[MS-SMBD]: SMB2 Remote Direct Memory Access (RDMA) Transport Protocol

<table>
<tr>
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This topic lists the Errata found in [MS-SMBD] 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.

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Errata below are for Protocol Document Version V12.0 – 2018/09/12.

Errata Published*	Description
2019/11/11	In Section 2.2.3.1, Buffer Descriptor V1 Structure, changed the structure name from SMB_DIRECT_BUFFER_DESCRIPTOR_1 to SMB_DIRECT_BUFFER_DESCRIPTOR_V1. Changed from: The SMB_DIRECT_BUFFER_DESCRIPTOR_1 structure represents a registered RDMA buffer and is used to Advertise the source and destination of RDMA Read and RDMA Write operations, respectively. The upper layer optionally embeds one or more of these structures in its payload when requesting RDMA direct placement of peer data via the protocol. … Changed to: The SMB_DIRECT_BUFFER_DESCRIPTOR_V1 structure represents a registered RDMA buffer and is used to Advertise the source and destination of RDMA Read and RDMA Write operations, respectively. The upper layer optionally embeds one or more of these structures in its payload when requesting RDMA direct placement of peer data via the protocol. …
2019/11/11	In Section 3.1.5.1, Sending Upper Layer Messages, the following was changed from: … The new messages to be sent, if any, MUST be appended to the list of messages in the Connection.SendQueue. If there are no messages to be sent and Connection.SendImmediate is TRUE, a newly constructed Data Transfer Message MUST be added to Connection.SendQueue. ● the credit processing specified in section 3.1.5.9 MUST be performed, and the CreditsGranted field of the first message in Connection.SendQueue MUST be incremented by the number of new credits returned. For each message in Connection.SendQueue: ● If Connection.SendCredits is 0, stop processing messages, and break the loop. ● If Connection.SendCredits is 1 and the CreditsGranted field of the message is 0, then at least one credit MUST be granted to the peer to prevent deadlock. If the processing specified in section 3.1.5.9 returns zero, stop processing Sends, and break the loop. Otherwise, increment the CreditsGranted field of the current first message in Connection.SendQueue by the number of new credits returned. ● The first message MUST be removed from Connection.SendQueue. ● The value of Connection.SendCredits MUST be decremented by one. ● The value of the CreditsRequested field of the message MUST be set to Connection.SendCreditTarget. ● If Connection.KeepaliveRequested is "PENDING", the Flags field of the message MUST be set to SMB_DIRECT_RESPONSE_REQUESTED, Connection.KeepaliveRequested MUST be set to

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	"SENT", and the Idle Connection Timer SHOULD<3> be set to an implementation-specific value. Otherwise, the Flags field of the message MUST be set to 0x0000.
	● If the message to be sent was provided with an optional remote memory token to be invalidated on the receiving peer, the token SHOULD be provided in an implementation-specific manner to the RDMA provider when sending. If sending of remote invalidation is not supported by the RDMA provider, the token MAY be ignored.
	● The message MUST be sent on the connection in an implementation-specific manner, and any error MUST be returned to the caller.
	● If Connection.SendQueue is empty, Connection.SendImmediate MUST be set to FALSE and success MUST be returned to the caller.
	Changed to:
	...
	For each message in Connection.SendQueue:
	● If Connection.SendCredits is 0, stop processing.
	● If CreditsGranted field of the first message in Connection.SendQueue is zero, the credit processing specified in section 3.1.5.9 MUST be performed, and the CreditsGranted field of the message MUST be set to the number of new credits returned.
	● If Connection.SendCredits is 1 and the CreditsGranted field of the message is 0, stop processing.
	● The first message MUST be removed from Connection.SendQueue.
	● The value of Connection.SendCredits MUST be decremented by one.
	● The value of the CreditsRequested field of the message MUST be set to Connection.SendCreditTarget.
	● If Connection.KeepaliveRequested is "PENDING", the Flags field of the message MUST be set to SMB_DIRECT_RESPONSE_REQUESTED, Connection.KeepaliveRequested MUST be set to "SENT", and the Idle Connection Timer SHOULD<3> be set to an implementation-specific value. Otherwise, the Flags field of the message MUST be set to 0x0000.
	● If the message to be sent was provided with an optional remote memory token to be invalidated on the receiving peer, the token SHOULD be provided in an implementation-specific manner to the RDMA provider when sending. If sending of remote invalidation is not supported by the RDMA provider, the token MAY be ignored.
	● The message MUST be sent on the connection in an implementation-specific manner.
	● Connection.SendImmediate MUST be set to FALSE.
	In Section 3.1.5.8, Receiving a Data Transfer Message, the following was changed from:
	...
	If Connection.SendQueue is empty, the credit processing specified in section 3.1.5.9 MUST be performed. If the number of new credits returned is greater than zero, the receiver MUST set Connection.SendImmediate to TRUE and MUST promptly send a Data Transfer message on the Connection, as specified in section 3.1.5.1.
	...
	Changed to:
	...
	If Connection.SendQueue is empty, the credit processing specified in section 3.1.5.9 MUST be performed. If the number of new credits returned is greater than zero, the receiver MUST

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	promptly send a newly constructed Data Transfer message with its CreditsGranted field set to the number of new credits on the Connection, as specified in section 3.1.5.1. …

*Date format: YYYY/MM/DD