Payara Server 5 Administration Cheat Sheet

The Payara® Platform - Production-Ready,
Cloud Native and Aggressively Compatible.

Contents

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This is a reverse dictionary for frequently operations. See Payara Server Documentation for all commands and options.

Start and Stop Domain

Use Case	Operations
Start Domain	asadmin start-domain [*domain-name*] *1
Stop Domain	asadmin stop-domain [*domain-name*] *1 Use Admin Console : Common Tasks > server (Admin Server) > Stop
Restart Domain	asadmin restart-domain [*domain-name*] *1 Use Admin Console : Common Tasks > server (Admin Server) > Restart
View status of Domains	asadmin list-domains

*1 : Assume setting **domain1** as default domain if *domain-name* is omitted.

Start and Stop Standalone Instance

There are two types of standalone instance:

- "Local" Instance is an instance that is on same machine running DAS.
  (It's basically on 'CONFIG' node.)
- "Remote" Instance is an instance on 'SSH' node or 'DCOM' node that is on different machine running DAS.

Use Case	Operations
Start Local Instance	asadmin start-local-instance [--sync={normal|-full}] *instance-name* *1 *2
Stop Local Instance	asadmin stop-local-instance *instance-name* *1

Use Case	Operations
Restart Local Instance	`asadmin restart-local-instance` *instance-name* [*1]
Start Local or Remote Instance	`asadmin start-instance [--sync={normal|full}]` *instance-name* [*2] Use Admin Console : Common Tasks > Instances
Stop Local or Remote Instance	`asadmin stop-instance` *instance-name* Use Admin Console : Common Tasks > Instances
Restart Local or Remote Instance	`asadmin restart-instance` *instance-name* Use Admin Console : Common Tasks > Instances
View status of Instances	`asadmin list-instances` Use Admin Console : Common Tasks > Instances

*1 : Available when a domain is not running.
*2 : Required to explicit --sync option when status of an instance isn't synchronous with DAS.
e.g. asadmin start-instance --sync=full instance1

Start, Stop and Management Deployment Group

Use Case	Operations
Create Deployment Group	`asadmin create-deployment-group` *deployment-group-name* Use Admin Console : Common Tasks > Deployment Groups
Delete Deployment Group	`asadmin delete-deployment-group` *deployment-group-name* Use Admin Console : Common Tasks > Deployment Groups
View list of Deployment Groups	`asadmin list-deployment-groups` Use Admin Console : Common Tasks > Deployment Groups

Use Case	Operations

Add a Instance to Deployment Group	`asadmin add-instance-to-deployment-group --instance` *`instance-name`* `--deploymentgroup` *`deployment-group-name`*
	`Use Admin Console : Common Tasks > Deployment Groups`

Remove a Instance from Deployment Group	`asadmin remove-instance-from-deployment-group --instance` *`instance-name`* `--deploymentgroup` *`deployment-group-name`*
	`Use Admin Console : Common Tasks > Deployment Groups`

Start Deployment Group	`asadmin start-deployment-group` *`deployment-group-name`*
	`Use Admin Console : Common Tasks > Deployment Groups`

Restart Deployment Group	`asadmin restart-deployment-group` *`deployment-group-name`*
	`Use Admin Console : Common Tasks > Deployment Groups`

Stop Deployment Group	`asadmin stop-deployment-group` *`deployment-group-name`*
	`Use Admin Console : Common Tasks > Deployment Groups`

Deploy and Undeploy Application

Use Case	Operations
Deploy Application (to DAS)	`asadmin deploy [--contextroot` *`context-root`*`] [--name=`*`component-name`*`]` *`file-archive`*`|`*`directory`* *1 `Use Admin Console : Common Tasks > Applications`

Deploy Application to Deployment Group	`asadmin deploy [--contextroot` *`context-root`*`] [--name=component-name] --enabled=true --target=`*`deployment-group-name file-archive`*
	`Use Admin Console : Common Tasks > Applications`

Deploy Application to an Instance	`asadmin deploy [--contextroot` *`context-root`*`] [--name=`*`component-name`*`] --enabled=true --target=`*`instance-name file-archive`*
	`Use Admin Console : Common Tasks > Applications`

Deploy Application to an Instance (already deployed on other instance)	`asadmin create-application-ref --target=` *`instance-name component-name`*
	`Use Admin Console : Common Tasks > Applications`

Deploy Application to multiple Instances	`asadmin deploy [--contextroot` *`context-root`*`] --name=`*`component-name`*` --enabled=true --target=` *`instance-name-1 file-archive`*
	`asadmin create-application-ref --target=` *`instance-name-2 component-name`* *2
	`Use Admin Console : Common Tasks > Applications`

Undeploy Application (from DAS)	`asadmin undeploy [--target=server]` *`component-name`*
	`Use Admin Console : Common Tasks > Applications`

