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Conformance Test Specification for Marlin Broadband Delivery System Implementations

Version 1.0.1

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Source	Marlin Developer Community
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Notice

Intellectual Property

A commercial Implementation of this specification requires a license from the Marlin Trust Management Organization.

Contact Information

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Contents

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130 **Introduction**

131 *Document Organization*
132 This document describes a Conformance Test Specification for client and service
133 implementations for Marlin Broadband Delivery System. It is organized as follows:
134   • (this) introduction, overview, and conformance conventions
135   • Sections for each of Conformance Test Items. These are:
136   o Conformance Test Items for Device
137   o Conformance Test Items for Registration Service
138   o Conformance Test Items for License Service
139   o Conformance Test Items for Marlin License Evaluation
140   • Scenarios for Conformance Test Items
141   • References

142 *Overview*
143 This document describes Conformance Test Specifications for client and service
144 implementations of the Marlin Broadband Delivery System based on Marlin Core
145 System Specification Ver1.3 [CORE], Marlin Broadband Delivery System
146 Specification Ver1.2 [BB], Marlin Errata: Marlin Core System v1.3, Version 1.0
147 [ERRATACORE], and Marlin Errata: Marlin Broadband Delivery System v1.2,
148 Version 1.0 [ERRATABB].
149 The goal for this Specification is to help ensure interoperability between independent
150 implementations of Marlin BB DRM Client and Marlin BB Services by testing
151 REQUIRED elements of the specifications. In other words, this Conformance Test
152 Specification does not ensure 100% coverage of the specification. It is expected that
153 the tests are expanded upon as implementers verify interoperability with each other.
154 Additionally, it does not cover all of REQUIRED functions in [CORE], but rather only
155 REQURIED functions in [CORE] which are used in [BB].

156 *Conformance Conventions*
157 The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
158 "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
159 specification are to be interpreted as described in IETF RFC 2119 [RFC2119].
160

Conformance Test Items for Marlin BB DRM Client

161

162 This section describes common functions REQUIRED for Marlin BB DRM Client
163 across the Marlin BB System Protocols.

Signature Verification

164

165 The following SHALL be tested for Marlin BB DRM Client:
166 • When Marlin BB DRM Client uses signed data, the Marlin BB DRM Client
167 SHALL verify the signature.
168 The Conformance Test SHALL confirm the specifications above for the client.

Role Assertion

169

170 The following SHALL be tested for Marlin BB DRM Client Role Assertion:
171 • From section 4.1 of [BB], Marlin BB DRM Client SHALL have DRM Client
172 Role, and the DRM Client Role SHALL be put in all request messages of
173 Marlin BB System Protocols.
174 • From section 7.1.3 of [BB], Marlin BB DRM Client SHALL have manufacturer,
175 model, and version, and Marlin BB DRM Client SHALL put them as Assertion
176 in all request messages of Marlin BB System Protocols.
177 The Conformance Test SHALL confirm the specifications above for the client.

Revocation Functions

178

179 The following revocation functions SHALL be tested for Marlin BB DRM Client:
180 • From section 8.1of [CORE], when a service is revoked, the Marlin BB DRM
181 Client does not communicate with the revoked service.
182 The Conformance Test SHALL confirm the specifications above for the client.

183   Conformance Test Items for Registration Service

184   This section describes functions REQUIRED for Marlin BB DRM Client and
185   Registration Service in each of corresponding Marlin BB System Protocols for
186   Registration Service.

187   *General Functions*

188   Signature Verification

189   The following SHALL be tested for Registration Service:
190   • When Registration Service uses signed data, the Registration Service
191   SHALL verify the signature.
192   The Conformance Test SHALL confirm the specifications above for the service.

193   Message Bindings

194   The following Message Bindings SHALL be tested for Registration Service:
195   • From section 5 of [BB], Marlin BB System Protocols SHALL use the NEMO
196   SOAP/HTTP Message Bindings.
197   The Conformance Test SHALL confirm the specifications above in both client and
198   service.

199   Service Role Assertion

200   The following SHALL be tested for Registration Service Role Assertion:
201   • From section 4.2.2 of [BB], the trust authority of the Role Assertion for the
202   Registration Service SHALL be the DRM Services Trust Authority.
203   The Conformance Test SHALL confirm the specifications above for the service.

