#">Embedded mode</a>	✓	✗	✗	
<a href="#">Installer</a>	✗	✗	✗	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.jetty.JettyDeployer	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - start()</a>	✗	✗	✗	
<a href="#">Hot Deployer - stop()</a>	✗	✗	✗	

### Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## jo 1.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.jo.JolxContainer	✓ <cargo containerId="jolx" cargo.containers = jolx	✓	
<a href="#">Container Factory</a>	✓ "jolx"	✓ <cargo containerId="jolx" cargo.containers = jolx	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.jo.JolxStandaloneConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.jo.JolxDeployer	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can jo! support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can jo! support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can jo! support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✓	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## Notes

Currently only jo! >= 1.1 is supported.

## Oc4J 9.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.orion.ContainerId=oc4j9x	✓ <cargo o.c.c.container.orion.ContainerId=oc4j9x	✓	
<a href="#">Container Factory</a>	✓ "oc4j9x"	✓ <cargo containerId="oc4j9x"	✓ cargo/containers = oc4j9x	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.orion.OrionStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can Oc4j9x support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can Oc4j9x support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can Oc4j9x support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✗	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.orion.rmi.port	OrionPropertySet.RMIPort	PORT	Port for the Orion RMI server	"25791"

## Orion 1.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.orion.OrionContainerLocalConfiguration = orionlx	✓ <cargo containerId="orionlx" cargo.containers = orionlx	✓	
<a href="#">Container Factory</a>	✓ "orionlx"	✓ <cargo containerId="orionlx" cargo.containers = orionlx	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.orion.OrionStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can Orion 1.x support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can Orion 1.x support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can Orion 1.x support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✗	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.orion.rmi.port	OrionPropertySet.RMIPort	PORT	Port for the Orion RMI server	"25791"

## Orion 2.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.orion.OrionContainerLocalConfiguration = orion2x	✓ <cargo containerId="orion2x" cargo.containers = orion2x	✓	
<a href="#">Container Factory</a>	✓ "orion2x"	✓ <cargo containerId="orion2x" cargo.containers = orion2x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.orion.OrionStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can Orion 2.x support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can Orion 2.x support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can Orion 2.x support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✗	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.orion.rmi.port	OrionPropertySet.RMIPort	PORT	Port for the Orion RMI server	"25791"

## Resin 2.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.resin.Resin2xContainerInstantiation	✓ <cargo resinId="resin2x" cargo.containers = resin2x	✓	
<a href="#">Container Factory</a>	✓ "resin2x"	✓ <cargo containerId="resin2x" cargo.containers = resin2x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.resin.Resin2xStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✓ o.c.c.container.resin.ResinExistingLocalConfiguration	✓	✓	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.resin.ResinDeployer	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Does Resin support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Does Resin support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Does Resin support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✓	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## Resin 3.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.resin.Resin3xContainerInstantiation	✓ <cargo o.c.c.container.resin.Resin3xContainerInstantiation	✓ cargo.containers = resin3x	
<a href="#">Container Factory</a>	✓ "resin3x"	✓ <cargo containerId="resin3x" cargo.containers = resin3x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.resin.Resin3xStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✓ o.c.c.container.resin.ResinExistingLocalConfiguration	✓	✓	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	✗	✗	✗	Apparently Resin 3.x supports EAR
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✓ o.c.c.container.resin.ResinDeployer	✗	✗	Resin 3.0.12 and above have an issue. See <a href="#">RSN-186</a>
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Does Resin support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Does Resin support this?
<a href="#">Hot Deployer -</a>	N/A	N/A	N/A	Does Resin

<a href="#">stop()</a>				support this?
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## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✓	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## Tomcat 3.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.tomcat.TomcatLocalContainer	✓ <cargo tomcatId="tomcat3x" localContainers = tomcat3x	✓	
<a href="#">Container Factory</a>	✓ "tomcat3x"	✓ <cargo containerId="tomcat3x" cargo.containers = tomcat3x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.tomcat.TomcatStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can Tomcat 3.x support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can Orion 3.x support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can Orion 3.x support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

## Tomcat 4.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓ o.c.c.container.tomcat.CatalinaStandaloneLocalConfiguration	✓ <cargo tomcatId="tomcat4x" containerId="tomcat4x" localContainers = tomcat4x	✓	
<a href="#">Container Factory</a>	✓ "tomcat4x"	✓ <cargo containerId="tomcat4x" cargo.containers = tomcat4x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓ o.c.c.container.tomcat.CatalinaStandaloneLocalConfiguration	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	Does not support META-INF/context.xml files yet
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	N/A	N/A	N/A	Can Tomcat 4.x support this?
<a href="#">Hot Deployer - start()</a>	N/A	N/A	N/A	Can Orion 4.x support this?
<a href="#">Hot Deployer - stop()</a>	N/A	N/A	N/A	Can Orion 4.x support this?

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✓	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.tomcat.shutdownPort	<a href="#">TomcatPropertySet.SHUTDOWN_PORT</a>		TCP/IP port number on which this server waits for a shutdown command	"8205"

## Tomcat 5.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

**Note: Tomcat 5.5.x is supported by requires JDK 1.5+**

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓	✓ <cargo o.c.c.container.tomcat.CatalinaLocalContainer	✓	
<a href="#">Container Factory</a>	✓ "tomcat5x"	✓ <cargo containerId="tomcat5x" cargo.containers	✓	= tomcat5x
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓	✓	✓	
<a href="#">Existing local configuration</a>	✗	✗	✗	
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✓	✓	✓	
<a href="#">Static deployment of EAR</a>	N/A	N/A	N/A	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - start()</a>	✗	✗	✗	
<a href="#">Hot Deployer -</a>	✗	✗	✗	

<a href="#">stop()</a>				
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## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✓	
<a href="#">GeneralPropertySet.LOGGING</a>	✓	

Custom configuration properties:

Property name	Java constant to use	Valid values	Description	Example
cargo.tomcat.shutdownPort	<a href="#">TomcatPropertySet.SHUTDOWN_PORT</a>		TCP/IP port number on which this server waits for a shutdown command	"8205"

## WebLogic 8.x

This page last changed on Dec 26, 2005 by [vmassol](#).

### Supported Features

Feature name	Java	Ant	Maven	Comment
<a href="#">Container Start</a>	✓	✓	✓	
<a href="#">Container Stop</a>	✓	✓	✓	
<a href="#">Container Instantiation</a>	✓	✓ <cargo o.c.c.container.weblogic.WebLogicContainer = weblogic8x	✓	
<a href="#">Container Factory</a>	✓ "weblogic8x"	✓ <cargo containerId="weblogic8x" containers = weblogic8x	✓	
<a href="#">Container Classpath</a>	✓	✓	✗	
<a href="#">Debugging</a>	✓	✓	✓	
<a href="#">Passing system properties</a>	✓	✓	✗	
<a href="#">Standalone Local Configuration</a>	✓	✓	✓	o.c.c.container.weblogic.WebLogicStandaloneConfiguration
<a href="#">Existing local configuration</a>	✓	✓	✓	o.c.c.container.weblogic.WebLogicExistingConfiguration
<a href="#">Static deployment of WAR</a>	✓	✓	✓	
<a href="#">Static deployment of expanded WAR</a>	✗	✗	✗	
<a href="#">Static deployment of EAR</a>	✓	✓	✓	
<a href="#">Standalone mode</a>	✓	✓	✓	
<a href="#">Embedded mode</a>	✗	✗	✗	
<a href="#">Installer</a>	✓	✓	✓	
<a href="#">Hot Deployer - deploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - undeploy()</a>	✗	✗	✗	
<a href="#">Hot Deployer - start()</a>	✗	✗	✗	
<a href="#">Hot Deployer - stop()</a>	✗	✗	✗	

## Supported Configuration properties

Property name	Supported?	Comment
<a href="#">ServletPropertySet.PORT</a>	✓	
<a href="#">GeneralPropertySet.HOSTNAME</a>	✗	
<a href="#">GeneralPropertySet.LOGGING</a>	✗	
<a href="#">WebLogicPropertySet.ADMIN_USER</a>	✓	WebLogic admin user name. Defaults to "weblogic"
<a href="#">WebLogicPropertySet.ADMIN_PWD</a>	✓	WebLogic admin user password. Defaults to "weblogic"
<a href="#">WebLogicPropertySet.SERVER</a>	✓	WebLogic server name. Defaults to "server"
<a href="#">WebLogicPropertySet.DOMAIN</a>	✓	WebLogic domain name. Defaults to "domain"

## Developers

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This page last changed on Nov 22, 2005 by [vmassol](#).

- [Adding a container](#)
- [Building](#)
- [Contributing](#)
- [Discussions](#)
- [Project Structure](#)
- [Release procedure](#)
- [SVN](#)

## Adding a container

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This page last changed on Dec 04, 2005 by [vmassol](#).

Before you start you might be interested in reading the [Project Structure](#) tutorial which shows the directory organization of the Cargo sources. The [Building](#) tutorial explains how to build Cargo from sources and the [Contributing](#) tutorial explains what rules to follow when contributing code.

Here are some quick steps to follow if you wish to add support for a new container in Cargo:

- Subscribe to the cargo dev mailing list and ask as many question you'd like there! 
- Create a JIRA issue on <http://jira.codehaus.org> (you'll need to register). I'll then add you to the cargo-developers group in JIRA and assign the issue to you
- Checkout Cargo from [SVN](#) trunk
- Understand the Cargo [project's directory structure](#). Container implementations are located in `trunk/core/containers/ContainerName`.
- Have a look at existing container implementations (search for example for `Resin3xLocalContainer` or `Orion2xLocalContainer`).
- Create a `org.codehaus.cargo.container.containerName` package if it doesn't already exist.
- Create the following classes:
  - A [container](#) implementation class named `_ServerNameNxContainerType_Container` where `ServerName` is the name of the container, `N` the version and `ContainerType` the type of container (Local or Remote). For example: `JBoss3xLocalContainer`.
  - A [configuration](#) implementation class named `_ServerNameConfigurationType_Configuration` where `ConfigurationType` can be `StandaloneLocal` or `ExistingLocal`. For example `JBossStandaloneLocalConfiguration`.
  - You may need to implement some ancillary classes but those are the main 2 required. Check how the other container are implemented to see how to implement them and what other classes you may need to implement.
- Cargo has an SPI that you should use and that should make it easy for you. Your container class should extend `org.codehaus.cargo.container.spi.Abstract_ContainerType_Container` and your configuration class should extend `org.codehaus.cargo.container.spi.configuration.Abstract_ConfigurationType_Configuration`.
- Register your new classes in the generic API in the Factory classes `trunk/core/api/generic` so that users can use your new container by using the generic API.
- Add your container to the tests in `trunk/samples/java`. This means editing the `*Test.java` classes and adding your container in the `suite()` method.
- Run the Cargo [build](#) to ensure everything is working. You'll probably find that you haven't followed the Cargo project's coding conventions... Fix those and build again until it passes! 
- Register on [Codehaus' confluence](#). Once this is done I'll add you to the cargo-developers user group so that you have the right to edit yourself the Cargo web site pages
- Document the new container on the [Cargo web site](#)
- Create a SVN patch and attach it to the JIRA issue you have created above

Thanks and happy coding!

## Building

This page last changed on Nov 26, 2005 by [vmassol](#).

## Prequisites

- Check out Cargo from [SVN](#) into a CARGOHOME directory (wherever you want on your machine)
- Install [Maven 1](#) or [Maven 2](#). Verify your installation works by typing "maven --version" (for Maven 1) or "mvn --version" (for Maven 2) at a command prompt.

## Building with Maven 1

### First time build

The Cargo build contains functional tests. Those tests are run on different containers. The first time you build Cargo it will download those container distributions which will take some time (the containers are installed into CARGOHOME/target/install). If you want to tell Cargo to run only on some specific container, see below.

### Maven 2 plugin cannot be built with Maven 1

The Maven 2 plugin located in CARGOHOME/extensions/maven2 cannot currently be built with Maven 1. The same applies for its functional tests located in CARGOHOME/samples/extensions/maven2.

- Go to CARGOHOME and type "maven". This will build the full Cargo project and the distribution jars will be generated in CARGOHOME/distribution/target/maven. The functional tests will be run on the default container set (see the section on "Selecting containers" below for more on that).
- If you want to build a single project, cd to that project and type "maven". Note that the build will fail if you've never built the dependent projects. Thus it is recommended to build the full Cargo project at least once.
- If you wish to clean all build-generated files, cd to CARGOHOME and type "maven cargo:clean".

## Selecting containers

The default list of containers to run on depends on the subproject being built:

- For the java samples, the list is in CARGOHOME/samples/java/project.properties. If you want to define a different list, simply create a build.properties file either in your home directory or in samples/java. In this file, create a cargo.containers listing the containers you wish to run on. For example if you only want to run on Tomcat 5.x you'd write:

```
cargo.containers = tomcat5x
```

- For the Ant samples, the list is in CARGOHOME/samples/extensions/ant/project.properties. Once again if you want to define a different list, simply create a build.properties file either in your

- home directory or in samples/extensions/ant.
- For the Maven1 samples, the list is in  
CARGOHOME/samples/extensions/maven/project.properties.

## Tips

- Type `maven -o` to work offline. This improves the build speed as Maven 1 does not check for updates on the remote repository for SNAPSHOTs.

# Building with Maven 2

### First time build

The Cargo build contains functional tests. Those tests are run on different containers. The first time you build Cargo it will download those container distributions which will take some time (the containers are installed into `\${java.io.tmpdir}/cargoinstalls`). If you want to tell Cargo to run only on some specific container, see below.

### Maven 2 build not fully finished

The Cargo Maven 2 build is still not completely finished. Most subprojects have been converted to build with Maven 2 except for the following:

- samples/\*\*
- extensions/intellijidea
- extensions/netbeans

- Go to CARGOHOME and type "`mvn install`". This will build the full Cargo project and the distribution jars will be generated in CARGOHOME/distribution/target.
- If you wish to clean all build-generated files, cd to CARGOHOME and type "`mvn clean`".

## Contributing

---

This page last changed on Nov 26, 2005 by [vmassol](#).

We're always looking for contributions! Here are some ways to participate in Cargo's development:

- by sending feedback to the user or dev [mailing lists](#). The feedback could be about something that does not work, something that could be improved, a feature you'd like to see, etc. Or simply it could be that you're a happy user. Letting us know helps a lot!
- by answering emails from others on the [mailing lists](#).
- by sending code patches. In that case there are a [few rules](#) you need to know.
- by spreading the word about Cargo!

### Coding rules

If you submit a patch you need to follow these rules:

- copyright your code to Vincent Massol (see [license explanations](#))
- ensure that your code passes the [build](#). Note that the build contains some checkstyle checks that your code must pass.
- use the same code formatting as the existing code.
- create a [JIRA issue](#) and attach your patch to it.
- add your name on the [Credits](#) page.

In addition if you plan to contribute big patches that impact existing code, we recommend discussing it on the mailing list first.

Thanks!

## Discussions

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This page last changed on Nov 22, 2005 by [vmassol](#).

This page gathers ongoing design discussions (well, of course most of the discussions happen on the [mailing list](#) so you should check there too). Once we get a consensu and enough content the idea is to move the content of the discussions as proper documentation in the main stream of documentation.

Note: If you want to add a new discussion, simply create a child page of this one and it'll automatically appear in the list below.

### Ongoing discussions

- [Ant tasks](#) — Discussion on the design of the Ant tasks.
- [Comparisons with other tools](#) — This is an attempt to compare Cargo with other tools.

## Ant tasks

---

This page last changed on Oct 16, 2005 by [aheritier](#).

Discussion on the design of the Ant tasks.

Here are the main discussions we had about the Ant tasks for Cargo:

- **Remove cargo-XXX tasks** : Actually there's one task for each container Id. It's not really evolutionary and works only with the containers referenced in the default Containers factory. We prefer to remove these aliases ([CARGO-132](#)) and to keep the generic one using either a container id as referenced in the default containers factory or the name of the container class.
- **Create a separate task for ZipUrlInstaller** : The zipUrlInstaller is actually a sub-element of the cargo task. We propose ([CARGO-75](#)) to extract it in a real task to be able to reuse it.
- **Create a separate task for deployers** : We can't reuse deployables between several servers and we can't have actually a remote deployer. We did a proposal ([Thread](#)) several months ago to solve this.
- **Extract configuration in an external (XML) file** : We discussed several times ([Thread](#), [CARGO-135](#)) about to store the configuration in a file instead of in the build script.

## Comparisons with other tools

This page last changed on Nov 21, 2005 by [vmassol](#).

This is an attempt to compare Cargo with other tools.

Features	<a href="#">Cargo</a>	<a href="#">Smartfrog</a>	<a href="#">Geronimo</a>
Configure containers/Generate configuration	★★	★★	★
Start/stop containers	★	★	★
Number of containers supported	★★	★	★
Distributed install of containers	✗	★★	?
Types of containers/nodes supported	★	★★★	★★

### Notes on Cargo

- Its usage is currently focused on the development environment.
- Doesn't support distributed installations
- Supports remote deployments of J2EE archives
- Currently focused on J2EE containers but the architecture is general and can support any type of containers (database, IDEs, EAIs, etc).

### Notes on Smartfrog

- Has a language to describe configurations
- Requires agents to be installed
- Focused on container deployment, management and monitoring

### Notes on Geronimo

- Completely wraps containers/components. Need adapter (GBean) to match component lifecycle with Geronimo's lifecycle.
- Focused on runtime and management of containers/components.

## Project Structure

This page last changed on Dec 29, 2005 by [vmassol](#).

Cargo's directory organization can be daunting for a newcomer. So here's some information on how the project is organized.