Undeploy Application from Deployment Group	`asadmin undeploy --target=`*`deployment-group-name component-name`*
	`Use Admin Console : Common Tasks > Applications`

Undeploy Application from an Instance (remove application completely)	`asadmin undeploy --target=`*`instance-name component-name`*
	`Use Admin Console : Common Tasks > Applications`

Use Case	Operations
Undeploy Application from an Instance (still deployed)	asadmin delete-application-ref --target=*instance-name component-name* Use Admin Console : Common Tasks > Applications
Undeploy Application from multiple Instances	asadmin delete-application-ref --target=*instance-name2 component-name* *2 asadmin undeploy --target=*instance-name1 component-name* Use Admin Console : Common Tasks > Applications
View Deployed Applications	asadmin list-applications [*target*] *3 Use Admin Console : Common Tasks > Applications
View Deployed Applications (only on any Instances)	asadmin list-application-refs [*target*] *3 Use Admin Console : Common Tasks > Applications

*1 : Not recommend to set *directory* on multiple instances because it's required that all instances can access to the *directory*.
*2 : Repeat number of instances; for example, repeat 2 occurs if there's 3 instances.
*3 : Assume setting **server** as default value if *target* is omitted.

Create and Delete JDBC Connection Pool

Use Case	Operations
Install JDBC Driver	asadmin add-library [--type=app] *jar-file*
Create JDBC Connection Pool (as Non-XA Data Source)	asadmin create-jdbc-connection-pool [--data-sourceclassname=class-name] --restype=javax.sql.DataSource [-property *name=value*)[:*name=value*]*] *pool-name* *1 Use Admin Console : Common Tasks > JDBC > JDBC Connection Pools (Recommended)

Use Case	Operations
Create JDBC Connection Pool as XA Data Source, *e.g.* for EJB Timer	asadmin create-jdbc-connection-pool [--datasourceclassname=class-name] --restype=javax.sql.XADataSource [-property _name=value_)[:_name=value_]*] _pool-name_ *1 Use Admin Console : Common Tasks > JDBC > JDBC Connection Pools (Recommended)
Delete JDBC Connection Pool	asadmin delete-jdbc-connection-pool [--cascade={false|true}] _pool-name_ Use Admin Console : Common Tasks > JDBC > JDBC Connection Pools
Ping JDBC Connection Pool	asadmin ping-connection-pool _pool-name_ Use Admin Console : Common Tasks > JDBC > JDBC Connection Pools
View list of JDBC Connection Pools	asadmin list-jdbc-connection-pools Use Admin Console : Common Tasks > JDBC > JDBC Connection Pools
Create JDBC Resource	asadmin create-jdbc-resources --connectionpoolid _pool-name_ [--enabled={true|false}] [--target={server|domain|_deployment-group-name_|_instance-name_}] _jndi-name_ Use Admin Console : Common Tasks > JDBC > JDBC Resources
Delete JDBC Resource	asadmin delete-jdbc-resources [--enabled={true|false}] [--target={server|domain|_instance-name_}] _jndi-name_ Use Admin Console : Common Tasks > JDBC > JDBC Resources
View list of JDBC Resources	asadmin list-jdbc-resources [--target={server|domain|_instance-name_}] Use Admin Console : Common Tasks > JDBC > JDBC Resources

*1 : There are many options other else and most of them are important for good performance.

Enable or Disable Monitoring

Use Case	Operations

Enable Monitoring Service [*1]	`asadmin set configs.config.${config-name}.monitoring-service.monitoring-enabled=true`
	`asadmin set configs.config.${config-name}.monitoring-service.mbean-enabled=true`
	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Monitoring Service → Check Enabled
	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Monitoring MBeabs → Check Enabled

Disable Monitoring Service [*1]	`asadmin set configs.config.${config-name}.monitoring-service.mbean-enabled=false`
	`asadmin set configs.config.${config-name}.monitoring-service.monitoring-enabled=false`
	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Monitoring Service → Uncheck Enabled
	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Monitoring MBeabs → Uncheck Enabled

Change Monitoring Level (for All Components) [*1 *2]	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Component Level Settings; 1. Select All Modules 2. Level → "HIGH" (Enabled) or "OFF" (Disabled), and then click "Change Level" 3. Click "Save"

Use Case	Operations

Change Monitoring Level (for Each Components) [*1 *2]	`asadmin set configs.config.${config-name}.monitoring-service.module-monitoring-levels.${module-name}=HIGH (Enabled)`
	or
	`asadmin set configs.config.${config-name}.monitoring-service.module-monitoring-levels.${module-name}=OFF (Disabled)`
	Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Component Level Settings;
	1. Select ${module-name}
	2. ${module-name} > Monitoring Level → "HIGH" (Enabled) or "OFF" (Disabled)
	3. Click "Save"

View Monitoring Settings [*1]	`asadmin get configs.config.${config-name}.monitoring-service.*` Use Admin Console : Configuration > ${config-name} > Monitoring > General (Tab) > Component Level Settings

*1 : ${config-name} is e.g. "server-config".
*2 : See "Table 1. Components and Services" about ${module-name}.