204   Revocation Functions

205   The following revocation functions SHALL be tested for Registration Service:
206   • From section 8.1of [CORE], when the requesting client has the revoked
207   issuer, Registration Service does not provide its service to the client.
208   • From section 8.1of [CORE], when the requesting client is revoked,
209   Registration Service does not provide its service to the client.
210   The Conformance Test SHALL confirm the specifications above for the service.

211   Shunning Functions

212   The following shunning functions SHALL be tested for Registration Service:
213   • From section 8.2 of [CORE] and section 5.1.2.1 of [BB], when the version of
214   the Marlin BB specification supported by the client (as indicated by the Marlin
215   BB DRM Client Role Assertion) is lower than the minimum specification
216   version required by the service, the fault message is returned.
217   • From section 8.2 of [CORE], section 5.1.2.1 of [BB], and section 7.1.3 of
218   [BB], when the client (the organization-specific version of the client, as
219   specified in the Marlin BB DRM Client Role Assertion) is one identified as
220   being compromised, so all services have been directed to shun it (refuse to
221   provide services to it).
222   The Conformance Test SHALL confirm the specifications above for the service.

223 ## *Node Acquisition*

224 ## **Security Policy**

225 The following Security Policy SHALL be tested for Node Acquisition:
226 - From section 5.2.2.2.3 of [BB], Node Acquisition Request Message SHALL
227 conform to "Full Security" defined in section 5.2 of [CORE].
228 - From section 5.2.2.2.3 of [BB], Node Acquisition Response Message SHALL
229 conform to "Full Security" defined in section 5.2 of [CORE].
230 The Conformance Test SHALL confirm the specifications above in both client and
231 service.

232 ## **Node Acquisition Message**

233 The following message parameters SHALL be tested for Node Acquisition:
234 - From section 5.2.2.2.1 of [BB], Node Acquisition Request Message includes
235 a BusinessToken element which has the same values as a BusinessToken
236 element included in the corresponding ActionToken.
237 - From section 5.2.2.2.3 of [BB], keep the message correlation between
238 Request and Response Messages.
239 - From section 5.2.2.2.3 of [BB], attach signature to the information of
240 message correlation.
241 The Conformance Test SHALL confirm the specifications above in both client and
242 service.

243 ## *Link Acquisition*

244 ## **Security Policy**

245 The following Security Policy SHALL be tested for Link Acquisition:
246 - From section 5.2.2.3.4 of [BB], Link Acquisition Request Message SHALL
247 conform to "Full Security" defined in section 5.2 of [CORE].
248 - From section 5.2.2.3.4 of [BB], Link Acquisition Response Message SHALL
249 conform to "Full Security" defined in section 5.2 of [CORE].
250 - From section 5.2.2.3.4 of [BB], Link Acquisition Confirmation Message
251 SHALL conform to "Full Security" defined in section 5.2 of [CORE].
252 The Conformance Test SHALL confirm the specifications above in both client and
253 service.

254 ## **Link Acquisition Message**

255 The following message parameters SHALL be tested for Link Acquisition:
256 - From section 5.2.2.3.1 of [BB], Link Acquisition Request Message includes a
257 BusinessToken element which has the same values as a BusinessToken
258 element included in the corresponding ActionToken.
259 - From section 5.2.2.3.1 of [BB], Link Acquisition Request Message includes
260 Public Part of the Octopus Node for "FromNode" which is specified in the
261 corresponding ActionToken.
262 - From section 5.2.2.3.1 of [BB], Link Acquisition Request Message includes
263 Public Part of the Octopus Node for "ToNode" which is specified in the
264 corresponding ActionToken.
265 - From section 5.2.2.3.3 of [BB], if AgentCarrier element does not exist in the
266 Response, AgentResultBlock element SHALL be omitted in Confirmation
267 Message.
268 - Correct processing of AgentCarrier SHALL be verified. The case where an

269   AgentCarrier element exists in the Response is tested during User Link
270   Acquisition. The case where an AgentCarrier does not exist in the
271   Response,is tested during Subscription Link Acquisition.
272   • From section 5.2.2.3.4 of [BB], keep the message correlation among
273   Request, Response, and Confirmation Messages.
274   • From section 5.2.2.3.4 of [BB], attach signature to the information of
275   message correlation.
276   • From section 3.1.1 of [BB], set Octopus User Node ID to Domain ID attribute
277   of User Link.
278   • From section 3.1.1 of [BB], set the assigned organization value to Domain
279   Policy attribute of User Link.
280   The Conformance Test SHALL confirm the specifications above in both client and
281   service.

