

## [MS-RDPEDYC]: Remote Desktop Protocol: Dynamic Channel Virtual Channel Extension

This topic lists the Errata found in [MS-RDPEDYC] since it was last published. Since this topic is updated frequently, we recommend that you subscribe to these RSS or Atom feeds to receive update notifications.



Errata are subject to the same terms as the Open Specifications documentation referenced.

Errata below are for Protocol Document Version [V17.0 - 2017/09/15](#).

Errata Published*	Description
2017/10/02	<p>In Section 2.2.3.3, DVC Data First Compressed PDU (DYNVC_DATA_FIRST_COMPRESSED), specified that the Data field is a structure of type RDP_SEGMENTED_DATA.</p> <p>Changed from:</p> <p>...</p> <p>Data (variable): An RDP8_BULK_ENCODED_DATA ([MS-RDPEGFX] section 2.2.5.3) structure containing the first block of data in a fragmented message, where the data has been compressed with the RDP 8.0 Bulk Compression algorithm ([MS-RDPEGFX] section 3.1.9.1) with the following modifications:</p> <ul style="list-style-type: none"> <li>▪ Maximum number of uncompressed bytes in a single segment: 8,192 instead of 65,535.</li> <li>▪ Maximum match distance / minimum history size: 8,192 bytes instead of 2,500,000 bytes.</li> <li>▪ The compression type code is PACKET_COMPR_TYPE_RDP8_LITE (0x06) instead of PACKET_COMPR_TYPE_RDP8 (0x04).</li> </ul> <p>If the data block cannot be compressed, the length of the Data field will be exactly one byte larger than the length of the uncompressed data block, in order to contain the header field. Thus, the maximum length of the data block, before compression, is 1,599 bytes minus the space taken for the Cmd, Len, cbId, ChannelId, and Length fields.</p> <p>Changed to:</p> <p>...</p> <p>Data (variable): An RDP_SEGMENTED_DATA ([MS-RDPEGFX] section 2.2.5.1) structure containing a single RDP8_BULK_ENCODED_DATA ([MS-RDPEGFX] section 2.2.5.3) segment. The segment contains the first block of data in a fragmented message, where the data has been compressed with the RDP 8.0 Bulk Compression algorithm ([MS-RDPEGFX] section 3.1.9.1) with the following modifications:</p> <ul style="list-style-type: none"> <li>▪ Maximum number of uncompressed bytes in a single segment: 8,192 instead of 65,535.</li> <li>▪ Maximum match distance / minimum history size: 8,192 bytes instead of 2,500,000 bytes.</li> <li>▪ The compression type code is PACKET_COMPR_TYPE_RDP8_LITE (0x06) instead of PACKET_COMPR_TYPE_RDP8 (0x04).</li> </ul> <p>If the data block cannot be compressed, the length of the Data field will be exactly two bytes larger than the length of the uncompressed data block, in order to contain the RDP_SEGMENTED_DATA descriptor and RDP8_BULK_ENCODED_DATA header fields. Thus, the maximum length of the data block, before compression, is 1,598 bytes minus the space taken for the Cmd, Len, cbId, ChannelId, and Length fields.</p>

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	<p>In Section 2.2.3.4, DVC Data Compressed PDU (DYNVC_DATA_COMPRESSED), specified that the Data field is a structure of type RDP_SEGMENTED_DATA.</p> <p>Changed from:</p> <p>...</p> <p>Data (variable): An RDP8_BULK_ENCODED_DATA ([MS-RDPEGFX] section 2.2.5.3) structure containing the first and only block of data in an unfragmented message, or a block of data following the first block in a fragmented message, where the data has been compressed with the RDP 8.0 Bulk Compression algorithm ([MS-RDPEGFX] section 3.1.9.1) with the following modifications:</p> <ul style="list-style-type: none"> <li>▪ Maximum number of uncompressed bytes in a single segment: 8,192 instead of 65,535.</li> <li>▪ Maximum match distance / minimum history size: 8,192 bytes instead of 2,500,000 bytes.</li> <li>▪ The compression type code is PACKET_COMPR_TYPE_RDP8_LITE (0x06) instead of PACKET_COMPR_TYPE_RDP8 (0x04).</li> </ul> <p>If the data block cannot be compressed, the length of the Data field will be exactly one byte larger than the length of the uncompressed data block, in order to contain the header field. Thus, the maximum length of the data block, before compression, is 1,599 bytes minus the space taken for Cmd, Sp, cbId, and ChannelId fields.</p> <p>Changed to:</p> <p>...</p> <p>Data (variable): An RDP_SEGMENTED_DATA ([MS-RDPEGFX] section 2.2.5.1) structure containing a single RDP8_BULK_ENCODED_DATA ([MS-RDPEGFX] section 2.2.5.3) segment. The segment contains the first and only block of data in an unfragmented message, or a block of data following the first block in a fragmented message, where the data has been compressed with the RDP 8.0 Bulk Compression algorithm ([MS-RDPEGFX] section 3.1.9.1) with the following modifications:</p> <ul style="list-style-type: none"> <li>▪ Maximum number of uncompressed bytes in a single segment: 8,192 instead of 65,535.</li> <li>▪ Maximum match distance / minimum history size: 8,192 bytes instead of 2,500,000 bytes.</li> <li>▪ The compression type code is PACKET_COMPR_TYPE_RDP8_LITE (0x06) instead of PACKET_COMPR_TYPE_RDP8 (0x04).</li> </ul> <p>If the data block cannot be compressed, the length of the Data field will be exactly two bytes larger than the length of the uncompressed data block, in order to contain the RDP_SEGMENTED_DATA descriptor and RDP8_BULK_ENCODED_DATA header fields. Thus, the maximum length of the data block, before compression, is 1,598 bytes minus the space taken for Cmd, Sp, cbId, and ChannelId fields.</p> <p>In Section 4.3.3, DVC Data First Compressed PDU, updated leading byte of data field in the DYNVC_DATA_FIRST_COMPRESSED PDU sample.</p> <p>Changed from:</p> <p>The following is an annotated sample of the DYNVC_DATA_FIRST_COMPRESSED PDU (section 2.2.3.3).</p> <pre> 00000000 64 03 7b 0c 26 38 c4 3f f4 74 01 d.{.8Ä?ðt. 64 -&gt; Header bitmask fields  0 - --\ 1 -     DYNVC_DATA_FIRST_COMPRESSED::Cmd = DataFirstCompressed (6) 1 -     0 - --/ </pre>