([view as slideshow](#))

### Cargo Project Hierarchy

#### Legend

- **directory/** : represents a directory
- **directory/** : represents a directory containing a Maven project

- **cargo/**
  - **core/** : Core Java APIs
    - **api/**
      - **util/** : Some useful classes for both module/ and container/ (logging interface, etc)
      - **module/** : API to create/parse J2EE Module files
      - **container/** : API to start/stop/configure containers and deploy J2EE Modules in them
      - **generic/** : Generic and untyped Java API sitting on top of the Core Container Java API
    - **containers/**
      - **resin/** : Resin implementation
      - **tomcat/** : Tomcat implementation
      - **.../** : Other container implementations
    - **uberjar/** : Uberjar packaging all api/ and containers/ jars in one big jar
  - **build-tools/** : Common files and tools related to the Maven 1 and Maven 2 builds (common checkstyle files, etc).
  - **extensions/** : Cargo extensions
    - **ant/** : Ant tasks that uses the core/ projects API
    - **maven/** : Maven 1 plugin (based on the Ant tasks)
    - **maven2/** : Maven 2 plugin
    - **netbeans/** : Netbeans plugin
    - **intellijidea/** : IntelliJ IDEA plugin
  - **samples/** : Sample projects that also serve as functional tests
    - **java/** : Samples exercising the Java core API
    - **extensions/**
      - **ant/** : Samples exercising the Ant tasks
      - **maven/** : Samples exercising the Maven 1 plugin
      - **maven2/** : Samples exercising the Maven 2 plugin
    - **testdata/** : Test data for all the Sample projects
      - **authentication-war** : Generates WAR with BASIC authentication defined in

`web.xml`

- **empty-ear** : Generates en empty EAR
- **empty-jar** : Generates en empty JAR
- **expanded-war** : Generates an expanded WAR
- **simple-ear** : Generates a simple EAR containing a simple WAR
- **simple-war** : Generates a simple WAR containing an HTML file
- **tomcat-context** : Generates a WAR containing a Tomcat context.xml file redefining the Context Root

## Release procedure

This page last changed on Dec 30, 2005 by [vmassol](#).

Releases are now performed using Maven 2 so you need to have Maven 2 installed (see the [building](#) page).

1. [Create a branch in SVN](#) so that others can keep working on the trunk. Create the branch in `svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/branches/<version>` and check it out on your local machine. Example:

```
svn copy svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/trunk \
  svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/branches/<N>
svn co svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/branches/<N>
```

2. On the SVN trunk change all references of `(N)-SNAPSHOT` by `(N+1)-SNAPSHOT` (for ex from `0.6-SNAPSHOT` to `0.7-SNAPSHOT`) and commit. Perform this by doing a global search and replace.  
Note: You may want to perform a clean before doing the search and replace to avoid changing all the build target directories.
3. In the new branch, do the same and replace all references of `(N)-SNAPSHOT` by `(N)` and commit (Ex: from `0.3-SNAPSHOT` to `0.3`).
4. Delete all the `(N)-SNAPSHOT` artifacts from your local maven repositories to have a clean slate.
5. Run `mvn install` at the top level of the release branch to build the different artifacts and ensure everything is ok
6. Run `mvn assembly:assembly` in `core/uberjar` of the release branch. Note: in the future this will be done automatically when you call `mvn install`.
7. Deploy everything by typing `mvn deploy` at the top level of the release branch. For this to work you'll need to create a `settings.xml` file (in your `.m2` directory or in your user home directory). Inside you'll need to define your credentials and more. Here's an example `settings.xml`:

```
<settings>
  [...]
  <servers>
    <server>
      <id>cargo-snapshot</id>
      <username>vmassol</username>
      <privateKey>/my/private/ssh/key</privateKey>
      <filePermissions>664</filePermissions>
      <directoryPermissions>775</directoryPermissions>
    </server>
    <server>
      <id>cargo-release</id>
      <username>vmassol</username>
      <privateKey>/my/private/ssh/key</privateKey>
      <filePermissions>664</filePermissions>
      <directoryPermissions>775</directoryPermissions>
    </server>
  </servers>
</settings>
```

8. Log onto Cargo JIRA, release the current version and add the next version
9. Check that the Cargo wiki is up to date. Specifically, perform the following updates:
  - a. modify the status on the home page about the delivery
  - b. modify the [Downloads](#) page to include the latest download links
  - c. create a release notes page for the new version
  - d. export the wiki to a zipped HTML file and add it the [Downloads](#) page
10. Tag the branch created in step 1 to  
`svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/tags/<version>`
11. Send an announcement email to Cargo mailing lists (and to other relevant sites)
12. Create a [blog post](#)



## SVN

---

This page last changed on Dec 26, 2005 by [vmassol](#).

For general information see the [SVN page on Codehaus](#).

### Repository browsing

Check out [Fisheye](#) at <http://fisheye.codehaus.org/viewrep/cargo/cargo/trunk>. Alternatively you can check the ViewCVS installation at <http://svn.cargo.codehaus.org> but it's not as nice as Fisheye...

### Anonymous SVN Access

Using the 'svn' protocol:

```
svn co svn://svn.cargo.codehaus.org/cargo/scm/cargo/trunk
```

Using the 'https' protocol

```
https://svn.codehaus.org/cargo/cargo/trunk
```

### Developer SVN Access

Using the 'svn+ssh' protocol:

```
svn co svn+ssh://svn.cargo.codehaus.org/home/projects/cargo/scm/cargo/trunk
```

Using the 'https' protocol

```
https://svn.codehaus.org/cargo/cargo/trunk
```

## Community

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This page last changed on Nov 22, 2005 by [vmassol](#).

- [Credits](#)
- [IRC](#)
- [License](#)
- [Mailing List Archives](#)

## Credits

This page last changed on Dec 01, 2005 by [vmassol](#).

The following persons deserve credit for Cargo.

### Committers:

- [Vincent Massol](#)  [vmassol](#): Lead developer of Cargo
- [Desire ATANGA](#): Initial implementation of Tomcat and WebLogic support
- [Arnaud Heritier](#)  [arnaudheritier](#): Implementation of the Maven 1.x plugin
- [Hendrik Schreiber](#): Implementation of jo! support and creation of the IDEA IntelliJ plugin
- [Milos Kleint](#): Netbeans extensions
- [I Nyoman Winardi](#): JBoss 3.x and 4.x support
- [Lev Olkhovich](#): JSR-88 support and remote containers support
- [Mark Hobson](#): Tomcat Hot deployment implementation + implementation of the Maven 2.x plugin
- [Magnus Grimsell](#): Lots of improvements to the Deployment API.

### Contributors:

- [Jerome Lacoste](#): General ideas and discussions about Cargo
- [Tim Shadel](#): Implementation of OC4J support
- Matt Raible: Asked for improvements to the Tomcat support so that Cargo can support nicely AppFuse. Provided patches to improve Tomcat support.
- Jan Zuchhold: Improvements to the Maven plugin ([passing system properties](#))
- Eoghan McIlwaine: Cargo logo and banner. Eoghan has also done a [larger, vertical version of the Cargo logo](#). Eoghan, you rock!
- Nigel Magnay: Several improvements to the Modules API and implementation of several container-specific merger classes.
- Bill Dudney: Implementation of the Tomcat Existing Local Configuration + beta tester of the m2 plugin

### Special thanks

- Apache and The Jakarta cactus project: Cargo started as a refactoring of the [Cactus](#) Ant integration subproject
- Christopher Lenz: Has developed most of the Cactus Ant integration code that spawned the Cargo project

If we have forgotten anyone, please accept our apologies and feel free to edit the page yourself to correct it (ask me if you need the rights).

### Artwork

- Eoghan's vertical logo for Cargo:



## IRC

---

This page last changed on Nov 26, 2005 by [vmassol](#).

You can always pop in to the Cargo IRC where you can chat with Cargo developers and users.

If you have a IRC client use:

<irc://irc.codehaus.org/#cargo>

or if you don't you can use the http client interface

<http://irc.codehaus.org>

If you use the http client, please give yourself a nickname and set the channel to #cargo.

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Some people feel that handing over copyright to Massol limits their rights in the code they contribute.

In fact it doesn't. Think about it: You give copyright to Massol, Massol immediately gives you the right to use the code under the ASL. What have you lost? You can still

- claim authorship on the [Credits](#) page and in JIRA issues. In addition your name will be added to [SVN](#) commits
- redistribute the code in source or binary form (provided the terms of the ASL are met).
- use the code in a commercial environment or link it into IDEs.
- fork the codebase if you are not happy with the way Massol is running the project.

Because the code is licensed under the ASL, the only thing you give up by assigning copyright to Massol is the right to veto a re-licensing of the code. For example Massol could re-license Cargo to another open source license without having to contact everybody who has ever contributed. Note that you would not lose any of the work you (and others) have done as it would still be licensed under ASL - noone can ever take these rights away from you!

All that said, the reason I decided to Copyright Cargo under my name is because I didn't know what other Copyright to use... Saying "The Cargo team" does not mean anything and does not solve the issue mentioned above. We can't license it to "Codehaus" either as Codehaus is not offering this service. Ideally we'd need a third party not-for-profit organization who could handle this for us (get signed CLAs, ensure code is clean, offer legal protection, etc). If anyone has any idea, please send it on the mailing list. I've always been uneasy about copyrighting this under my name and I'd love to find a better solution.

## Mailing List Archives

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### Archives on Nabble

- [Dev list](#)
- [User list](#)
- [Announcements list](#)
- [All lists combined](#)

### Archives On GMANE

- [User list](#)
- [Developer list](#)

### News Readers on GMANE

- [User list News Reader](#)
- [Developer list News Reader](#)

### Archives on Codehaus

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## **CenterHeaderFill**

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## QuickLinks

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## RightHeader

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## Quick start

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The following examples demonstrate how to configure Resin 3.0.15 to start in `target/resin3x` and deploy a WAR located in `path/to/simple.war`. The default port is 8080. Please note that the `container.start()` and `container.stop()` methods wait until the container is fully started and fully stopped before continuing. Thus, for any action you are executing after, you are assured the container is completely operational.

### Static deployment

Static deployment means that the Deployable is deployed before the container is started. Here's an example using the strongly type Java API:

```
Deployable war = new WAR("path/to/simple.war");

Configuration configuration =
    new Resin3xStandaloneLocalConfiguration("target/myresin3x"));
configuration.addDeployable(war);

LocalContainer container = new Resin3xLocalContainer(configuration);
container.setHome("c:/apps/resin-3.0.15");

container.start();
// Here you are assured the container is started.

container.stop();
// Here you are assured the container is stopped.
```

Here's the same example using the generic untyped API:

```
Deployable war = new DefaultDeployableFactory().createDeployable(
    "resin3x", "path/to/simple.war", DeployableType.WAR);

LocalConfiguration configuration =
    (LocalConfiguration) new DefaultConfigurationFactory(
        "resin3x", ConfigurationType.STANDALONE);
configuration.addDeployable(war);

LocalContainer container =
    (LocalContainer) new DefaultContainerFactory().createContainer(
        "resin3x", configuration);
container.setHome("c:/apps/resin-3.0.15");

container.start();
// Here you are assured the container is started.

container.stop();
// Here you are assured the container is stopped.
```

### Dynamic deployment

Dynamic deployment means that the Deployable is deployed after the container is started.

```
LocalContainer container = new Resin3xLocalContainer(
    new Resin3xStandaloneLocalConfiguration("target/myresin3x"));
```

```
container.setHome("c:/apps/resin-3.0.15");

container.start();

// Here you are assured the container is started.

Deployable war = new WAR("path/to/simple.war");
Deployer deployer = new ResinDeployer(container);
deployer.deploy(war)

// Here you are NOT sure the WAR has finished deploying. To be sure you
// need to use a DeployableMonitor to monitor the deployment. For example
// the following code deploys the WAR and wait until it is available to
// serve requests (the URL should point to a resource inside your WAR):
deployer.deploy(war, new URLDeployableMonitor("http://server:port/some/url"));

container.stop();

// Here you are assured the container is stopped.
```

## Downloads

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### Info

Older downloads can be found in the [Archived Downloads](#) section.

The downloads you need to pick depends on how you plan to use Cargo:

- If you want to integrate Cargo in your Java code you'll need to add the following jars to your classpath:
  - the cargo-core-api-\* jars and the container implementations you wish to use (cargo-core-container-\* jars).
  - or the cargo-core-uberjar jar which aggregates all the required jars.
- If you want to [use Cargo from Ant](#), you'll need to pick the same jars as above in addition to the cargo-ant jar.
- If you want to [use Cargo from Maven 1](#), you'll only need to install the cargo-maven-plugin jar in your local Maven installation.
- If you want to [use Cargo from Maven 2](#), you don't need to install anything at all as Maven 2 will automatically download the required jars when you first use the plugin.
- If you want to [use Cargo from IntelliJ IDEA](#), you only need to pick the cargo-intellijidea zip as it contains everything required.

Category	Version	Artifacts	Description	Release notes
Core API	0.7	<a href="#">cargo-core-api-util</a>	Utility classes used by other core API jars	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-api-module</a>	API to parse/create J2EE Modules (WAR, EAR, etc)	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-api-container</a>	The main Cargo Container API and all associated object	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-api-generic</a>	Generic API wrapping the main Cargo Container API	<a href="#">Notes</a>
Core Containers	0.7	<a href="#">cargo-core-container-jboss</a>	JBoss implementation of the Core Container API	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-container-jetty</a>	Jetty implementation of the Core Container API	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-container-jol</a>	jol implementation	<a href="#">Notes</a>

			of the Core Container API	
	0.7	<a href="#">cargo-core-container</a>	<a href="#">Orion</a> implementation of the Core Container API	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-container</a>	<a href="#">Resin</a> implementation of the Core Container API	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-container</a>	<a href="#">Tomcat</a> implementation of the Core Container API	<a href="#">Notes</a>
	0.7	<a href="#">cargo-core-container</a>	<a href="#">Weblogic</a> implementation of the Core Container API	<a href="#">Notes</a>
Core Uberjar	0.7	<a href="#">cargo-core-uberjar</a>	Convenience jar containing all the other jars from above	<a href="#">Notes</a>
Extensions	0.7	<a href="#">cargo-ant</a>	Ant tasks for Cargo.	<a href="#">Notes</a>
	0.7	<a href="#">cargo-maven-plugin</a>	Maven 1 plugin for Cargo	<a href="#">Notes</a>
	N/A	N/A	Maven 2 plugin for Cargo. Not released yet. See the <a href="#">Maven 2 plugin documentation page</a> for how to use a development version of the Maven 2 Cargo plugin.	
	0.1	<a href="#">cargo-intellijidea</a>	IntelliJ IDEA plugin for Cargo	<a href="#">Notes</a>
	N/A	N/A	Netbeans plugin for Cargo. Not released yet.	

## Documentation

TODO

## Continuous Builds

Cargo is using [Codehaus's Beetlejuice](#) to build Cargo whenever there's a commit. This allows us to ensure that the Cargo build works at all times. As a side effect, this also means that you can grab the latest Cargo artifacts from Beetlejuice. Unfortunately Beetlejuice does not provide a URL to point directly to the artifacts so you'll need to perform the following actions:

- Go to the [cargo project](#)
- Click the item in the "last build" column
- Click on "the build has N Artifacts". You'll be presented with a list of artifacts built during the last build. Grab the one you need.

## Archived Downloads

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### Archived downloads

Version	Links	Release notes
<a href="#">0.1</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 11/09/04</a>
<a href="#">0.2</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 03/10/04</a>
<a href="#">0.3</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 30/10/04</a>
<a href="#">0.4</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 26/11/04</a>
<a href="#">0.5</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 30/04/05</a>
<a href="#">0.6</a>	<a href="#">Jar download</a>   <a href="#">Documentation</a>	<a href="#">Released on 21/07/05</a>

## Release notes for Cargo 0.5

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### Implemented issues

jira.codehaus.org (25 issues)					
T	Key	Res	Summary	Assignee	Reporter
	<a href="#">CARGO-134</a>	FIXED	<a href="#">Add public Container.getExtraClasspath() API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-133</a>	FIXED	<a href="#">Add public Container.getSystemProperties() API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-131</a>	FIXED	<a href="#">Test on Resin 3.0.9</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-130</a>	FIXED	<a href="#">Test on Resin 2.1.16</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-123</a>	FIXED	<a href="#">Move all Monitor-related classes to a o.c.c.util.monitor package</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-122</a>	FIXED	<a href="#">Split the core subproject into 3: container, util and module</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-121</a>	FIXED	<a href="#">Extract superclass for Resin and job deployer</a>	Hendrik Schreiber	Hendrik Schreiber
	<a href="#">CARGO-119</a>	FIXED	<a href="#">Functionality for adding ejb-refs to web applications</a>	Vincent Massol	Magnus Grimsmell
	<a href="#">CARGO-115</a>	FIXED	<a href="#">Create a Jetty4xEmbedded Deployer</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-114</a>	FIXED	<a href="#">Add Container.isAppend() API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-113</a>	FIXED	<a href="#">Add Container.getOutput() API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-112</a>	FIXED	<a href="#">Create URLDeployableMonitor to monitor deployable using a URL</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-111</a>	FIXED	<a href="#">Add DeployableMonitor/DeployableMonitorListener</a>	Vincent Massol	Vincent Massol

	<a href="#">interfaces to monitor deployable hot deployments</a>			
	<a href="#">CARGO-110</a>	FIXED	<a href="#">Functionality for adding web modules to application.xml</a>	Vincent Massol    Magnus Grimsell
	<a href="#">CARGO-109</a>	FIXED	<a href="#">WebXmlMerger cannot merge the run-as element of a servlet</a>	Vincent Massol    Magnus Grimsell
	<a href="#">CARGO-108</a>	FIXED	<a href="#">Ability to get Jetty Server object for configuration</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-105</a>	FIXED	<a href="#">Move all configuration-related API to a new org.codehaus.cargo.container.configuration package</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-104</a>	FIXED	<a href="#">Move static deployments to Standalone Configuration</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-103</a>	FIXED	<a href="#">Create a Resin Deployer</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-102</a>	FIXED	<a href="#">Add migration guide for migrating from Cargo 0.4 to Cargo 0.5</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-101</a>	FIXED	<a href="#">Add support for jo!</a>	Hendrik Schreiber    Hendrik Schreiber
	<a href="#">CARGO-98</a>	FIXED	<a href="#">[Maven plugin] Container stops with maven</a>	Arnaud Heritier    Arnaud Heritier
	<a href="#">CARGO-97</a>	CANNOT REPRODUCE	<a href="#">Missing tools.jar in CP for WebLogic 8.x implementation</a>	Vincent Massol    Vincent Massol
	<a href="#">CARGO-96</a>	FIXED	<a href="#">Proxy settings do not seem to work when using the ZipURLInstaller</a>	Arnaud Heritier    Vincent Massol
	<a href="#">CARGO-92</a>	FIXED	<a href="#">Missing Xerces dependency when using the Maven Eclipse plugin</a>	Vincent Massol    Arnaud Heritier

