

```

*****
1913 Mon Sep 16 13:28:50 2013
new/usr/src/cmd/mdb/Makefile.common
4124 Want mdb dcmd+walker to fix broken ::nlm_sysid for the new lock manager
Reviewed by: Jeremy Jones <jeremy@delphix.com>
Reviewed by: Adam Leventhal <ahl@delphix.com>
Reviewed by: Matthew Ahrens <mahrens@delphix.com>
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23 #
24 # MDB modules used for debugging user processes that every ISA's build
25 # subdirectory will need to build.
26 #

28 COMMON_MODULES_PROC = \
29     dof \
30     libavl \
31     libc \
32     libcmdutils \
33     libnvpair \
34     libproc \
35     libpython2.6 \
36     libsysevent \
37     libtopo \
38     libumem \
39     libuutil \
40     libzpool \
41     mdb_ds \
42     mdb_test

44 #
45 # MDB modules used for debugging user processes which are only 32-bit
46 #
47 COMMON_MODULES_PROC_32BIT = \
48     svc.configd \
49     svc.startd

51 #
52 # MDB modules used for debugging kernels.
53 #
54 COMMON_MODULES_KVM = \
55     arp \
56     cpc \
57     crypto \
58     dtrace \

```

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59     emlxs \
60     fcip \
61     fcp \
62     ftcl \
63     genunix \
64     hook \
65     neti \
66     idm \
67     ii \
68     ip \
69     ipc \
70     ipp \
71     klmmod \
72     krtld \
73     lofs \
74     logindmux \
75     mac \
76     md \
77     mpt_sas \
78     mr_sas \
79     nca \
80     nsctl \
81     nsmb \
82     pmcs \
83     ptm \
84     qlc \
85     random \
86     rdc \
87     sl394 \
88     scsi_vhci \
89     sctp \
90     sd \
91     sdbc \
92     smbfs \
93     smbstrv \
94     sockfs \
95     specfs \
96     spps \
97     srpt \
98     stmf \
99     stmf_sbd \
100     sv \
101     ufs \
102     usba \
103     zfs

