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Conformance Test Specification for Marlin Broadband Shared Domain Topology Specification

Version 1.0
Final

Source
Date

Marlin Developer Community
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114 **1 Introduction**

115 **1.1 Document Organization**

116 This document describes a Conformance Test Specification for client and service
117 implementations for the Marlin Broadband Shared Domain Topology Specification
118 (BBSD). It is organized as follows:

- 119 • (this) introduction, overview, conformance conventions and references
- 120 • Sections for each of the Conformance Test Items. These are:
 - 121 ○ Conformance Test Items for Device
 - 122 ○ Conformance Test Items for Registration Service of the Broadband
123 Shared Domain Manager
 - 124 ○ Conformance Test Items for Registration Service at the Service
125 Provider
 - 126 ○ Conformance Test Items for License Service
 - 127 ○ Conformance Test Items for Marlin License Evaluation
- 128 • Scenarios for Conformance Test Items

129 **1.2 Overview**

130 This document describes Conformance Test Specification for client and service
131 implementations of the Marlin Broadband Shared Domain Topology Specification
132 [MBSD]. The goal for this specification is to help ensure interoperability between
133 independent implementations of Marlin BB DRM Clients and Marlin BB Services
134 supporting Broadband Shared Domain Topology by testing functions specified in
135 [MBSD]. In other words, this Conformance Test Specification does not ensure 100%
136 coverage of the specification. It is expected that the tests are expanded upon as
137 implementers verify interoperability with each other.

138 **1.3 Conformance Conventions**

139 The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”,
140 “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this
141 specification are to be interpreted as described in IETF RFC 2119 [RFC 2119].

142 **1.4 Abbreviations**

BB	Broadband
BBSD	Broadband Shared Domain
BBSD Dereg	Broadband Shared Domain Deregistration
BBSD Lic Acq	Broadband Shared Domain License Acquisition
BBSD Link Acq	Broadband Shared Domain Link Acquisition
DRM	Digital Rights Management

144 **1.5 References**

145 Normative References

[MBB]	Marlin Broadband Delivery System Specification, Version 1.2
[MBNS]	Marlin - Broadband Network Service Profile Specification, Version 1.0
[MBSD]	Marlin - Broadband Shared Domain Topology Specification, version 1.0
[MUPnP]	Marlin - UPnP Extension Specification, version 1.0 Draft WD002

[CTSBNS]	Conformance Test Specification for Marlin Broadband Network Service Profile Specification, version 1.0
[MCS]	Marlin - Core System Specification, version 1.3
[MPAC]	Marlin - Profile and Capability Signaling, Version 1.0
[RFC 2119]	S. Bradner, <i>RFC 2119 - Key words for use in RFCs to Indicate Requirement Levels</i> , IETF, March 1997, http://www.ietf.org/rfc/rfc2119.txt

146

147 **2 Conformance Test Items for Marlin BB DRM Client**

148 This section describes common functions REQUIRED for Marlin BB DRM Clients
149 across the Marlin BB System Protocols. The Marlin BB DRM Client is assumed to
150 implement [MBNS] Extended Topology and it MUST conform to the conformance test
151 items defined in Section 2 of [CTSBNS].

152 **2.1 Profile Capability Signalling**

153 The support for profile signalling is RECOMMENDED for a Marlin BB DRM Client
154 that implements [MBSD].

155 The following SHALL be tested for the Marlin BB DRM Client that indicates it
156 implements the mandatory functionality in [MBSD]:

- 157 • The Marlin BB DRM Client SHALL follow the profile signalling defined in
158 section 3 of [MBSD] and the Marlin BB DRM Client SHALL support the
159 mandatory functionality in [MBSD].

160 The Conformance Test SHALL confirm the specifications above for the client.

161 **3 Conformance Test Items for UPnP Extensions**

162 The support for [MUPnP] and its extensions to support [MBSD] is OPTIONAL for the
 163 Marlin BB DRM Client and the local Broadband Shared Domain Manager that
 164 implement [MBSD].

