

# Running Multiple Geronimo Instances

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It is possible to run multiple instances of geronimo on the same machine. Currently multiple instances of geronimo share the following directories in `<geronimo_home>`, the directory where you installed Geronimo.

- bin
- lib
- schema
- repository

Each instance gets its own copy of the following at `<geronimo_home>/<instance_name>`

- var
- deploy (hot deployment)

bin, lib and schema are read-only, and thus may be shared between instances. The repository is also shared, which means that an application deployed in one instance will show up in the list of deployed modules in all the other instances, but only shown running in the deployed instance.

## Creating a new server instance

Start with a fresh image of geronimo. Do not use an image that has been used to run the default instance.

To create an instance named `foo` do the following. All your instance data will be put in `<geronimo_home>/foo`. All the directories named below are relative to `<geronimo_home>`.

Follow the procedures as below:

1. Create a directory `foo` under `<geronimo_home>`.
2. Copy `var` to `foo`. Starting from v2.2, you can use a GShell command [deploy/new-instance](#) to help you with this step.
3. Edit `foo/var/config/config-substitutions.properties` and change the `portOffset`. Try using any integers such as 1, 2, 10, 20, 30.. for various instances.

## Running an instance

1. Set the `org.apache.geronimo.server.name` system property before you start the server. Use the syntax `-Dorg.apache.geronimo.server.name=foo` for an instance named `foo` located at `<geronimo_home>/foo`. Add this to your `GERONIMO_OPTS` environment variable  
On a Windows system: `set GERONIMO_OPTS=-Dorg.apache.geronimo.server.name=foo`  
On a Unix-like system: `export GERONIMO_OPTS=-Dorg.apache.geronimo.server.name=foo`
2. Start the server using `startup`

```
<geronimo_home>/bin/startup
```

3. To shutdown this instance, use the port number of RMI Naming port (default 1099). For the new instance `foo`, the port number should be 1099 plus `portOffset` specified in `foo/var/config/config-substitutions.properties`.

```
<geronimo_home>/bin/shutdown --port <port_num>
```

4. To deploy applications to this instance use the port number of RMI Naming port

```
<geronimo_home>/bin/deploy --port <port_num> deploy <applications>
```

The Administrative Console can also be used for all these operations. Connect to an instance by using the right HTTP port (default 8080).

## Further readings

To use multiple repositories see [Configuring multiple Repositories](#).