Link Acquisition Derivative

283   From section 3.1.1 of [BB], Marlin BB DRM Client (represented by Octopus
284   Personality Nodes) is linked to Users (Octopus User Nodes) by the User Link which
285   includes a Control to check Domain related status stored in SeaShell, and Marlin BB
286   DRM Client can consume Marlin Licenses which are targeted and bound to the
287   Octopus User Node.
288   Marlin BB DRM Client (represented by Octopus Personality Nodes) can be linked to
289   Subscriptions (Octopus Subscription Nodes) by a Subscription Link between User
290   and Subscription Node. The Subscription link includes a Control to check validity
291   period by comparing Marlin BB DRM Client's trusted time, and Marlin BB DRM Client
292   can consume Marlin Subscription Licenses which are targeted to both Octopus
293   Subscription Node and Octopus User Node, and bound to the Octopus User Node.
294   The Conformance Test SHALL confirm the specifications above for the client.

Deregistration

Security Policy

297   The following Security Policy SHALL be tested for Deregistration:
298   • From section 5.2.2.4.4 of [BB], Deregistration Request Message SHALL
299   conform to "Full Security" defined in section 5.2 of [CORE].
300   • From section 5.2.2.4.4 of [BB], Deregistration Response Message SHALL
301   conform to "Full Security" defined in section 5.2 of [CORE].
302   • From section 5.2.2.4.4 of [BB], Deregistration Confirmation Message SHALL
303   conform to "Full Security" defined in section 5.2 of [CORE].
304   The Conformance Test SHALL confirm the specifications above in both client and
305   service.

Deregistration Message

307   The following message parameters SHALL be tested for Deregistration:
308   • From section 5.2.2.4.1 of [BB], Deregistration Request Message includes
309   the BusinessToken element which has the same values as the
310   BusinessToken element included in the corresponding ActionToken.
311   • From section 5.2.2.4.1 of [BB], Deregistration Request Message includes
312   Public Part of the Octopus Node for "FromNode" which is specified in the
313   corresponding ActionToken.
314   • From section 5.2.2.4.1 of [BB], Deregistration Request Message includes
315   Public Part of the Octopus Node for "ToNode" which is specified in the
316   corresponding ActionToken.

317   • From section 5.2.2.4.4 of [BB], keep the message correlation among
318   Request, Response, and Confirmation Messages.
319   • From section 5.2.2.4.4 of [BB], attach signature to the information of
320   message correlation.
321 The Conformance Test SHALL confirm the specifications above for the client.

322 **Deregistration Derivative**
323 From section 3.1.1 of [BB], if a Marlin BB DRM Client is deregistered, contents
324 whose Marlin Licenses are targeted and bound to the Domain from which the Marlin
325 BB DRM Client deregistered MUST NOT be played on the deregistered Marlin BB
326 DRM Client.
327 The Conformance Test SHALL confirm the specifications above for the client.

328 # Conformance Test Items for License Service and
329 # Client

330 This section describes functions REQUIRED for Marlin BB DRM Client and License
331 Service in Marlin BB System Protocols.

332 ## *General Functions for License Service*

333 ### Signature Verification

334 The following SHALL be tested for License Service:
335 • When License Service uses signed data, the License Service SHALL verify
336   the signature.
337 The Conformance Test SHALL confirm the specifications above for the service.

338 ### Message Bindings

339 The following Message Bindings SHALL be tested for License Service:
340 • From section 5 of [BB], Marlin BB System Protocols SHALL use the NEMO
341   SOAP/HTTP Message Bindings.
342 The Conformance Test SHALL confirm the specifications above in both client and
343 service.