165 The following SHALL be tested for the Marlin BB DRM Client and the local
 166 Broadband Shared Domain Manager that indicate it implements extensions to
 167 [MUPnP] to support [MBSD]:

168 **3.1 *Joining a Marlin Broadband Shared Domain Locally***

169 • From Section 5.4 of [MBSD], when a Marlin BB DRM Client supporting
 170 [MBSD] requests to join a Marlin Broadband Shared Domain from a
 171 Broadband Shared Domain Manager in a local area network, the Domain
 172 Manager SHALL invoke X_PutMarlinActionToken() to deliver an Action Token
 173 to the Marlin BB DRM Client.

174 • From Section 5.4 of [MBSD], when the Domain Manager in a local area
 175 network discovers a new Marlin BB DRM Client that supports [MBSD], it MAY
 176 invoke X_PutMarlinActionToken() to deliver an Action Token to the Marlin BB
 177 DRM Client.

178 The Conformance Test SHALL confirm the specifications above for the Domain
 179 Manager.

180

181 • From Section 5.2 and 5.3 of [MBSD], when a DMC invokes X_JoinDomain()
 182 on a DMR, the DMR SHALL invoke X_GetMarlinActionToken() on the
 183 designated Domain Manager in the local area network to acquire an Action
 184 Token. The input parameter of X_JoinDomain() SHALL be used as the input
 185 parameter of X_GetMarlinActionToken().

186 The Conformance Test SHALL confirm the specifications above for the client.

187 **3.2 *Distribution of Nodes and Links***

188 • From Section 5.5 of [MBSD], when a Marlin BB DRM Client supporting
 189 [MBSD] gets an invocation of X_GetMarlinNodeLinks() in the local area
 190 network, the Octopus bundle to be returned MUST conform to the output
 191 parameter defined in Section 5.5.1 of [MBSD].

192 • From Section 5.6 of [MBSD], when the Domain Manager in the local area
 193 network invokes X_PutMarlinNodeLinks() on a Marlin BB DRM Client
 194 supporting [MBSD], the Octopus Nodes and Links in the input parameter
 195 SHALL be used to update the corresponding Octopus Nodes and Links
 196 stored in the Marlin BB DRM Client that have the same "ContextTag" as those
 197 in the input parameter.

198 The Conformance Test SHALL confirm the specifications above for the client.

199 **4 Conformance Test Items for Registration Service of** 200 **the Broadband Shared Domain Manager**

201 This section describes the functions REQUIRED for Marlin BB DRM Client and
202 Registration Service of the Broadband Shared Domain Manager in each of
203 corresponding Marlin BB System Protocols for Registration Service. The Registration
204 Service hosted in the Broadband Shared Domain Manager issues Domain Nodes
205 and Domain Links to the Marlin BB DRM Clients. It is assumed that both Marlin BB
206 DRM Client and the Registration Service implement [MBNS] Extended Topology and
207 they MUST conform to the conformance test items defined in Section 3.1 of
208 [CTSBNS].

209 **4.1 Node Acquisition**

210 The Marlin BB DRM Client and the Registration Service MUST conform to the
211 conformance test items defined in Section 3.2 of [CTSBNS].

212 **4.2 Link Acquisition**

213 **4.2.1 Security Policy and Message Security Bindings**

214 The Marlin BB DRM Client and the Registration Service MUST conform to the
215 conformance test items defined in Section 3.3.1 of [CTSBNS].

216 **4.2.2 Link Acquisition Message**

217 **4.2.2.1 Main Test Items**

218 The following message parameters SHALL be tested for Link Acquisition:

- 219 • From section 3.1.1 of [MBB], set Domain Node ID to Domain ID attribute of
220 Domain Link.
- 221 • From section 3.1.1 of [MBB], set the assigned organization value to Domain
222 Policy attribute of Domain Link.