## Source code changes

Changes detected by [Clirr](#) between cargo-0.4.jar and cargo-0.5.jar:

- [Core] org.codehaus.cargo.deployment.\* package moved to org.codehaus.cargo.module

```
ERROR: 8001: org.codehaus.cargo.deployment.DefaultJarArchive: Class
org.codehaus.cargo.deployment.DefaultJarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.JarArchive: Class
org.codehaus.cargo.deployment.JarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.application.ApplicationXml: Class
org.codehaus.cargo.deployment.application.ApplicationXml removed
ERROR: 8001: org.codehaus.cargo.deployment.application.ApplicationXmlIo: Class
org.codehaus.cargo.deployment.application.ApplicationXmlIo removed
ERROR: 8001:
org.codehaus.cargo.deployment.application.ApplicationXmlIo$ApplicationXmlEntityResolver: Class
org.codehaus.cargo.deployment.application.ApplicationXmlIo$ApplicationXmlEntityResolver removed
ERROR: 8001: org.codehaus.cargo.deployment.application.ApplicationXmlTag: Class
org.codehaus.cargo.deployment.application.ApplicationXmlTag removed
ERROR: 8001: org.codehaus.cargo.deployment.application.ApplicationXmlVersion: Class
org.codehaus.cargo.deployment.application.ApplicationXmlVersion removed
ERROR: 8001: org.codehaus.cargo.deployment.application.DefaultApplicationXml: Class
org.codehaus.cargo.deployment.application.DefaultApplicationXml removed
ERROR: 8001: org.codehaus.cargo.deployment.application.DefaultEarArchive: Class
org.codehaus.cargo.deployment.application.DefaultEarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.application.EarArchive: Class
org.codehaus.cargo.deployment.application.EarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.AbstractDescriptor: Class
org.codehaus.cargo.deployment.webapp.AbstractDescriptor removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.AbstractDescriptorIo: Class
org.codehaus.cargo.deployment.webapp.AbstractDescriptorIo removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.AbstractDescriptorTag: Class
org.codehaus.cargo.deployment.webapp.AbstractDescriptorTag removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.DefaultWarArchive: Class
org.codehaus.cargo.deployment.webapp.DefaultWarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.WarArchive: Class
org.codehaus.cargo.deployment.webapp.WarArchive removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXml: Class
org.codehaus.cargo.deployment.webapp.WebXml removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXmlIo: Class
org.codehaus.cargo.deployment.webapp.WebXmlIo removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXmlIo$WebXmlEntityResolver: Class
org.codehaus.cargo.deployment.webapp.WebXmlIo$WebXmlEntityResolver removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXmlMerger: Class
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ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXmlTag: Class
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ERROR: 8001: org.codehaus.cargo.deployment.webapp.WebXmlVersion: Class
org.codehaus.cargo.deployment.webapp.WebXmlVersion removed
ERROR: 8001: org.codehaus.cargo.deployment.webapp.jboss.JBossWarArchive: Class
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ERROR: 8001: org.codehaus.cargo.deployment.webapp.jboss.JBossWebXml: Class
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INFO: 8000: org.codehaus.cargo.module.DefaultJarArchive: Class
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INFO: 8000: org.codehaus.cargo.module.Descriptor: Class org.codehaus.cargo.module.Descriptor
added
INFO: 8000: org.codehaus.cargo.module.Dtd: Class org.codehaus.cargo.module.Dtd added
INFO: 8000: org.codehaus.cargo.module.Dtd$DtdHandler: Class
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INFO: 8000: org.codehaus.cargo.module.Dtd$XmlEntityResolver: Class
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INFO: 8000: org.codehaus.cargo.module.DtdParseException: Class
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INFO: 8000: org.codehaus.cargo.module.Grammar: Class org.codehaus.cargo.module.Grammar added
INFO: 8000: org.codehaus.cargo.module.JarArchive: Class org.codehaus.cargo.module.JarArchive
```

```

added
INFO: 8000: org.codehaus.cargo.module.application.ApplicationXml: Class
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INFO: 8000: org.codehaus.cargo.module.application.ApplicationXmlIo: Class
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org.codehaus.cargo.module.application.ApplicationXmlIo$ApplicationXmlEntityResolver: Class
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INFO: 8000: org.codehaus.cargo.module.ejb.Session: Class org.codehaus.cargo.module.ejb.Session
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INFO: 8000: org.codehaus.cargo.module.webapp.WebXmlIo: Class
org.codehaus.cargo.module.webapp.WebXmlIo added
INFO: 8000: org.codehaus.cargo.module.webapp.WebXmlIo$WebXmlEntityResolver: Class
org.codehaus.cargo.module.webapp.WebXmlIo$WebXmlEntityResolver added
INFO: 8000: org.codehaus.cargo.module.webapp.WebXmlMerger: Class
org.codehaus.cargo.module.webapp.WebXmlMerger added
INFO: 8000: org.codehaus.cargo.module.webapp.WebXmlTag: Class
org.codehaus.cargo.module.webapp.WebXmlTag added

```

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INFO: 8000: org.codehaus.cargo.module.webapp.WebXmlVersion: Class
org.codehaus.cargo.module.webapp.WebXmlVersion added
INFO: 8000: org.codehaus.cargo.module.webapp.jboss.JBossWarArchive: Class
org.codehaus.cargo.module.webapp.jboss.JBossWarArchive added
INFO: 8000: org.codehaus.cargo.module.webapp.jboss.JBossWebXml: Class
org.codehaus.cargo.module.webapp.jboss.JBossWebXml added
INFO: 8000: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlIo: Class
org.codehaus.cargo.module.webapp.jboss.JBossWebXmlIo added
INFO: 8000: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlTag: Class
org.codehaus.cargo.module.webapp.jboss.JBossWebXmlTag added
INFO: 8000: org.codehaus.cargo.module.webapp.orion.OrionWebXml: Class
org.codehaus.cargo.module.webapp.orion.OrionWebXml added
INFO: 8000: org.codehaus.cargo.module.webapp.orion.OrionWebXmlIo: Class
org.codehaus.cargo.module.webapp.orion.OrionWebXmlIo added
INFO: 8000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXml: Class
org.codehaus.cargo.module.webapp.tomcat.TomcatContextXml added
INFO: 8000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlIo: Class
org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlIo added
INFO: 8000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlTag: Class
org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlTag added
INFO: 8000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXml added
INFO: 8000: org.codehaus.cargo.module.webapp.tomcat.TomcatWarArchive: Class
org.codehaus.cargo.module.webapp.tomcat.TomcatWarArchive added
INFO: 8000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXml: Class
org.codehaus.cargo.module.webapp.weblogic.WeblogicXml added
INFO: 8000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlIo: Class
org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlIo added
INFO: 8000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlTag: Class
org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlTag added
INFO: 8000: org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmi: Class
org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmi added
INFO: 8000: org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmiGrammar: Class
org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmiGrammar added
INFO: 8000: org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmiIo: Class
org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmiIo added

```

- [Core] Removed ability to add deployables to a Container. They must now either be added to a Configuration for static deployment or using a Deployer for dynamic deployments
- [Core] Added a StandaloneConfiguration interface which defines the addDeployable() method.
- [Ant] Moved <war> and <ear> elements inside the <configuration> element

```

ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void
addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public java.util.List
getDeployables()' has been removed
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'public void
addConfiguredEar(org.codehaus.cargo.ant.EARElement)' has been removed
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'public void
addConfiguredWar(org.codehaus.cargo.ant.WARElement)' has been removed
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'protected java.util.List getEars()' has
been removed
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'protected java.util.List getWars()' has
been removed
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'protected void
setupDeployables(org.codehaus.cargo.container.Container)' has been removed
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void
addConfiguredEar(org.codehaus.cargo.ant.EARElement)' has been added
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void
addConfiguredWar(org.codehaus.cargo.ant.WARElement)' has been added
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'protected java.util.List
getEars()' has been added
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'protected java.util.List
getWars()' has been added
INFO: 4000: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: Added

```

```

org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
INFO: 4000: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Added
org.codehaus.cargo.container.configuration.StandaloneConfiguration to the set of implemented
interfaces
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void
addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.util.List
getDeployables()' has been removed
INFO: 7011: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Method 'public
void addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been added
INFO: 7011: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Method 'public
java.util.List getDeployables()' has been added

```

- [Core] Added Deployer interface for dynamic deployments + implementation for Resin, Jetty and Jolix

```

INFO: 8000: org.codehaus.cargo.container.deployer.DefaultDeployerFactory: Class
org.codehaus.cargo.container.deployer.DefaultDeployerFactory added
INFO: 8000: org.codehaus.cargo.container.deployer.DeployableMonitor: Class
org.codehaus.cargo.container.deployer.DeployableMonitor added
INFO: 8000: org.codehaus.cargo.container.deployer.DeployableMonitorListener: Class
org.codehaus.cargo.container.deployer.DeployableMonitorListener added
INFO: 8000: org.codehaus.cargo.container.deployer.Deployer: Class
org.codehaus.cargo.container.deployer.Deployer added
INFO: 8000: org.codehaus.cargo.container.deployer.DeployerFactory: Class
org.codehaus.cargo.container.deployer.DeployerFactory added
INFO: 8000: org.codehaus.cargo.container.deployer.URLDeployableMonitor: Class
org.codehaus.cargo.container.deployer.URLDeployableMonitor added
INFO: 8000: org.codehaus.cargo.container.jetty.JettyDeployer: Class
org.codehaus.cargo.container.jetty.JettyDeployer added
INFO: 8000: org.codehaus.cargo.container.orion.OrionDeployer: Class
org.codehaus.cargo.container.orion.OrionDeployer added
INFO: 8000: org.codehaus.cargo.container.resin.ResinDeployer: Class
org.codehaus.cargo.container.resin.ResinDeployer added
INFO: 8000: org.codehaus.cargo.container.jo.JolxDeployer: Class
org.codehaus.cargo.container.jo.JolxDeployer added
INFO: 8000: org.codehaus.cargo.container.spi.DeployerWatchdog: Class
org.codehaus.cargo.container.spi.DeployerWatchdog added
INFO: 8000: org.codehaus.cargo.container.spi.AbstractCopyingDeployer: Class
org.codehaus.cargo.container.spi.AbstractCopyingDeployer added

```

- [Core] Moved Configuration objects to package `org.codehaus.cargo.container.configuration` (they were previously in `org.codehaus.cargo.container`)
- [Core] Moved `org.codehaus.cargo.container.configuration.ConfigurationFactory` to an interface and added a `org.codehaus.cargo.container.configuration.DefaultConfigurationFactory`
- [Core] Added new `org.codehaus.cargo.container.configuration.ConfigurationCapability` class

```

ERROR: 7005: org.codehaus.cargo.container.Container: Parameter 1 of 'public void
setConfiguration(org.codehaus.cargo.container.Configuration)' has changed its type to
org.codehaus.cargo.container.configuration.Configuration
ERROR: 7006: org.codehaus.cargo.ant.ConfigurationElement: Return type of method 'public
org.codehaus.cargo.container.Configuration
createConfiguration(org.codehaus.cargo.container.Container)' has been changed to
org.codehaus.cargo.container.configuration.Configuration
ERROR: 8001: org.codehaus.cargo.container.Configuration: Class
org.codehaus.cargo.container.Configuration removed
ERROR: 8001: org.codehaus.cargo.container.ConfigurationFactory: Class
org.codehaus.cargo.container.ConfigurationFactory removed
ERROR: 8001: org.codehaus.cargo.container.ConfigurationFactory$ConfigurationKey: Class

```



```

INFO: 7003: org.codehaus.cargo.container.spi.AbstractConfiguration: Method 'public void
configure()' has been removed, but an inherited definition exists.
INFO: 7003: org.codehaus.cargo.container.spi.AbstractConfiguration: Method 'public void
verifyProperties()' has been removed, but an inherited definition exists.
INFO: 7003: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.lang.String
getId()' has been removed, but an inherited definition exists.
INFO: 7003: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.lang.String
getName()' has been removed, but an inherited definition exists.

```

- [Core] Added Jo 1.x support

```

INFO: 8000: org.codehaus.cargo.ant.jo.JolxCargoTask: Class
org.codehaus.cargo.ant.jo.JolxCargoTask added
INFO: 8000: org.codehaus.cargo.container.jo.JolxContainer: Class
org.codehaus.cargo.container.jo.JolxContainer added
INFO: 8000: org.codehaus.cargo.container.jo.JolxDployer: Class
org.codehaus.cargo.container.jo.JolxDployer added
INFO: 8000: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Class
org.codehaus.cargo.container.jo.JolxStandaloneConfiguration added
INFO: 8000: org.codehaus.cargo.container.jo.JoPropertySet: Class
org.codehaus.cargo.container.jo.JoPropertySet added

```

- [Core] Renamed org.codehaus.cargo.container.Capability to  
org.codehaus.cargo.container.ContainerCapability

```

ERROR: 8001: org.codehaus.cargo.container.Capability: Class
org.codehaus.cargo.container.Capability removed
INFO: 8000: org.codehaus.cargo.container.ContainerCapability: Class
org.codehaus.cargo.container.ContainerCapability added
ERROR: 7006: org.codehaus.cargo.container.Container: Return type of method 'public
org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7006: org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer: Return type of method
'public org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7006: org.codehaus.cargo.container.orion.AbstractOrionContainer: Return type of method
'public org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7006: org.codehaus.cargo.container.resin.AbstractResinContainer: Return type of method
'public org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7006: org.codehaus.cargo.container.tomcat.AbstractTomcatContainer: Return type of method
'public org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7006: org.codehaus.cargo.container.weblogic.AbstractWebLogicContainer: Return type of
method 'public org.codehaus.cargo.container.Capability getCapability()' has been changed to
org.codehaus.cargo.container.ContainerCapability
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public
org.codehaus.cargo.container.Capability getCapability()' has been removed

```

- [Core] Moved all Monitor-related classes from org.codehaus.cargo.util to  
org.codehaus.cargo.util.monitor

```

ERROR: 4001: org.codehaus.cargo.container.Container: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.Container: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
ERROR: 4001: org.codehaus.cargo.container.deployable.Deployable: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.deployable.Deployable: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
ERROR: 4001: org.codehaus.cargo.container.deployable.EAR: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.deployable.EAR: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
ERROR: 5001: org.codehaus.cargo.container.deployable.EAR: Removed
org.codehaus.cargo.util.MonitoredObject from the list of superclasses
INFO: 5000: org.codehaus.cargo.container.deployable.EAR: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 4001: org.codehaus.cargo.container.deployable.WAR: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.deployable.WAR: Added

```







```

INFO: 5000: org.codehaus.cargo.container.weblogic.AbstractWebLogicContainer: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 4001: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
ERROR: 5001: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: Removed
org.codehaus.cargo.util.MonitoredObject from the list of superclasses
INFO: 5000: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 4001: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Removed
org.codehaus.cargo.util.Monitorable from the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
ERROR: 5001: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Removed
org.codehaus.cargo.util.MonitoredObject from the list of superclasses
INFO: 5000: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 8001: org.codehaus.cargo.util.FileMonitor: Class org.codehaus.cargo.util.FileMonitor
removed
ERROR: 8001: org.codehaus.cargo.util.Monitor: Class org.codehaus.cargo.util.Monitor removed
ERROR: 8001: org.codehaus.cargo.util.Monitorable: Class org.codehaus.cargo.util.Monitorable
removed
ERROR: 8001: org.codehaus.cargo.util.MonitoredObject: Class
org.codehaus.cargo.util.MonitoredObject removed
ERROR: 8001: org.codehaus.cargo.util.NullMonitor: Class org.codehaus.cargo.util.NullMonitor
removed
ERROR: 8001: org.codehaus.cargo.util.SimpleMonitor: Class org.codehaus.cargo.util.SimpleMonitor
removed
INFO: 8000: org.codehaus.cargo.util.monitor.FileMonitor: Class
org.codehaus.cargo.util.monitor.FileMonitor added
INFO: 8000: org.codehaus.cargo.util.monitor.Monitor: Class
org.codehaus.cargo.util.monitor.Monitor added
INFO: 8000: org.codehaus.cargo.util.monitor.Monitorable: Class
org.codehaus.cargo.util.monitor.Monitorable added
INFO: 8000: org.codehaus.cargo.util.monitor.MonitoredObject: Class
org.codehaus.cargo.util.monitor.MonitoredObject added
INFO: 8000: org.codehaus.cargo.util.monitor.NullMonitor: Class
org.codehaus.cargo.util.monitor.NullMonitor added
INFO: 8000: org.codehaus.cargo.util.monitor.SimpleMonitor: Class
org.codehaus.cargo.util.monitor.SimpleMonitor added

```

- [Core] Added new org.codehaus.cargo.util.monitor.AntMonitor class

```

INFO: 8000: org.codehaus.cargo.util.monitor.AntMonitor: Class
org.codehaus.cargo.util.monitor.AntMonitor added

```

- [Core] Promoted org.codehaus.cargo.container.internal.util.FileUtils class to a public
org.codehaus.cargo.util.FileUtils class as it is now used in the org.codehaus.cargo.module
package (and we do want to have any dependency from org.codehaus.cargo.module to
org.codehaus.cargo.container - only in the other direction)

```

INFO: 8000: org.codehaus.cargo.util.FileUtils: Class org.codehaus.cargo.util.FileUtils added
ERROR: 8001: org.codehaus.cargo.container.internal.util.FileUtils: Class
org.codehaus.cargo.container.internal.util.FileUtils removed
ERROR: 7006: org.codehaus.cargo.container.spi.AbstractConfiguration: Return type of method
'protected org.codehaus.cargo.container.internal.util.FileUtils getFileUtils()' has been
changed to org.codehaus.cargo.util.FileUtils
ERROR: 7006: org.codehaus.cargo.container.spi.AbstractContainer: Return type of method
'protected org.codehaus.cargo.container.internal.util.FileUtils getFileUtils()' has been
changed to org.codehaus.cargo.util.FileUtils

```

- [Core] Added new org.codehaus.cargo.util.CargoException which is the base of all Cargo
exceptions.

