Name deploy – deploys the specified component

Synopsis `deploy [--help]`
`[--force={false|true}]`
`[--virtualservers` *virtual_servers*`]`
`[--contextroot` *context_root*`]`
`[--precompilejsp={false|true}]`
`[--verify={false|true}]`
`[--name` *component_name*`]`
`[--upload={true|false}]`
`[--retrieve` *local_dirpath*`]`
`[--dbvendorname` *dbvendorname*`]`
`[--createtables={true|false}|--dropandcreatetables={true|false}]`
`[--uniquetablenames={true|false}]`
`[--deploymentplan` *deployment_plan*`]`
`[--enabled={true|false}]`
`[--generatermistubs={false|true}]`
`[--availabilityenabled={false|true}]`
`[--asyncreplication={true|false}]`
`[--lbenabled={true|false}]`
`[--keepstate={false|true}]`
`[--libraries` *jar_file*`[,`*jar_file*`]*]`
`[--target` *target*`]`
`[--type` *pkg-type*`]`
`[--properties(`*name=value*`)[:`*name=value*`]*]`
`[`*file_archive* `|`*filepath*`]`

Description The `deploy` subcommand deploys applications to the server. Applications can be enterprise applications, web applications, Enterprise JavaBeans (EJB) modules, connector modules, and application client modules. If the component is already deployed or already exists, it is forcibly redeployed if the `--force` option is set to `true` (default is `false`).

The `--createtables` and `--dropandcreatetables` options are boolean flags and therefore can take the values of *true* or *false*. These options are only used during deployment of CMP beans that have not been mapped to a database (that is, no `sun-cmp-mappings.xml` descriptor is provided in the module's `META-INF` directory). They are ignored otherwise.

The `--createtables` and `--dropandcreatetables` options are mutually exclusive; only one should be used. If drop and/or create tables fails, the deployment does not fail; a warning message is provided in the log file.

This subcommand is supported in remote mode only.

Options `--help`
`-?`
    Displays the help text for the subcommand.

--force
  If set to `true`, redeploys the component even if the specified component has already been deployed or already exists. Default is `false`.

--virtualservers
  One or more virtual server IDs. Multiple IDs are separated by commas.

--contextroot
  Valid only if the archive is a web module. It is ignored for other archive types; defaults to filename without extension.

--precompilejsp
  By default this option does not allow the JSP to be precompiled during deployment. Instead, JSPs are compiled during runtime. Default is `false`.

--verify
  If set to true and the required verifier packages are installed from the Update Center, the syntax and semantics of the deployment descriptor is verified. Default is `false`.

--name
  Name of the deployable component.

  The name can include an optional version identifier, which follows the name and is separated from the name by a colon (`:`). The version identifier must begin with a letter or number. It can contain alphanumeric characters plus underscore (`_`), dash (`-`), and period (`.`) characters. For more information about module and application versions, see the "Module and Application Versions" in *Sun GlassFish Enterprise Server v3 Preview Application Deployment Guide*.

--upload
  Uploads the deployable file to the administration server. The deployable file must be accessible from the client. If the file is accessible to both server and client, set the `--upload` option to `false`. The default is `false`. If a directory *filepath* is specified, this option is ignored.

--retrieve
  Retrieves the client stub JAR file from the server machine to the local directory.

--dbvendorname
  Specifies the name of the database vendor for which tables are created. Supported values include db2, mssql, mysql, oracle, derby, javadb, postgresql, and sybase. These values are case-insensitive. If not specified, the value of the database-vendor-name attribute in `sun-ejb-jar.xml` is used. If no value is specified, a connection is made to the resource specified by the `jndi-name` subelement of the `cmp-resource` element in the `sun-ejb-jar.xml` file, and the database vendor name is read. If the connection cannot be established, or if the value is not recognized, SQL-92 compliance is presumed.

--createtables

If specified as true, creates tables at deployment of an application with unmapped CMP beans. If specified as false, tables are not created. If not specified, the value of the `create-tables-at-deploy` entry in the `cmp-resource` element of the `sun-ejb-jar.xml` file determines whether or not tables are created.

--dropandcreatetables

If specified as true when the component is redeployed, the tables created by the previous deployment are dropped before creating the new tables. Applies to deployed applications with unmapped CMP beans. Preexisting tables will not be dropped on the initial deployment of an application or on a deployment that follows an explicit undeploy. If specified as false, tables are neither dropped nor created. If not specified, the tables are dropped if the `drop-tables-at-undeploy` entry in the `cmp-resource` element of the `sun-ejb-jar.xml` file is set to true, and the new tables are created if the `create-tables-at-deploy` entry in the `cmp-resource` element of the `sun-ejb-jar.xml` file is set to true.

