CPI Communications (1.2) Implementation Requirements

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CPI-C 1.2 Conformance and Implementation Requirements

Conformance

The implementation requirements for CPI-C 1.2 are divided by end user function into a base group and one optional support group:

Conversation Support includes those functions needed to exchange data between application programs.

Transaction Support includes those functions needed to coordinate changes to protected resources by distributed application programs.

The Conversation Support base is mandatory, and Transaction Support is optional.

Transaction Support (optional)
Conversation Support (mandatory)

Implementation Requirements

The specific implementation requirements are defined in the following tables using:

Mandatory Support for the call, conversation characteristic, or value is required to conform to the CPI-C 1.2 base, or to CPI-C 1.2 with an optional support group.

optional Support for the call, conversation characteristic, or value is optional and is not required to conform to the CPI-C 1.2 base or the optional support group.

Conversation-Specific Calls

Table 1. Implementation Requirements — Conversation-Specific Calls

Call	CPI-C 1.2 Conversation Support	CPI-C 1.2 Transaction Support
CMACCP — Accept_Conversation	Mandatory	Mandatory
CMACCI — Accept_Incoming	Mandatory	Mandatory
CMALLC — Allocate	Mandatory	Mandatory
CMCANC — Cancel_Conversation	Mandatory	Mandatory
CMCFM — Confirm	Mandatory	Mandatory
CMCFMD — Confirmed	Mandatory	Mandatory
CMDEAL — Deallocate	Mandatory	Mandatory
CMFLUS — Flush	Mandatory	Mandatory
CMINIC — Initialize_For_Incoming	Mandatory	Mandatory
CMINIT — Initialize_Conversation	Mandatory	Mandatory
CMPTR — Prepare_to_Receive	Mandatory	Mandatory
CMRCV — Receive	Mandatory	Mandatory
CMRTS — Request_to_Send	Mandatory	Mandatory
CMSEND — Send_Data	Mandatory	Mandatory
CMSERR — Send_Error	Mandatory	Mandatory
CMTRTS — Test_Request_to_Send_Received	Mandatory	Mandatory

Set/Extract Calls

Table 2. Implementation Requirements — Conversation-Specific Set/Extract Calls		
Call	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
CMECTX — Extract_Conversation_Context	Mandatory	Mandatory
CMSCSP — Set_Conversation_Security_Password	Mandatory	Mandatory
CMSCST — Set_Conversation_Security_Type	Mandatory	Mandatory
CMSCSU — Set_Conversation_Security_User_ID	Mandatory	Mandatory
CMESUI — Extract_Security_User_ID	Mandatory	Mandatory
CMECS — Extract_Conversation_State	Mandatory	Mandatory
CMSCT — Set_Conversation_Type	Mandatory	Mandatory
CMECT — Extract_Conversation_Type	Mandatory	Mandatory
CMSDT — Set_Deallocate_Type	Mandatory	Mandatory
CMSED — Set_Error_Direction	Mandatory	Mandatory
CMSF — Set_Fill	Mandatory	Mandatory
CMSLD — Set_Log_Data	Mandatory	Mandatory
CMSMN — Set_Mode_Name	Mandatory	Mandatory
CMEMN — Extract_Mode_Name	Mandatory	Mandatory
CMSPLN — Set_Partner_LU_Name	Mandatory	Mandatory
CMEPLN — Extract_Partner_LU_Name	Mandatory	Mandatory
CMSPTR — Set_Prepare_to_Receive_Type	Mandatory	Mandatory
CMSPM — Set_Processing_Mode	Mandatory	Mandatory
CMSRT — Set_Receive_Type	Mandatory	Mandatory
CMSRC — Set_Return_Control	Mandatory	Mandatory
CMSST — Set_Send_Type	Mandatory	Mandatory
CMSSL — Set_Sync_Level	Mandatory	Mandatory
CMESL — Extract_Sync_Level	Mandatory	Mandatory
CMSTPN — Set_TP_Name	Mandatory	Mandatory
CMETPN — Extract_TP_Name	Mandatory	Mandatory

Conversation Characteristics, Variables, and Values

Table 3 (Page 1 of 4). Implementation Requirements — Conversation Characteristics, Variables, and Values