223 The Conformance Test SHALL confirm the specifications above for the service.

224 **4.2.2.2 Link Acquisition with Broadband Shared Domain Topology**

225 The support of Broadband Shared Domain Topology [MBSD] is REQUIRED for
226 Marlin BB DRM Client which implements [MBSD]. This SHALL be tested for message
227 combination patterns for Link Acquisition emulated in the following table:
228

	From Node in Request	To Node in Request	AgentCarrier in Response	AgentResultBlock in Confirmation
BBSD Link Acq-1	Personality Node	Domain Node	Exist	Exist
BBSD Link Acq-2	Personality Node	Domain Node	Not exist	Not exist

229

230 The Conformance Test SHALL confirm the specifications above for client.

231 **4.3 Deregistration**

232 **4.3.1 Security Policy and Message Security Bindings**

233 The Marlin BB DRM Client and the Registration Service MUST conform to the
234 conformance test items defined in Section 3.4.1 of [CTSBNS].

235 **4.3.2 Deregistration Message**

236 **4.3.2.1 Deregistration with Broadband Shared Domain Topology**

237 The support of Broadband Shared Domain Topology [MBSD]
 238 [MBSD][MBSD][MBSD]is REQUIRED for the Marlin BB DRM Client which
 239 implements [MBSD]. This SHALL be tested for message combination pattern for
 240 Deregistration emulated in the following table:
 241

	From Node in Request	To Node in Request	AgentCarrier in Response	AgentResultBlock in Confirmation
BBSD Dereg.-1	Personality Node	Domain Node	Exist	Exist

242

243 The Conformance Test SHALL confirm the specifications for client.

244 **4.3.3 Deregistration Derivative**

245 From section 3.1.1 of [MBB], if a Marlin BB DRM Client is deregistered, content
 246 accessible to the Domain from which the Marlin BB DRM Client deregistered MUST
 247 NOT be playable on the deregistered Marlin BB DRM Client.

248 The Conformance Test SHALL confirm the specifications above for the client.

249 **5 Conformance Test Items for Registration Service**

250 This section describes the functions REQUIRED for Marlin BB DRM Client and
 251 Registration Service at the Service Provider in each of the corresponding Marlin BB
 252 System Protocols. The Registration Service at the Service Provider issues User
 253 Nodes, Subscription Nodes, User Links and Subscription Links to the Marlin BB DRM
 254 Client. It is assumed that both Marlin BB DRM Client and the Registration Service
 255 implement [MBNS] Extended Topology and they MUST conform to the conformance
 256 test items defined in Section 3.1 of [CTSBNS].

257 **5.1 Node Acquisition**

258 The Marlin BB DRM Client and the Registration Service MUST conform to the
 259 conformance test items defined in Section 3.2 of [CTSBNS].

260 **5.2 Link Acquisition**

261 **5.2.1 Security Policy and Message Security Bindings**

262 The Marlin BB DRM Client and the Registration Service MUST conform to the
 263 conformance test items defined in Section 3.3.1 of [CTSBNS].

264 **5.2.2 Link Acquisition Message**

265 **5.2.2.1 Main Test Items**

266 The following message parameters SHALL be tested for Link Acquisition:

- 267 • From section 3.1.1 of [MBB], set Domain Node ID to Domain ID attribute of
 268 User Link.
- 269 • From section 4.3 of [MBSD], set ContextTag of the User Node to the
 270 ContextTag attribute of the User Link.
- 271 • From section 4.3 of [MBSD], set ContextTag of the User Node to the
 272 ContextTag attribute of the Subscription Node.
- 273 • From section 4.3 of [MBSD], set ContextTag of the User Node to the
 274 ContextTag attribute of the Subscription Link.