--uniquetablenames

Guarantees unique table names for all the beans and results in a hash code added to the table names. This is useful if you have an application with case-sensitive bean names. Applies to applications with unmapped CMP beans.

--deploymentplan

Deploys the deployment plan, which is a JAR file that contains GlassFish Server descriptors. Specify this option when deploying a pure EAR file. A pure EAR file is an EAR without GlassFish Server descriptors.

--enabled

Allows users to access the application. If set to `false`, users will not be able to access the application. This option enables the application on the specified target instance or cluster. If you deploy to the target `domain`, this option is ignored, since deploying to the domain doesn't deploy to a specific instance or cluster. The default is `true`.

--generatermistubs

If set to `true`, static RMI-IIOP stubs are generated and put into the `client.jar`. If set to `false`, the stubs are not generated. Default is `false`.

--availabilityenabled

This option controls whether high-availability is enabled for web sessions and for stateful session bean (SFSB) checkpointing and potentially passivation. If set to false (default) all web session saving and SFSB checkpointing is disabled for the specified application, web application, or EJB module. If set to true, the specified application or module is enabled for high-availability. Set this option to true only if high availability is configured and enabled at higher levels, such as the server and container levels.

--asyncreplication

This option controls whether web session and SFSB states for which high availability is enabled are first buffered and then replicated using a separate asynchronous thread. If set to

true (default), performance is improved but availability is reduced. If the instance where states are buffered but not yet replicated fails, the states are lost. If set to false, performance is reduced but availability is guaranteed. States are not buffered but immediately transmitted to other instances in the cluster.

`--lbenabled`

This option controls whether the deployed application is available for load balancing. The default is true.

`--keepstate`

This option controls whether web sessions, SFSB instances, and persistently created EJB timers are retained between redeployments. The default is false. This option is not supported and ignored in a clustered environment.

Some changes to an application between redeployments prevent this feature from working properly. For example, do not change the set of instance variables in the SFSB bean class.

For web applications, this feature is applicable only if in the `glassfish-web-app.xml` file the `persistence-type` attribute of the `session-manager` element is `file`.

For stateful session bean instances, the persistence type without high availability is set in the server (the `sfsb-persistence-type` attribute) and must be set to `file`, which is the default and recommended value.

If any active web session, SFSB instance, or EJB timer fails to be preserved or restored, *none* of these will be available when the redeployment is complete. However, the redeployment continues and a warning is logged.

To preserve active state data, GlassFish Server serializes the data and saves it in memory. To restore the data, the class loader of the newly redeployed application deserializes the data that was previously saved.

`--libraries`

A comma-separated list of library JAR files. Specify the library JAR files by their relative or absolute paths. Specify relative paths relative to *domain-dir*/lib/applibs. The libraries are made available to the application in the order specified.

`--target`

Specifies the target to which you are deploying. Valid values are:

server

Deploys the component to the default server instance `server` and is the default value.

domain

Deploys the component to the domain. If `domain` is the target for an initial deployment, the application is deployed to the domain, but no server instances or clusters reference the application. If `domain` is the target for a redeployment (the `--force` option is set to true), and dynamic reconfiguration is enabled for the clusters or server instances that reference the application, the referencing clusters or server instances automatically get

the new version of the application. If redeploying, and dynamic configuration is disabled, the referencing clusters or server instances do not get the new version of the application until the clustered or standalone server instances are restarted.

cluster_name
Deploys the component to every server instance in the cluster.

instance_name
Deploys the component to a particular sever instance.

`--type`
The packaging archive type of the component that is being deployed. Possible values are as follows:

`osgi`
The component is packaged as an OSGi Alliance bundle.

The `--type` option is optional. If the component is packaged as a regular archive, omit this option.

`--properties` or `--property`
Optional keyword-value pairs that specify additional properties for the deployment. The available properties are determined by the implementation of the component that is being deployed or redeployed. The `--properties` option and the `--property` option are equivalent. You can use either option regardless of the number of properties that you specify.

Note – For properties that contain . (dot) separators in their names, using the `set` subcommand to change these properties requires a server restart. A better approach is to use the `redeploy` subcommand with the changed properties. If you do use the `set` subcommand, the . (dot) separators in these properties names must be escaped.

You can specify the following properties for a deployment:

`jar-signing-alias`
Specifies the alias for the security certificate with which the application client container JAR file is signed. Java Web Start will not run code that requires elevated permissions unless it resides in a JAR file signed with a certificate that the user's system trusts. For your convenience, GlassFish Server signs the JAR file automatically using the certificate with this alias from the domain's keystore. Java Web Start then asks the user whether to trust the code and displays the GlassFish Server certificate information. To sign this JAR file with a different certificate, add the certificate to the domain keystore, then use this property. For example, you can use a certificate from a trusted authority, which avoids the Java Web Start prompt, or from your own company, which users know they can trust. Default is `s1as`, the alias for the self-signed certificate created for every domain.