105 CLOSED_COMMON_MODULES_KVM = \
106     mpt \
107     nfs

109 include $(SRC)/Makefile.master

```

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*****
5500 Mon Sep 16 13:28:52 2013
new/usr/src/cmd/mdb/common/modules/klmmod/nlm.c
4124 Want mdb dcmd+walker to fix broken :nlm_sysid for the new lock manager
Reviewed by: Jeremy Jones <jeremy@delphix.com>
Reviewed by: Adam Leventhal <ahl@delphix.com>
Reviewed by: Matthew Ahrens <mahrens@delphix.com>
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11 * http://www.illumos.org/license/CDDL.
12 *
13 * CDDL HEADER END
14 */

16 /*
17  * Copyright (c) 2013 by Delphix. All rights reserved.
18 */

20 #include <netinet/in.h>
21 #include <sys/socket.h>

23 #include <mdb/mdb_ctf.h>
24 #include <mdb/mdb_modapi.h>
25 #include <mdb/mdb_ks.h>

28 /*
29  * nlm_host dcmd implementation
30 */

32 typedef struct mdb_sockaddr_in { /* IPv4 struct */
33     sa_family_t    sin_family;
34     struct {
35         union { /* MUST specify all fields in the union */
36             struct {
37                 uint8_t s_b1;
38                 uint8_t s_b2;
39                 uint8_t s_b3;
40                 uint8_t s_b4;
41             } s_un_b;
42             struct {
43                 uint16_t s_w1;
44                 uint16_t s_w2;
45             } s_un_w;
46             uint32_t s_addr;
47         } s_un;
48     } sin_addr;
49 } mdb_sockaddr_in_t;

51 typedef struct mdb_sockaddr_in6 { /* IPv6 struct */
52     in6_addr_t sin6_addr;
53 } mdb_sockaddr_in6_t;

55 typedef struct mdb_nlm_host {
56     uint_t      nh_refs;
57     uintptr_t   nh_name;
58     struct { /* struct netbuf in the os src code */

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59     /*
60      * ptr to struct sockaddr_in/mdb_sockaddr_in_t
61      * or to struct sockaddr_in6/mdb_sockaddr_in6_t
62      */
63     uintptr_t     buf;
64     } nh_addr;
65     sysid_t      nh_sysid;
66     uint8_t      nh_flags;
67 } mdb_nlm_host_t;

69 /*
70  * Output looks like:
71  * > :nlm_host
72  * NLN_HOST      IP ADDR      HOST      REFCNT  SYSID  FLAGS
73  * ffffffff01d80f7b48 172.16.203.114  delphix      0      14    0x5
74  * ffffffff01d80f7968 fe80::dc:ff:fe01:fdbf charleston.talisker 0      31    0x5
75  */
76 static int
77 nlm_host_dcmd(uintptr_t addr, uint_t flags, int argc, const mdb_arg_t *argv)
78 {
79     mdb_nlm_host_t nlm_host;
80     char nh_name[1024];
81     mdb_sockaddr_in_t sockaddr;
82     mdb_sockaddr_in6_t sockaddr6;
83     boolean_t ipv4;

85     if (argc != 0) {
86         return (DCMD_USAGE);
87     }

89     if (!(flags & DCMD_ADDRSPEC)) {
90         if (mdb_walk_dcmd("nlm_host", "nlm_host", argc, argv) == -1) {
91             mdb_warn("can't walk all nlm_hosts");
92             return (DCMD_ERR);
93         }
94         return (DCMD_OK);
95     }

98     if (mdb_ctf_vread(&nlm_host, "struct nlm_host", "mdb_nlm_host_t",
99         addr, 0) == -1) {
100         return (DCMD_ERR);
101     }

103     if (mdb_readstr(nh_name, sizeof (nh_name), nlm_host.nh_name) == -1) {
104         mdb_warn("failed to read nh_name at %p\n", nlm_host.nh_name);
105         (void) strcpy(nh_name, "<unknown>");
106     }

108     /*
109      * We expect to primarily encounter IPv4 addresses, so use an IPv4
110      * struct for the initial read.
111      */
112     if (mdb_ctf_vread(&sockaddr, "struct sockaddr_in", "mdb_sockaddr_in_t",
113         nlm_host.nh_addr.buf, 0) == -1) {
114         return (DCMD_ERR);
115     }
116     if (sockaddr.sin_family == AF_INET) { /* IPv4 */
117         ipv4 = B_TRUE;
118     } else { /* AF_INET6 == IPv6 */
119         ipv4 = B_FALSE;
120         if (mdb_ctf_vread(&sockaddr6, "struct sockaddr_in6",
121             "mdb_sockaddr_in6_t", nlm_host.nh_addr.buf, 0) == -1) {
122             return (DCMD_ERR);
123         }
124     }

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```

126     if (DCMD_HDRSPEC(flags)) {
127         mdb_printf("<u>%-16s %-24s %-16s %6s %6s %6s%</u>\n",
128             "NLM_HOST", "IP_ADDR", "HOST", "REFCNT",
129             "SYSID", "FLAGS");
130     }
131
132     mdb_printf("%-16p ", addr);
133     if (ipv4) {
134         mdb_printf("%-24I", sockaddr.sin_addr.S_un.S_addr);
135     } else {
136         mdb_printf("%-24N", &sockaddr6.sin6_addr);
137     }
138     mdb_printf(" %-20s %2u %6u %6#x\n",
139         nh_name, nlm_host.nh_refs, nlm_host.nh_sysid, nlm_host.nh_flags);
140
141     return (DCMD_OK);
142 }
143
144 /*
145  * nlm_host walker implementation
146  */
147
148 typedef struct mdb_nlm_globals_list {
149     uintptr_t tqh_first; /* first element */
150 } mdb_nlm_globals_list_t;
151
152 typedef struct mdb_nlm_globals {
153     struct {
154         uintptr_t tqe_next; /* next element */
155     } nlm_link;
156 } mdb_nlm_globals_t;
157
158 static int
159 nlm_host_walk_init(mdb_walk_state_t *wsp)
160 {
161     mdb_nlm_globals_list_t globals_list;
162     GElf_Sym sym;
163     mdb_nlm_globals_t nlm_global;
164
165     /*
166      * 1. Find the global list of zones.
167      * 2. Read the first element in the list.
168      * 3. Read the AVL tree field and call ::walk_avl.
169      */
170     if (mdb_lookup_by_name("nlm_zones_list", &sym) != 0) {
171         return (WALK_ERR);
172     }
173
174     if (mdb_ctf_vread(&globals_list, "struct nlm_globals_list",
175         "mdb_nlm_globals_list_t", sym.st_value, 0) == -1) {
176         return (WALK_ERR);
177     }
178
179     if (globals_list.tqh_first == 0) {
180         mdb_warn("empty zones list!\n");
181         return (WALK_ERR);
182     }
183
184     /* This walk works for a single zone. Warn if there is > 1 zone. */
185     if (mdb_ctf_vread(&nlm_global, "struct nlm_globals",
186         "mdb_nlm_globals_t", globals_list.tqh_first, 0) == -1) {
187         return (WALK_ERR);
188     }
189     if (nlm_global.nlm_link.tqe_next != 0) {
190         mdb_warn("2+ zones present -- info for only the "

```

```

191         "first zone in the data structure will be printed.\n");
192     }
193
194     wsp->walk_addr = globals_list.tqh_first
195         + mdb_ctf_offsetof_by_name("struct nlm_globals", "nlm_hosts_tree");
196     if (mdb_layered_walk("avl", wsp) == -1) {
197         mdb_warn("failed to walk 'avl'\n");
198         return (WALK_ERR);
199     }
200
201     return (WALK_NEXT);
202 }
203
204 static int
205 nlm_host_walk_step(mdb_walk_state_t *wsp)
206 {
207     return (wsp->walk_callback(wsp->walk_addr, wsp->walk_layer,
208         wsp->walk_cbdata));
209 }
210
211 static const mdb_dcmd_t dcmds[] = {
212     { "nlm_host", "", "dump an nlm_host structure",
213         nlm_host_dcmd, NULL },
214     { NULL }
215 };
216
217 static const mdb_walker_t walkers[] = {
218     { "nlm_host", "dump all nlm_host structures",
219         nlm_host_walk_init, nlm_host_walk_step, NULL },
220     { NULL }
221 };
222
223 static const mdb_modinfo_t modinfo = {
224     MDB_API_VERSION, dcmds, walkers
225 };
226
227 const mdb_modinfo_t *
228 _mdb_init(void)
229 {
230     return (&modinfo);
231 }
232