```

INFO: 8000: org.codehaus.cargo.util.CargoException: Class
org.codehaus.cargo.util.CargoException added
WARNING: 5000: org.codehaus.cargo.container.ContainerException: Added
org.codehaus.cargo.util.CargoException to the list of superclasses
INFO: 7000: org.codehaus.cargo.container.ContainerException: Method 'public java.lang.Throwable

```

```
getOriginalThrowable()' is now implemented in superclass org.codehaus.cargo.util.CargoException  
INFO: 7003: org.codehaus.cargo.container.ContainerException: Method 'public void  
printStackTrace()' has been removed, but an inherited definition exists.  
INFO: 7003: org.codehaus.cargo.container.ContainerException: Method 'public void  
printStackTrace(java.io.PrintStream)' has been removed, but an inherited definition exists.  
INFO: 7003: org.codehaus.cargo.container.ContainerException: Method 'public void  
printStackTrace(java.io.PrintWriter)' has been removed, but an inherited definition exists.
```

- [Core] Added public APIs `org.codehaus.cargo.container.Container.getOutput()` and `org.codehaus.cargo.container.Container.isAppend()`

```
ERROR: 7012: org.codehaus.cargo.container.Container: Method 'public java.io.File getOutput()'  
has been added to an interface  
ERROR: 7012: org.codehaus.cargo.container.Container: Method 'public boolean isAppend()' has  
been added to an interface  
INFO: 7010: org.codehaus.cargo.container.spi.AbstractContainer: Accessibility of method  
protected java.io.File getOutput()' has been increased from protected to public  
INFO: 7010: org.codehaus.cargo.container.spi.AbstractContainer: Accessibility of method  
protected boolean isAppend()' has been increased from protected to public
```

- [Core] Fixed proxy support in the Installer by adding a ProxyAuthenticator class
- [Core] Added tests for ZipURLInstaller and made small modifications to improve testability

```
INFO: 8000: org.codehaus.cargo.container.installer.Proxy$ProxyAuthenticator: Class  
org.codehaus.cargo.container.installer.Proxy$ProxyAuthenticator added  
INFO: 7010: org.codehaus.cargo.container.installer.ZipURLInstaller: Accessibility of method  
private void download()' has been increased from private to protected  
INFO: 7011: org.codehaus.cargo.container.installer.ZipURLInstaller: Method 'protected void  
setAntTaskFactory(org.codehaus.cargo.container.internal.util.AntTaskFactory)' has been added
```

- [Core] Added handy class when implementing Cargo factories based on a container id and a hint

```
INFO: 8000: org.codehaus.cargo.container.spi.AbstractGenericHintFactory: Class  
org.codehaus.cargo.container.spi.AbstractGenericHintFactory added  
INFO: 8000: org.codehaus.cargo.container.spi.AbstractGenericHintFactory$GenericParameters:  
Class org.codehaus.cargo.container.spi.AbstractGenericHintFactory$GenericParameters added
```

- [Core] Start of a Resin ExistingConfiguration implementation. Does not work yet and must not be used.

```
INFO: 8000: org.codehaus.cargo.container.resin.ResinExistingConfiguration: Class  
org.codehaus.cargo.container.resin.ResinExistingConfiguration added
```

- [Core] Added property for supporting container authentication

```
INFO: 6000: org.codehaus.cargo.container.property.ServletPropertySet: Added public field USERS  
INFO: 8000: org.codehaus.cargo.container.property.User: Class  
org.codehaus.cargo.container.property.User added  
INFO: 8000: org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration: Class  
org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration added  
INFO: 5000: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Added  
org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration to the list of  
superclasses  
INFO: 5000: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Added  
org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration to the list of  
superclasses  
INFO: 7011: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Method 'protected  
java.lang.String getToken()' has been added  
INFO: 7011: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Method 'protected  
java.lang.String getUserToken()' has been added  
INFO: 7011: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Method  
'protected java.lang.String getSecurityToken(java.lang.String, java.lang.String)' has been  
added
```

- [Core] Added `org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer.getServer()` API to allow users to further configure a Jetty server

```
INFO: 7011: org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer: Method 'public  
java.lang.Object getServer()' has been added
```

- [Core] Added possibility to pass JVM arguments to Configurations by introducing a new cargo.jvmargs property

```
INFO: 6000: org.codehaus.cargo.container.property.GeneralPropertySet: Added public field  
JVMARGS
```

## Release notes for Cargo 0.6

This page last changed on Dec 30, 2005 by [vmassol](#).

### Implemented issues

jira.codehaus.org (25 issues)					
T	Key	Res	Summary	Assignee	Reporter
	<a href="#">CARGO-168</a>	FIXED	<a href="#">Distribution creation fails</a>	Vincent Massol	Arnaud Heritier
	<a href="#">CARGO-167</a>	FIXED	<a href="#">maven-findbugs-plugin not found when creating the distribution</a>	Arnaud Heritier	Arnaud Heritier
	<a href="#">CARGO-166</a>	FIXED	<a href="#">Add DeployableMonitor.undeploy() API to monitor undeployments</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-165</a>	FIXED	<a href="#">Current distribution is not compatible with Maven2</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-163</a>	FIXED	<a href="#">Add new ConfigurationFactory.isConfigurationRegistered() API method</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-162</a>	FIXED	<a href="#">Move addDeployable/getDeployables from StandaloneConfiguration to Configuration</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-160</a>	FIXED	<a href="#">Move all extensions to the core in a new extensions/ directory</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-159</a>	FIXED	<a href="#">Fix SCM &lt;connection&gt; tags in build POMs which are using an invalid "http://" protocol</a>	Vincent Massol	jeremi Joslin
	<a href="#">CARGO-158</a>	FIXED	<a href="#">Transform ContainerFactory class into an interface</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-157</a>	FIXED	<a href="#">Rename containerKey attribute in containerId in the Cargo task and add a new</a>	Vincent Massol	Vincent Massol

			<a href="#">class attribute for custom container implementations</a>		
	<a href="#">CARGO-156</a>	FIXED	<a href="#">Completely separate DeployableFactory from Container interface</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-155</a>	FIXED	<a href="#">Separate Generic Java API from the core container API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-154</a>	FIXED	<a href="#">Added new DeployableType class</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-153</a>	FIXED	<a href="#">Remove dependency on Container in Configuration's constructors and Add Configuration to Container's constructors</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-152</a>	FIXED	<a href="#">Add new Container.setDeployableFactory API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-151</a>	FIXED	<a href="#">Replace DeployableFactory.createWAR()/EAR() by a generic createDeployable()</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-150</a>	FIXED	<a href="#">Introduce new ConfigurationType enumeration class</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-145</a>	DUPLICATE	<a href="#">Add support for JBoss Application Server</a>	Vincent Massol	I Nyoman Winardi
	<a href="#">CARGO-143</a>	FIXED	<a href="#">Allow Tomcat META-INF/context.xml to be used in expanded webapps</a>	Vincent Massol	Jan Zuchhold
	<a href="#">CARGO-142</a>	CANNOT REPRODUCE	<a href="#">Ant tasks do not clear old temp files.</a>	Vincent Massol	Michael Rimov
	<a href="#">CARGO-141</a>	FIXED	<a href="#">EjbJarXml.getVendor returns null for WebSphere</a>	Vincent Massol	Magnus Grimsell
	<a href="#">CARGO-140</a>	FIXED	<a href="#">Maven cargo plugin references cargo-ant as a dependency</a>	Vincent Massol	Brice Copy
	<a href="#">CARGO-139</a>	FIXED	<a href="#">dtd:s are loaded</a>	Vincent Massol	Magnus Grimsell

	<a href="#">CARGO-135</a>	WON'T FIX	<a href="#">from the web</a> <a href="#">Add Cargo config file</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-127</a>	FIXED	<a href="#">Add support for passing system properties in the Maven plugin</a>	Vincent Massol	Vincent Massol

## Source code changes

Changes detected by [Clirr](#) between cargo-0.5.jar and cargo-0.6.jar.

Binary compatibility breaks:

```

ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void
executeActions(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: Method 'protected java.lang.String getContainerKey()' has been removed
ERROR: org.codehaus.cargo.ant.CargoTask: Method 'public void setContainerKey(java.lang.String)' has been removed
ERROR: org.codehaus.cargo.ant.CargoTask: Method 'protected void setupConfiguration(org.codehaus.cargo.container.Container)' has been removed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupExtraClasspath(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupHomeDir(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupMonitor(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupOutput(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupSystemProperties(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.CargoTask: In method 'protected void setupTimeout(org.codehaus.cargo.container.Container)' the number of arguments has changed
ERROR: org.codehaus.cargo.ant.ConfigurationElement: Parameter 1 of 'public org.codehaus.cargo.container.configuration.Configuration createConfiguration(org.codehaus.cargo.container.Container)' has changed its type to java.lang.String
ERROR: org.codehaus.cargo.ant.ConfigurationElement: Method 'public java.lang.String getHint()' has been removed
ERROR: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void setHint(java.lang.String)' has been removed
ERROR: org.codehaus.cargo.ant.EARElement: Parameter 1 of 'public org.codehaus.cargo.container.deployable.EAR createEAR(org.codehaus.cargo.container.Container)' has changed its type to java.lang.String
ERROR: org.codehaus.cargo.ant.WARElement: Parameter 1 of 'public org.codehaus.cargo.container.deployable.WAR createWAR(org.codehaus.cargo.container.Container)' has changed its type to java.lang.String
ERROR: org.codehaus.cargo.container.Container: Method 'public org.codehaus.cargo.container.deployable.DeployableFactory getDeployableFactory()' has been removed
ERROR: org.codehaus.cargo.container.ContainerFactory: Class org.codehaus.cargo.container.ContainerFactory removed
ERROR: org.codehaus.cargo.container.configuration.Configuration: Method 'public void addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been added to an interface
ERROR: org.codehaus.cargo.container.configuration.Configuration: Method 'public java.util.List<Deployable> getDeployables()' has been added to an interface
ERROR: org.codehaus.cargo.container.configuration.ConfigurationFactory: Class org.codehaus.cargo.container.configuration.ConfigurationFactory removed
ERROR: org.codehaus.cargo.container.configuration.DefaultConfigurationFactory: Class org.codehaus.cargo.container.configuration.DefaultConfigurationFactory removed
ERROR: org.codehaus.cargo.container.configuration.DefaultConfigurationFactory$ConfigurationFactoryParameters: Class org.codehaus.cargo.container.configuration.DefaultConfigurationFactory$ConfigurationFactoryParameters removed

```

```
ERROR: org.codehaus.cargo.container.configuration.StandaloneConfiguration: Class
org.codehaus.cargo.container.configuration.StandaloneConfiguration removed
ERROR: org.codehaus.cargo.container.deployable.DeployableFactory: Class
org.codehaus.cargo.container.deployable.DeployableFactory removed
ERROR: org.codehaus.cargo.container.deployer.DefaultDeployerFactory: Class
org.codehaus.cargo.container.deployer.DefaultDeployerFactory removed
ERROR: org.codehaus.cargo.container.deployer.DeployableMonitorListener: Method 'public void
undeployed()' has been added to an interface
ERROR: org.codehaus.cargo.container.deployer.DeployerFactory: Class
org.codehaus.cargo.container.deployer.DeployerFactory removed
ERROR: org.codehaus.cargo.container.internal.util.HintKey: Class
org.codehaus.cargo.container.internal.util.HintKey removed
ERROR: org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer: In method 'public
Jetty4xEmbeddedContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Parameter 1 of 'public
JettyStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its type to
java.io.File
ERROR: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Method 'public
JettyStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: In method 'public void
configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.jo.JolxContainer: In method 'public JolxContainer()' the
number of arguments has changed
ERROR: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Parameter 1 of 'public
JolxStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its type to
java.io.File
ERROR: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Method 'public
JolxStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: In method 'public void
configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.orion.AbstractOrionContainer: In method 'public
AbstractOrionContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.orion.Oc4j9xContainer: In method 'public Oc4j9xContainer()'
the number of arguments has changed
ERROR: org.codehaus.cargo.container.orion.OrionlxContainer: In method 'public
OrionlxContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.orion.Orion2xContainer: In method 'public
Orion2xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.orion.OrionDeployer: Class
org.codehaus.cargo.container.orion.OrionDeployer removed
ERROR: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Parameter 1 of 'public
OrionStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its type to
java.io.File
ERROR: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Method 'public
OrionStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: In method 'public void
configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.resin.AbstractResinContainer: In method 'public
AbstractResinContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Parameter 1 of
'public AbstractResinStandaloneConfiguration(org.codehaus.cargo.container.Container)' has
changed its type to java.io.File
ERROR: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Method 'public
AbstractResinStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has
been removed
ERROR: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: In method
'public void configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: In method
'protected void prepareAdditions(org.apache.tools.ant.types.FilterChain)' the number of
arguments has changed
ERROR: org.codehaus.cargo.container.resin.Resin2xContainer: In method 'public
Resin2xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: Removed
```

```
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: Parameter 1 of
'public Resin2xStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its
type to java.io.File
ERROR: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: Method 'public
Resin2xStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: In method 'protected
void prepareAdditions(org.apache.tools.ant.types.FilterChain)' the number of arguments has
changed
ERROR: org.codehaus.cargo.container.resin.Resin3xContainer: In method 'public
Resin3xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: Parameter 1 of
'public Resin3xStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its
type to java.io.File
ERROR: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: Method 'public
Resin3xStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: In method 'protected
void prepareAdditions(org.apache.tools.ant.types.FilterChain)' the number of arguments has
changed
ERROR: org.codehaus.cargo.container.resin.ResinExistingConfiguration: Parameter 1 of 'public
ResinExistingConfiguration(org.codehaus.cargo.container.Container)' has changed its type to
java.io.File
ERROR: org.codehaus.cargo.container.resin.ResinExistingConfiguration: Method 'public
ResinExistingConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.resin.ResinExistingConfiguration: In method 'public void
configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.spi.AbstractConfiguration: In method 'public
AbstractConfiguration(org.codehaus.cargo.container.Container, java.io.File)' the number of
arguments has changed
ERROR: org.codehaus.cargo.container.spi.AbstractConfiguration: Method 'public
org.codehaus.cargo.container.Container getContainer()' has been removed
ERROR: org.codehaus.cargo.container.spi.AbstractContainer: In method 'public
AbstractContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public
org.codehaus.cargo.container.deployable.DeployableFactory getDeployableFactory()' has been
removed
ERROR: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void
setDeployableFactory(org.codehaus.cargo.container.deployable.DeployableFactory)' has been
removed
ERROR: org.codehaus.cargo.container.spi.AbstractGenericHintFactory: Class
org.codehaus.cargo.container.spi.AbstractGenericHintFactory removed
ERROR: org.codehaus.cargo.container.spi.AbstractGenericHintFactory$GenericParameters: Class
org.codehaus.cargo.container.spi.AbstractGenericHintFactory$GenericParameters removed
ERROR: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Parameter 1 of 'public
AbstractStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its type
to java.io.File
ERROR: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Method 'public
AbstractStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.spi.ContainerConfiguration: In method 'public void
configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.spi.DefaultDeployableFactory: Class
org.codehaus.cargo.container.spi.DefaultDeployableFactory removed
ERROR: org.codehaus.cargo.container.spi.DeployerWatchdog: Method 'public void
waitForDeployment()' has been removed
ERROR: org.codehaus.cargo.container.tomcat.AbstractCatalinaContainer: In method 'public
AbstractCatalinaContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.AbstractTomcatContainer: In method 'public
AbstractTomcatContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration: Parameter 1
of 'public AbstractTomcatStandaloneConfiguration(org.codehaus.cargo.container.Container)' has
changed its type to java.io.File
ERROR: org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration: Method
'public AbstractTomcatStandaloneConfiguration(org.codehaus.cargo.container.Container,
java.io.File)' has been removed
```

```

ERROR: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Parameter 1 of
'public CatalinaStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed
its type to java.io.File
ERROR: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Method 'public
CatalinaStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: In method 'public
void configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.Tomcat3xContainer: In method 'public
Tomcat3xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.Tomcat4xContainer: In method 'public
Tomcat4xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.Tomcat5xContainer: In method 'public
Tomcat5xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.tomcat.TomcatDeployableFactory: Class
org.codehaus.cargo.container.tomcat.TomcatDeployableFactory removed
ERROR: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Parameter 1 of
'public TomcatStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed its
type to java.io.File
ERROR: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Method 'public
TomcatStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: In method 'public
void configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.weblogic.AbstractWebLogicContainer: In method 'public
AbstractWebLogicContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: In method 'public
WebLogic8xContainer()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Removed
org.codehaus.cargo.container.configuration.StandaloneConfiguration from the set of implemented
interfaces
ERROR: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Parameter 1 of
'public WebLogicStandaloneConfiguration(org.codehaus.cargo.container.Container)' has changed
its type to java.io.File
ERROR: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Method 'public
WebLogicStandaloneConfiguration(org.codehaus.cargo.container.Container, java.io.File)' has been
removed
ERROR: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: In method 'public
void configure()' the number of arguments has changed
ERROR: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: In method
'protected void setupDeployables(java.io.File)' the number of arguments has changed
ERROR: org.codehaus.cargo.module.Dtd$XmlEntityResolver: Class
org.codehaus.cargo.module.Dtd$XmlEntityResolver removed

```

#### Changes not affecting compatibility:

