

# Running Multiple Instances of Geronimo

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This article is organized as follows:

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 shared, i.e. an application deployed in one instance will show up in the list of deployed modules, but not running, in all the other instances!

## Creating A New Server Instance

Be Careful

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>`.

1. `mkdir foo`
2. Copy var to foo.
3. Edit `foo/var/config/config.substitutions.properties` and change the `portOffset`. Try using 10, 20, 30.. etc for various instances.

## An Example

We will be using `var` as a template.

- To create all the instances under a directory named `servers` copy `var` to `servers/geronimo1` and change the `portOffset` for each instance.
- To run ith instance set `org.apache.geronimo.server.name` property to `servers/geronimo1`.

## Running An Instance

1. Set the `org.apache.geronimo.server.name` system property to the instance name 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 Windows Hint  
`set 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) `<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`  
.....

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

## The Default Instance

The default instance is nameless, i.e. it is run from `<geronimo_home>/var`. It can be deleted!

**Coming Soon!**

The default instance named 'geronimo' will be created and run using the following. It will use `<geronimo_home>/geronimo` for instance data.

<geronimo\_home>/bin/startup

## Other Useful Enhancements

To use multiple repositories see:  
[Multiple Repositories](#)