



The transport stream format

For kbmMW v. 0.93c and 1.00

Layout of the transport stream format using the Indy transport without verification enabled.

Basic datatypes for the STANDARD streamformat	
Description	Data
Integer	4 bytes : b1,b2,b3,b4 ie. value = $b4 \times 256^3$ + $b3 \times 256^2$ + $b2 \times 256$ + $b1$
Count	Integer
Length	Count
Identifier	Integer
Type	Integer
String	
Length of string	Length
String contents without any ending 0	Bytes of length size (no ending 0)
Range	
Low	Integer
High	Integer
VariantByteArray	
Dimension	Count
Low/High bound	Range
Data	Bytes of High-Low+1 size.
VariantArray	
Dimension	Count
Low/High bound	Range
[VariantN]	[Variant]
Variant	
Type (from VarType)	Type
[if byte array]	[VariantByteArray]
[if array]	[VariantArray]
[else]	[String]
Stream	
Size	Count
Data	Size number of Bytes
Stream Identifier	Integer (179305407)
Stream Format Identifier	String (STANDARD)
Stream Version Identifier	String (100) for 0.93c (101) for v.1.00



The default layout of client requests to the application server is described in the following chart. Some streamformats may only want to replace the basic datatype formats as described on the first page, while others might want to replace the complete format including header and request layouts.

A simple request from a client to the application server		
Description	Responsible	Data
Transmit transmission header. Request size	Transport	4 bytes : b1,b2,b3,b4 ie. value = $b4 \times 256^3$ + $b3 \times 256^2$ + $b2 \times 256$ + $b1$ Total size – 4 bytes (this field)
Transmit request stream Transport stream header Stream identifier Stream format identifier Stream format version Request header ServiceName ServiceVersion Function UserName Password Token Location Only if Stream Format Version > '100' (StateID Data AttributeCount [AttributeN])	Streamformat	Stream Identifier Stream Format Identifier Stream Format Version String String String String String String String (Integer Variant Count [String])
Request ArgumentCount (0-n) [ArgumentN] Streamsize [if Streamsize>0 stream]	Streamformat	Integer [Variant] Count [Stream]



The default layout of application server response to the a client request is described in the following chart. Some streamformats may only want to replace the basic datatype formats as described on the first page, while others might want to replace the complete format including header and request layouts.

A response from the application server to the client		
Description	Responsible	Data
Transmit transmission header. Response size	Transport	4 bytes : b1,b2,b3,b4 ie. value = $b4 \times 256^3$ + $b3 \times 256^2$ + $b2 \times 256$ + $b1$ Total size – 4 bytes (this field)
Transmit response stream Transport stream header Stream identifier Stream format identifier Stream format version Response header Status code Status text Internal code Token StateID Data	Streamformat	Identifier (179305407) String String Integer String Integer String Integer Variant
Response Result Streamsize [if Streamsize>0 stream]	Streamformat	Variant Count [Stream]

That concludes the description of the transport stream format.

Kim Madsen
 kbm@components4developers.com