275 The Conformance Test SHALL confirm the specifications above for the service.

276 **5.2.2.2 Link Acquisition with Broadband Shared Domain Topology**

277 The support of Broadband Shared Domain Topology [MBSD] is REQUIRED for the
 278 Marlin BB DRM Client which implements [MBSD]. In addition to the message
 279 combination patterns for Link Acquisition defined in Section 3.3.2.2 and 3.3.2.3 of
 280 [CTSBNS], this SHALL be tested for message combination patterns for Link
 281 Acquisition emulated in the following table:
 282

	From Node in Request	To Node in Request	AgentCarrier in Response	AgentResultBlock in Confirmation
BBSD Link Acq-1	Domain Node	User Node	Not exist	Not exist

283

284 The Conformance Test SHALL confirm the specifications above for client.

285

286 **6 Conformance Test Items for License Service**

287 This section describes the functions REQUIRED for Marlin BB DRM Clients and
 288 License Services in Marlin BB System Protocols. It is assumed that both Marlin BB
 289 DRM Client and the License Service implement [MBNS] Extended Topology and they
 290 MUST conform to the conformance test items defined in Section 4.1 of [CTSBNS].

291 **6.1 License Acquisition**

292 **6.1.1 Security Policy and Message Security Bindings**

293 The Marlin BB DRM Client and the License Service MUST conform to the
 294 conformance test items defined in Section 4.2.1 of [CTSBNS].

295 **6.1.2 License Acquisition Message**

296 **6.1.2.1 Main Test Items**

297 The following message parameters SHALL be tested for License Acquisition:
 298 • From section 4.3 of [MBSD], set ContextTag of the User Node to the
 299 ContextTag attribute of the Marlin License Object.
 300 The Conformance Test SHALL confirm the specifications above for the service.

301 **6.1.2.2 License Acquisition with Broadband Shared Domain Topology**

302 The support of Broadband Shared Domain Topology [MBSD] is REQUIRED for the
 303 Marlin BB DRM Client which implements [MBSD]. When the Broadband Shared
 304 Domain Topology functionality is supported by Marlin BB DRM Client, The message
 305 combination patterns for License Acquisition emulated in the following table SHALL
 306 be tested:
 307

	Octopus Node in Request
BBSD Lic Acq-1	Personality Node
BBSD Lic Acq-2	User Node
BBSD Lic Acq-3	Subscription Node
BBSD Lic Acq-4	Domain Node

308
 309 The Conformance Test SHALL confirm the specifications above for client.

310 **7 Conformance Test Items for Marlin License** 311 **Evaluation**

312 This section describes variations of Marlin Licenses RECOMMENDED to be used for
313 the license evaluation test of Marlin BB DRM Client. The license evaluation test is to
314 confirm whether Marlin BB DRM Clients can evaluate the Marlin License as expected.

315
316 The intent of this section is to define a set of license conditions that correspond to
317 current business models and to the mandatory requirements in [MBSD].

318
319 It is understood that Marlin's Octopus engine can express infinitely more conditions
320 than defined here, so while implementers SHOULD attempt to test all Octopus
321 constructs, an exhaustive test case specification is difficult to define.

322 **7.1 Variation 1**

323 This variation assumes a purchase model where Marlin Licenses are shared among
324 devices which are members of a Marlin Broadband Shared Domain. The Octopus
325 Bundle of the Marlin License includes:

- 326 • Control object (quantity=1)
 - 327 ✧ Targeted to Octopus User Node
- 328 • Controller object (quantity=1)
 - 329 ✧ ContentKeyReference (quantity=1)
 - 330 ✧ Includes an HMAC signature and a public key signature
- 331 • ContentKey object (quantity=1)
 - 332 ✧ Bound to Scuba Sharing Secret Key used for Octopus User Node
- 333 • Protector object (quantity=1)
 - 334 ✧ ContentReference (quantity=1)

335 **7.2 Variation 2**

336 This variation assumes a purchase model where Marlin Licenses are shared among
337 devices which are members of a Marlin Broadband Shared Domain. The Octopus
338 Bundle of the Marlin License includes:

- 339 • Control object (quantity=1)
 - 340 ✧ Targeted to Octopus Domain Node
- 341 • Controller object (quantity=1)
 - 342 ✧ ContentKeyReference (quantity=1)
 - 343 ✧ Includes an HMAC signature and a public key signature
- 344 • ContentKey object (quantity=1)
 - 345 ✧ Bound to Scuba Sharing Secret Key used for Octopus Domain Node
- 346 • Protector object (quantity=1)
 - 347 ✧ ContentReference (quantity=1)

348 **7.3 Variation 3**

349 This variation assumes a subscription model where Marlin Licenses are shared
350 among devices who are members of a Marlin Broadband Shared Domain, and the
351 subscription period is specified in the Subscription Link. The Octopus Bundle of the
352 Marlin License includes:

- 353 • Control object (quantity=1)
 - 354 ✧ Targeted to Octopus User Node
 - 355 ✧ Targeted to Octopus Subscription Node
- 356 • Controller object (quantity=1)

- 357 ✧ ContentKeyReference (quantity=1)
- 358 ✧ Includes an HMAC signature and a public key signature
- 359 • ContentKey object (quantity=1)
- 360 ✧ Bound to Scuba Sharing Public Key used for Octopus User Node
- 361 • Protector object (quantity=1)
- 362 ✧ ContentReference (quantity=1)

363 **7.4 Variation 4**

364 This variation assumes a subscription model where Marlin Licenses are shared
365 among the users with the same subscription. The Octopus Bundle of such a Marlin
366 License includes:

- 367 • Control object (quantity=1)
- 368 ✧ Targeted to Octopus Subscription Node
- 369 • Controller object (quantity=1)
- 370 ✧ ContentKeyReference (quantity=1)
- 371 ✧ Includes an HMAC signature and a public key signature
- 372 • ContentKey object (quantity=1)
- 373 ✧ Bound to Scuba Sharing Public Key used for Octopus Subscription
374 Node
- 375 • Protector object (quantity=1)
- 376 ✧ ContentReference (quantity=1)

377 8 Scenario for CTS (Informative)

378 This section introduces several test scenarios. The Conformance Test can efficiently
 379 confirm all Conformance Test Items defined in this document by sequentially
 380 executing the scenarios in this section.

381
 382 Table 1 enumerates suggested scenario sequences. For instance scenario sequence
 383 Run1 suggests running first Scenario 1 then Scenario 2, Scenario 3 and finally
 384 Scenario 4.

385
 386 Table 2 enumerates the REQUIRED and the OPTIONAL Test Items for each
 387 scenario; the corresponding sections in this document are provided.
 388

Run 1	Run 2	Run 3	Run 4	Run 5	Run 6
Scenario 1	Scenario 10				
Scenario 2					
Scenario 3	Scenario 5	Scenario 6	Scenario 3	Scenario 3	
Scenario 4			Scenario 7	Scenario 9	

Table 1: Suggested scenario sequence runs.

Scenario	REQUIRED Test Items	OPTIONAL Test Items
Scenario 1	4.1, 4.2	2.1, 3.1
Scenario 2	5.1, 5.2	
Scenario 3	6.1	2.1
Scenario 4	7.1, 7.2	2.1
Scenario 5	5.1, 5.2, 7.3	
Scenario 6	5.1, 5.2, 7.4	
Scenario 7	4.3.1, 4.3.2	2.1
Scenario 8	4.3.3	2.1
Scenario 9	3.1, 3.2, 7.1, 7.2, 7.3, 7.4	2.1
Scenario 10	3.1, 3.2, 7.1, 7.2, 7.3, 7.4	2.1

Table 2: Enumeration of Test Items REQUIRED and OPTIONAL for each scenario.