```

INFO: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'protected java.lang.Class getContainerClass()'
has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'protected java.lang.String getContainerId()'
has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'protected
org.codehaus.cargo.util.monitor.Monitor getMonitor()' has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'protected
org.codehaus.cargo.container.Container makeContainer()' has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'public void setClass(java.lang.Class)' has been
added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'public void
setContainerFactory(org.codehaus.cargo.generic.ContainerFactory)' has been added
INFO: org.codehaus.cargo.ant.CargoTask: Method 'public void setContainerId(java.lang.String)'
has been added
INFO: org.codehaus.cargo.ant.ConfigurationElement: Method 'public
org.codehaus.cargo.generic.configuration.ConfigurationType getType()' has been added
INFO: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void
setType(java.lang.String)' has been added
INFO: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added

```

```
INFO: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.container.resin.ResinExistingConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.container.spi.AbstractConfiguration: Method 'public void
addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been added
INFO: org.codehaus.cargo.container.spi.AbstractConfiguration: Method 'public java.util.List
getDeployables()' has been added
INFO: org.codehaus.cargo.container.spi.AbstractCopyingDeployer: Method 'public void
deploy(java.util.List)' has been added
INFO: org.codehaus.cargo.container.spi.AbstractCopyingDeployer: Method 'public void
setShouldDeployExpandedWARs(boolean)' has been added
INFO: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Method 'public void
addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been removed, but an
inherited definition exists.
INFO: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Method 'public
java.util.List getDeployables()' has been removed, but an inherited definition exists.
INFO: org.codehaus.cargo.container.spi.DeployerWatchdog: Method 'public void undeployed()' has
been added
INFO: org.codehaus.cargo.container.spi.DeployerWatchdog: Method 'public void watch(boolean)'
has been added
INFO: org.codehaus.cargo.container.spi.DeployerWatchdog: Method 'public void
watchForAvailability()' has been added
INFO: org.codehaus.cargo.container.spi.DeployerWatchdog: Method 'public void
watchForUnavailability()' has been added
INFO: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Method 'public
java.lang.String toString()' has been added
INFO: org.codehaus.cargo.generic.ContainerFactory: Class
org.codehaus.cargo.generic.ContainerFactory added
INFO: org.codehaus.cargo.generic.DefaultContainerFactory: Class
org.codehaus.cargo.generic.DefaultContainerFactory added
INFO: org.codehaus.cargo.generic.configuration.ConfigurationFactory: Class
org.codehaus.cargo.generic.configuration.ConfigurationFactory added
INFO: org.codehaus.cargo.generic.configuration.ConfigurationType: Class
org.codehaus.cargo.generic.configuration.ConfigurationType added
INFO: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Class
org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory added
INFO:
org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory$ConfigurationFactoryParameters:
Class
org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory$ConfigurationFactoryParameters
added
INFO: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Class
org.codehaus.cargo.generic.deployable.DefaultDeployableFactory added
INFO: org.codehaus.cargo.generic.deployable.DeployableFactory: Class
org.codehaus.cargo.generic.deployable.DeployableFactory added
INFO: org.codehaus.cargo.generic.deployable.DeployableType: Class
org.codehaus.cargo.generic.deployable.DeployableType added
INFO: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Class
org.codehaus.cargo.generic.deployer.DefaultDeployerFactory added
INFO: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory$DeployerFactoryParameters:
Class org.codehaus.cargo.generic.deployer.DefaultDeployerFactory$DeployerFactoryParameters
added
INFO: org.codehaus.cargo.generic.deployer.DeployerFactory: Class
org.codehaus.cargo.generic.deployer.DeployerFactory added
INFO: org.codehaus.cargo.generic.internal.util.HintKey: Class
org.codehaus.cargo.generic.internal.util.HintKey added
INFO: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory: Class
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory added
INFO: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters: Class
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters added
INFO: org.codehaus.cargo.module.XmlEntityResolver: Class
org.codehaus.cargo.module.XmlEntityResolver added
INFO: org.codehaus.cargo.module.webapp.WebXmlVersion: Method 'public boolean
equals(java.lang.Object)' has been removed, but an inherited definition exists.
INFO: org.codehaus.cargo.module.webapp.WebXmlVersion: Method 'public int hashCode()' has been
removed, but an inherited definition exists.
```

## Release notes for Cargo 0.7

This page last changed on Dec 30, 2005 by [vmassol](#).

### Main changes

Here are the highlights of Cargo 0.7:

- Major refactoring to support Remote containers (i.e. containers that are started somewhere and with which we don't interact through the file system).
- Added JBoss 3.x and 4.x support.
- Added new Deployable type: EJB. Note that this new deployable is supported only by the JBoss container.
- Added a Tomcat Existing Configuration implementation.
- Added a Tomcat Local Deployer and a Tomcat Remote Deployer which uses the Tomcat Manager app for deployment.
- Added a WebLogic Existing Configuration implementation.

The list of all issues fixed and features implemented is available below.

Please note that version 0.7 has broken almost all APIs. This was majoritarily due to the Remote container support refactoring. This is one of the last 0.X version before the 1.0 release and we took the opportunity to fix the API now rather than to go through a lengthy and difficult deprecation strategy (which we'll use once 1.0 is out). We apologize to all our early users for this. This is probably the last time such a major change happens before the 1.0 release.

### Implemented issues

jira.codehaus.org (25 issues)					
T	Key	Res	Summary	Assignee	Reporter
	<a href="#">CARGO-235</a>	FIXED	<a href="#">Add support for EJB deployments</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-234</a>	FIXED	<a href="#">Add support for EJB deployables</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-233</a>	FIXED	<a href="#">Replace &lt;war&gt; and &lt;ear&gt; config element by a generic &lt;deployable&gt; one in the Cargo Ant task</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-232</a>	FIXED	<a href="#">ClassCastException when trying to deploy an EAR in Tomcat 4.x or 5.x</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-228</a>	FIXED	<a href="#">Error while performing a remote</a>	Vincent Massol	Aleksander Blomskøld

			<a href="#">deployment with Tomcat</a>	Vincent Massol	Bill Dudney
	<a href="#">CARGO-226</a>	WON'T FIX	<a href="#">.project &amp; .classpath files for eclipse are in the repo, should be in svn:ignore property</a>	Vincent Massol	Bill Dudney
	<a href="#">CARGO-225</a>	FIXED	<a href="#">DefaultConfigurator fails when creating runtime configurations</a>	Vincent Massol	Aleksander Blomskøld
	<a href="#">CARGO-223</a>	WON'T FIX	<a href="#">no way to specify the manager to use in the tomcat impl</a>	Vincent Massol	Bill Dudney
	<a href="#">CARGO-220</a>	FIXED	<a href="#">Rename all m2 groupIds to org.codehaus.cargo</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-219</a>	FIXED	<a href="#">Create a core/uberjar project to generate an aggregated core jar (uberjar)</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-218</a>	FIXED	<a href="#">Removed creation of default configurations when creating a container using a ContainerFactory</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-215</a>	FIXED	<a href="#">NPE if no container output file is defined by the user</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-213</a>	FIXED	<a href="#">Rename homeDir property in home in LocalContainer and Installer to align it with LocalConfiguration.</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-212</a>	DUPLICATE	<a href="#">Websphere support</a>	Vincent Massol	Malcolm Wong Ho
	<a href="#">CARGO-211</a>	FIXED	<a href="#">API for implementing merging</a>	Magnus Grimsell	Nigel Magnay
	<a href="#">CARGO-209</a>	FIXED	<a href="#">Base classes for wrapping Elements</a>	Magnus Grimsell	Nigel Magnay
	<a href="#">CARGO-207</a>	DUPLICATE	<a href="#">Improve War file support to allow merging of files other than</a>	Nigel Magnay	Nigel Magnay

	<a href="#">CARGO-206</a>	FIXED	<a href="#">web.xml</a> <a href="#">Incorrect Home URL passed to JBoss 3.x</a>	I Nyoman Winardi	Binil Thomas
	<a href="#">CARGO-205</a>	FIXED	<a href="#">Add API to check if a given deployer has been registered, when using the generic API</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-204</a>	FIXED	<a href="#">Create Tomcat classes for supporting remote deployments</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-203</a>	FIXED	<a href="#">NPE when deploying tomcat on ant</a>	Vincent Massol	Steve Loughran
	<a href="#">CARGO-202</a>	FIXED	<a href="#">Add notion of Deployer type to represent local and remote deployers</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-201</a>	FIXED	<a href="#">Add getType() method to the Configuration interface</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-200</a>	FIXED	<a href="#">Add getType() method to the Deployable interface</a>	Vincent Massol	Vincent Massol
	<a href="#">CARGO-199</a>	FIXED	<a href="#">Add getType() method to the Container interface</a>	Vincent Massol	Vincent Massol

## Source code changes

Changes detected by [Clirr](#) between cargo-0.6.jar and cargo-0.7.jar.

Changes to the core:

```

ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public org.codehaus.cargo.container.configuration.Configuration getConfiguration()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public java.lang.String[] getExtraClasspath()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public java.io.File getHomeDir()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public java.io.File getOutput()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public java.util.Map<String, String> getSystemProperties()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public long getTimeout()' has been removed
ERROR: 7012: org.codehaus.cargo.container.Container: Method 'public ContainerType getType()' has been added to an interface
  
```