344 ### Role Assertion

345 The following SHALL be tested for License Service Role Assertion:
346 • From section 4.2.1 of [BB], the trust authority of the Role Assertion for the
347   License Service SHALL be the DRM Services Trust Authority.
348 The Conformance Test SHALL confirm the specifications above for the service.

349 ### Revocation Functions

350 The following revocation functions SHALL be tested for License Service:
351 • From section 8.1 of [CORE], when the requesting client has the revoked
352   issuer, License Service does not provide its service to the client.
353 • From section 8.1of [CORE], when the requesting client is revoked, License
354   Service does not provide its service to the client.
355 The Conformance Test SHALL confirm the specifications above for the service.

356 ### Shunning Functions

357 The following shunning functions SHALL be tested for License Service:
358 • From section 8.2 of [CORE] and section 5.1.2.1 of [BB], when the version of
359   the Marlin BB specification supported by the client (as indicated by the Marlin
360   BB DRM Client Role Assertion) is lower than the minimum specification
361   version required by the service, the fault message is returned.
362 • From section 8.2 of [CORE] and section 5.1.2.1 of [BB], and section 7.1.3 of
363   [BB], when the client (the organization-specific version of the client, as
364   specified in the Marlin BB DRM Client Role Assertion) is one identified as
365   being compromised, so all services have been directed to shun it (refuse to
366   provide services to it).
367 The Conformance Test SHALL confirm the specifications above for the service.

368 ### Exclusion Functions

369 The following exclusion functions SHALL be tested for License Service:

370 • From section 7.4 of [CORE], after the first exclusion, the content key SHALL
371   be encrypted using the [Starfish] revocation mechanism.
372 • From section 7.4 of [CORE], when exclusion is used, $K_{root.}$ is recovered from
373   the BKB. The BKB MUST be carried in the same Bundle as the Content Key
374   object per Section 3.3.2 of [CORE].
375 The Conformance Test SHALL confirm the specifications above for the service.

376 *License Acquisition*

377 Security Policy

378 The following Security Policy SHALL be tested for License Acquisition:
379 • From section 5.2.1.4 of [BB], License Acquisition Request Message SHALL
380   conform to "Full Security" defined in section 5.2 of [CORE].
381 • From section 5.2.1.4 of [BB], License Acquisition Response Message
382   SHALL conform to "Full Security" defined in section 5.2 of [CORE].
383 The Conformance Test SHALL confirm the specifications above in both client and
384 service.

385 License Acquisition Message

386 The following message parameters SHALL be tested for License Acquisition:
387 • From section 5.2.1.2 of [BB], License Acquisition Request Message includes
388   the BusinessToken element which has the same values as the
389   BusinessToken element included in the corresponding ActionToken.
390 • From section 5.2.1.2 of [BB], License Acquisition Request Message includes
391   Public Part of the Octopus Node to be bound which is specified in the
392   corresponding ActionToken.
393 • From section 5.2.1.4 of [BB], keep the message correlation between
394   Request and Response Messages.
395 • From section 5.2.1.4 of [BB], attach signature to the information of message
396   correlation.
397 The Conformance Test SHALL confirm the specifications above in both client and
398 service.

399 **Conformance Test Items for Marlin License**
400 **Evaluation**

401 This section describes variations of Marlin Licenses used for the license evaluation
402 test of Marlin BB DRM Client. The license evaluation test is to confirm whether Marlin
403 BB DRM Clients can evaluate the Marlin License as expected.
404
405 The intent of this section is to define a set of license conditions that correspond to
406 current business models. It is understood that marlin's octopus engine can express
407 infinitely more conditions than defined here, so while implementers SHOULD attempt
408 to test all octopus constructs, an exhaustive test case specification is difficult to
409 define.