389 8.1 Scenario 1

390 This scenario is to confirm REQUIRED specifications related to Node Acquisition and
 391 Link Acquisition from the Broadband Shared Domain Manager by assuming the
 392 following sequence:

- 393 1. Acquisition of Action Token: The Conformance Test Items described in
 394 Section 3.1 MAY be confirmed by the sequence.
- 395 2. Acquisition of Configuration Token
- 396 3. Acquisition of Octopus Domain Node: The Conformance Test Items
 397 described in section 4.1 are to be confirmed by the sequence.
- 398 4. Acquisition of Domain Link: The Conformance Test Items described in
 399 section 4.2 are to be confirmed by the sequence.

400 As the result of the sequences, the Marlin BB DRM Client gets corresponding
 401 Octopus Domain Node and Domain Link.

402 **8.2 Scenario 2**

403 This scenario is to confirm REQUIRED specifications related to Node Acquisition and
404 Link Acquisition from the Service Provider by assuming the following sequence. Note
405 that this scenario assumes that Scenario 1 is successfully completed.

- 406 1. Acquisition of Action Token
- 407 2. Acquisition of Configuration Token
- 408 3. Acquisition of Octopus User Node: The Conformance Test Items described
409 in section 5.1 are to be confirmed by the sequence.
- 410 4. Acquisition of User Link in which the Domain Node is linked to the User
411 Node: The Conformance Test Items described in section 5.2 are to be
412 confirmed by the sequence.

413 As the result of the sequences, the Marlin BB DRM Client gets corresponding
414 Octopus User Node and User Link.

415 **8.3 Scenario 3**

416 This scenario is to confirm REQUIRED specifications related to License Acquisition
417 by assuming the following sequence. Note that this scenario assumes that Scenario
418 1 and Scenario 2 are successfully completed.

- 419 1. Acquisition of Action Token
- 420 2. Acquisition of a License. The Conformance Test Items described in section
421 6.1 are to be confirmed by the sequence.

422

423 This scenario is executed for acquiring a License corresponding Variation 1 and
424 Variation 2 in section 7.

425 As the result of the scenario sequences, the Marlin BB DRM Client gets the
426 corresponding Marlin Licenses targeted and bound to the Domain Node acquired in
427 the Scenario 1 or targeted and/or bound to the Octopus User Node acquired in
428 Scenario 2.

429 **8.4 Scenario 4**

430 This scenario is to confirm REQUIRED specifications regarding evaluation of a Marlin
431 License by assuming the following sequence. Note that this scenario assumes that
432 Scenario 1, Scenario 2 and Scenario 3 are successfully completed.

- 433 1. Evaluation of Licenses acquired in Scenario 3: The corresponding
434 Conformance Test Items described in section 7 are to be confirmed by the
435 sequence.

436 As the result of the sequences, the Marlin BB DRM Client successfully consumes the
437 Marlin Licenses acquired in Scenario 3.

438 **8.5 Scenario 5**

439 This scenario is to confirm REQUIRED specifications regarding evaluation of a Marlin
440 License by assuming the following sequence. Note that this scenario assumes that
441 Scenario 1 and Scenario 2 are successfully completed.

- 442 1. Acquisition of Action Token
- 443 2. Acquisition of Configuration Token
- 444 3. Acquisition of Octopus Subscription Node
- 445 4. Acquisition of Subscription Link with a given subscription period
- 446 5. Acquisition of License targeted to the Octopus Subscription Node and User
447 Node
- 448 6. Evaluation of License acquired: The corresponding Conformance Test Items
449 described in section 7 are to be confirmed by the sequence.

450

451 This scenario is executed for acquiring a License corresponding Variation 3 in
452 section 7.
453 As the result of the sequences, the Marlin BB DRM Client successfully consumes the
454 Marlin License acquired.

455 **8.6 Scenario 6**

456 This scenario is to confirm REQUIRED specifications regarding evaluation of a Marlin
457 License by assuming the following sequence. Note that this scenario assumes that
458 Scenario 1 and Scenario 2 are successfully completed.