`java-web-start-enabled`
Specifies whether Java Web Start access is permitted for an application client module. Default is true.

compatibility

> Specifies the GlassFish Server release with which to be backward compatible in terms of JAR visibility requirements for applications. The only allowed value is v2, which refers to Sun GlassFish Enterprise Server version 2 or Sun Java System Application Server version 9.1 or 9.1.1. The Java EE 6 platform specification imposes stricter requirements than Java EE 5 did on which JAR files can be visible to various modules within an EAR file. In particular, application clients must not have access to EJB JAR files or other JAR files in the EAR file unless references use the standard Java SE mechanisms (extensions, for example) or the Java EE library-directory mechanism. Setting this property to v2 removes these Java EE 6 restrictions.

keepSessions={false|true}

> Superseded by the --keepstate option.

> If the --force option is set to true, this property can by used to specify whether active sessions of the application that is being redeployed are preserved and then restored when the redeployment is complete. Applies to HTTP sessions in a web container. Default is false.

> false
>
> > Active sessions of the application are *not* preserved and restored (default).

> true
>
> > Active sessions of the application are preserved and restored.
> >
> > If any active session of the application fails to be preserved or restored, *none* of the sessions will be available when the redeployment is complete. However, the redeployment continues and a warning is logged.
> >
> > To preserve active sessions, GlassFish Server serializes the sessions and saves them in memory. To restore the sessions, the class loader of the newly redeployed application deserializes any sessions that were previously saved.

> preserveAppScopedResources
>
> > If set to true, preserves any application-scoped resources and restores them during redeployment. Default is false.

> Other available properties are determined by the implementation of the component that is being redeployed.

Operands   *file_archive* |*filepath*

> The path to the archive that contains the application that is being deployed. This path can be a relative path or an absolute path.

> The archive can be in either of the following formats:

> - An archive file, for example, /export/JEE_apps/hello.war.

If the --upload option is set to true, this is the path to the deployable file on the local client machine. If the --upload option is set to false, this is the absolute path to the file on the server machine.

- A directory that contains the exploded format of the deployable archive. This is the absolute path to the directory on the server machine.

  If you specify a directory, the --upload option is ignored.

Whether this operand is required if you use the --force option depends on how the application was originally deployed:

- If the application was originally deployed from a file, the *archive-path* operand is required. The operand must specify an archive file.

- If the application was originally deployed from a directory, the *archive-path* operand is optional.

  If this operand is omitted, the path is retrieved from the domain.xml file. Otherwise, the operand can specify a directory or an archive file.

Examples

EXAMPLE 1 Deploying an Enterprise Application

This example deploys the enterprise application packaged in the Cart.ear file to the default server instance server. You can use the --target option to deploy to a different server instance or to a cluster.

```
asadmin> deploy Cart.ear
Application deployed successfully with name Cart.
Command deploy executed successfully
```

EXAMPLE 2 Deploying a Web Application With the Default Context Root

This example deploys the web application in the hello.war file to the default server instance server. You can use the --target option to deploy to a different server instance or to a cluster.

```
asadmin> deploy hello.war
Application deployed successfully with name hello.
Command deploy executed successfully
```

EXAMPLE 3 Forcibly Deploying a Web Application With a Specific Context Root

This example forcibly deploys the web application in the hello.war file. The context root of the deployed web application is greetings. If the application has already been deployed, it is redeployed.

```
asadmin> deploy  --force=true --contextroot greetings hello.war
Application deployed successfully with name hello.
Command deploy executed successfully
```

EXAMPLE 4 Deploying an Enterprise Bean

This example deploys a component based on the EJB specification (enterprise bean) with CMP and creates the database tables used by the bean.

This example uses the --target option. The target in this example is an existing cluster, cluster1.

```
asadmin> deploy --createtables=true EmployeeEJB.jar
Application deployed successfully with name EmployeeEJB.
Command deploy executed successfully
```

EXAMPLE 5 Deploying a Connector Module

This example deploys a connector module that is packaged in an RAR file.

This example uses the --target option. The target in this example is an existing standalone server instance that does not belong to a cluster.

```
asadmin> deploy jdbcra.rar
Application deployed successfully with name jdbcra.
Command deploy executed successfully
```

Exit Status

0	subcommand executed successfully
1	error in executing the subcommand

See Also   redeploy(1), list-components(1), undeploy(1)

asadmin(1M)

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