```
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public boolean isAppend()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setAppend(boolean)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setConfiguration(org.codehaus.cargo.container.configuration.Configuration)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setExtraClasspath(java.lang.String[])' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setHomeDir(java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setHomeDir(java.lang.String)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setOutput(java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setSystemProperties(java.util.Map)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void setTimeout(long)' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void start()' has been removed
ERROR: 7002: org.codehaus.cargo.container.Container: Method 'public void stop()' has been removed
ERROR: 7012: org.codehaus.cargo.container.ContainerCapability: Method 'public boolean supportsDeployableType(org.codehaus.cargo.container.deployable.DeployableType)' has been added to an interface
ERROR: 7002: org.codehaus.cargo.container.ContainerCapability: Method 'public boolean supportsEar()' has been removed
ERROR: 7002: org.codehaus.cargo.container.ContainerCapability: Method 'public boolean supportsWar()' has been removed
INFO: 8000: org.codehaus.cargo.container.ContainerType: Class org.codehaus.cargo.container.ContainerType added
INFO: 8000: org.codehaus.cargo.container.LocalContainer: Class org.codehaus.cargo.container.LocalContainer added
INFO: 8000: org.codehaus.cargo.container.RemoteContainer: Class org.codehaus.cargo.container.RemoteContainer added
ERROR: 7002: org.codehaus.cargo.container.configuration.Configuration: Method 'public void addDeployable(org.codehaus.cargo.container.deployable.Deployable)' has been removed
ERROR: 7002: org.codehaus.cargo.container.configuration.Configuration: Method 'public java.util.List getDeployables()' has been removed
ERROR: 7002: org.codehaus.cargo.container.configuration.Configuration: Method 'public java.io.File getDir()' has been removed
ERROR: 7012: org.codehaus.cargo.container.configuration.Configuration: Method 'public org.codehaus.cargo.container.configuration.ConfigurationType getType()' has been added to an interface
INFO: 8000: org.codehaus.cargo.container.configuration.ConfigurationType: Class org.codehaus.cargo.container.configuration.ConfigurationType added
INFO: 8000: org.codehaus.cargo.container.configuration.ExistingLocalConfiguration: Class org.codehaus.cargo.container.configuration.ExistingLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.configuration.LocalConfiguration: Class org.codehaus.cargo.container.configuration.LocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.configuration.RuntimeConfiguration: Class org.codehaus.cargo.container.configuration.RuntimeConfiguration added
INFO: 8000: org.codehaus.cargo.container.configuration.StandaloneLocalConfiguration: Class org.codehaus.cargo.container.configuration.StandaloneLocalConfiguration added
ERROR: 7012: org.codehaus.cargo.container.deployable.Deployable: Method 'public org.codehaus.cargo.container.deployable.DeployableType getType()' has been added to an interface
INFO: 8000: org.codehaus.cargo.container.deployable.DeployableType: Class org.codehaus.cargo.container.deployable.DeployableType added
INFO: 7011: org.codehaus.cargo.container.deployable.EAR: Method 'public org.codehaus.cargo.container.deployable.DeployableType getType()' has been added
INFO: 8000: org.codehaus.cargo.container.deployable.EJB: Class org.codehaus.cargo.container.deployable.EJB added
INFO: 7011: org.codehaus.cargo.container.deployable.WAR: Method 'public org.codehaus.cargo.container.deployable.DeployableType getType()' has been added
ERROR: 8001: org.codehaus.cargo.container.deployable.jboss.JBossWAR: Class org.codehaus.cargo.container.deployable.jboss.JBossWAR removed
ERROR: 8001: org.codehaus.cargo.container.deployable.tomcat.TomcatWAR: Class org.codehaus.cargo.container.deployable.tomcat.TomcatWAR removed
ERROR: 7012: org.codehaus.cargo.container.deployer.Deployer: Method 'public org.codehaus.cargo.container.deployer.DeployerType getType()' has been added to an interface
ERROR: 7012: org.codehaus.cargo.container.deployer.Deployer: Method 'public void redeploy(org.codehaus.cargo.container.deployable.Deployable)' has been added to an interface
INFO: 8000: org.codehaus.cargo.container.deployer.DeployerType: Class org.codehaus.cargo.container.deployer.DeployerType added
ERROR: 7012: org.codehaus.cargo.container.installer.Installer: Method 'public java.io.File getHome()' has been added to an interface
ERROR: 7002: org.codehaus.cargo.container.installer.Installer: Method 'public java.io.File
```

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getHomeDir()' has been removed
INFO: 7011: org.codehaus.cargo.container.installer.ZipURLInstaller: Method 'public java.io.File
getHome()' has been added
ERROR: 7002: org.codehaus.cargo.container.installer.ZipURLInstaller: Method 'public
java.io.File getHomeDir()' has been removed
INFO: 7011: org.codehaus.cargo.container.internal.J2EEContainerCapability: Method 'public
boolean supportsDeployableType(org.codehaus.cargo.container.deployable.DeployableType)' has
been added
ERROR: 7002: org.codehaus.cargo.container.internal.J2EEContainerCapability: Method 'public
boolean supportsEar()' has been removed
ERROR: 7002: org.codehaus.cargo.container.internal.J2EEContainerCapability: Method 'public
boolean supportsWar()' has been removed
INFO: 8000: org.codehaus.cargo.container.internal.RunnableContainer: Class
org.codehaus.cargo.container.internal.RunnableContainer added
INFO: 7011: org.codehaus.cargo.container.internal.ServletContainerCapability: Method 'public
boolean supportsDeployableType(org.codehaus.cargo.container.deployable.DeployableType)' has
been added
ERROR: 7002: org.codehaus.cargo.container.internal.ServletContainerCapability: Method 'public
boolean supportsEar()' has been removed
ERROR: 7002: org.codehaus.cargo.container.internal.ServletContainerCapability: Method 'public
boolean supportsWar()' has been removed
ERROR: 8001: org.codehaus.cargo.container.internal.jetty.JettyExecutorThread: Class
org.codehaus.cargo.container.internal.jetty.JettyExecutorThread removed
ERROR: 8001:
org.codehaus.cargo.container.internal.jetty.JettyStandaloneConfigurationCapability: Class
org.codehaus.cargo.container.internal.jetty.JettyStandaloneConfigurationCapability removed
ERROR: 8001: org.codehaus.cargo.container.internal.jo.JolxStandaloneConfigurationCapability:
Class org.codehaus.cargo.container.internal.jo.JolxStandaloneConfigurationCapability removed
ERROR: 8001:
org.codehaus.cargo.container.internal.orion.OrionStandaloneConfigurationCapability: Class
org.codehaus.cargo.container.internal.orion.OrionStandaloneConfigurationCapability removed
ERROR: 8001: org.codehaus.cargo.container.internal.resin.ResinRun: Class
org.codehaus.cargo.container.internal.resin.ResinRun removed
ERROR: 8001:
org.codehaus.cargo.container.internal.resin.ResinStandaloneConfigurationCapability: Class
org.codehaus.cargo.container.internal.resin.ResinStandaloneConfigurationCapability removed
ERROR: 8001: org.codehaus.cargo.container.internal.resin.ResinUtil: Class
org.codehaus.cargo.container.internal.resin.ResinUtil removed
ERROR: 8001:
org.codehaus.cargo.container.internal.tomcat.TomcatStandaloneConfigurationCapability: Class
org.codehaus.cargo.container.internal.tomcat.TomcatStandaloneConfigurationCapability removed
INFO: 7011: org.codehaus.cargo.container.internal.util.AntUtils: Method 'public
org.apache.tools.ant.types.Environment$Variable createSysProperty(java.lang.String,
java.net.URI)' has been added
ERROR: 8001:
org.codehaus.cargo.container.internal.weblogic.WebLogicStandaloneConfigurationCapability: Class
org.codehaus.cargo.container.internal.weblogic.WebLogicStandaloneConfigurationCapability
removed
INFO: 8000: org.codehaus.cargo.container.jboss.JBoss3xLocalContainer: Class
org.codehaus.cargo.container.jboss.JBoss3xLocalContainer added
INFO: 8000: org.codehaus.cargo.container.jboss.JBoss4xLocalContainer: Class
org.codehaus.cargo.container.jboss.JBoss4xLocalContainer added
INFO: 8000: org.codehaus.cargo.container.jboss.JBossDeployer: Class
org.codehaus.cargo.container.jboss.JBossDeployer added
INFO: 8000: org.codehaus.cargo.container.jboss.JBossExistingLocalConfiguration: Class
org.codehaus.cargo.container.jboss.JBossExistingLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.jboss.JBossPropertySet: Class
org.codehaus.cargo.container.jboss.JBossPropertySet added
INFO: 8000: org.codehaus.cargo.container.jboss.JBossStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.jboss.JBossStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.jboss.JBossWAR: Class
org.codehaus.cargo.container.jboss.JBossWAR added
INFO: 8000: org.codehaus.cargo.container.jboss.internal.AbstractJBossLocalContainer: Class
org.codehaus.cargo.container.jboss.internal.AbstractJBossLocalContainer added
INFO: 8000: org.codehaus.cargo.container.jboss.internal.JBossContainerCapability: Class
org.codehaus.cargo.container.jboss.internal.JBossContainerCapability added
INFO: 8000:
org.codehaus.cargo.container.jboss.internal.JBossStandaloneLocalConfigurationCapability: Class
org.codehaus.cargo.container.jboss.internal.JBossStandaloneLocalConfigurationCapability added
ERROR: 8001: org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer: Class
org.codehaus.cargo.container.jetty.Jetty4xEmbeddedContainer removed
INFO: 8000: org.codehaus.cargo.container.jetty.Jetty4xEmbeddedLocalContainer: Class
org.codehaus.cargo.container.jetty.Jetty4xEmbeddedLocalContainer added
ERROR: 7005: org.codehaus.cargo.container.jetty.JettyDeployer: Parameter 1 of 'public
JettyDeployer(org.codehaus.cargo.container.Container)' has changed its type to
org.codehaus.cargo.container.LocalContainer
INFO: 7011: org.codehaus.cargo.container.jetty.JettyDeployer: Method 'public
org.codehaus.cargo.container.deployer.DeployerType getType()' has been added

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INFO: 7011: org.codehaus.cargo.container.jetty.JettyDeployer: Method 'public void redeploy(org.codehaus.cargo.container.deployable.Deployable)' has been added
ERROR: 8001: org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration: Class org.codehaus.cargo.container.jetty.JettyStandaloneConfiguration removed
INFO: 8000: org.codehaus.cargo.container.jetty.JettyStandaloneLocalConfiguration: Class org.codehaus.cargo.container.jetty.JettyStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.jetty.JettyExecutorThread: Class org.codehaus.cargo.container.jetty.internal.JettyExecutorThread added
INFO: 8000: org.codehaus.cargo.container.jetty.internal.JettyExecutorThread added
INFO: 8000:
org.codehaus.cargo.container.jetty.internal.JettyStandaloneLocalConfigurationCapability: Class org.codehaus.cargo.container.jetty.internal.JettyStandaloneLocalConfigurationCapability added
ERROR: 8001: org.codehaus.cargo.container.jo.JolxContainer: Class org.codehaus.cargo.container.jo.JolxContainer removed
ERROR: 5001: org.codehaus.cargo.container.jo.JolxDeployer: Removed
org.codehaus.cargo.container.spi.AbstractCopyingDeployer from the list of superclasses
INFO: 5000: org.codehaus.cargo.container.jo.JolxDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractCopyingDeployer to the list of superclasses
INFO: 5000: org.codehaus.cargo.container.jo.JolxDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractDeployer to the list of superclasses
INFO: 5000: org.codehaus.cargo.container.jo.JolxDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractLocalDeployer to the list of superclasses
ERROR: 7005: org.codehaus.cargo.container.jo.JolxDeployer: Parameter 1 of 'public JolxDeployer(org.codehaus.cargo.container.Container)' has changed its type to org.codehaus.cargo.container.LocalContainer
INFO: 8000: org.codehaus.cargo.container.jo.JolxLocalContainer: Class org.codehaus.cargo.container.jo.JolxLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.jo.JolxStandaloneConfiguration: Class org.codehaus.cargo.container.jo.JolxStandaloneConfiguration removed
INFO: 8000: org.codehaus.cargo.container.jo.JolxStandaloneLocalConfiguration: Class org.codehaus.cargo.container.jo.JolxStandaloneLocalConfiguration added
INFO: 8000:
org.codehaus.cargo.container.jo.internal.JolxStandaloneLocalConfigurationCapability: Class org.codehaus.cargo.container.jo.internal.JolxStandaloneLocalConfigurationCapability added
INFO: 8000: org.codehaus.cargo.container.jsr88.GenericJSR88Configuration: Class org.codehaus.cargo.container.jsr88.GenericJSR88Configuration added
INFO: 8000: org.codehaus.cargo.container.jsr88.JSR88ConfigurationCapability: Class org.codehaus.cargo.container.jsr88.JSR88ConfigurationCapability added
INFO: 8000: org.codehaus.cargo.container.jsr88.JSR88Deployer: Class org.codehaus.cargo.container.jsr88.JSR88Deployer added
ERROR: 8001: org.codehaus.cargo.container.orion.AbstractOrionContainer: Class org.codehaus.cargo.container.orion.AbstractOrionContainer removed
ERROR: 8001: org.codehaus.cargo.container.orion.Orion9xContainer: Class org.codehaus.cargo.container.orion.Oc4j9xContainer removed
INFO: 8000: org.codehaus.cargo.container.orion.Oc4j9xLocalContainer: Class org.codehaus.cargo.container.orion.Oc4j9xLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.orion.Orion1xContainer: Class org.codehaus.cargo.container.orion.Orion1xContainer removed
INFO: 8000: org.codehaus.cargo.container.orion.Orion1xLocalContainer: Class org.codehaus.cargo.container.orion.Orion1xLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.orion.Orion2xContainer: Class org.codehaus.cargo.container.orion.Orion2xContainer removed
INFO: 8000: org.codehaus.cargo.container.orion.Orion2xLocalContainer: Class org.codehaus.cargo.container.orion.Orion2xLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.orion.OrionStandaloneConfiguration: Class org.codehaus.cargo.container.orion.OrionStandaloneConfiguration removed
INFO: 8000: org.codehaus.cargo.container.orion.OrionStandaloneLocalConfiguration: Class org.codehaus.cargo.container.orion.OrionStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.orion.internal.AbstractOrionLocalContainer: Class org.codehaus.cargo.container.orion.internal.AbstractOrionLocalContainer added
INFO: 8000:
org.codehaus.cargo.container.orion.internal.OrionStandaloneLocalConfigurationCapability: Class org.codehaus.cargo.container.orion.internal.OrionStandaloneLocalConfigurationCapability added
INFO: 6000: org.codehaus.cargo.container.property.GeneralPropertySet: Added public field PROTOCOL
INFO: 8000: org.codehaus.cargo.container.property.JSR88PropertySet: Class org.codehaus.cargo.container.property.JSR88PropertySet added
INFO: 8000: org.codehaus.cargo.container.property.RemotePropertySet: Class org.codehaus.cargo.container.property.RemotePropertySet added
ERROR: 8001: org.codehaus.cargo.container.resin.AbstractResinContainer: Class org.codehaus.cargo.container.resin.AbstractResinContainer removed
ERROR: 8001: org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration: Class org.codehaus.cargo.container.resin.AbstractResinStandaloneConfiguration removed
ERROR: 8001: org.codehaus.cargo.container.resin.Resin2xContainer: Class org.codehaus.cargo.container.resin.Resin2xContainer removed
INFO: 8000: org.codehaus.cargo.container.resin.Resin2xLocalContainer: Class org.codehaus.cargo.container.resin.Resin2xLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration: Class org.codehaus.cargo.container.resin.Resin2xStandaloneConfiguration removed
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INFO: 8000: org.codehaus.cargo.container.resin.Resin2xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.resin.Resin2xStandaloneLocalConfiguration added
ERROR: 8001: org.codehaus.cargo.container.resin.Resin3xContainer: Class
org.codehaus.cargo.container.resin.Resin3xContainer removed
INFO: 8000: org.codehaus.cargo.container.resin.Resin3xLocalContainer: Class
org.codehaus.cargo.container.resin.Resin3xLocalContainer added
ERROR: 8001: org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration: Class
org.codehaus.cargo.container.resin.Resin3xStandaloneConfiguration removed
INFO: 8000: org.codehaus.cargo.container.resin.Resin3xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.resin.Resin3xStandaloneLocalConfiguration added
ERROR: 5001: org.codehaus.cargo.container.resin.ResinDeployer: Removed
org.codehaus.cargo.container.spi.AbstractCopyingDeployer from the list of superclasses
INFO: 5000: org.codehaus.cargo.container.resin.ResinDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractCopyingDeployer to the list of superclasses
INFO: 5000: org.codehaus.cargo.container.resin.ResinDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractDeployer to the list of superclasses
INFO: 5000: org.codehaus.cargo.container.resin.ResinDeployer: Added
org.codehaus.cargo.container.spi.deployer.AbstractLocalDeployer to the list of superclasses
ERROR: 7005: org.codehaus.cargo.container.resin.ResinDeployer: Parameter 1 of 'public
ResinDeployer(org.codehaus.cargo.container.Container)' has changed its type to
org.codehaus.cargo.container.LocalContainer
ERROR: 8001: org.codehaus.cargo.container.resin.ResinExistingConfiguration: Class
org.codehaus.cargo.container.resin.ResinExistingConfiguration removed
INFO: 8000: org.codehaus.cargo.container.resin.ResinExistingLocalConfiguration: Class
org.codehaus.cargo.container.resin.ResinExistingLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.resin.internal.AbstractResinLocalContainer: Class
org.codehaus.cargo.container.resin.internal.AbstractResinLocalContainer added
INFO: 8000:
org.codehaus.cargo.container.resin.internal.AbstractResinStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.resin.internal.AbstractResinStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.resin.internal.ResinRun: Class
org.codehaus.cargo.container.resin.internal.ResinRun added
INFO: 8000:
org.codehaus.cargo.container.resin.internal.ResinStandaloneLocalConfigurationCapability: Class
org.codehaus.cargo.container.resin.internal.ResinStandaloneLocalConfigurationCapability added
INFO: 8000: org.codehaus.cargo.container.resin.internal.ResinUtil: Class
org.codehaus.cargo.container.resin.internal.ResinUtil added
ERROR: 8001: org.codehaus.cargo.container.spi.AbstractConfiguration: Class
org.codehaus.cargo.container.spi.AbstractConfiguration removed
ERROR: 7004: org.codehaus.cargo.container.spi.AbstractContainer: In method 'public
AbstractContainer(org.codehaus.cargo.container.configuration.Configuration)' the number of
arguments has changed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void
addToolsJarToClasspath(org.apache.tools.ant.types.Path)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void
doStart(org.apache.tools.ant.taskdefs.Java)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void
doStop(org.apache.tools.ant.taskdefs.Java)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected
org.codehaus.cargo.container.internal.util.AntUtils getAntUtils()' has been removed
ERROR: 7013: org.codehaus.cargo.container.spi.AbstractContainer: Abstract method 'public
org.codehaus.cargo.container.ContainerCapability getCapability()' has been added
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public
org.codehaus.cargo.container.configuration.Configuration getConfiguration()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public
java.lang.String[] getExtraClasspath()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected
org.codehaus.cargo.util.FileUtils getFileUtils()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.io.File
getHomeDir()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected
org.codehaus.cargo.container.internal.util.HttpUtils getHttpUtils()' has been removed
ERROR: 7013: org.codehaus.cargo.container.spi.AbstractContainer: Abstract method 'public
java.lang.String getId()' has been added
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected
org.codehaus.cargo.container.internal.util.JdkUtils getJdkUtils()' has been removed
ERROR: 7013: org.codehaus.cargo.container.spi.AbstractContainer: Abstract method 'public
java.lang.String getName()' has been added
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.io.File
getOutput()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected
org.codehaus.cargo.container.internal.util.ResourceUtils getResourceUtils()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public java.util.Map
getSystemProperties()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public long
getTimeout()' has been removed
ERROR: 7013: org.codehaus.cargo.container.spi.AbstractContainer: Abstract method 'public
org.codehaus.cargo.container.ContainerType getType()' has been added
```

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ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public boolean isAppend()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setAppend(boolean)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setConfiguration(org.codehaus.cargo.container.configuration.Configuration)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setExtraClasspath(java.lang.String[])' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setHomeDir(java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setHomeDir(java.lang.String)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setOutput(java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void setState(org.codehaus.cargo.container.State)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setSystemProperties(java.util.Map)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void setTimeout(long)' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void start()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'public void stop()' has been removed
ERROR: 7002: org.codehaus.cargo.container.spi.AbstractContainer: Method 'protected void verifyHomeDir()' has been removed
ERROR: 8001: org.codehaus.cargo.container.spi.AbstractCopyingDeployer: Class org.codehaus.cargo.container.spi.AbstractCopyingDeployer removed
INFO: 8000: org.codehaus.cargo.container.spi.AbstractLocalContainer: Class org.codehaus.cargo.container.spi.AbstractLocalContainer added
INFO: 8000: org.codehaus.cargo.container.spi.AbstractRemoteContainer: Class org.codehaus.cargo.container.spi.AbstractRemoteContainer added
ERROR: 8001: org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration: Class org.codehaus.cargo.container.spi.AbstractStandaloneConfiguration removed
ERROR: 8001: org.codehaus.cargo.container.spi.AbstractStandaloneConfigurationCapability: Class org.codehaus.cargo.container.spi.AbstractStandaloneConfigurationCapability removed
ERROR: 8001: org.codehaus.cargo.container.spi.ContainerConfiguration: Class org.codehaus.cargo.container.spi.ContainerConfiguration removed
ERROR: 8001: org.codehaus.cargo.container.spi.DefaultServerRun: Class org.codehaus.cargo.container.spi.DefaultServerRun removed
ERROR: 8001: org.codehaus.cargo.container.spi.DeployerWatchdog: Class org.codehaus.cargo.container.spi.DeployerWatchdog removed
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractConfiguration: Class org.codehaus.cargo.container.spi.configuration.AbstractConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractExistingLocalConfiguration: Class org.codehaus.cargo.container.spi.configuration.AbstractExistingLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractLocalConfiguration: Class org.codehaus.cargo.container.spi.configuration.AbstractLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractRuntimeConfiguration: Class org.codehaus.cargo.container.spi.configuration.AbstractRuntimeConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractRuntimeConfigurationCapability: Class org.codehaus.cargo.container.spi.configuration.AbstractRuntimeConfigurationCapability added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractStandaloneLocalConfiguration: Class org.codehaus.cargo.container.spi.configuration.AbstractStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.AbstractStandaloneLocalConfigurationCapability: Class org.codehaus.cargo.container.spi.configuration.AbstractStandaloneLocalConfigurationCapability added
INFO: 8000: org.codehaus.cargo.container.spi.configuration.ContainerConfiguration: Class org.codehaus.cargo.container.spi.configuration.ContainerConfiguration added
INFO: 8000: org.codehaus.cargo.container.spi.deployer.AbstractCopyingDeployer: Class org.codehaus.cargo.container.spi.deployer.AbstractCopyingDeployer added
INFO: 8000: org.codehaus.cargo.container.spi.deployer.AbstractDeployer: Class org.codehaus.cargo.container.spi.deployer.AbstractDeployer added
INFO: 8000: org.codehaus.cargo.container.spi.deployer.AbstractLocalDeployer: Class org.codehaus.cargo.container.spi.deployer.AbstractLocalDeployer added
INFO: 8000: org.codehaus.cargo.container.spi.deployer.AbstractRemoteDeployer: Class org.codehaus.cargo.container.spi.deployer.AbstractRemoteDeployer added
INFO: 8000: org.codehaus.cargo.container.spi.deployer.DeployerWatchdog: Class org.codehaus.cargo.container.spi.deployer.DeployerWatchdog added
INFO: 8000: org.codehaus.cargo.container.spi.util.ContainerUtils: Class org.codehaus.cargo.container.spi.util.ContainerUtils added
INFO: 8000: org.codehaus.cargo.container.spi.util.DefaultServerRun: Class org.codehaus.cargo.container.spi.util.DefaultServerRun added
ERROR: 8001: org.codehaus.cargo.container.tomcat.AbstractCatalinaContainer: Class
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org.codehaus.cargo.container.tomcat.AbstractCatalinaContainer removed
ERROR: 8001: org.codehaus.cargo.container.tomcat.AbstractTomcatContainer: Class
org.codehaus.cargo.container.tomcat.AbstractTomcatContainer removed
INFO: 8000: org.codehaus.cargo.container.tomcat.AbstractTomcatRemoteContainer: Class
org.codehaus.cargo.container.tomcat.AbstractTomcatRemoteContainer added
ERROR: 8001: org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration: Class
org.codehaus.cargo.container.tomcat.AbstractTomcatStandaloneConfiguration removed
ERROR: 8001: org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration: Class
org.codehaus.cargo.container.tomcat.CatalinaStandaloneConfiguration removed
ERROR: 8001: org.codehaus.cargo.container.tomcat.Tomcat3xContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat3xContainer removed
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat3xLocalContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat3xLocalContainer added
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat3xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.Tomcat3xStandaloneLocalConfiguration added
ERROR: 8001: org.codehaus.cargo.container.tomcat.Tomcat4xContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat4xContainer removed
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat4xLocalContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat4xLocalContainer added
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat4xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.Tomcat4xStandaloneLocalConfiguration added
ERROR: 8001: org.codehaus.cargo.container.tomcat.Tomcat4xRemoteContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat4xRemoteContainer added
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat4xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.Tomcat4xStandaloneLocalConfiguration added
ERROR: 8001: org.codehaus.cargo.container.tomcat.Tomcat5xContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat5xContainer removed
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat5xLocalContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat5xLocalContainer added
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat5xRemoteContainer: Class
org.codehaus.cargo.container.tomcat.Tomcat5xRemoteContainer added
INFO: 8000: org.codehaus.cargo.container.tomcat.Tomcat5xStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.Tomcat5xStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatCopyingLocalDeployer: Class
org.codehaus.cargo.container.tomcat.TomcatCopyingLocalDeployer added
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatExistingLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.TomcatExistingLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatLocalDeployer: Class
org.codehaus.cargo.container.tomcat.TomcatLocalDeployer added
INFO: 6000: org.codehaus.cargo.container.tomcat.TomcatPropertySet: Added public field
MANAGER_PASSWORD
INFO: 6000: org.codehaus.cargo.container.tomcat.TomcatPropertySet: Added public field
MANAGER_URL
INFO: 6000: org.codehaus.cargo.container.tomcat.TomcatPropertySet: Added public field
MANAGER_USERNAME
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatRemoteDeployer: Class
org.codehaus.cargo.container.tomcat.TomcatRemoteDeployer added
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatRuntimeConfiguration: Class
org.codehaus.cargo.container.tomcat.TomcatRuntimeConfiguration added
ERROR: 8001: org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration: Class
org.codehaus.cargo.container.tomcat.TomcatStandaloneConfiguration removed
INFO: 8000: org.codehaus.cargo.container.tomcat.TomcatWAR: Class
org.codehaus.cargo.container.tomcat.TomcatWAR added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.AbstractCatalinaLocalContainer: Class
org.codehaus.cargo.container.tomcat.internal.AbstractCatalinaLocalContainer added
INFO: 8000:
org.codehaus.cargo.container.tomcat.internal.AbstractCatalinaStandaloneLocalConfiguration:
Class org.codehaus.cargo.container.tomcat.internal.AbstractCatalinaStandaloneLocalConfiguration
added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.AbstractTomcatDeployer: Class
org.codehaus.cargo.container.tomcat.internal.AbstractTomcatDeployer added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.AbstractTomcatLocalContainer: Class
org.codehaus.cargo.container.tomcat.internal.AbstractTomcatLocalContainer added
INFO: 8000:
org.codehaus.cargo.container.tomcat.internal.AbstractTomcatStandaloneLocalConfiguration: Class
org.codehaus.cargo.container.tomcat.internal.AbstractTomcatStandaloneLocalConfiguration added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.TomcatManager: Class
org.codehaus.cargo.container.tomcat.internal.TomcatManager added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.TomcatManagerException: Class
org.codehaus.cargo.container.tomcat.internal.TomcatManagerException added
INFO: 8000: org.codehaus.cargo.container.tomcat.internal.TomcatRuntimeConfigurationCapability:
Class org.codehaus.cargo.container.tomcat.internal.TomcatRuntimeConfigurationCapability added
INFO: 8000:
org.codehaus.cargo.container.tomcat.internal.TomcatStandaloneLocalConfigurationCapability:
Class org.codehaus.cargo.container.tomcat.internal.TomcatStandaloneLocalConfigurationCapability
added
ERROR: 8001: org.codehaus.cargo.container.weblogic.AbstractWebLogicContainer: Class
org.codehaus.cargo.container.weblogic.AbstractWebLogicContainer removed
ERROR: 8001: org.codehaus.cargo.container.weblogic.WebLogic8xContainer: Class
org.codehaus.cargo.container.weblogic.WebLogic8xContainer removed