```

new/usr/src/cmd/mdb/intel/amd64/klmmod/Makefile

1

680 Mon Sep 16 13:28:52 2013

new/usr/src/cmd/mdb/intel/amd64/klmmod/Makefile

4124 Want mdb dcmd+walker to fix broken ::nlm_sysid for the new lock manager

Reviewed by: Jeremy Jones <jeremy@delphix.com>

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Reviewed by: Matthew Ahrens <mahrens@delphix.com>

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15 #
17 MODULE = klmmod.so
18 MDBTGT = kvm
20 MODSRCS = nlm.c
22 include ../../../../Makefile.cmd
23 include ../../../../Makefile.cmd.64
24 include ../../Makefile.amd64
25 include ../../../../Makefile.module
```

new/usr/src/cmd/mdb/intel/ia32/klmmod/Makefile

1

643 Mon Sep 16 13:28:53 2013

new/usr/src/cmd/mdb/intel/ia32/klmmod/Makefile

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15 #
17 MODULE = klmmod.so
18 MDBTGT = kvm
20 MODSRCS = nlm.c
22 include ../../../../Makefile.cmd
23 include ../../../../Makefile.ia32
24 include ../../../../Makefile.module
```

new/usr/src/cmd/mdb/sparc/v9/klmmod/Makefile

1

758 Mon Sep 16 13:28:53 2013

new/usr/src/cmd/mdb/sparc/v9/klmmod/Makefile

4124 Want mdb dcmd+walker to fix broken ::nlm_sysid for the new lock manager

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15 #

17 MODULE = klmmod.so
18 MDBTGT = kvm

20 MODSRCS = nlm.c

22 include ../../../../Makefile.cmd
23 include ../../../../Makefile.cmd.64
24 include ../../Makefile.sparcv9

26 ROOTKMOD = $(ROOT)/usr/kernel/kmdb$(MACHMODDIR)

28 include ../../../../Makefile.module

30 $(ROOTKMOD):
31     $(INS.dir)
```

new/usr/src/pkg/manifests/developer-debug-mdb.mf

1

```
*****
21513 Mon Sep 16 13:28:54 2013
new/usr/src/pkg/manifests/developer-debug-mdb.mf
4124 Want mdb dcmd-walker to fix broken ::nlm_sysid for the new lock manager
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22 #
23 # Copyright (c) 2010, Oracle and/or its affiliates. All rights reserved.
24 # Copyright (c) 2013 by Delphix. All rights reserved.
25 #
26 #
27 set name=pkg.fmri value=pkg:/developer/debug/mdb@$(PKGVERS)
28 set name=pkg.description value="Modular Debugger (MDB)"
29 set name=pkg.summary value="Modular Debugger"
30 set name=info.classification \
31     value=org.opensolaris.category.2008:Development/System
32 set name=variant.arch value=$(ARCH)
33 dir path=kernel group=sys
34 dir path=kernel/kmdb group=sys
35 dir path=kernel/kmdb/$(ARCH64) group=sys
36 dir path=platform group=sys variant.opensolaris.zone=global
37 $(i386_ONLY)dir path=platform/i86pc group=sys variant.opensolaris.zone=global
38 $(i386_ONLY)dir path=platform/i86pc/kernel group=sys \
39     variant.opensolaris.zone=global
40 $(i386_ONLY)dir path=platform/i86pc/kernel/kmdb group=sys
41 $(i386_ONLY)dir path=platform/i86pc/kernel/kmdb/$(ARCH64) group=sys
42 $(i386_ONLY)dir path=platform/i86xpv group=sys variant.opensolaris.zone=global
43 $(i386_ONLY)dir path=platform/i86xpv/kernel group=sys \
44     variant.opensolaris.zone=global
45 $(i386_ONLY)dir path=platform/i86xpv/kernel/kmdb group=sys
46 $(i386_ONLY)dir path=platform/i86xpv/kernel/kmdb/$(ARCH64) group=sys
47 $(sparc_ONLY)dir path=platform/sun4u group=sys variant.opensolaris.zone=global
48 $(sparc_ONLY)dir path=platform/sun4u/kernel group=sys \
49     variant.opensolaris.zone=global
50 $(sparc_ONLY)dir path=platform/sun4u/kernel/kmdb group=sys
51 $(sparc_ONLY)dir path=platform/sun4u/kernel/kmdb/$(ARCH64) group=sys
52 $(sparc_ONLY)dir path=platform/sun4v group=sys variant.opensolaris.zone=global
53 $(sparc_ONLY)dir path=platform/sun4v/kernel group=sys \
54     variant.opensolaris.zone=global
55 $(sparc_ONLY)dir path=platform/sun4v/kernel/kmdb group=sys
56 $(sparc_ONLY)dir path=platform/sun4v/kernel/kmdb/$(ARCH64) group=sys
57 dir path=usr group=sys
58 dir path=usr/bin
```

new/usr/src/pkg/manifests/developer-debug-mdb.mf

2