Conversation Characteristics, Variables, and Values	CPI-C 1.2 Conversation Support	CPI-C 1.2 Transaction Support
buffer	Mandatory	Mandatory
context_id	Mandatory	Mandatory
context_id_length	Mandatory	Mandatory
conversation_id	Mandatory	Mandatory
conversation_security_type	Mandatory	Mandatory
CM_SECURITY_NONE	Mandatory	Mandatory
CM_SECURITY_SAME	Mandatory	Mandatory
CM_SECURITY_PROGRAM	Mandatory	Mandatory
conversation_state	Mandatory	Mandatory
CM_INITIALIZE_STATE	Mandatory	Mandatory
CM_SEND_STATE	Mandatory	Mandatory
CM_RECEIVE_STATE	Mandatory	Mandatory
CM_SEND_PENDING_STATE	Mandatory	Mandatory
CM_CONFIRM_STATE	Mandatory	Mandatory
CM_CONFIRM_SEND_STATE	Mandatory	Mandatory
CM_CONFIRM_DEALLOCATE_STATE	Mandatory	Mandatory
CM_DEFER_RECEIVE_STATE	optional	Mandatory
CM_DEFER_DEALLOCATE_STATE	optional	Mandatory
CM_SYNC_POINT_STATE	optional	Mandatory
CM_SYNC_POINT_SEND_STATE	optional	Mandatory
CM_SYNC_POINT_DEALLOCATE_STATE	optional	Mandatory
CM_INITIALIZE_INCOMING_STATE	Mandatory	Mandatory
conversation_type	Mandatory	Mandatory
CM_BASIC_CONVERSATION	Mandatory	Mandatory
CM_MAPPED_CONVERSATION	Mandatory	Mandatory
data_received	Mandatory	Mandatory
CM_NO_DATA_RECEIVED	Mandatory	Mandatory
CM_DATA_RECEIVED	Mandatory	Mandatory
CM_COMPLETE_DATA_RECEIVED	Mandatory	Mandatory
CM_INCOMPLETE_DATA_RECEIVED	Mandatory	Mandatory
deallocate_type	Mandatory	Mandatory
CM_DEALLOCATE_SYNC_LEVEL	Mandatory	Mandatory
CM_DEALLOCATE_FLUSH	Mandatory	Mandatory
CM_DEALLOCATE_CONFIRM	Mandatory	Mandatory
CM_DEALLOCATE_ABEND	Mandatory	Mandatory
error_direction	Mandatory	Mandatory
CM_RECEIVE_ERROR	Mandatory	Mandatory
CM_SEND_ERROR	Mandatory	Mandatory

Table 3 (Page 2 of 4). Implementation Requirements — Conversation Characteristics, Variables, and Values		
Conversation Characteristics, Variables, and Values	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
fill CM_FILL_LL CM_FILL_BUFFER	Mandatory Mandatory Mandatory	Mandatory Mandatory Mandatory
log_data	Mandatory	Mandatory
log_data_length	Mandatory	Mandatory
mode_name	Mandatory	Mandatory
mode_name_length	Mandatory	Mandatory
partner_LU_name	Mandatory	Mandatory
partner_LU_name_length	Mandatory	Mandatory
prepare_to_receive_type CM_PREP_TO_RECEIVE_SYNC_LEVEL CM_PREP_TO_RECEIVE_FLUSH CM_PREP_TO_RECEIVE_CONFIRM	Mandatory Mandatory Mandatory Mandatory	Mandatory Mandatory Mandatory Mandatory
processing_mode CM_BLOCKING CM_NON_BLOCKING	Mandatory Mandatory Mandatory	Mandatory Mandatory Mandatory
receive_type CM_RECEIVE_AND_WAIT CM_RECEIVE_IMMEDIATE	Mandatory Mandatory Mandatory	Mandatory Mandatory Mandatory
received_length	Mandatory	Mandatory
request_to_send_received CM_REQ_TO_SEND_NOT_RECEIVED CM_REQ_TO_SEND_RECEIVED	Mandatory Mandatory Mandatory	Mandatory Mandatory Mandatory
requested_length	Mandatory	Mandatory

Table 3 (Page 3 of 4). Implementation Requirements — Conversation Characteristics, Variables, and Values