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INFO: 8000: org.codehaus.cargo.container.weblogic.WebLogic8xLocalContainer: Class  
org.codehaus.cargo.container.weblogic.WebLogic8xLocalContainer added  
INFO: 8000: org.codehaus.cargo.container.weblogic.WebLogicExistingLocalConfiguration: Class  
org.codehaus.cargo.container.weblogic.WebLogicExistingLocalConfiguration added  
INFO: 8000: org.codehaus.cargo.container.weblogic.WebLogicPropertySet: Class  
org.codehaus.cargo.container.weblogic.WebLogicPropertySet added  
ERROR: 8001: org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration: Class  
org.codehaus.cargo.container.weblogic.WebLogicStandaloneConfiguration removed  
INFO: 8000: org.codehaus.cargo.container.weblogic.WebLogicStandaloneLocalConfiguration: Class  
org.codehaus.cargo.container.weblogic.WebLogicStandaloneLocalConfiguration added  
INFO: 8000: org.codehaus.cargo.container.weblogic.internal.AbstractWebLogicLocalContainer:  
Class org.codehaus.cargo.container.weblogic.internal.AbstractWebLogicLocalContainer added  
INFO: 8000:  
org.codehaus.cargo.container.weblogic.internal.WebLogicExistingLocalConfigurationCapability:  
Class  
org.codehaus.cargo.container.weblogic.internal.WebLogicExistingLocalConfigurationCapability  
added  
INFO: 8000:  
org.codehaus.cargo.container.weblogic.internal.WebLogicStandaloneLocalConfigurationCapability:  
Class  
org.codehaus.cargo.container.weblogic.internal.WebLogicStandaloneLocalConfigurationCapability  
added  
ERROR: 7005: org.codehaus.cargo.generic.ContainerFactory: Parameter 2 of 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String,  
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type  
to org.codehaus.cargo.container.ContainerType  
ERROR: 7005: org.codehaus.cargo.generic.ContainerFactory: Parameter 3 of 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String,  
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type  
to org.codehaus.cargo.container.configuration.Configuration  
ERROR: 7002: org.codehaus.cargo.generic.ContainerFactory: Method 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String)' has been removed  
ERROR: 7002: org.codehaus.cargo.generic.ContainerFactory: Method 'public boolean  
isContainerRegistered(java.lang.String, org.codehaus.cargo.container.ContainerType)' has been  
added to an interface  
ERROR: 7004: org.codehaus.cargo.generic.ContainerFactory: In method 'public void  
registerContainer(java.lang.String, java.lang.Class)' the number of arguments has changed  
INFO: 4000: org.codehaus.cargo.generic.DefaultContainerFactory: Added  
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces  
INFO: 5000: org.codehaus.cargo.generic.DefaultContainerFactory: Added  
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory to the list of superclasses  
INFO: 5000: org.codehaus.cargo.generic.DefaultContainerFactory: Added  
org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory to the list of  
superclasses  
INFO: 5000: org.codehaus.cargo.generic.DefaultContainerFactory: Added  
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses  
ERROR: 7005: org.codehaus.cargo.generic.DefaultContainerFactory: Parameter 2 of 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String,  
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type  
to org.codehaus.cargo.container.ContainerType  
ERROR: 7005: org.codehaus.cargo.generic.DefaultContainerFactory: Parameter 3 of 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String,  
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type  
to org.codehaus.cargo.container.configuration.Configuration  
ERROR: 7002: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String,  
org.codehaus.cargo.generic.configuration.ConfigurationType)' has been removed  
ERROR: 7002: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'public  
org.codehaus.cargo.container.Container createContainer(java.lang.String)' has been removed  
INFO: 7011: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'protected  
java.lang.Object createInstance(java.lang.reflect.Constructor, java.lang.String,  
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' has been added  
INFO: 7011: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'protected  
java.lang.reflect.Constructor getConstructor(java.lang.Class, java.lang.String,  
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' has been added  
INFO: 7011: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'public boolean  
isContainerRegistered(java.lang.String, org.codehaus.cargo.container.ContainerType)' has been  
added  
ERROR: 7004: org.codehaus.cargo.generic.DefaultContainerFactory: In method 'public void  
registerContainer(java.lang.String, java.lang.Class)' the number of arguments has changed  
INFO: 7011: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'public void  
registerContainer(java.lang.String, java.lang.String,  
org.codehaus.cargo.container.ContainerType)' has been added  
ERROR: 7002: org.codehaus.cargo.generic.DefaultContainerFactory: Method 'public void  
setConfigurationFactory(org.codehaus.cargo.generic.configuration.ConfigurationFactory)' has
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been removed
ERROR: 7005: org.codehaus.cargo.generic.configuration.ConfigurationFactory: Parameter 2 of
'public org.codehaus.cargo.container.configuration.Configuration
createConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType)' has changed its type to
org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7005: org.codehaus.cargo.generic.configuration.ConfigurationFactory: Parameter 2 of
'public org.codehaus.cargo.container.configuration.Configuration
createConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type
to org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7005: org.codehaus.cargo.generic.configuration.ConfigurationFactory: Parameter 2 of
'public boolean isConfigurationRegistered(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType)' has changed its type to
org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7005: org.codehaus.cargo.generic.configuration.ConfigurationFactory: Parameter 2 of
'public void registerConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType, java.lang.Class)' has changed its
type to org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 8001: org.codehaus.cargo.generic.configuration.ConfigurationType: Class
org.codehaus.cargo.generic.configuration.ConfigurationType removed
INFO: 4000: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Added
org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory to the list of
superclasses
INFO: 5000: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 7005: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Parameter 2
of 'public org.codehaus.cargo.container.configuration.Configuration
createConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType)' has changed its type to
org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7005: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Parameter 2
of 'public org.codehaus.cargo.container.configuration.Configuration
createConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType, java.io.File)' has changed its type
to org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7004: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: In method
'protected java.lang.Object createInstance(java.lang.reflect.Constructor,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of
arguments has changed
ERROR: 7004: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: In method
'protected java.lang.reflect.Constructor getConstructor(java.lang.Class,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of
arguments has changed
ERROR: 7005: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Parameter 2
of 'public boolean isConfigurationRegistered(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType)' has changed its type to
org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7005: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Parameter 2
of 'public void registerConfiguration(java.lang.String,
org.codehaus.cargo.generic.configuration.ConfigurationType, java.lang.Class)' has changed its
type to org.codehaus.cargo.container.configuration.ConfigurationType
INFO: 7011: org.codehaus.cargo.generic.configuration.DefaultConfigurationFactory: Method
'public void registerConfiguration(java.lang.String, java.lang.String,
org.codehaus.cargo.container.configuration.ConfigurationType)' has been added
INFO: 4000: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Added
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory to the list of superclasses
INFO: 5000: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Added
org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory to the list of
superclasses
INFO: 5000: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 7005: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Parameter 3 of
'public org.codehaus.cargo.container.deployable.Deployable createDeployable(java.lang.String,
java.lang.String, org.codehaus.cargo.generic.deployable.DeployableType)' has changed its type
to org.codehaus.cargo.container.deployable.DeployableType
INFO: 7011: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'protected
java.lang.Object createInstance(java.lang.reflect.Constructor, java.lang.String,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' has been added
INFO: 7011: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'protected
java.lang.reflect.Constructor getConstructor(java.lang.Class, java.lang.String,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' has been added
INFO: 7011: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'public
boolean isDeployableRegistered(java.lang.String,
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org.codehaus.cargo.container.deployable.DeployableType)' has been added
INFO: 7011: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'public void registerDeployable(java.lang.String, org.codehaus.cargo.container.deployable.DeployableType, java.lang.Class)' has been added
INFO: 7011: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'public void registerDeployable(java.lang.String, java.lang.String,
org.codehaus.cargo.container.deployable.DeployableType)' has been added
ERROR: 7002: org.codehaus.cargo.generic.deployable.DefaultDeployableFactory: Method 'public void registerImplementation(java.lang.String, java.util.Map)' has been removed
ERROR: 7005: org.codehaus.cargo.generic.deployable.DeployableFactory: Parameter 3 of 'public org.codehaus.cargo.container.deployable.Deployable createDeployable(java.lang.String, java.lang.String, org.codehaus.cargo.generic.deployable.DeployableType)' has changed its type to org.codehaus.cargo.container.deployable.DeployableType
ERROR: 7012: org.codehaus.cargo.generic.deployable.DeployableFactory: Method 'public boolean isDeployableRegistered(java.lang.String,
org.codehaus.cargo.container.deployable.DeployableType)' has been added to an interface
ERROR: 7012: org.codehaus.cargo.generic.deployable.DeployableFactory: Method 'public void registerDeployable(java.lang.String, org.codehaus.cargo.container.deployable.DeployableType, java.lang.Class)' has been added to an interface
ERROR: 8001: org.codehaus.cargo.generic.deployable.DeployableType: Class
org.codehaus.cargo.generic.deployable.DeployableType removed
INFO: 4000: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Added
org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory to the list of
superclasses
INFO: 5000: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 7005: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Parameter 2 of 'public org.codehaus.cargo.container.deployer.Deployer
createDeployer(org.codehaus.cargo.container.Container, java.lang.String)' has changed its type to org.codehaus.cargo.container.deployer.DeployerType
ERROR: 7004: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: In method 'protected java.lang.Object createInstance(java.lang.reflect.Constructor,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of arguments has changed
ERROR: 7004: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: In method 'protected java.lang.reflect.Constructor getConstructor(java.lang.Class,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of arguments has changed
INFO: 7011: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Method 'public boolean isDeployerRegistered(java.lang.String, org.codehaus.cargo.container.deployer.DeployerType)' has been added
ERROR: 7005: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Parameter 2 of 'public void registerDeployer(java.lang.String, java.lang.String, java.lang.Class)' has changed its type to org.codehaus.cargo.container.deployer.DeployerType
INFO: 7011: org.codehaus.cargo.generic.deployer.DefaultDeployerFactory: Method 'public void registerDeployer(java.lang.String, java.lang.String,
org.codehaus.cargo.container.deployer.DeployerType)' has been added
ERROR: 6011: org.codehaus.cargo.generic.deployer.DeployerFactory: Field DEFAULT has been removed, but it was previously a constant
ERROR: 7005: org.codehaus.cargo.generic.deployer.DeployerFactory: Parameter 2 of 'public org.codehaus.cargo.container.deployer.Deployer
createDeployer(org.codehaus.cargo.container.Container, java.lang.String)' has changed its type to org.codehaus.cargo.container.deployer.DeployerType
ERROR: 7012: org.codehaus.cargo.generic.deployer.DeployerFactory: Method 'public boolean isDeployerRegistered(java.lang.String, org.codehaus.cargo.container.deployer.DeployerType)' has been added to an interface
ERROR: 7005: org.codehaus.cargo.generic.deployer.DeployerFactory: Parameter 2 of 'public void registerDeployer(java.lang.String, java.lang.String, java.lang.Class)' has changed its type to org.codehaus.cargo.container.deployer.DeployerType
INFO: 4000: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory: Added
org.codehaus.cargo.util.monitor.Monitorable to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory: Added
org.codehaus.cargo.util.monitor.MonitoredObject to the list of superclasses
ERROR: 7004: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory: In method 'protected java.lang.Object createInstance(java.lang.reflect.Constructor,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of arguments has changed
ERROR: 7004: org.codehaus.cargo.generic.spi.AbstractGenericHintFactory: In method 'protected java.lang.reflect.Constructor getConstructor(java.lang.Class,
org.codehaus.cargo.generic.spi.AbstractGenericHintFactory$GenericParameters)' the number of arguments has changed
INFO: 8000: org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory: Class
org.codehaus.cargo.generic.spi.AbstractIntrospectionGenericHintFactory added
INFO: 8000: org.codehaus.cargo.module.AbstractDescriptor: Class
org.codehaus.cargo.module.AbstractDescriptor added
INFO: 8000: org.codehaus.cargo.module.AbstractDescriptorIo: Class
```

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org.codehaus.cargo.module.AbstractDescriptorIo added
INFO: 8000: org.codehaus.cargo.module.AbstractDescriptorTag: Class
org.codehaus.cargo.module.AbstractDescriptorTag added
INFO: 8000: org.codehaus.cargo.module.J2eeDescriptor: Class
org.codehaus.cargo.module.J2eeDescriptor added
ERROR: 7012: org.codehaus.cargo.module.application.ApplicationXml: Method 'public void
addEjbModule(java.lang.String)' has been added to an interface
INFO: 5000: org.codehaus.cargo.module.application.ApplicationXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.application.ApplicationXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.application.DefaultApplicationXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.application.DefaultApplicationXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 7011: org.codehaus.cargo.module.application.DefaultApplicationXml: Method 'public void
addEjbModule(java.lang.String)' has been added
INFO: 4000: org.codehaus.cargo.module.ejb.EjbJarXml: Added org.codehaus.cargo.module.Descriptor
to the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.module.ejb.EjbJarXml: Added
org.codehaus.cargo.module.J2eeDescriptor to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.module.ejb.EjbJarXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.EjbJarXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 7011: org.codehaus.cargo.module.ejb.EjbJarXml: Method 'public java.lang.String
getFileName()' has been added
ERROR: 7006: org.codehaus.cargo.module.ejb.EjbJarXml: Return type of method 'public
org.codehaus.cargo.module.ejb.VendorEjbDescriptor getVendorDescriptor()' has been changed to
org.codehaus.cargo.module.Descriptor
INFO: 5000: org.codehaus.cargo.module.ejb.EjbXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.EjbXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.ejb.EjbXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.EjbXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 4000: org.codehaus.cargo.module.ejb.VendorEjbDescriptor: Added
org.codehaus.cargo.module.Descriptor to the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.module.ejb.orion.OrionEjbJarXml: Added
org.codehaus.cargo.module.Descriptor to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.module.ejb.orion.OrionEjbJarXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.orion.OrionEjbJarXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 7011: org.codehaus.cargo.module.ejb.orion.OrionEjbJarXml: Method 'public java.lang.String
getFileName()' has been added
INFO: 5000: org.codehaus.cargo.module.ejb.orion.OrionEjbXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.orion.OrionEjbXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 4000: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Added
org.codehaus.cargo.module.Descriptor to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 7011: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Method 'public void
addDispatchPolicy(org.codehaus.cargo.module.ejb.EjbDef, java.lang.String)' has been added
INFO: 7011: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Method 'public
java.lang.String getDispatchPolicy(org.codehaus.cargo.module.ejb.EjbDef)' has been added
INFO: 7011: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbJarXml: Method 'public
java.lang.String getFileName()' has been added
INFO: 5000: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 6000: org.codehaus.cargo.module.ejb.weblogic.WeblogicEjbXmlTag: Added public field
DISPATCH_POLICY
INFO: 4000: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmi: Added
org.codehaus.cargo.module.Descriptor to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmi: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses

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ERROR: 5001: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmi: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 7011: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmi: Method 'public
java.lang.String getFileName()' has been added
INFO: 5000: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmiIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.ejb.websphere.IbmEjbJarBndXmiIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 8000: org.codehaus.cargo.module.internal.util.xml.AbstractElement: Class
org.codehaus.cargo.module.internal.util.xml.AbstractElement added
INFO: 8000: org.codehaus.cargo.module.internal.util.xml.AbstractNode: Class
org.codehaus.cargo.module.internal.util.xml.AbstractNode added
INFO: 8000: org.codehaus.cargo.module.internal.util.xml.AbstractNodeList: Class
org.codehaus.cargo.module.internal.util.xml.AbstractNodeList added
INFO: 8000: org.codehaus.cargo.module.merge.AbstractMergeSet: Class
org.codehaus.cargo.module.merge.AbstractMergeSet added
INFO: 8000: org.codehaus.cargo.module.merge.MergeElement: Class
org.codehaus.cargo.module.merge.MergeElement added
INFO: 8000: org.codehaus.cargo.module.merge.MergeException: Class
org.codehaus.cargo.module.merge.MergeException added
INFO: 8000: org.codehaus.cargo.module.merge.MergeNodeList: Class
org.codehaus.cargo.module.merge.MergeNodeList added
INFO: 8000: org.codehaus.cargo.module.merge.MergePair: Class
org.codehaus.cargo.module.merge.MergePair added
INFO: 8000: org.codehaus.cargo.module.merge.MergeProcessor: Class
org.codehaus.cargo.module.merge.MergeProcessor added
INFO: 8000: org.codehaus.cargo.module.merge.MergeStrategy: Class
org.codehaus.cargo.module.merge.MergeStrategy added
ERROR: 8001: org.codehaus.cargo.module.webapp.AbstractDescriptor: Class
org.codehaus.cargo.module.webapp.AbstractDescriptor removed
ERROR: 8001: org.codehaus.cargo.module.webapp.AbstractDescriptorIo: Class
org.codehaus.cargo.module.webapp.AbstractDescriptorIo removed
ERROR: 8001: org.codehaus.cargo.module.webapp.AbstractDescriptorTag: Class
org.codehaus.cargo.module.webapp.AbstractDescriptorTag removed
INFO: 4000: org.codehaus.cargo.module.webapp.WebXml: Added org.codehaus.cargo.module.Descriptor
to the set of implemented interfaces
INFO: 4000: org.codehaus.cargo.module.webapp.WebXml: Added
org.codehaus.cargo.module.J2eeDescriptor to the set of implemented interfaces
INFO: 5000: org.codehaus.cargo.module.webapp.WebXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.WebXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
ERROR: 7005: org.codehaus.cargo.module.webapp.WebXml: Parameter 1 of 'public void
addRootElement(org.codehaus.cargo.module.webapp.AbstractDescriptorTag, org.w3c.dom.Element)'
has changed its type to org.codehaus.cargo.module.AbstractDescriptorTag
INFO: 7011: org.codehaus.cargo.module.webapp.WebXml: Method 'public java.lang.String
getFileName()' has been added
ERROR: 7006: org.codehaus.cargo.module.webapp.WebXml: Return type of method 'public
org.codehaus.cargo.module.webapp.VendorWebAppDescriptor getVendorDescriptor()' has been changed
to org.codehaus.cargo.module.Descriptor
ERROR: 7005: org.codehaus.cargo.module.webapp.WebXml: Parameter 1 of 'public void
replaceRootElement(org.codehaus.cargo.module.webapp.AbstractDescriptorTag,
org.w3c.dom.Element)' has changed its type to org.codehaus.cargo.module.AbstractDescriptorTag
INFO: 5000: org.codehaus.cargo.module.webapp.WebXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.WebXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
ERROR: 7002: org.codehaus.cargo.module.webapp.WebXmlIo: Method 'public java.io.File[]
writeAll(org.codehaus.cargo.module.webapp.WebXml, java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.module.webapp.WebXmlIo: Method 'public void
writeWebXml(org.codehaus.cargo.module.webapp.WebXml, java.io.File)' has been removed
ERROR: 7002: org.codehaus.cargo.module.webapp.WebXmlIo: Method 'public void
writeWebXml(org.codehaus.cargo.module.webapp.WebXml, java.io.File, java.lang.String)' has been
removed
ERROR: 7002: org.codehaus.cargo.module.webapp.WebXmlIo: Method 'public void
writeWebXml(org.codehaus.cargo.module.webapp.WebXml, java.io.File, java.lang.String, boolean)'
has been removed
ERROR: 7002: org.codehaus.cargo.module.webapp.WebXmlIo: Method 'public void
writeWebXml(org.codehaus.cargo.module.webapp.WebXml, java.io.OutputStream, java.lang.String,
boolean)' has been removed
INFO: 5000: org.codehaus.cargo.module.webapp.WebXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.WebXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.jboss.JBossWebXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.jboss.JBossWebXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses

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INFO: 5000: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.jboss.JBossWebXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.orion.OrionWebXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.orion.OrionWebXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.OrionWebXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.OrionWebXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.OrionWebXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.OrionWebXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.tomcat.TomcatContextXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXml: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.weblogic.WeblogicXml: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlTag: Added
org.codehaus.cargo.module.AbstractDescriptorTag to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.webapp.weblogic.WeblogicXmlTag: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorTag from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.webapp.websphere.IbmWebBndXmi: Added
org.codehaus.cargo.module.AbstractDescriptor to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.websphere.IbmWebBndXmi: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptor from the list of superclasses
INFO: 5000: org.codehaus.cargo.module.websphere.IbmWebBndXmiIo: Added
org.codehaus.cargo.module.AbstractDescriptorIo to the list of superclasses
ERROR: 5001: org.codehaus.cargo.module.websphere.IbmWebBndXmiIo: Removed
org.codehaus.cargo.module.webapp.AbstractDescriptorIo from the list of superclasses
INFO: 8000: org.codehaus.cargo.util.Base64: Class org.codehaus.cargo.util.Base64 added
INFO: 7011: org.codehaus.cargo.util.FileUtils: Method 'public java.io.File
createDirectory(java.net.URI, java.lang.String)' has been added