```
59 dir path=usr/bin/$(ARCH32)
60 dir path=usr/bin/$(ARCH64)
61 dir path=usr/include
62 dir path=usr/include/sys
63 dir path=usr/lib
64 dir path=usr/lib/mdb group=sys
65 dir path=usr/lib/mdb/kvm group=sys
66 dir path=usr/lib/mdb/kvm/$(ARCH64) group=sys
67 dir path=usr/lib/mdb/proc group=sys
68 $(sparc_ONLY)dir path=usr/lib/mdb/proc/$(ARCH64) group=sys
69 $(i386_ONLY)dir path=usr/lib/mdb/proc/$(ARCH64)
70 dir path=usr/lib/mdb/raw group=sys
71 dir path=usr/platform group=sys
72 $(i386_ONLY)dir path=usr/platform/i86pc group=sys
73 $(i386_ONLY)dir path=usr/platform/i86pc/lib
74 $(i386_ONLY)dir path=usr/platform/i86pc/lib/mdb group=sys
75 $(i386_ONLY)dir path=usr/platform/i86pc/lib/mdb/kvm group=sys
76 $(i386_ONLY)dir path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64) group=sys
77 $(i386_ONLY)dir path=usr/platform/i86xpv group=sys
78 $(i386_ONLY)dir path=usr/platform/i86xpv/lib
79 $(i386_ONLY)dir path=usr/platform/i86xpv/lib/mdb group=sys
80 $(i386_ONLY)dir path=usr/platform/i86xpv/lib/mdb/kvm group=sys
81 $(i386_ONLY)dir path=usr/platform/i86xpv/lib/mdb/kvm/$(ARCH64) group=sys
82 $(sparc_ONLY)dir path=usr/platform/sun4u group=sys
83 $(sparc_ONLY)dir path=usr/platform/sun4u/lib
84 $(sparc_ONLY)dir path=usr/platform/sun4u/lib/mdb group=sys
85 $(sparc_ONLY)dir path=usr/platform/sun4u/lib/mdb/kvm group=sys
86 $(sparc_ONLY)dir path=usr/platform/sun4u/lib/mdb/kvm/$(ARCH64) group=sys
87 $(sparc_ONLY)dir path=usr/platform/sun4v group=sys
88 $(sparc_ONLY)dir path=usr/platform/sun4v/lib
89 $(sparc_ONLY)dir path=usr/platform/sun4v/lib/mdb group=sys
90 $(sparc_ONLY)dir path=usr/platform/sun4v/lib/mdb/kvm group=sys
91 $(sparc_ONLY)dir path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64) group=sys
92 dir path=usr/share/man
93 dir path=usr/share/man/man1
94 file path=kernel/kmdb/$(ARCH64)/arp group=sys mode=0555
95 file path=kernel/kmdb/$(ARCH64)/cpc group=sys mode=0555
96 $(i386_ONLY)file path=kernel/kmdb/$(ARCH64)/cpu.generic group=sys mode=0555
97 $(i386_ONLY)file path=kernel/kmdb/$(ARCH64)/cpu_ms.AuthenticAMD.15 group=sys \
98     mode=0555
99 file path=kernel/kmdb/$(ARCH64)/crypto group=sys mode=0555
100 file path=kernel/kmdb/$(ARCH64)/genunix group=sys mode=0555
101 file path=kernel/kmdb/$(ARCH64)/hook group=sys mode=0555
102 $(sparc_ONLY)file path=kernel/kmdb/$(ARCH64)/intr group=sys mode=0555
103 file path=kernel/kmdb/$(ARCH64)/ip group=sys mode=0555
104 file path=kernel/kmdb/$(ARCH64)/ipc group=sys mode=0555
105 file path=kernel/kmdb/$(ARCH64)/ipp group=sys mode=0555
106 file path=kernel/kmdb/$(ARCH64)/klmod group=sys mode=0555
107 file path=kernel/kmdb/$(ARCH64)/krtld group=sys mode=0555
108 file path=kernel/kmdb/$(ARCH64)/lofs group=sys mode=0555
109 file path=kernel/kmdb/$(ARCH64)/logindmux group=sys mode=0555
110 file path=kernel/kmdb/$(ARCH64)/mac group=sys mode=0555
111 file path=kernel/kmdb/$(ARCH64)/md group=sys mode=0555
112 file path=kernel/kmdb/$(ARCH64)/mdb_ds group=sys mode=0555
113 file path=kernel/kmdb/$(ARCH64)/mpt group=sys mode=0555
114 file path=kernel/kmdb/$(ARCH64)/mpt_sas group=sys mode=0555
115 file path=kernel/kmdb/$(ARCH64)/mr_sas group=sys mode=0555
116 file path=kernel/kmdb/$(ARCH64)/nca group=sys mode=0555
117 file path=kernel/kmdb/$(ARCH64)/neti group=sys mode=0555
118 file path=kernel/kmdb/$(ARCH64)/nfs group=sys mode=0555
119 file path=kernel/kmdb/$(ARCH64)/ptm group=sys mode=0555
120 file path=kernel/kmdb/$(ARCH64)/random group=sys mode=0555
121 file path=kernel/kmdb/$(ARCH64)/s1394 group=sys mode=0555
122 $(i386_ONLY)file path=kernel/kmdb/$(ARCH64)/sata group=sys mode=0555
123 file path=kernel/kmdb/$(ARCH64)/scsi_vhci group=sys mode=0555
124 file path=kernel/kmdb/$(ARCH64)/sctp group=sys mode=0555
```