- 459 1. Acquisition of Action Token
- 460 2. Acquisition of Configuration Token
- 461 3. Acquisition of Octopus Subscription Node
- 462 4. Acquisition of Subscription Link
- 463 5. Acquisition of License targeted and bound to the Octopus Subscription Node.
- 464 6. Evaluation of License acquired: The corresponding Conformance Test Items
465 described in section 7 are to be confirmed by the sequence.

466
467 This scenario is executed for acquiring a License corresponding Variation 4 in
468 section 7.
469 As the result of the sequences, the Marlin BB DRM Client successfully consumes the
470 Marlin License acquired.

471 **8.7 Scenario 7**

472 This scenario is to confirm REQUIRED specifications related to Deregistration by
473 assuming the following sequence. Note that this scenario assumes Scenario 1 is
474 successfully completed.

- 475 1. Acquisition of Action Token
- 476 2. Process of Deregistration: The Conformance Test Items described in section
477 4.3.1 and 4.3.2 are to be confirmed by the sequence.

478 As the result of the sequences, the Marlin BB DRM Client deregisters from the
479 Broadband Shared Domain registered in the Scenario 1.

480 **8.8 Scenario 8**

481 This scenario is to confirm REQUIRED specifications evaluating Marlin License
482 targeted to Octopus User Node. Note that this scenario assumes that Scenario 1,
483 Scenario 2, Scenario 3 and Scenario 7 are successfully completed.

- 484 1. Evaluation of License: The Conformance Test Items described in section
485 4.3.3 are to be confirmed by the sequence.

486 As the result of the sequences, the Marlin BB DRM Client fails to consume the Marlin
487 License acquired in the Scenario 3.

488 **8.9 Scenario 9**

489 This scenario is to confirm specifications to distribute Marlin Octopus nodes and links
490 and evaluating a Marlin License obtained from other clients in the local area network
491 via UPnP. Note that this scenario assumes Scenario 1, Scenario 2, and Scenario 3
492 are successfully completed.

- 493 1. Add a new Marlin BB Device into the Shared Domain: The Conformance Test
494 Items described in Section 3.1 SHALL be confirmed by the sequence.
- 495 2. Acquisition of Domain Node and Link.
- 496 3. Acquisition of content and License: The new Marlin BB Device browses
497 content from the DMS in the local area network via UPnP and obtains the
498 content and License.

- 499 4. Acquisition of Octopus nodes and links: The new Marlin BB Device obtains
500 the necessary Octopus Nodes and Links in the local area network using
501 X_GetMarlinNodeLinks(). The Conformance Test Items described in Section
502 3.2 SHALL be confirmed by the sequence.
503 5. Evaluation of License: The Conformance Test Items described in section 7
504 are to be confirmed by the sequence.
505 As a result of the sequences, the Marlin BB DRM Client successfully consumes the
506 License acquired from the DMS in the local area network.

507 **8.10 Scenario 10**

- 508 This scenario is to confirm specifications to proactively distribute Marlin Octopus
509 nodes and links in the local area network via UPnP.
510 1. Add two Marlin BB Devices (RefDev, TestDev) into the Shared Domain: The
511 Conformance Test Items described in Section 3.1 SHALL be confirmed by the
512 sequence.
513 2. Acquisition of Domain Node and Link.
514 3. Acquisition of User Node, Links and License: TestDev registers with the
515 Service Provider and acquires a Marlin License for a purchased content as
516 described in Scenario 2 and Scenario 3.
517 4. TestDev pro-actively distributes the User Nodes and Links obtained from the
518 Service Provider in Step 3 by invoking X_PutMarlinNodeLinks() on the
519 RefDev: The Conformance Test Items described in Section 3.2 SHALL be
520 confirmed by the sequence.
521 5. Acquisition of content and License: RefDev browses content from the DMS in
522 the local area network via UPnP and obtains the content and License.
523 6. Evaluation of License: The Conformance Test Items described in section
524 4.3.3 are to be confirmed by the sequence.
525 As the result of the sequences, the Marlin BB DRM Client (RefDev) successfully
526 consumes the License acquired from the DMS in the local area network.