Conversation Characteristics, Variables, and Values	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
return_code	Mandatory	Mandatory
CM_OK	Mandatory	Mandatory
CM_ALLOCATE_FAILURE_NO_RETRY	Mandatory	Mandatory
CM_ALLOCATE_FAILURE_RETRY	Mandatory	Mandatory
CM_CONVERSATION_TYPE_MISMATCH	Mandatory	Mandatory
CM_PIP_NOT_SPECIFIED_CORRECTLY	Mandatory	Mandatory
CM_SECURITY_NOT_VALID	Mandatory	Mandatory
CM_SYNC_LVL_NOT_SUPPORTED_LU	Mandatory	Mandatory
CM_SYNC_LVL_NOT_SUPPORTED_PGM	Mandatory	Mandatory
CM_TPN_NOT_RECOGNIZED	Mandatory	Mandatory
CM_TP_NOT_AVAILABLE_NO_RETRY	Mandatory	Mandatory
CM_TP_NOT_AVAILABLE_RETRY	Mandatory	Mandatory
CM_DEALLOCATED_ABEND	Mandatory	Mandatory
CM_DEALLOCATED_NORMAL	Mandatory	Mandatory
CM_PARAMETER_ERROR	Mandatory	Mandatory
CM_PRODUCT_SPECIFIC_ERROR	Mandatory	Mandatory
CM_PROGRAM_ERROR_NO_TRUNC	Mandatory	Mandatory
CM_PROGRAM_ERROR_PURGING	Mandatory	Mandatory
CM_PROGRAM_ERROR_TRUNC	Mandatory	Mandatory
CM_PROGRAM_PARAMETER_CHECK	Mandatory	Mandatory
CM_PROGRAM_STATE_CHECK	Mandatory	Mandatory
CM_RESOURCE_FAILURE_NO_RETRY	Mandatory	Mandatory
CM_RESOURCE_FAILURE_RETRY	Mandatory	Mandatory
CM_UNSUCCESSFUL	Mandatory	Mandatory
CM_DEALLOCATED_ABEND_SVC	Mandatory	Mandatory
CM_DEALLOCATED_ABEND_TIMER	Mandatory	Mandatory
CM_SVC_ERROR_NO_TRUNC	Mandatory	Mandatory
CM_SVC_ERROR_PURGING	Mandatory	Mandatory
CM_SVC_ERROR_TRUNC	Mandatory	Mandatory
CM_TAKE_BACKOUT	optional	Mandatory
CM_DEALLOCATED_ABEND_BO	optional	Mandatory
CM_DEALLOCATED_ABEND_SVC_BO	optional	Mandatory
CM_DEALLOCATED_ABEND_TIMER_BO	optional	Mandatory
CM_RESOURCE_FAILURE_NO_RETRY_BO	optional	Mandatory
CM_RESOURCE_FAILURE_RETRY_BO	optional	Mandatory
CM_DEALLOCATED_NORMAL_BO	optional	Mandatory
CM_OPERATION_INCOMPLETE	Mandatory	Mandatory
CM_SYSTEM_EVENT	Mandatory	Mandatory
CM_OPERATION_NOT_ACCEPTED	Mandatory	Mandatory
return_control	Mandatory	Mandatory
CM_WHEN_SESSION_ALLOCATED	Mandatory	Mandatory
CM_IMMEDIATE	Mandatory	Mandatory
security_password	Mandatory	Mandatory
security_password_length	Mandatory	Mandatory
security_user_ID	Mandatory	Mandatory

Table 3 (Page 4 of 4). Implementation Requirements — Conversation Characteristics, Variables, and Values		
Conversation Characteristics, Variables, and Values	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
security_user_ID_length	Mandatory	Mandatory
send_length	Mandatory	Mandatory
send_type	Mandatory	Mandatory
CM_BUFFER_DATA	Mandatory	Mandatory
CM_SEND_AND_FLUSH	Mandatory	Mandatory
CM_SEND_AND_CONFIRM	Mandatory	Mandatory
CM_SEND_AND_PREP_TO_RECEIVE	Mandatory	Mandatory
CM_SEND_AND_DEALLOCATE	Mandatory	Mandatory
status_received	Mandatory	Mandatory
CM_NO_STATUS_RECEIVED	Mandatory	Mandatory
CM_SEND_RECEIVED	Mandatory	Mandatory
CM_CONFIRM_RECEIVED	Mandatory	Mandatory
CM_CONFIRM_SEND_RECEIVED	Mandatory	Mandatory
CM_CONFIRM_DEALLOC_RECEIVED	Mandatory	Mandatory
CM_TAKE_COMMIT	optional	Mandatory
CM_TAKE_COMMIT_SEND	optional	Mandatory
CM_TAKE_COMMIT_DEALLOCATE	optional	Mandatory
sym_dest_name	Mandatory	Mandatory
sync_level	Mandatory	Mandatory
CM_NONE	Mandatory	Mandatory
CM_CONFIRM	Mandatory	Mandatory
CM_SYNC_POINT	optional	Mandatory
TP_name	Mandatory	Mandatory
TP_name_length	Mandatory	Mandatory

Non-Conversation-Specific Calls

Table 4. Implementation Requirements — Non-Conversation-Specific Calls		
Call	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
CMCNVI — Convert_Incoming	Mandatory	Mandatory
CMCNVO — Convert_Outgoing	Mandatory	Mandatory
CMEMBS — Extract_Maximum_Buffer_Size	Mandatory	Mandatory
CMRLTP — Release_Local_TP_Name	Mandatory	Mandatory
CMSLTP — Specify_Local_TP_Name	Mandatory	Mandatory
CMWAIT — Wait_For_Conversation	Mandatory	Mandatory

Non-Conversation Characteristics, Variables, and Values

Table 5. Implementation Requirements — Non-Conversation Characteristics, Variables, and Values		
Non-Conversation Characteristics, Variables, and Values	**CPI-C 1.2 Conversation Support**	**CPI-C 1.2 Transaction Support**
conversation_return_code (same values as return_code)	Mandatory	Mandatory
maximum_buffer_size	Mandatory	Mandatory