410 *Variation 1*

411 The Variation 1 assumes a purchased model where Marlin Licenses are shared
412 among the user's devices. The Octopus Bundle for Variation 1 of Marlin License
413 includes followings:
414 • Control object (quantity=1)
415 ✧ Targeted to Octopus User Node
416 • Controller object (quantity=1)
417 ✧ ContentKeyReference (quantity=1)
418 ✧ Includes an HMAC signature and a public key signature
419 • ContentKey object (quantity=1)
420 ✧ Bound to Scuba Sharing Secret Key used for Octopus User Node
421 • Protector object (quantity=1)
422 ✧ ContentReference (quantity=1)

423 *Variation 2*

424 The Variation 2 assumes a rental model where Marlin Licenses with a validity period
425 are shared among the user's devices. The validity period is compared with Marlin BB
426 DRM Client's trusted time by using System.Host.GetTrustedTime. The Octopus
427 Bundle for Variation 2 of Marlin License includes followings:
428 • Control object (quantity=1)
429 ✧ Targeted to Octopus User Node
430 ✧ Absolute validity period (NotBefore and NotAfter)
431 • Controller object (quantity=1)
432 ✧ ContentKeyReference (quantity=1)
433 ✧ Includes an HMAC signature and a public key signature
434 • ContentKey object (quantity=1)
435 ✧ Bound to Scuba Sharing Secret Key used for Octopus User Node
436 • Protector object (quantity=1)
437 ✧ ContentReference (quantity=1)

438 *Variation 3*

439 The Variation 3 assumes a rental model as the Variation 2, the difference is Marlin
440 License includes more than one Content Key. The validity period is compared with
441 Marlin BB DRM Client's trusted time by using System.Host.GetTrustedTime. The
442 Octopus Bundle for Variation 3 of Marlin License includes followings:
443 • Control object (quantity=1)
444 ✧ Targeted to Octopus User Node
445 ✧ Absolute validity period (NotBefore and NotAfter)

446   • Controller object (quantity=1)
447   ◇ ContentKeyReference (quantity=2)
448   ◇ Includes two HMAC signatures and a public key signature
449   • ContentKey object (quantity=2)
450   ◇ Bound to Scuba Sharing Secret Key used for Octopus User Node
451   • Protector object (quantity=2)
452   ◇ ContentReference (quantity=1 respectively)

453   ## *Variation 4*
454   The Variation 4 assumes a purchased model where Marlin Licenses are bound to
455   one particular device and cannot be shared. The Octopus Bundle for Variation 4 of
456   Marlin License includes followings:
457   • Control object (quantity=1)
458   ◇ Targeted to Octopus Personality Node
459   • Controller object (quantity=1)
460   ◇ ContentKeyReference (quantity=1)
461   ◇ Includes an HMAC signature and a public key signature
462   • ContentKey object (quantity=1)
463   ◇ Bound to Scuba Sharing Public Key used for Octopus Personality Node
464   • Protector object (quantity=1)
465   ◇ ContentReference (quantity=1)

466   ## *Variation 5*
467   The Variation 5 assumes a subscription model where Marlin Licenses are shared
468   among the user's devices, and the subscription period is specified in Subscription
469   Link. The Octopus Bundle for Variation 5 of Marlin License includes followings:
470   • Control object (quantity=1)
471   ◇ Targeted to Octopus User Node
472   ◇ Targeted to Octopus Subscription Node
473   • Controller object (quantity=1)
474   ◇ ContentKeyReference (quantity=1)
475   ◇ Includes an HMAC signature and a public key signature
476   • ContentKey object (quantity=1)
477   ◇ Bound to Scuba Sharing Public Key used for Octopus User Node
478   • Protector object (quantity=1)
479   ◇ ContentReference (quantity=1)

480   ## *Variation 6*
481   The Variation 6 assumes a shunning case where Marlin Licenses requires later
482   specification version then the device, and the device cannot consume the Marlin
483   License. The Octopus Bundle for Variation 6 of Marlin License includes followings:
484   • Control object (quantity=1)
485   ◇ Targeted to Octopus User Node
486   ◇ Specification version check
487   • Controller object (quantity=1)
488   ◇ ContentKeyReference (quantity=1)
489   ◇ Includes an HMAC signature and a public key signature
490   • ContentKey object (quantity=1)
491   ◇ Bound to Scuba Sharing Secret Key used for Octopus User Node
492   • Protector object (quantity=1)
493   ◇ ContentReference (quantity=1)
494

495 # Scenario for CTS (Informative)

496 This section introduces several scenarios. The Conformance Test can confirm all of
497 REQUIRED Conformance Test Items efficiently by sequentially executing Scenario 1
498 to Scenario 13.