```

125 file path=kernel/kmdb/$(ARCH64)/sd group=sys mode=0555
126 file path=kernel/kmdb/$(ARCH64)/sockfs group=sys mode=0555
127 file path=kernel/kmdb/$(ARCH64)/specfs group=sys mode=0555
128 file path=kernel/kmdb/$(ARCH64)/sppp group=sys mode=0555
129 $(sparc_ONLY)file path=kernel/kmdb/$(ARCH64)/ssd group=sys mode=0555
130 file path=kernel/kmdb/$(ARCH64)/ufs group=sys mode=0555
131 $(i386_ONLY)file path=kernel/kmdb/$(ARCH64)/uhci group=sys mode=0555
132 file path=kernel/kmdb/$(ARCH64)/usba group=sys mode=0555
133 $(i386_ONLY)file path=kernel/kmdb/arp group=sys mode=0555
134 $(i386_ONLY)file path=kernel/kmdb/cpc group=sys mode=0555
135 $(i386_ONLY)file path=kernel/kmdb/cpu.generic group=sys mode=0555
136 $(i386_ONLY)file path=kernel/kmdb/cpu_ms.AuthenticAMD.15 group=sys mode=0555
137 $(i386_ONLY)file path=kernel/kmdb/crypto group=sys mode=0555
138 $(i386_ONLY)file path=kernel/kmdb/genunix group=sys mode=0555
139 $(i386_ONLY)file path=kernel/kmdb/hook group=sys mode=0555
140 $(i386_ONLY)file path=kernel/kmdb/ip group=sys mode=0555
141 $(i386_ONLY)file path=kernel/kmdb/ipc group=sys mode=0555
142 $(i386_ONLY)file path=kernel/kmdb/ipp group=sys mode=0555
143 $(i386_ONLY)file path=kernel/kmdb/klmmod group=sys mode=0555
144 $(i386_ONLY)file path=kernel/kmdb/krtld group=sys mode=0555
145 $(i386_ONLY)file path=kernel/kmdb/lofs group=sys mode=0555
146 $(i386_ONLY)file path=kernel/kmdb/logindmux group=sys mode=0555
147 $(i386_ONLY)file path=kernel/kmdb/mac group=sys mode=0555
148 $(i386_ONLY)file path=kernel/kmdb/md group=sys mode=0555
149 $(i386_ONLY)file path=kernel/kmdb/mdb_ds group=sys mode=0555
150 $(i386_ONLY)file path=kernel/kmdb/mpt group=sys mode=0555
151 $(i386_ONLY)file path=kernel/kmdb/mpt_sas group=sys mode=0555
152 $(i386_ONLY)file path=kernel/kmdb/mr_sas group=sys mode=0555
153 $(i386_ONLY)file path=kernel/kmdb/nca group=sys mode=0555
154 $(i386_ONLY)file path=kernel/kmdb/neti group=sys mode=0555
155 $(i386_ONLY)file path=kernel/kmdb/nfs group=sys mode=0555
156 $(i386_ONLY)file path=kernel/kmdb/ptm group=sys mode=0555
157 $(i386_ONLY)file path=kernel/kmdb/random group=sys mode=0555
158 $(i386_ONLY)file path=kernel/kmdb/s1394 group=sys mode=0555
159 $(i386_ONLY)file path=kernel/kmdb/sata group=sys mode=0555
160 $(i386_ONLY)file path=kernel/kmdb/scsi_vhci group=sys mode=0555
161 $(i386_ONLY)file path=kernel/kmdb/sctp group=sys mode=0555
162 $(i386_ONLY)file path=kernel/kmdb/sd group=sys mode=0555
163 $(i386_ONLY)file path=kernel/kmdb/sockfs group=sys mode=0555
164 $(i386_ONLY)file path=kernel/kmdb/specfs group=sys mode=0555
165 $(i386_ONLY)file path=kernel/kmdb/sppp group=sys mode=0555
166 $(i386_ONLY)file path=kernel/kmdb/ufs group=sys mode=0555
167 $(i386_ONLY)file path=kernel/kmdb/uhci group=sys mode=0555
168 $(i386_ONLY)file path=kernel/kmdb/usba group=sys mode=0555
169 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/$(ARCH64)/apix group=sys \
170 mode=0555
171 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/$(ARCH64)/pcplusmp group=sys \
172 mode=0555
173 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/$(ARCH64)/unix group=sys \
174 mode=0555
175 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/$(ARCH64)/uppc group=sys \
176 mode=0555
177 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/apix group=sys mode=0555
178 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/pcplusmp group=sys mode=0555
179 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/unix group=sys mode=0555
180 $(i386_ONLY)file path=platform/i86pc/kernel/kmdb/uppc group=sys mode=0555
181 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/$(ARCH64)/unix group=sys \
182 mode=0555
183 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/$(ARCH64)/xpv_psm group=sys \
184 mode=0555
185 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/$(ARCH64)/xpv_uppc group=sys \
186 mode=0555
187 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/unix group=sys mode=0555
188 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/xpv_group=sys mode=0555
189 $(i386_ONLY)file path=platform/i86xpv/kernel/kmdb/xpv_uppc group=sys mode=0555
190 $(sparc_ONLY)file path=platform/sun4u/kernel/kmdb/$(ARCH64)/oplhwd group=sys \

```

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191 mode=0555
192 $(sparc_ONLY)file path=platform/sun4u/kernel/kmdb/$(ARCH64)/sgenv group=sys \
