

MOST

Media Oriented Systems Transport

Multimedia and Control
Networking Technology

MOST Content Security Specification

Rev 1.3

06/2015

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Bibliography

All documents, which are referenced by this MOST document, are listed here.

Document		Revision
[1]	MOST Specification	
[2]	MOST GeneralFBlock	
[3]	5C Digital Transmission Content Protection Specification Volume 1	
[4]	DTCP Volume 1 supplement B, mapping DTCP to MOST M6	
[5]	DTCP Volume 1 supplement H, mapping DTCP to MOST AES-128	
[6]	HDCP Interface Independent Adaptation Specification	

Document History

Changes between Rev. 1.2 and Rev. 1.3

Change Ref.	Section	Changes
1V3_001	All	– Removed reference to DTCP Supplement E, mapping to DTCP-IP (use of DTCP-IP natively on MEP only).

Changes between Rev. 1.1 and Rev. 1.2

Change Ref.	Section	Changes
1V2_001	All	– Minor corrections;
1V2_002	Bibliography	– Added Suppl. H, HDCP Spec.
1V3_003	4	–

Changes between Rev. 1.0-00 and Rev. 1.1

Change Ref.	Section	Changes
1V1_001	All	– Minor corrections;
1V1_002	Bibliography	– New chapter for the purpose of harmonization with other MOST Cooperation documents.
1V1_003	4	– Added DTCP Volume 1 supplement B and supplement E.

First version 1.0-00

Change Ref.	Section	Changes
-	-	- First version, no changes

1 Introduction

1.1 Purpose

The need for the protected and controlled distribution of digital content is the basis of the MOST Content Security Specification. Several Content Protection schemes have been developed to protect entertainment contents like video and audio data from unauthorized copying, intercepting, and tampering during the transmission.

The purpose of this document is to specify common rules and procedures to support already implemented and future Content Protection schemes. They may use some or all of the services described in this specification. The intention is that each Content Protection scheme will be described in a separate, but associated 'MOST ContentProtectionScheme XYZ' specification.

Appendix A: Content Protection Schemes lists the currently available Content Protection schemes. As the need arises, additional schemes may be added to the list.

