

1 Health Center API sample driver readme
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23 1.0 Introduction

24
25
26 This sample driver code demonstrates how to utilize the Health Center API in a Java
27 application. For a description of how to use the Health Center API, see the
documentation
28 in IBM Knowledge Center (
<https://www.ibm.com/support/knowledgecenter/en/SS3KLZ/com.ibm.java.diagnostics.healthcenter.doc/topics/api.html>).

29
30
31 1.1 Driver components and architecture

32
33 The Health Center API sample code contains the following core components, which
34 represent the Java application:

- 35
36
 - o Hcclientdrv.java is a Java application that calls the Health Center API
 - o myClassEventListener.java is a class to handle the class event
 - o myGCEvenListener.java is a class to handle the garbage collection event
 - o myProfilingEventListener.java is a class to the handle profiling event
 - o myThreadEventListener.java is a class to handle the thread event

41
42 2.0 Change history

43
44
45 2019May21 Initial version

46
47
48 3.0 Prerequisites

49
50
51 The following list provides the required release levels:
52

- o z/TPF with APAR PJ45580 and all prerequisite APARs applied. For more information,
53 see the APEDIT for PJ45580 (<https://www.ibm.com/support/docview.wss?uid=swg1PJ45580>).
54 For more information about installing, building, and configuring z/TPF support for
55 Java, see the z/TPF product documentation in IBM Knowledge Center
56 (<https://www.ibm.com/support/knowledgecenter/SSB23S>).
- o Java Agent for IBM Monitoring and Diagnostic Tools - Health Center on z/TPF
57
58 <https://www-01.ibm.com/support/docview.wss?uid=swg1PJ45580>

59
60
61 4.0 Installing the driver

62
63
64 1) Use FTP to transfer the tar file (Hcclientdrv.tar.gz) to your Linux on IBM Z build

system.

65 This file can be placed in any directory as a holding location, for example,
66 /tmp/ztpftar

- 67
- 68 2) Create a root directory to hold the unpacked files, for example, /ztpfdrvs
 - 69
 - 70 3) Extract the source code from the tar file by entering the following commands:
71 cd /ztpfdrvs
72 tar -xvzf /tmp/ztpftar/Hcclientdrv.tar.gz
73

74 The project source files are extracted in the following directory structure:

75
76 List of files:

77 -----

78 o ./hcclientDrv

- 79
- 80 * hcclientdrv.mak
 - 81 * hcclientdrv.cntl
 - 82 * hcclientdrv.loadfile
 - 83 * pom.xml
 - 84 * ./src/com/ibm/drivers/Hcclientdrv.java
 - 85 * ./src/com/ibm/drivers/myClassEventListener.java
 - 86 * ./src/com/ibm/drivers/myGCEventListener.java
 - 87 * ./src/com/ibm/drivers/myProfilingEventListener.java
 - 88 * ./src/com/ibm/drivers/myThreadEventListener.java
- 89

- 90 4) Create a maketpf.cfg file with the following contents:

91
92 APPL_ROOT := /ztpfdrvs
93 TPF_ROOT := /ztpf
94 LOADTPF_IP:=ftp://<user>@<host>
95 TPF_BSS_NAME := BSS
96 #TPF_SS_NAME :=
97 #USER_VERSION_CODE :=
98

- 99
- a) Set APPL_ROOT to the directory that contains the driver source code that was extracted.
 - 100 b) Set TPF_ROOT to the directory that contains the z/TPF source code.
 - 101 c) Set LOADTPF_IP to the correct user/host of your z/TPF system.
 - 102 d) Set TPF_BSS_NAME to the basic subsystem name of your z/TPF system. By default, this value is set to BSS.
 - 103
 - 104 e) Optional: Set TPF_SS_NAME to the subsystem name.
 - 105 f) Optional: Set USER_VERSION_CODE to any 2-character string. The 2-character string that you set is appended to the shared objects that are built. By default, this value is set to null.
- 106

107 For details about these variables, enter man maketpf.cfg on your Linux on Z build system.

- 110
- 111 5) Direct link to configuring a local maven repo:

112 https://www.ibm.com/support/knowledgecenter/SSB23S_1.1.0.15/com.ibm.java.80.doc/user/cfglinxmaven_local.html

- 113
- 114 6) Run the maketpf utility with the accompanied control file (hcclientdrv.cntl) to assemble,
115 compile, and link the driver programs:

116
117 bldtpf /ztpfdrvs/hcclientdrv/hcclientdrv.cntl

- 118
- 119 7) Use the standard load procedure to transfer and load the driver shared jar files (Java programs).

120
121 loadtpf -s hccfload /ztpfdrvs/hcclientdrv/hcclientdrv.loadfile

- 122
- 123
- 124 8) Use the standard procedure to activate these loadsets on the z/TPF system.

125
126 For more information about program management, including how to build and load programs

to
127 the z/TPF system, see the z/TPF product documentation in IBM Knowledge Center
128 (<https://www.ibm.com/support/knowledgecenter/SSB23S>).
129
130

131 5.0 Configuring the z/TPF system

132
133 Ensure that you have a Java application running with an attached Health Center agent
with
134 default port 1972.
135

136 6.0 Running the Health Center client driver

137
138
139
140 By default, the jar files are deployed in the /sys/tpf_pbfiles/apps/hcclientdrv
directory

141 on the z/TPF system. Before you run the driver, enter the following commands:

142
143 1. zfile export hcclientdrv=/sys/tpf_pbfiles/apps/hcclientdrv/monitoring-api-1.0.jar
144 2. zfile export
hcclientdrv=\$hcclientdrv:/sys/tpf_pbfiles/apps/hcclientdrv/Hcclientdrv.jar

145
146 3. Define your domain and host:
147 zdtcp do define-{your domain}
148 zdtcp ho define-{your houst}

149
150 o The driver will run for 5 minutes

151
152 User: zfile java -Xhealthcenter -cp \$hcclientdrv com.ibm.drivers.Hcclientdrv

153
154 System: While Hcclientdrv is running the following logs file gets generated:
155 /tmp/classapi.log
156 /tmp/gcapi.log
157 /tmp/profilingapi.log
158 /tmp/threadapi.log
159

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