193 mode=0555
194 $(sparc_ONLY)file path=platform/sun4u/kernel/kmdb/$(ARCH64)/sgsbcc group=sys \
195 mode=0555
196 $(sparc_ONLY)file path=platform/sun4u/kernel/kmdb/$(ARCH64)/unix group=sys \
197 mode=0555
198 $(sparc_ONLY)file path=platform/sun4v/kernel/kmdb/$(ARCH64)/errh group=sys \
199 mode=0555
200 $(sparc_ONLY)file path=platform/sun4v/kernel/kmdb/$(ARCH64)/ldc group=sys \
201 mode=0555
202 $(sparc_ONLY)file path=platform/sun4v/kernel/kmdb/$(ARCH64)/mdesc group=sys \
203 mode=0555
204 $(sparc_ONLY)file path=platform/sun4v/kernel/kmdb/$(ARCH64)/unix group=sys \
205 mode=0555
206 $(sparc_ONLY)file path=platform/sun4v/kernel/kmdb/$(ARCH64)/vdsk group=sys \
207 mode=0555
208 file path=usr/bin/$(ARCH32)/mdb mode=0555
209 file path=usr/bin/$(ARCH64)/mdb mode=0555
210 file path=usr/include/sys/mdb_modapi.h
211 file path=usr/lib/mdb/kvm/$(ARCH64)/arp.so group=sys mode=0555
212 file path=usr/lib/mdb/kvm/$(ARCH64)/cpc.so group=sys mode=0555
213 $(i386_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/cpu.generic.so group=sys \
214 mode=0555
215 $(i386_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/cpu_ms.AuthenticAMD.15.so \
216 group=sys mode=0555
217 file path=usr/lib/mdb/kvm/$(ARCH64)/crypto.so group=sys mode=0555
218 file path=usr/lib/mdb/kvm/$(ARCH64)/genunix.so group=sys mode=0555
219 file path=usr/lib/mdb/kvm/$(ARCH64)/hook.so group=sys mode=0555
220 $(sparc_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/intr.so group=sys mode=0555
221 file path=usr/lib/mdb/kvm/$(ARCH64)/ip.so group=sys mode=0555
222 file path=usr/lib/mdb/kvm/$(ARCH64)/ipc.so group=sys mode=0555
223 file path=usr/lib/mdb/kvm/$(ARCH64)/ipp.so group=sys mode=0555
224 file path=usr/lib/mdb/kvm/$(ARCH64)/klmmod.so group=sys mode=0555
225 file path=usr/lib/mdb/kvm/$(ARCH64)/krtld.so group=sys mode=0555
226 file path=usr/lib/mdb/kvm/$(ARCH64)/lofs.so group=sys mode=0555
227 file path=usr/lib/mdb/kvm/$(ARCH64)/logindmux.so group=sys mode=0555
228 file path=usr/lib/mdb/kvm/$(ARCH64)/mac.so group=sys mode=0555
229 file path=usr/lib/mdb/kvm/$(ARCH64)/md.so group=sys mode=0555
230 $(i386_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/mdb_kb.so group=sys mode=0555
231 file path=usr/lib/mdb/kvm/$(ARCH64)/mdb_ks.so group=sys mode=0555
232 file path=usr/lib/mdb/kvm/$(ARCH64)/mpt.so group=sys mode=0555
233 file path=usr/lib/mdb/kvm/$(ARCH64)/mpt_sas.so group=sys mode=0555
234 file path=usr/lib/mdb/kvm/$(ARCH64)/mr_sas.so group=sys mode=0555
235 file path=usr/lib/mdb/kvm/$(ARCH64)/nca.so group=sys mode=0555
236 file path=usr/lib/mdb/kvm/$(ARCH64)/neti.so group=sys mode=0555
237 file path=usr/lib/mdb/kvm/$(ARCH64)/nfs.so group=sys mode=0555
238 file path=usr/lib/mdb/kvm/$(ARCH64)/ptm.so group=sys mode=0555
239 file path=usr/lib/mdb/kvm/$(ARCH64)/random.so group=sys mode=0555
240 file path=usr/lib/mdb/kvm/$(ARCH64)/s1394.so group=sys mode=0555
241 $(i386_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/sata.so group=sys mode=0555
242 file path=usr/lib/mdb/kvm/$(ARCH64)/scsi_vhci.so group=sys mode=0555
243 file path=usr/lib/mdb/kvm/$(ARCH64)/sctp.so group=sys mode=0555
244 file path=usr/lib/mdb/kvm/$(ARCH64)/sd.so group=sys mode=0555
245 file path=usr/lib/mdb/kvm/$(ARCH64)/sockfs.so group=sys mode=0555
246 file path=usr/lib/mdb/kvm/$(ARCH64)/specfs.so group=sys mode=0555
247 file path=usr/lib/mdb/kvm/$(ARCH64)/sppp.so group=sys mode=0555
248 $(sparc_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/ssd.so group=sys mode=0555
249 file path=usr/lib/mdb/kvm/$(ARCH64)/ufs.so group=sys mode=0555
250 $(i386_ONLY)file path=usr/lib/mdb/kvm/$(ARCH64)/uhci.so group=sys mode=0555
251 file path=usr/lib/mdb/kvm/$(ARCH64)/usba.so group=sys mode=0555
252 $(i386_ONLY)file path=usr/lib/mdb/kvm/arp.so group=sys mode=0555
253 $(i386_ONLY)file path=usr/lib/mdb/kvm/cpc.so group=sys mode=0555
254 $(i386_ONLY)file path=usr/lib/mdb/kvm/cpu.generic.so group=sys mode=0555
255 $(i386_ONLY)file path=usr/lib/mdb/kvm/cpu_ms.AuthenticAMD.15.so group=sys \
256 mode=0555

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257 $(i386_ONLY)file path=usr/lib/mdb/kvm/crypto.so group=sys mode=0555
258 $(i386_ONLY)file path=usr/lib/mdb/kvm/genunix.so group=sys mode=0555
259 $(i386_ONLY)file path=usr/lib/mdb/kvm/hook.so group=sys mode=0555
