

[MS-RDPEGFX]: Remote Desktop Protocol: Graphics Pipeline Extension

This topic lists the Errata found in [MS-RDPEGFX] 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 [V11.0 – 2017/06/01](#).

Errata Published*	Description				
2017/06/26	<p>In Sections 2.2.3.3, RDPGFX_CAPSET_VERSION10, 2.2.3.4, RDPGFX_CAPSET_VERSION102, and 2.2.3.5, RDPGFX_CAPSET_VERSION103, the description for the flag RDPGFX_CAPS_FLAG_AVC_DISABLED was revised to address all modes with specific instructions for the YUV444 mode.</p> <p>In each section, the text was changed from:</p> <table border="1" data-bbox="500 823 1414 976"> <tr> <td data-bbox="500 823 959 976">RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020</td> <td data-bbox="959 823 1414 976">Indicates that usage of the MPEG-4 AVC/H.264 Codec in either YUV420p or YUV444 modes is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.</td> </tr> </table> <p>Changed to:</p> <table border="1" data-bbox="500 1087 1414 1367"> <tr> <td data-bbox="500 1087 959 1367">RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020</td> <td data-bbox="959 1087 1414 1367">If this flag is set, it indicates that usage of the MPEG-4 AVC/H.264 Codec in any mode is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message. If the flag is not set, the client MUST be capable of processing the MPEG-4 AVC/H.264 Codec in YUV444 mode in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.</td> </tr> </table>	RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	Indicates that usage of the MPEG-4 AVC/H.264 Codec in either YUV420p or YUV444 modes is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.	RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	If this flag is set, it indicates that usage of the MPEG-4 AVC/H.264 Codec in any mode is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message. If the flag is not set, the client MUST be capable of processing the MPEG-4 AVC/H.264 Codec in YUV444 mode in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.
RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	Indicates that usage of the MPEG-4 AVC/H.264 Codec in either YUV420p or YUV444 modes is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.				
RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	If this flag is set, it indicates that usage of the MPEG-4 AVC/H.264 Codec in any mode is not supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message. If the flag is not set, the client MUST be capable of processing the MPEG-4 AVC/H.264 Codec in YUV444 mode in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message.				
2017/06/26	<p>in Section 2.2.3.5, RDPGFX_CAPSET_VERSION103, changes were made to specify Bitmap Cache size and number of variable-length slot values for RDPGFX_CAPSET_VERSION_10, RDPGFX_CAPSET_VERSION_102 and RDPGFX_CAPSET_VERSION_103. Additionally, the description of the structure was revised to indicate a bitmap cache size of 16MB.</p> <p>Changed from:</p> <p>The RDPGFX_CAPSET_VERSION103 structure specifies an RDP version 10.3 Graphics Capability Set and conforms to the capability set layout specified in section 2.2.1.6. It is identical in form to the RDPGFX_CAPSET_VERSION102 (section 2.2.3.4) structure.</p> <p>flags (4 bytes): A 32-bit unsigned integer that specifies capability flags.</p>				

Flag	Meaning
RDPGFX_CAPS_FLAG_SMALL_CACHE 0x00000002	See the definition of the RDPGFX_CAPS_FLAG_SMALL_CACHE (0x00000002) flag in section 2.2.3.1 for details.<1>
RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	If this flag is set, it is supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message. If the flag is not set, the client MUST be capable of processing the MPEG-4 AVC/H.264 Codec in YUV444 mode in the RDPGFX_WIRE_TO_SURFACE_PDU_1 message.

Changed to:

The RDPGFX_CAPSET_VERSION103 structure specifies an RDP version 10.3 Graphics Capability Set and conforms to the capability set layout specified in section 2.2.1.6. Selection of this capability set implies that the bitmap cache (as defined in section 3.3.1.4) MUST be constrained to 16MB in size.

flags (4 bytes): A 32-bit unsigned integer that specifies capability flags.

Flag	Meaning
RDPGFX_CAPS_FLAG_AVC_DISABLED 0x00000020	If this flag is set, it is supported in the RDPGFX_WIRE_TO_SURFACE_PDU_1 (section 2.2.2.1) message. If the flag is not set, the client MUST be capable of processing the MPEG-4 AVC/H.264 Codec in YUV444 mode in the RDPGFX_WIRE_TO_SURFACE_PDU_1 message.

In Section 3.3.1.4, Bitmap Cache, the description was revised to include sizes for RDPGFX_CAPSET_VERSION10, RDPGFX_CAPSET_VERSION102, and RDPGFX_CAPSET_VERSION103.

Changed from:

The Bitmap Cache ADM element is used to store bitmaps of arbitrary dimensions. Each bitmap is associated with a key and is stored in a variable-length slot (identified by a slot index). The size of the bitmap cache is capped at 100 MB or 16 MB, depending on whether the RDPGFX_CAPS_FLAG_THINCLIENT (0x00000001) flag or RDPGFX_CAPS_FLAG_SMALL_CACHE (0x00000002) flag is specified in the flags field of an RDPGFX_CAPSET_VERSION8 (section 2.2.3.1) or an RDPGFX_CAPSET_VERSION81 (section 2.2.3.2) structure, which is encapsulated in the server-to-client RDPGFX_CAPS_CONFIRM_PDU (section 2.2.2.19) message. The maximum possible number of variable-length slots is 25,600 in the case of a 100 MB cache and 4,096 in the case of a 16 MB cache. The size of the bitmap data stored across all of the in-use variable-length slots at any point in time MUST NOT exceed the total size of the cache.

Changed to:

Errata Published*	Description
	<p>The Bitmap Cache ADM element is used to store bitmaps of arbitrary dimensions. Each bitmap is associated with a key and is stored in a variable-length slot (identified by a slot index). The size of the bitmap cache is capped at 100 MB or 16 MB, depending on whether the RDPGFX_CAPS_FLAG_THINCLIENT (0x00000001) flag or RDPGFX_CAPS_FLAG_SMALL_CACHE (0x00000002) flag is specified in the flags field of an RDPGFX_CAPSET_VERSION8 (section 2.2.3.1), RDPGFX_CAPSET_VERSION81 (section 2.2.3.2), RDPGFX_CAPSET_VERSION10 (section 2.2.3.3), or RDPGFX_CAPSET_VERSION102 (section 2.2.3.4) structure, which is encapsulated in the server-to-client RDPGFX_CAPS_CONFIRM_PDU (section 2.2.2.19) message. The size of the bitmap cache is constrained to 16MB in size when the RDPGFX_CAPSET_VERSION103 (section 2.2.3.5) structure is encapsulated in the server-to-client RDPGFX_CAPS_CONFIRM_PDU message. The maximum possible number of variable-length slots is 25,600 in the case of a 100 MB cache and 4,096 in the case of a 16 MB cache. The size of the bitmap data stored across all of the in-use variable-length slots at any point in time MUST NOT exceed the total size of the cache.</p> <p>In Section 6, Appendix A, Product Behavior, the product behavior note regarding the limitations of RDP10.3 servers was removed from section 2.2.3.5.</p> <p>Removed: <1> Section 2.2.3.5: Microsoft RDP 10.3 servers ignore the RDPGFX_CAPS_FLAG_SMALL_CACHE (0x00000002) flag in the RDPGFX_CAPSET_VERSION103 structure and always constrain the bitmap cache to 16 MB in size.</p>

*Date format: YYYY/MM/DD