1.2 Related Documents

MOST (Media Oriented Systems Transport) Specification

1.3 Terms and Abbreviations

Sink	The target of a data transfer
Source	The source of a data transfer

2 Operational Model

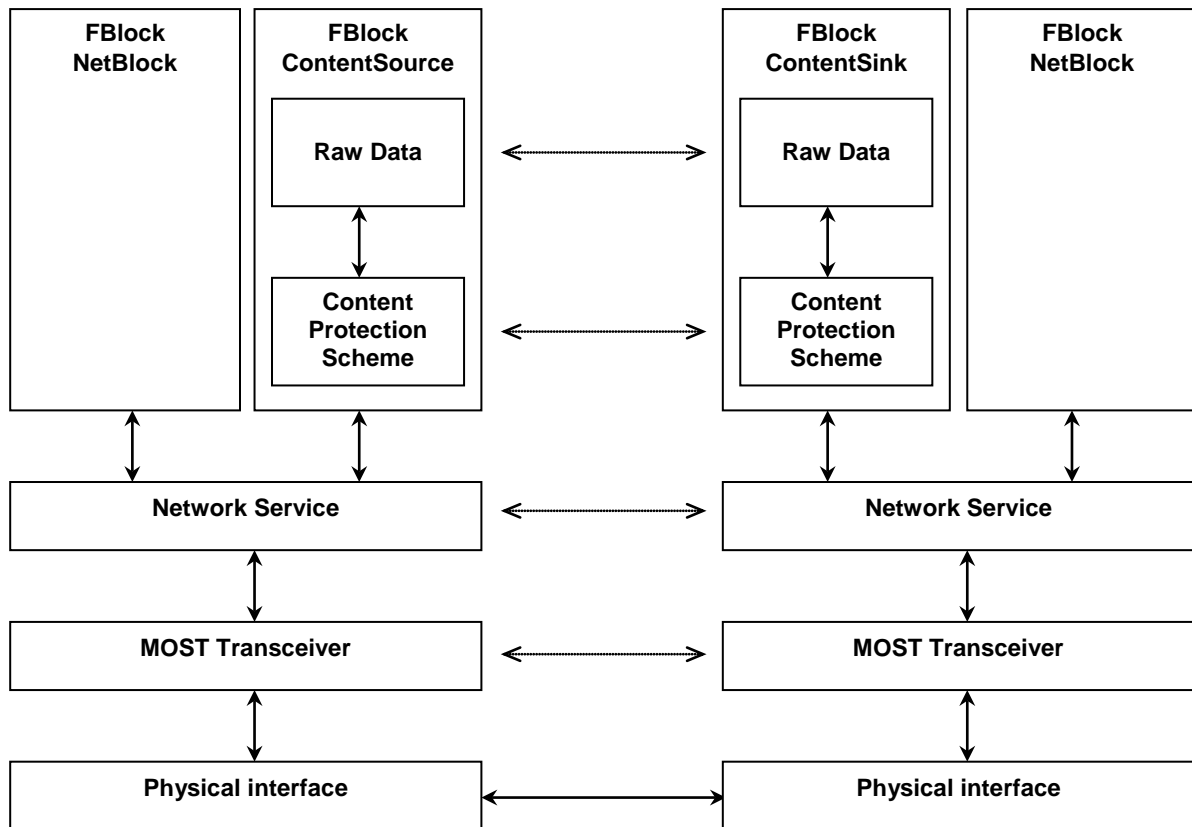


Figure 2-1: Operational Model

3 General requirements for security devices

3.1 Implementation

Each independent source or sink, located in different MOST devices or the same MOST device, must implement its own encoder or decoder. So the functional address, that is, FBlockID and InstID, makes every encoder or decoder unique in the MOST system. No additional labels are used for this purpose.

3.2 Device Functions

All MOST devices feature a common set of functions for administering synchronous and isochronous connections. By using this command set, information about the devices can be gathered, allocation or connection procedures can be initiated, etc.

Content Protection schemes use special mechanisms and protocols. To enable these specific protocols, the standard functionality of a MOST device must be enhanced. This can be easily realized by defining and implementing additional functions, to support such a specific Content Protection scheme.

3.3 Extended Information

In many cases, the use of Content Protection schemes requires additional information exchange. For example, before a connection can be built, both sides must know the used Content Protection scheme plus scheme specific global parameters (if there are any).

This fits to the mechanisms of the standard MOST '*SourceInfo*' and '*SinkInfo*' requests.

For example a device according MOST Specification Rev. 2.x could answer on such a request:

<i>DataType:</i>	<i>MPEG2_TransportStream with ContentProtectionSchemeXYZ</i>
<i>Parameters:</i>	<i>BlockWidth, PacketLength</i>

As shown above, the returned '*DataType*' not only indicates that an isochronous MPEG-stream can be delivered, but also the supported Content Protection scheme used to protect the data. The parameter '*BlockWidth*' describes the required number of bytes per MOST frame. The parameter '*PacketLength*' contains extended information about the packet size of the used ContentProtection scheme.

For example, a device according to MOST Specification Rev. 3.x could answer such a request:

<i>DataType:</i>	<i>MPEG2_TransportStream</i>
<i>ContentProtection:</i>	<i>ContentProtectionSchemeXYZ</i>
<i>TransmissionClass:</i>	<i>A/V Packetized Isochronous</i>
<i>TransmissionParameter:</i>	<i>DataRate</i>

4 Appendix A: Content Protection Schemes

Type	ContentProtectionScheme	Document
DTCP	DTCP Volume 1 supplement B, mapping DTCP to MOST (with M6 cipher), Rev 1.2 MOST_ContentProtectionScheme_DTCP_Implementation	[4]
DTCP	DTCP Volume 1 supplement H, mapping DTCP to MOST (with AES-128 cipher), Rev 1.0 MOST_ContentProtectionScheme_DTCP_Implementation	[5]
HDCP	HDCP Interface Independent Adaptation Specification MOST_ContentProtectionScheme_HDCP_Implementation	[6]

Table 4-1: Available Content Protection Schemes

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