260 $(i386_ONLY)file path=usr/lib/mdb/kvm/ip.so group=sys mode=0555
261 $(i386_ONLY)file path=usr/lib/mdb/kvm/ipc.so group=sys mode=0555
262 $(i386_ONLY)file path=usr/lib/mdb/kvm/ipp.so group=sys mode=0555
263 $(i386_ONLY)file path=usr/lib/mdb/kvm/klmmmod.so group=sys mode=0555
264 $(i386_ONLY)file path=usr/lib/mdb/kvm/krtld.so group=sys mode=0555
265 $(i386_ONLY)file path=usr/lib/mdb/kvm/lofs.so group=sys mode=0555
266 $(i386_ONLY)file path=usr/lib/mdb/kvm/logindmux.so group=sys mode=0555
267 $(i386_ONLY)file path=usr/lib/mdb/kvm/mac.so group=sys mode=0555
268 $(i386_ONLY)file path=usr/lib/mdb/kvm/md.so group=sys mode=0555
269 $(i386_ONLY)file path=usr/lib/mdb/kvm/mdb_kb.so group=sys mode=0555
270 $(i386_ONLY)file path=usr/lib/mdb/kvm/mdb_ks.so group=sys mode=0555
271 $(i386_ONLY)file path=usr/lib/mdb/kvm/mpt.so group=sys mode=0555
272 $(i386_ONLY)file path=usr/lib/mdb/kvm/mpt_sas.so group=sys mode=0555
273 $(i386_ONLY)file path=usr/lib/mdb/kvm/mr_sas.so group=sys mode=0555
274 $(i386_ONLY)file path=usr/lib/mdb/kvm/nca.so group=sys mode=0555
275 $(i386_ONLY)file path=usr/lib/mdb/kvm/neti.so group=sys mode=0555
276 $(i386_ONLY)file path=usr/lib/mdb/kvm/nfs.so group=sys mode=0555
277 $(i386_ONLY)file path=usr/lib/mdb/kvm/ptm.so group=sys mode=0555
278 $(i386_ONLY)file path=usr/lib/mdb/kvm/random.so group=sys mode=0555
279 $(i386_ONLY)file path=usr/lib/mdb/kvm/sl394.so group=sys mode=0555
280 $(i386_ONLY)file path=usr/lib/mdb/kvm/sata.so group=sys mode=0555
281 $(i386_ONLY)file path=usr/lib/mdb/kvm/scsi_vhci.so group=sys mode=0555
282 $(i386_ONLY)file path=usr/lib/mdb/kvm/sctp.so group=sys mode=0555
283 $(i386_ONLY)file path=usr/lib/mdb/kvm/sd.so group=sys mode=0555
284 $(i386_ONLY)file path=usr/lib/mdb/kvm/sockfs.so group=sys mode=0555
285 $(i386_ONLY)file path=usr/lib/mdb/kvm/specfs.so group=sys mode=0555
286 $(i386_ONLY)file path=usr/lib/mdb/kvm/sppp.so group=sys mode=0555
287 $(i386_ONLY)file path=usr/lib/mdb/kvm/ufs.so group=sys mode=0555
288 $(i386_ONLY)file path=usr/lib/mdb/kvm/uhci.so group=sys mode=0555
289 $(i386_ONLY)file path=usr/lib/mdb/kvm/usba.so group=sys mode=0555
290 file path=usr/lib/mdb/proc/$(ARCH64)/ld.so group=sys mode=0555
291 file path=usr/lib/mdb/proc/$(ARCH64)/libavl.so group=sys mode=0555
292 file path=usr/lib/mdb/proc/$(ARCH64)/libc.so group=sys mode=0555
293 file path=usr/lib/mdb/proc/$(ARCH64)/libcmdutils.so group=sys mode=0555
294 file path=usr/lib/mdb/proc/$(ARCH64)/libnvpair.so group=sys mode=0555
295 file path=usr/lib/mdb/proc/$(ARCH64)/libproc.so group=sys mode=0555
296 file path=usr/lib/mdb/proc/$(ARCH64)/libpython2.6.so group=sys mode=0555
297 file path=usr/lib/mdb/proc/$(ARCH64)/libsysevent.so group=sys mode=0555
298 file path=usr/lib/mdb/proc/$(ARCH64)/libtopo.so group=sys mode=0555
299 file path=usr/lib/mdb/proc/$(ARCH64)/libumem.so group=sys mode=0555
300 file path=usr/lib/mdb/proc/$(ARCH64)/libutil.so group=sys mode=0555
301 file path=usr/lib/mdb/proc/$(ARCH64)/mdb_ds.so group=sys mode=0555
302 $(i386_ONLY)file path=usr/lib/mdb/proc/$(ARCH64)/mdb_test.so group=sys \
mode=0555
303 file path=usr/lib/mdb/proc/ld.so group=sys mode=0555
304 file path=usr/lib/mdb/proc/libavl.so group=sys mode=0555
305 file path=usr/lib/mdb/proc/libavl.so group=sys mode=0555
306 file path=usr/lib/mdb/proc/libc.so group=sys mode=0555
307 file path=usr/lib/mdb/proc/libcmdutils.so group=sys mode=0555
308 file path=usr/lib/mdb/proc/libnvpair.so group=sys mode=0555
309 file path=usr/lib/mdb/proc/libproc.so group=sys mode=0555
310 file path=usr/lib/mdb/proc/libpython2.6.so group=sys mode=0555
311 file path=usr/lib/mdb/proc/libsysevent.so group=sys mode=0555
312 file path=usr/lib/mdb/proc/libtopo.so group=sys mode=0555
313 file path=usr/lib/mdb/proc/libumem.so group=sys mode=0555
314 file path=usr/lib/mdb/proc/libutil.so group=sys mode=0555
315 file path=usr/lib/mdb/proc/mdb_ds.so group=sys mode=0555
316 file path=usr/lib/mdb/proc/svc.configd.so group=sys mode=0555
317 file path=usr/lib/mdb/proc/svc.startd.so group=sys mode=0555
318 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/apix.so \
group=sys mode=0555
319 group=sys mode=0555
320 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/pcplusmp.so \
group=sys mode=0555
321 group=sys mode=0555
322 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/unix.so \