Server Monitoring

Use Case	Operations
Monitor Server *1	`asadmin get server.${module-name}.*` *2 Use Admin Console : Common Tasks > server (Admin Server) > Monitor (Tab) > Server (Tab) Use JMX or MicroProfile Metrics *3

*1 : Require to enable monitoring service with one or more monitored components/services.
*2 : See “Table 1. Component and Services” about ${module-name}.
*3 : Require additional settings (environment dependent). See Payara Server Documentation and Payara Blog in detail.

Table 1. Components and Services

asadmin	Admin Cosole	asadmin	Admin Console
jvm	Jvm	jpa	Java Persistence
transaction-service	Transaction Service	jdbc-connection-pool	Jdbc Connection Pool
connector-service	Connector Service	thread-pool	Thread Pool
jms-service	Jms Service	ejb-container	Ejb Container
security	Security Service	orb	ORB (Object Request Broker)
web-container	Web Container	connector-connection-pool	Connector Connection Pool
jersey	Jersey (Restful Web Services)	deployment	Deployment
web-services-container	Web Services Container	http-service	Http Service

Configure and View Log

Use Case	Operations
View and Configure Server Logger Settings	Edit ${install-dir}/glassfish/domains/${domain-name}/config/logging.properties file directly (Not Recommended) Use Admin Console : Configuration > ${config-name} > Logger Settings > General (Tab)
View Server Log	Use Admin Console : Common Tasks > server (Admin Server) > General (Tab) > Click "View Log Files" (Log Viewer) Use Admin Console : Common Tasks > server (Admin Server) > General (Tab) > Click "View Raw Log" (Raw Log Viewer) Open "server.log" file directly. Default Location is as follows: • DAS: ${install-dir}/glassfish/domains/${domain-name}/logs/server.log • Instance: ${install-dir}/glassfish/nodes/${node-name}/${instance-name}/logs/server.log
Rotate Log (Force)	asadmin rotate-log Use Admin Console : Common Tasks > server (Admin Server) > General (Tab) > Click "Rotate Log"
Enable Access Logging [*1]	asadmin set configs.config.${config-name}.http-service.access-logging-enabled=true Use Admin Console : Configuration > ${config-name} > HTTP Service > Access Logging → Check "Enabled"
Disable Access Logging [*1]	asadmin set configs.config.${config-name}.http-service.access-logging-enabled=true Use Admin Console : Configuration > ${config-name} > HTTP Service > Access Logging → Uncheck "Enabled"

Use Case	Operations
View Access Log	Open "access.log" file directly. Default Location is as follows: • DAS: ${install-dir}/glassfish/domains/${domain-name}/logs/access/server_access_log.YYYY-MM-DD.txt • Instance: ${install-dir}/glassfish/nodes/${node-name}/${instance-name}/logs/access/server_access_log.YYYY-MM-DD.txt

*1 : In default, access logging is disabled.

Connect to DAS with Secure Admin

Use Case	Machine	Operations
Setup Enable Secure Admin	Local	1. asadmin start-domain [--domain-name] 2. asadmin change-admin-password 3. asadmin enable-secure-admin 4. asadmin restart-domain Use Admin Console 1. Common Tasks > Domain > Administrator Password (Tab) → Set "New Password" and Click "Save" 2. Common Tasks > server (Admin Server) > Click "Secure Administration..." > Click "Enable Secure Admin" 3. Restart Domain

Use Case	Machine	Operations
Access to Admin Console	Local	Open https://localhost:4848/ *1 With enter admin user and password
	Remote	Open https://*das-hostname*:4848/ *1 With enter admin user and password
Use asadmin command (before Login)	Local	asadmin [--host localhost] [--user *admin-user-name*] *command options* *2 With enter admin user and password
	Remote	asadmin --host *das-hostname* [--user *admin-user-name*] *command options* *2 With enter admin user and password
Login	Local	asadmin [--host localhost] [--user *admin-user-name*] login *2 With enter admin user and password
	Remote	asadmin --host *das-hostname* [--user *admin-user-name*] login *2 With enter admin user and password
Use asadmin command after Login	Local	asadmin [--host localhost] [--user *admin-user-name*] *command options* *2 **Without** enter admin user and password
	Remote	asadmin --host *das-hostname* [--user *admin-user-name*] *command options* *2 **Without** enter admin user and password

*1 : It should be “HTTPS” access if secure admin is enabled.
*2 : In default, admin-user-name is “admin”.

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