499 ## *Scenario 1*

500 The Scenario 1 is to confirm REQUIRED specifications related to Node Acquisition
501 and Link Acquisition by assuming following sequences:
502   1. Acquisition of Action Token
503   2. Acquisition of Configuration Token
504   3. Acquisition of Octopus User Node: The Conformance Test Items described
505   in section 2.1, 3.1.1, 3.1.3, 3.2.1, and 3.2.2 are to be confirmed by the
506   sequence.
507   4. Acquisition of User Link: The Conformance Test Items described in section
508   2.1, 3.1.1, 3.1.3, 3.3.1, and 3.3.2 are to be confirmed by the sequence.
509 As the result of the sequences, the Marlin BB DRM Client gets corresponding
510 Octopus User Node and User Link.

511 ## *Scenario 2*

512 The Scenario 2 is to confirm REQUIRED specifications related to License Acquisition
513 by assuming following sequences. Please note that the Scenario 2 assumes the
514 Scenario 1 is successfully completed:
515   1. Acquisition of Action Token
516   2. Acquisition of License targeted to the Octopus User Node: The following
517   Conformance Test Items described in section 2.1, 4.1.1, 4.1.3, 4.2.1, and
518   4.2.2 are to be confirmed by the sequence.
519 As the result of the sequences, the Marlin BB DRM Client gets corresponding Marlin
520 License which is targeted to the Octopus User Node acquired in the Scenario 1.

521 ## *Scenario 3*

522 The Scenario 3 is to confirm REQUIRED specifications regarding evaluation of Marlin
523 License by assuming the following sequence. Please note that the Scenario 3
524 assumes Scenarios 1-2 are successfully completed:
525   1. Evaluation of License in Scenario 2: The Conformance Test Items described
526   in section 5 are to be confirmed by the sequence.
527 As the result of the sequences, the Marlin BB DRM Client successfully consumes the
528 Marlin License acquired in the Scenario 2.

529 ## *Scenario 4*

530 The Scenario 4 is to confirm REQUIRED specifications related to Node Acquisition
531 and Link Acquisition by assuming following sequences. Please note that the Scenario
532 4 assumes Scenarios 1 is successfully completed:
533   1. Acquisition of Action Token
534   2. Acquisition of Configuration Token
535   3. Acquisition of Octopus Subscription Node: The Conformance Test Items
536   described in section 2.1, 3.1.1, 3.1.3, 3.2.1, and 3.2.2 are to be confirmed by
537   the sequence.
538   4. Acquisition of Subscroption Link: The Conformance Test Items described in
539   section 2.1, 3.1.1, 3.1.3, 3.3.1, and 3.3.2 are to be confirmed by the
540   sequence.

541 As the result of the sequences, the Marlin BB DRM Client gets corresponding
542 Octopus Subscription Node and Subscription Link.

543 *Scenario 5*

544 The Scenario 5 is to confirm REQUIRED specifications related to License Acquisition
545 by assuming following sequences. Please note that the Scenario 5 assumes the
546 Scenario 1 and 4 are successfully completed:
547   1. Acquisition of Action Token
548   2. Acquisition of License targeted to the Octopus Subscription Node: The
549   following Conformance Test Items described in section 2.1, 4.1.1, 4.1.3,
550   4.2.1, and 4.2.2 are to be confirmed by the sequence.
551 As the result of the sequences, the Marlin BB DRM Client gets corresponding Marlin
552 License which is targeted to the Octopus Subscription Node acquired in the Scenario
553 4.

554 *Scenario 6*

555 The Scenario 6 is to confirm REQUIRED specifications regarding evaluation of Marlin
556 License by assuming the following sequence. Please note that the Scenario 6
557 assumes Scenarios 1, 4, and 5 are successfully completed:
558   1. Evaluation of License in Scenario 5: The Conformance Test Items described
559   in section 5 are to be confirmed by the sequence.
560 As the result of the sequences, the Marlin BB DRM Client successfully consumes the
561 Marlin License acquired in the Scenario 5.