```

## Changes to the Ant API:

```

INFO: 7011: org.codehaus.cargo.ant.CargoTask: Method 'protected java.lang.String getHome()' has
been added
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'protected java.io.File getHomeDir()' has
been removed
INFO: 7011: org.codehaus.cargo.ant.CargoTask: Method 'public void setHint(java.lang.String)'
has been added
INFO: 7011: org.codehaus.cargo.ant.CargoTask: Method 'public void setHome(java.lang.String)'
has been added
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'public void setHomeDir(java.io.File)'
has been removed
INFO: 7011: org.codehaus.cargo.ant.CargoTask: Method 'public void
setType(org.codehaus.cargo.container.ContainerType)' has been added
INFO: 7011: org.codehaus.cargo.ant.CargoTask: Method 'protected void setupHome()' has been
added
ERROR: 7002: org.codehaus.cargo.ant.CargoTask: Method 'protected void setupHomeDir()' has been
removed
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void
addConfiguredDeployable(org.codehaus.cargo.ant.DeployableElement)' has been added
ERROR: 7002: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void
addConfiguredEar(org.codehaus.cargo.ant.EARElement)' has been removed

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ERROR: 7002: org.codehaus.cargo.ant.ConfigurationElement: Method 'public void addConfiguredWar(org.codehaus.cargo.ant.WARElement)' has been removed
INFO: 7011: org.codehaus.cargo.ant.ConfigurationElement: Method 'protected java.util.List getDeployables()' has been added
ERROR: 7002: org.codehaus.cargo.ant.ConfigurationElement: Method 'protected java.util.List getEars()' has been removed
ERROR: 7006: org.codehaus.cargo.ant.ConfigurationElement: Return type of method 'public org.codehaus.cargo.generic.configuration.ConfigurationType getType()' has been changed to org.codehaus.cargo.container.configuration.ConfigurationType
ERROR: 7002: org.codehaus.cargo.ant.ConfigurationElement: Method 'protected java.util.List getWars()' has been removed
INFO: 8000: org.codehaus.cargo.ant.DeployableElement: Class org.codehaus.cargo.ant.DeployableElement added
ERROR: 8001: org.codehaus.cargo.ant.EARElement: Class org.codehaus.cargo.ant.EARElement removed
ERROR: 8001: org.codehaus.cargo.ant.WARElement: Class org.codehaus.cargo.ant.WARElement removed
ERROR: 8001: org.codehaus.cargo.ant.jo.JolxCargoTask: Class org.codehaus.cargo.ant.jo.JolxCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.orion.Oc4j9xCargoTask: Class org.codehaus.cargo.ant.orion.Oc4j9xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.orion.Orion1xCargoTask: Class org.codehaus.cargo.ant.orion.Orion1xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.orion.Orion2xCargoTask: Class org.codehaus.cargo.ant.orion.Orion2xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.resin.Resin2xCargoTask: Class org.codehaus.cargo.ant.resin.Resin2xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.resin.Resin3xCargoTask: Class org.codehaus.cargo.ant.resin.Resin3xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.tomcat.Tomcat3xCargoTask: Class org.codehaus.cargo.ant.tomcat.Tomcat3xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.tomcat.Tomcat4xCargoTask: Class org.codehaus.cargo.ant.tomcat.Tomcat4xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.tomcat.Tomcat5xCargoTask: Class org.codehaus.cargo.ant.tomcat.Tomcat5xCargoTask removed
ERROR: 8001: org.codehaus.cargo.ant.weblogic.WebLogic8xCargoTask: Class org.codehaus.cargo.ant.weblogic.WebLogic8xCargoTask removed
```

## Release notes for IntelliJ IDEA Plugin 0.1

This page last changed on Dec 30, 2005 by [vmasol](#).

### Release notes for IntelliJ IDEA Plugin 0.1

This is the initial release of the plugin. It comes bundled with Cargo 0.6 and supports all its containers.

### Installation

You may install this plugin by unzipping the zip file into your IntelliJ IDEA plugins folder and restarting the IDE. However, usually you are much better off by using the built-in plugin manager like this:

*File -> Settings -> Plugins -> Available -> Right Click on Cargo -> Download and Install Plugin*

### Requirements

- [IntelliJ IDEA 4.5.4](#)

### Implemented issues

jira.codehaus.org (3 issues)						
T	Key	Res	Summary	Assignee	Reporter	Reporter
	<a href="#">CARGO-188</a>	FIXED	<a href="#">org.codehaus.cargo.container.hudson.idea.CargoContainerGrinderTest.testSetHomeDir fails if no floppy disc is inserted in the disk drive</a>	Hendrik Schreiber	<a href="#">Magnus Grindal</a>	<a href="#">Test.setHomeDir fails if no floppy disc is inserted in the disk drive</a>
	<a href="#">CARGO-186</a>	FIXED	<a href="#">Testcases testSetConfigDir and testSetHomeDir fail on windows</a>	Hendrik Schreiber		Arnaud Heritier
	<a href="#">CARGO-179</a>	FIXED	<a href="#">Create Cargo plugin for IntelliJIdea 4.5.4</a>	Hendrik Schreiber		Hendrik Schreiber

### Known Issues

- When stopping a container an Exception will be shown in the console. This is a bug in the version of Ant that comes bundled with IntelliJ IDEA 4.5.4.
- This version of the plugin will not work with any other version of IntelliJ IDEA. The next release will be for IntelliJ IDEA 5.x.

## [Home](#)

This page last changed on Dec 30, 2005 by [vmassol](#).

## Mission

Cargo is a thin wrapper around existing containers (e.g. J2EE containers). It provides different APIs to easily manipulate containers.

Cargo provides the following APIs:

- A Java to start/stop/configure Java Containers and deploy modules into them. We also offer Ant tasks, Maven 1, Maven 2, IntelliJ IDEA and Netbeans plugins.
- A Java API to parse/create/merge J2EE Modules

## Status

**Version status** (click in the status column to get release notes):

Version	Status	Comments
<a href="#">0.1</a>	<a href="#">(1)</a>	Released on 11/09/04
<a href="#">0.2</a>	<a href="#">(1)</a>	Released on 03/10/04
<a href="#">0.3</a>	<a href="#">(1)</a>	Released on 30/10/04
<a href="#">0.4</a>	<a href="#">(1)</a>	Released on 26/11/04
<a href="#">0.5</a>	<a href="#">(1)</a>	Released on 30/04/05
<a href="#">0.6</a>	<a href="#">(1)</a>	Released on 21/07/05
<a href="#">0.7</a>	<a href="#">(1)</a>	Released on 30/12/05

## Architecture

[\(view as slideshow\)](#)

High level Cargo  
architecture

Different ways  
of using Cargo

Cargo offers different ways of using it at different levels:

- **Module Java API:** A Java API to parse/create/merge J2EE Modules (WAR, EAR, etc)
- **Container Java API:** A Java API to start/stop/configure Java Containers and deploy modules into them.
- **Generic Java API:** A Java API that sits on top of the Container API but allows writing generic code that works with any container. It consists mostly in a set of Factory classes to instantiate Container API objects by name.
- **Build plugins**
  - [Ant tasks](#): A set of Ant tasks that wrap the Generic Java API
  - [Maven 1](#): A Maven 1 plugin that wraps the Ant tasks
  - [Maven 2](#): A Maven 2 plugin
- **IDE plugins**
  - [Netbeans](#)
  - [IntelliJ IDEA](#)

The main Container API objects are:

- The [Container](#) is the top level interface wrapping a real physical container. Cargo supports [local](#) and [remote](#) containers. A Container is composed of a [Configuration](#).
- A [Configuration](#) tells Cargo how the container is to be configured (whether it should create a standalone setup, whether it should be based on an existing configuration, etc). A Configuration can be configured to install [Deployables](#) before the Container is started.
- You can use a [Deployer](#) to deploy [Deployables](#) dynamically (i.e. after the Container is started).
- [Deployables](#) are archives to be deployed in the Container. They are WAR, EAR, etc.

## Feature list

Some top-level features (the full feature list can be found [here](#)):

- [Configuration](#) — A Configuration specifies how the container is configured
- [Container](#) — A top level interface wrapping a real physical container
- [Debugging](#) — Explain how to perform debugging when something doesn't work in Cargo
- [Deployment](#) — How to deploy components to a container
- [Extensions](#) — Extensions are additions to the Cargo core Java API such as build tool plugins, IDE plugins, etc
- [Module API](#) — API to manipulate J2EE archives, including vendor-specific deployment descriptors

## Container support

List of supported containers and the extensions that are implemented for each container (Java API, Ant tasks and Maven plugins). The specified version is the Cargo version where the feature was first made available. Click on a container's name to see a detailed list of features it supports.

Container	Java API(version)	Ant tasks(version)	Maven 1 plugin(version)	Maven 2 plugin(version)
<a href="#">JBoss 3.x</a>	✓ 0.7	✓ 0.7	✓ 0.7	✓ 0.7
<a href="#">JBoss 4.x</a>	✓ 0.7	✓ 0.7	✓ 0.7	✓ 0.7
<a href="#">Jetty 4.x</a>	✓ 0.1	✗ ???	✗ ???	✗ ???

<a href="#">jbo! 1.x</a>	✓ 0.5	✓ 0.5	✓ 0.5	✓ 0.7
<a href="#">OC4J 9.x</a>	✓ 0.3	✓ 0.3	✓ 0.5	✓ 0.7
<a href="#">Orion 1.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Orion 2.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Resin 2.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Resin 3.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 3.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 4.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">Tomcat 5.x</a>	✓ 0.1	✓ 0.1	✓ 0.5	✓ 0.7
<a href="#">WebLogic 8.x</a>	✓ 0.3	✓ 0.3	✓ 0.5	✓ 0.7

We also encourage you to report success and failures on different versions of those containers in the [Tested on](#) section.

## Quick Start

The following examples demonstrate how to configure Resin 3.0.15 to start in `target/resin3x` and deploy a WAR located in `path/to/simple.war`. The default port is 8080. Please note that the `container.start()` and `container.stop()` methods wait until the container is fully started and fully stopped before continuing. Thus, for any action you are executing after, you are assured the container is completely operational.

### Static deployment

Static deployment means that the Deployabe is deployed before the container is started. Here's an example using the strongly type Java API:

```
Deployable war = new WAR("path/to/simple.war");

Configuration configuration =
    new Resin3xStandaloneLocalConfiguration("target/myresin3x"));
configuration.addDeployable(war);

LocalContainer container = new Resin3xLocalContainer(configuration);
container.setHome("c:/apps/resin-3.0.15");

container.start();
// Here you are assured the container is started.

container.stop();
// Here you are assured the container is stopped.
```

Here's the same example using the generic untyped API:

```
Deployable war = new DefaultDeployableFactory().createDeployable(
    "resin3x", "path/to/simple.war", DeployableType.WAR);
```

```

LocalConfiguration configuration =
    (LocalConfigutation) new DefaultConfigurationFactory(
        "resin3x", ConfigurationType.STANDALONE);
configuration.addDeployable(war);

LocalContainer container =
    (LocalContainer) new DefaultContainerFactory().createContainer(
        "resin3x", configuration);
container.setHome("c:/apps/resin-3.0.15");

container.start();
// Here you are assured the container is started.

container.stop();
// Here you are assured the container is stopped.

```

## **Dynamic deployment**

Dynamic deployment means that the Deployable is deployed after the container is started.

```

LocalContainer container = new Resin3xLocalContainer(
    new Resin3xStandaloneLocalConfiguration("target/myresin3x"));
container.setHome("c:/apps/resin-3.0.15");

container.start();

// Here you are assured the container is started.

Deployable war = new WAR("path/to/simple.war");
Deployer deployer = new ResinDeployer(container);
deployer.deploy(war)

// Here you are NOT sure the WAR has finished deploying. To be sure you
// need to use a DeployableMonitor to monitor the deployment. For example
// the following code deploys the WAR and wait until it is available to
// serve requests (the URL should point to a resource inside your WAR):
deployer.deploy(war, new URLDeployableMonitor("http://server:port/some/url"));

container.stop();

// Here you are assured the container is stopped.

```