
Enhydra Administration Application

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Introduction

Enhydra administration application is JMX based. It can be accessed via EnTray (Enhydra Service Name -> EnhydraAdmin), or directly on address <http://localhost:9000/EnhydraAdmin>.

NOTE: We are assuming that Enhydra Admin application is installed on default connection port setting (9000).

Trough Enhydra Admin you can access every MBean registered to the system and administer its exposed attributes and/or invoke any of its exposed operations.

Registered MBeans are grouped according to their name and on first application screen you are able to see all registered domains to Enhydra JMX Server and their matched MBeans and MBean groups. Click on MBean group to access its matching MBeans and MBean subgroup(s).

In this document we'll focus on MBeans registered by enhydra application ('EnhydraApplications' domain).

For each enhydra application registers following MBeans to the server:

- ApplicationConfig
- Context
- PresentationManger
- SessionManger

- DatabaseManger (if application uses DODS)
- Database-[DB Name] (if application uses DODS - for every Logical Database registered to applications DatabaseManager)
- Database.Table-[DB Name].[Table Name] (if application uses DODS - for every DODS generated DO class)

ApplicationConfig MBean

In the ApplicationConfig MBean every configuration parameter (except those matching 'SessionManager', 'PresentationManager' or 'DatabaseManager' section) present in the application configuration file is shown. The values shown can be changed and the changes committed by pressing the Update button. Updating the parameters causes the restart of the application.

Set of available operations:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.
- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application runtime).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'getConfig' - returns string presentation of actual application configuration object.

Context MBean

Set of available operations:

- 'getAppName' - shows registered application name.
- 'getAppContext' - shows registered application context name.
- 'getAppRealContext' - shows real path to application context.

PresentationManager MBean

In the PresentationManager MBean every configuration parameter (matching 'PresentationManager' section) present in the application configuration file is shown. The values shown can be changed and the changes committed by pressing the Update button. Updating the parameters causes the restart of the application.

NOTE: Presentation Managed gets initialized and configured before actual application startup during which he is assigned to actual application. This is the reason for which actual parameter changes will not take any effect until application (re)deployment.

Set of available operations:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.
- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application runtime).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'getPresentationManager' - returns actual application Presentation Manager object.
- 'flushCache' - flushes presentation object and resource cache.
- 'sizeofPOCache' - returns the number of PO cache entries or 0 if PO caching is disabled.
- 'sizeofResourceCache' - returns the number of resource cache entries or 0 if resource caching is disabled.
- 'addMimeType' - adds new mime type in to extension mapping.

SessionManager MBean

In the SessionManager MBean every configuration parameter (matching 'SessionManager' section) present in the application configuration file is shown. The values shown can be changed and the changes committed by pressing the Update button. Updating the parameters causes the restart of the application.

Set of available operations:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.
- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application run-time).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'getSessionManager' - returns actual application Session Manager object.
- 'getEncodeUrlState' - returns the value indicating the URL encoding status.

DatabaseManager MBean

In the DatabaseManager MBean every configuration parameter (matching 'DatabaseManager' and not matching 'Database' or 'Database Table' sections) present in the application configuration file is shown. The values shown can be changed and the changes committed by pressing the Update button. Updating the parameters causes the restart of the application.

Set of available operations:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.

- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application run-time).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'getDatabaseManager' - returns actual application Database Manager object.
- 'Refresh_Cache' - refreshes Database Manager cache.
- 'Refresh_Statistics' - refreshes Database Manager statistics.
- 'Enable_Cache' - enables Database Manager cache status.
- 'Disable_Cache' - disables Database Manager cache status.
- 'Toggle_EnableOrDisable_Cache' - toggles Database Manager cache status.

Database-[DB Name] MBean

In the Database-[DB Name] MBean every configuration parameter (matching 'DatabaseManager.[DB Name]' and not matching 'DatabaseManager.[DB Name].[Table Name]' section) present in the application configuration file is shown. The values shown can be changed and the changes committed by pressing the Update button. Updating the parameters causes the restart of the application.

Set of available operations:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.
- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application run-time).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new

MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'getDatabase' - returns actual Logical Database object.
- 'Refresh_Cache' - refreshes Database cache.
- 'Refresh_Statistics' - refreshes Database statistics.
- 'Enable_Cache' - enables Database cache status.
- 'Disable_Cache' - disables Database cache status.
- 'Toggle_EnableOrDisable_Cache' - toggles Database cache status.

Database.Table-[DB Name].[Table Name] MBean

It presents the table parameters, derived from the configuration file (that are matching 'DatabaseManager.[DB Name].[Table Name]' section) and the default table (cache) values. The values shown can be changed and the changes committed by pressing the Update button. Any parameter that was changed, but had not been present in the configuration file (e.g. Default cache configuration) and hence had been assigned the default value, is added automatically to the configuration file with its new value. Updating the other than caching parameters causes the restart of the application.

Several operations are available:

- 'reset' - resets all the parameters to the values they had when the Enhydra Application has been started.
- 'saveAttributes' - saves the parameter values to the configuration file.
- 'getAppInfo' - shows registered application name.
- 'addAttribute' - enables definition of new application parameter on the fly (during application runtime).

NOTE: Newly defined application parameter will not appear in already present set of MBean attributes. The reason for this is fact that Enhydra Admin works with cloned object containing attribute names and although application itself and its matching MBean have new parameter defined new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'removeAttribute' - enables removal of existing application parameter.

NOTE: removed parameter won't be removed from already present set of MBean attributes (although its value will be empty). The reason for this is fact that Enhydra Admin works with cloned object

containing attribute names and although application itself and its matching MBean don't have removed parameter any more new MBean Information object won't get picked up by 'EnhydraAdmin' application until its restart.

- 'Refresh_Cache' - refreshes Table cache.
- 'Refresh_Statistics' - refreshes Table statistics.
- 'Enable_Cache' - enables Table cache status.
- 'Disable_Cache' - disables Table cache status.
- 'Toggle_EnableOrDisable_Cache' - toggles Table cache status.

- To get the appropriate statistics use one of the following operations:
 - Get Table Data Struct Statistics
 - Get Table Simple Query Statistics
 - Get Table Complex Query Statistics
 - Get Table Statistics

- To clear the appropriate statistics use one of the following operations:
 - Clear Table Data Struct Statistics
 - Clear Table Simple Query Statistics
 - Clear Table Complex Query Statistics
 - Clear Table Statistics