562 *Scenario 7*

563 The Scenario 7 is to confirm REQUIRED specifications related to Deregistration by
564 assuming following sequences. Please note that the Scenario 7 assumes Scenario 1
565 is successfully completed:
566   1. Acquisition of ActionToken
567   2. Process of Deregistration: The Conformance Test Items described in section
568   2.1, 3.1.1, 3.1.3, 3.4.1, and 3.4.2 are to be confirmed by the sequence.
569 As the result of the sequences, the Marlin BB DRM Client deregisters from the user
570 domain registered in the Scenario 1.

571 *Scenario 8*

572 The Scenario 8 is to confirm REQUIRED specifications regarding Deregistration by
573 evaluating Marlin License targeted to the Octopus User Node. Please note that the
574 Scenario 8 assumes Scenarios 1 and 2 are successfully completed:
575   1. Evaluation of License: The Conformance Test Items described in section 0
576   are to be confirmed by the sequence.
577 As the result of the sequences, the Marlin BB DRM Client fails to consume the Marlin
578 License acquired in the Scenario 2.

579 *Scenario 9*

580 The Scenario 9 is to confirm REQUIRED specifications regarding exclusion by
581 acquiring and evaluating Marlin License with BKB in excluded Marlin BB DRM Client.
582 Please note that the Scenario 9 assumes Scenario 1 is successfully completed:
583   1. Acquisition Process of License with BKB
584   2. Evaluation of License with BKB: The Conformance Test Items described in
585   section 4.1.6 are to be confirmed by the sequence.
586 As the result of the sequences, the Marlin BB DRM Client fails to consume the Marlin
587 License with BKB.

Scenario 10

The Scenario 10 is to confirm REQUIRED specifications regarding revocation by acquiring CRL and trying to access the revoked service. Please note that when the CRL is to revoke the License Service, to request User targeted Marlin License, the Scenario 10 assumes the Scenario 1 is successfully completed, but when the CRL is to revoke the Registration Service, the Scenario 10 can be executed independently from other Scenarios:

1. Acquisition Process of CRL
2. Communication with the revoked service: The Conformance Test Items described in section 2.3 are to be confirmed by the sequence.

As the result of the sequences, the Marlin BB DRM Client fails to access the revoked service.

Scenario 11

The Scenario 11 is to confirm REQUIRED specifications regarding revocation by using CRL which revoked manufacturer (issuer) of Marlin BB DRM Client. Please note that the Scenario 11 assumes Scenarios 1-10 are successfully completed:

1. Communication with the revoked manufacturer's device: The Conformance Test Items described in section 3.1.4 or 4.1.4 are to be confirmed by the sequence

As the result of the sequences, the Marlin BB DRM Client which has the revoked issuer fails to access the service.

Scenario 12

The Scenario 12 is to confirm REQUIRED specifications regarding revocation by using CRL which revoked a device. Please note that the Scenario 12 can be executed independently from other Scenarios:

1. Communication with the revoked device: The Conformance Test Items described in section 3.1.4 or 4.1.4 are to be confirmed by the sequence.

As the result of the sequences, the revoked Marlin BB DRM Client fails to access the service.

Scenario 13

The Scenario 13 is to confirm REQUIRED specifications regarding shunning by assuming following sequences. Please note that the Scenario 13 can be executed independently from other Scenarios:

1. Communication with the device for which shunning should be performed: The Conformance Test Items described in section 3.1.5 or 4.1.5 are to be confirmed by the sequence.

As the result of the sequences, the shunned Marlin BB DRM Client fails to access the service.

626   **References**

[BB]	Marlin Broadband Delivery System Specification, Version 1.2.
[CORE]	Marlin Core System Specification, Version 1.3.
[ERRATACORE]	Marlin Errata: Marlin Core System v1.3, Version 1.0
[ERRATABB]	Marlin Errata: Marlin Broadband Delivery System v1.2, Version 1.0
[RFC2119]	S. Bradner, *Key words for use in RFCs to Indicate Requirement Levels*, IETF RFC 2119, March 1997. http://www.ietf.org/rfc/rfc2119.txt.
[Starfish]	Starfish - Marlin Broadcast Encryption Scheme v1.2

627