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CHAPTER 3

Administering Domains

This chapter provides procedures for administering domains in the GlassFish Server Open Source Edition environment by using the `asadmin` command-line utility.

The following topics are addressed here:

- “About Administering Domains” on page 81
- “Creating, Logging In To, and Deleting a Domain” on page 83
- “Starting and Stopping a Domain” on page 87
- “Configuring a Domain for Automatic Restart” on page 90
- “Additional Domain Tasks” on page 93

Instructions for accomplishing the tasks in this chapter by using the Administration Console are contained in the Administration Console online help.

About Administering Domains

A domain contains a group of GlassFish Server instances that are administered together. Each domain has a domain administration server (DAS) that hosts administrative applications. These concepts are explained in more detail in the following sections:

- “GlassFish Server Instances” on page 81
- “Domains for Administering GlassFish Server” on page 82
- “Domain Administration Server (DAS)” on page 82

GlassFish Server Instances

A GlassFish Server *instance* is a single Virtual Machine for the Java platform (Java Virtual Machine or JVM machine) on a single node in which GlassFish Server is running. A node defines the host where the GlassFish Server instance resides. The JVM machine must be compatible with the Java Platform, Enterprise Edition (Java EE).

GlassFish Server instances form the basis of an application deployment.

Whenever a domain is created, GlassFish Server creates a default instance that is named `server`. If a single instance meets your requirements, you can use this instance for deploying applications without the need to administer GlassFish Server instances explicitly. You administer the default instance when you administer its domain.

If you require multiple instances, you must administer the instances explicitly. For more information, see Chapter 3, “Administering GlassFish Server Instances,” in *GlassFish Server Open Source Edition 3.1 High Availability Administration Guide*.

For an instance, you can also create virtual servers. Virtual servers do not span instances. For many purposes, you can use virtual servers instead of multiple instances in operational deployments. Virtual servers enable you to offer, within a single instance, separate domain names, IP addresses, and some administration capabilities to organizations or individuals. To these users, a virtual server behaves like a dedicated web server, but without the hardware and basic web server maintenance.

For more information about virtual servers, see “[Administering Virtual Servers](#)” on page 263.

Domains for Administering GlassFish Server

A *domain* is an administrative boundary that contains a group of GlassFish Server instances that are administered together. Each instance can belong to only one domain. A domain provides a preconfigured runtime for user applications. Each domain has its own configuration data, log files, and application deployment areas that are independent of other domains. If the configuration is changed for one domain, the configurations of other domains are not affected.

Domains enable different organizations and administrators to share securely a single GlassFish Server installation. Each organization or administrator can administer the instances in a single domain without affecting the instances in other domains.

At installation time, GlassFish Server creates a default administrative domain that is named `domain1`. After installation, you can create additional administrative domains as necessary.

When a domain is created, you are prompted for the administration user name and password. If you accept the default, the user `admin` is created without password. To reset the administration password, see “[To Change the Administration Password](#)” in *GlassFish Server Open Source Edition 3.1 Security Guide*.

Domain Administration Server (DAS)

The *domain administration server (DAS)* is a specially designated GlassFish Server instance that hosts administrative applications. The DAS is similar to any other GlassFish Server instance,

except that the DAS has additional administration capabilities. The DAS authenticates the administrator, accepts requests from administration tools, and communicates with other instances in the domain to carry out the requests from administration tools.

Each domain has its own DAS with a unique administration port number. The default administration port is 4848, but a different port can be specified when a domain is created.

The DAS is the default GlassFish Server instance in a domain and is named `server`. If a single instance meets your requirements, you can use the DAS for deploying applications and for administering the domain.

The graphical Administration Console communicates with a specific DAS to administer the domain that is associated with the DAS. Each Administration Console session enables you to configure and manage only one domain. If you create multiple domains, you must start a separate Administration Console session to manage each domain.

Creating, Logging In To, and Deleting a Domain

The following topics are addressed here:

- “To Create a Domain” on page 83
- “To List Domains” on page 84
- “To Log In to a Domain” on page 85
- “To Delete a Domain” on page 87

▼ To Create a Domain

After installing GlassFish Server and creating the default domain (`domain1`), you can create additional domains by using the local `create-domain` subcommand. This subcommand creates the configuration of a domain. Any user who has access to the `asadmin` utility on a given system can create a domain and store the domain configuration in a folder of choice. By default, the domain configuration is created in the default directory for domains. You can override this location to store the configuration elsewhere.

You are required to specify an administrative user when you create a domain, or you can accept the default login identity which is username `admin` with no password.

Before You Begin Determine which profile will apply to the domain.

1 Select a name for the domain that you are creating.

You can verify that a name is not already in use by using the `list-domains(1)` subcommand

2 Create a domain by using the `create-domain(1)` subcommand.

Information about the options for this subcommand is included in this help page.