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	<pre> 0 - --\ DYNVC_DATA_FIRST_COMPRESSED::Sp = 1 1 - --/ 0 - --\ DYNVC_DATA_FIRST_COMPRESSED::cbId = 0 0 - --/  03 -&gt; DYNVC_DATA_FIRST_COMPRESSED::ChannelId = 0x3  7b 0c -&gt; DYNVC_DATA_FIRST_COMPRESSED::Length = 0x0c7b = 3195 bytes  26 .... 01 -&gt; DYNVC_DATA_COMPRESSED::Data = 7 bytes of compressed payload  26 = PACKET_COMPRESSED + type 6  38 = binary 0 0111000 c4 = binary 1 10001 00 3f = binary 001 11111 f4 = binary 11110 100 74 = binary 0111010 0  01 = one bit (least-significant) ignored from 0x74 byte.  ...  Changed to: The following is an annotated sample of the DYNVC_DATA_FIRST_COMPRESSED PDU (section 2.2.3.3).  00000000 64 03 7b 0c e0 26 38 c4 3f f4 74 01 d.{.ä&amp;8Ä?öt. 64 -&gt; Header bitmask fields  0 - --\ 1 -   DYNVC_DATA_FIRST_COMPRESSED::Cmd = DataFirstCompressed (6) 1 -   0 - --/ 0 - --\ DYNVC_DATA_FIRST_COMPRESSED::Sp = 1 1 - --/ 0 - --\ DYNVC_DATA_FIRST_COMPRESSED::cbId = 0 0 - --/  03 -&gt; DYNVC_DATA_FIRST_COMPRESSED::ChannelId = 0x3  7b 0c -&gt; DYNVC_DATA_FIRST_COMPRESSED::Length = 0x0c7b = 3195 bytes  e0 .... 01 -&gt; DYNVC_DATA_COMPRESSED::Data = 8 bytes of compressed payload e0 = DEBLOCK_SINGLE  26 = PACKET_COMPRESSED + type 6  38 = binary 0 0111000 c4 = binary 1 10001 00 3f = binary 001 11111 f4 = binary 11110 100 74 = binary 0111010 0  01 = one bit (least-significant) ignored from 0x74 byte.  ... </pre>

Errata Published*	Description
	<p>In Section 4.3.4, DVC Data Compressed PDU, updated leading byte of data field in the DYNVC_DATA_FIRST_COMPRESSED PDU sample.</p> <p>Changed from:</p> <p>The following is an annotated sample of the DYNVC_DATA_COMPRESSED PDU (section 2.2.3.4).</p> <pre> 00000000 70 03 26 88 7f e8 f0 02           p.&amp;^èð. 70 -&gt; Header bitmask fields  0 - --\ 1 -     DYNVC_DATA_COMPRESSED::Cmd = DataCompressed (7) 1 -     1 - --/ 0 - --\ DYNVC_DATA_COMPRESSED::Sp = 0 0 - --/ 0 - --\ DYNVC_DATA_COMPRESSED::cbId = 0 0 - --/  03 -&gt; DYNVC_DATA_COMPRESSED::ChannelId = 0x3  26 .... 07 -&gt; DYNVC_DATA_COMPRESSED::Data = 6 bytes of compressed payload  26 = PACKET_COMPRESSED + type 6  88 = binary 10001 000 7f = binary 01 111111 e8 = binary 1110 1000 f0 = binary 111100 00  02 = two bits (least-significant) ignored from 0x00 byte. Compressed payload binary stream: 10001 00001 = match distance = 1 (referring to "q" from the previous payload in section 4.3.3) 1111111110 1000111100 = match length = 1024 + 572 = 1596  ...  Changed to:  The following is an annotated sample of the DYNVC_DATA_COMPRESSED PDU (section 2.2.3.4).</pre> <pre> 00000000 70 03 e0 26 88 7f e8 f4 02 p.à&amp;^èð. 70 -&gt; Header bitmask fields  0 - --\ 1 -     DYNVC_DATA_COMPRESSED::Cmd = DataCompressed (7) 1 -     1 - --/ 0 - --\ DYNVC_DATA_COMPRESSED::Sp = 0 0 - --/ 0 - --\ DYNVC_DATA_COMPRESSED::cbId = 0 0 - --/  03 -&gt; DYNVC_DATA_COMPRESSED::ChannelId = 0x3  e0 .... 02 -&gt; DYNVC_DATA_COMPRESSED::Data = 7 bytes of compressed payload e0 = DEBLOCK_SINGLE  26 = PACKET_COMPRESSED + type 6 </pre>

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	<pre> 88 = binary 10001 000 7f = binary 01 111111 e8 = binary 1110 1000 f4 = binary 111101 00  02 = two bits (least-significant) ignored from 0x00 byte. Compressed payload binary stream: 10001 00001 = match distance = 1 (referring to "q" from the previous payload in section 4.3.3) 111111110 1000111101 = match length = 1024 + 573 = 1597  ... </pre>

\*Date format: YYYY/MM/DD