[MS-RDPESC]: Remote Desktop Protocol: Smart Card Virtual Channel Extension

Errata below are for Protocol Document Version V11.0.1 – 2016/07/14.

Errata Published*	Description
2016/09/26	Multiple changes in various sections: • Added the dialect SCREDIR_VERSION_WINDOWS_8 to the protocol versions and the behavior note along with the build numbers for SCREDIR_VERSION_XP, SCREDIR_VERSION_LONGHORN, and SCREDIR_VERSION_WINDOWS_8 in Section 1.7, Versioning and Capability Negotiation. • Updated the function number for SCARD_IOCTL_RELEASETARTEDEVENT IOCTL to 57 and updated the behavior note to include Windows 7 and Windows Server 2008 R2 in Section 3.1.4, Message Processing Events and Sequencing Rules. In Section 1.7, Versioning and Capability Negotiation, changed from: This document covers versioning issues in the following areas: • Protocol Versions: Smart Card Redirection supports the explicit dialects "SCREDIR_VERSION_XP" and "SCREDIR_VERSION_LONGHORN". Multiple versions of the Smart Card Redirection Protocol exist. It was introduced in Remote Desktop Protocol version 5.1 and extended by adding additional calls in Remote Desktop Protocol version 6.0. The version of the protocol is determined on the server by querying the value of the TS client build number. • Capability Negotiation: The Smart Card Redirection protocol does not support negotiation of the dialect to use. Instead, an implementation is configured with the dialect to use. The dialect used is determined by the TS client's build number. The TS server determines the dialect to use by analyzing the client build number on device announce.<1> If the build number is at least 4,034, SCREDIR_VERSION_LONGHORN is assumed; otherwise, SCREDIR_VERSION_XP is to be used. Changed to: This document covers versioning issues in the following areas: • Protocol Versions: Smart Card Redirection supports the dialects SCREDIR_VERSION_XP (1), SCREDIR_VERSION_LONGHORN (2), and SCREDIR_VERSION_WINDOWS_8 (3). • Capability Negotiation: The Smart Card Redirection protocol does not support negotiation of the dialect to use. Instead, an implementation is configured with the dialect to use.

Errata Published *	Description
	The TS server determines the dialect to use by analyzing the client build number on device announce as specified in [MS-RDPBCGR] section 2.2.1.3.2 using the following mapping.<1>

Build Number	Dialect
>= 7865	SCREDIR_VERSION_WINDOWS_8 (3)
>= 4034 and < 7865	SCREDIR_VERSION_LONGHORN (2)
< 4034	SCREDIR_VERSION_XP (1)

In Section 3.1.4, Message Processing Events and Sequencing Rules, changed from:

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Function number	Value for IoControlCode	IRP_MJ_DEVICE_CONTROL request	Input packet, Output packet
56	0x000900E0	SCARD_IOCTL_ACCESSSTARTEDEVENT	ScardAccessStartedEvent_Call (section 2.2.2.30), Long_Return (section 2.2.3.3)
58	0x000900E8	SCARD_IOCTL_LOCATECARDSBYATRA	LocateCardsByATRA_Call (section 2.2.2.23), LocateCards_Return (section 2.2.3.5)
...			
64	0x00090100	SCARD_IOCTL_GETTRANSMITCOUNT	GetTransmitCount_Call (section 2.2.2.29), GetTransmitCount_Return (section 2.2.3.13)
66	0x000900E4	SCARD_IOCTL_RELEASETARTEDEVENT	Not used.
67	0x00090104	SCARD_IOCTL_GETREADERICON	GetReaderIcon_Call (section 2.2.2.31), GetReaderIcon_Return (section 2.2.3.14)
68	0x00090108	SCARD_IOCTL_GETDEVICETYPEID	GetDeviceTypeId_Call (section 2.2.2.32), GetDeviceTypeId_Return (section 2.2.3.15)

Changed to:

...

Errata Published *	Description				
		Functio n number	Value for IoControlCo de	IRP_MJ_DEVICE_CONTROL request	Input packet, Output packet
		56	0x000900E0	SCARD_IOCTL_ACCESSSTARTEDEV ENT	ScardAccessStartedEvent_ Call (section 2.2.2.30), Long_Return (section 2.2.3.3)
		57	0x000900E4	SCARD_IOCTL_RELEASETARTEDEV ENT	Not used.
		58	0x000900E8	SCARD_IOCTL_LOCATECARDSBYAT RA	LocateCardsByATRA_Call (section 2.2.2.23), LocateCards_Return (section 2.2.3.5)
		...			
		64	0x00090100	SCARD_IOCTL_GETTRANSMITCOUN T	GetTransmitCount_Call (section 2.2.2.29), GetTransmitCount_Return (section 2.2.3.13)
		65	0x00090104	SCARD_IOCTL_GETREADERICON	GetReaderIcon_Call (section 2.2.2.31), GetReaderIcon_Return (section 2.2.3.14)
		66	0x00090108	SCARD_IOCTL_GETDEVICETYPEID	GetDeviceTypeId_Call (section 2.2.2.32), GetDeviceTypeId_Return (section 2.2.3.15)

In Section 7, Appendix B: Product Behavior, changed from:

<1> Section 1.7: The Windows XP and Windows Server 2003 versions always use SCREDIR_VERSION_XP. Windows Vista and Windows Server 2008 are always SCREDIR_VERSION_LONGHORN.

<2> Section 3.1.4: Windows XP and Windows Server 2003 implement function numbers 5 through 58. Windows Vista and Windows Server 2008 implement function numbers 5 through 64.

Changed to:

<1> Section 1.7: The Windows XP and Windows Server 2003 versions always use SCREDIR_VERSION_XP. Windows Vista and Windows Server 2008 are always SCREDIR_VERSION_LONGHORN. All other versions use SCREDIR_VERSION_WINDOWS_8.

<2> Section 3.1.4: Windows XP and Windows Server 2003 implement function numbers 5 through 58. Windows Vista, Windows Server 2008, Windows 7, and Windows Server 2008 R2 implement function numbers 5 through 64. All other versions implement 5 through 66.

*Date format: YYYY/MM/DD