```

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323 group=sys mode=0555
324 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/uppc.so \
325 group=sys mode=0555
326 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/apix.so group=sys \
327 mode=0555
328 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/pcplusmp.so group=sys \
329 mode=0555
330 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/unix.so group=sys \
331 mode=0555
332 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/uppc.so group=sys \
333 mode=0555
334 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/unix.so \
335 group=sys mode=0555
336 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/xpv.so \
337 group=sys mode=0555
338 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/xpv_psm.so \
339 group=sys mode=0555
340 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/$(ARCH64)/xpv_uppc.so \
341 group=sys mode=0555
342 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/unix.so group=sys \
343 mode=0555
344 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/xpv.so group=sys \
345 mode=0555
346 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/xpv_psm.so group=sys \
347 mode=0555
348 $(i386_ONLY)file path=usr/platform/i86pc/lib/mdb/kvm/xpv_uppc.so group=sys \
349 mode=0555
350 $(sparc_ONLY)file path=usr/platform/sun4u/lib/mdb/kvm/$(ARCH64)/oplhwd.so \
351 group=sys mode=0555
352 $(sparc_ONLY)file path=usr/platform/sun4u/lib/mdb/kvm/$(ARCH64)/sgenv.so \
353 group=sys mode=0555
354 $(sparc_ONLY)file path=usr/platform/sun4u/lib/mdb/kvm/$(ARCH64)/sgsbcc.so \
355 group=sys mode=0555
356 $(sparc_ONLY)file path=usr/platform/sun4u/lib/mdb/kvm/$(ARCH64)/unix.so \
357 group=sys mode=0555
358 $(sparc_ONLY)file path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64)/errh.so \
359 group=sys mode=0555
360 $(sparc_ONLY)file path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64)/ldc.so \
361 group=sys mode=0555
362 $(sparc_ONLY)file path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64)/mdesc.so \
363 group=sys mode=0555
364 $(sparc_ONLY)file path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64)/unix.so \
365 group=sys mode=0555
366 $(sparc_ONLY)file path=usr/platform/sun4v/lib/mdb/kvm/$(ARCH64)/vdsk.so \
367 group=sys mode=0555
368 file path=usr/share/man/man1/adb.1
369 file path=usr/share/man/man1/kmdb.1
370 file path=usr/share/man/man1/mdb.1
371 hardlink path=usr/bin/$(ARCH32)/adb target=../../../../usr/bin/$(ARCH32)/mdb
372 hardlink path=usr/bin/$(ARCH64)/adb target=../../../../usr/bin/$(ARCH64)/mdb
373 hardlink path=usr/bin/adb target=../../../../usr/lib/isaexec
374 hardlink path=usr/bin/mdb target=../../../../usr/lib/isaexec
375 legacy pkg=SUNWmdb desc="Modular Debugger (MDB)" name="Modular Debugger"
376 legacy pkg=SUNWmdbl desc="Modular Debugger (MDB) (Root)" \
377 name="Modular Debugger (Root)"
378 license cr_Sun license=cr_Sun
379 license lic_CDDL license=lic_CDDL
380 license usr/src/common/bzip2/LICENSE license=usr/src/common/bzip2/LICENSE
381 license usr/src/uts/common/io/mr_sas/THIRDPARTYLICENSE \
382 license=usr/src/uts/common/io/mr_sas/THIRDPARTYLICENSE
383 license usr/src/uts/common/zmod/THIRDPARTYLICENSE \
384 license=usr/src/uts/common/zmod/THIRDPARTYLICENSE
385 $(sparc_ONLY)link path=kernel/kmdb/$(ARCH64)/niump target=intr
386 $(sparc_ONLY)link path=kernel/kmdb/$(ARCH64)/pcisx target=intr
387 $(sparc_ONLY)link path=kernel/kmdb/$(ARCH64)/pcisch target=intr
388 $(sparc_ONLY)link path=kernel/kmdb/$(ARCH64)/px target=intr

```

new/usr/src/pkg/manifests/developer-debug-mdb.mf

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```
389 $(sparc_ONLY)link path=usr/lib/mdb/kvm/$(ARCH64)/niumx.so target=intr.so
390 $(sparc_ONLY)link path=usr/lib/mdb/kvm/$(ARCH64)/pcipsy.so target=intr.so
391 $(sparc_ONLY)link path=usr/lib/mdb/kvm/$(ARCH64)/pcisch.so target=intr.so
392 $(sparc_ONLY)link path=usr/lib/mdb/kvm/$(ARCH64)/px.so target=intr.so
```