



## Changes and Additions

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### Protocol Version 21

Following is a list of changes made in Protocol Version 21:

- Added NumMRDs, FLTAgentMRDID, and FltAgentMRDState under CONFIG\_AGENT\_EVENT.
- Added a new Message with the type 259. This Message is reserved for internal use only.
- Changed the behavior of the PeripheralType field in the OPEN\_CONF message.

### Protocol Version 20

Following is a list of additional changes made in Protocol Version 20 (Unified CCE Release 11.5(1)):

**Important**

In the CTI Server Protocol Version 20 the floating field tag and length size changed from 1 byte to 2 byte USHORT.

- Added the fixed AgentSkillTargetID and floating AgentID fields to the AGENT\_PRE\_CALL\_EVENT message.
- Added the CONFIG\_MRD\_EVENT message.
  - Added bit mask value 32=Media Routing Domain Information to the CONFIG\_REQUEST\_EVENT message ConfigInformation field. Added a cross-reference to this field from the OPEN\_REQ message ConfigMsgMask field.
  - Added bit mask value 32=Media Routing Domain Information to the CONFIG\_BEGIN\_EVENT message ConfigInformation field.
  - Added the MR\_DOMAIN\_ID\_TAG, DESCRIPTION\_TAG, ENTERPRISE\_NAME\_TAG, MAX\_TASK\_DURATION\_TAG, AND INTERRUPTIBLE\_TAG to the event CONFIG\_MRD\_EVENT.
- Added that the AGENT\_PRE\_CALL\_ABORT\_EVENT message is sent to the to ALL\_EVENTS client.
- Added the following values to the [Tag Values](#) table:
  - SSO\_ENABLED\_TAG for the CONFIG\_AGENT\_EVENT and SET\_AGENT\_STATE\_REQ
  - FLT\_TASK\_ID\_TAG for the AGENT\_TASKS\_RESP message
  - FLT\_ICM\_DISP\_TAG and FLT\_APP\_DISP\_TAG for the MEDIA\_LOGOUT\_IND message
- For the CONFIG\_AGENT\_EVENT message, the length of the LoginName field is increased to 255 Bytes.
- Floating field subfields have changed:
  - The Tag subfield is a Data Type of USHORT and a Byte Size of 2.
  - The FieldLength subfield is a Data Type of USHORT and a Byte Size of 2.
- Added or modified these tags in the Tag Values table for the SNAPSHOT\_TASKS\_RESP message: SCRIPT\_SELECTOR\_TAG , APPLICATION\_STRING1\_TAG, APPLICATION\_STRING2\_TAG, CALL\_VAR\_1\_TAG through CALL\_VAR\_10\_TAG, NAMED\_VARIABLE\_TAG, NAMED\_ARRAY\_TAG.
- Added new TaskState Values that may appear in SNAPSHOT\_TASK\_RESP messages.
- Added the following values to the Disposition Codes table for nonvoice tasks:
  - 63=Task Transferred
  - 64=Application Disconnected
  - 65=Task Transferred on Agent Logout

## Protocol Version 19

The following is a list of changes made for CTI Server in Protocol Version 19:

- Updated Message Types in Messaging Conventions chapter.
- Added Configuration Acquisition Messages section in Application Level Interfaces chapter.
- Added row containing INTERNAL\_AGENT\_STATE\_TAG to Tag Values. Table [Tag Values](#).
- Added values 27 to 37 for outbound call types to CallType Values [CallType Values](#).
- Added row containing InternalAgentState to QUERY\_AGENT\_STATE CONF Message Form to Table [Message Types](#).
- Added Agent's Internal States and their Status Values to Table [Agent's Internal States and their Status Values](#).
- Removed the ClientAddressIPV6 and SendingAddressIPV6 elements and the CLIENT\_ADDRESS\_IPV6\_TAG (226) and SENDING\_ADDRESS\_IPV6\_TAG(227) tags due to a change in the handling of IPv6 addresses.
- Changed ClientAddress and SendingAddress elements' size from 16 byte to 64 byte to support IPv6 addresses.
- Added the DepartmentID field to the following messages:
  - OPEN\_CONF
  - AGENT\_STATE\_EVENT
  - AGENT\_TEAM\_CONFIG\_EVENT
  - QUERY\_AGENT\_STATE\_CONF

## Protocol Version 18

The following is a list of changes made for CTI Server in Protocol Version 18 (Unified CCE version 10.0(1) - internal use only):

- Added values 247 to 254 to Tag Values Table [Tag Values](#).

## Protocol Version 17

The following is a list of changes made for CTI Server in Protocol Version 17 (Unified CCE version 9.0(1) - internal use only):

Added row containing OPTIONS\_TAG to Tag Values Table [Tag Values](#).

## Protocol Version 16

The following is a list of changes made for CTI Server in Protocol Version 16 (Unified CCE version 9.0(1)).

- Added Agent TeamName to AGENT\_TEAM\_CONFIG\_EVENT Table [Supervisor Service](#)  
Added AGENT\_TEAM\_NAME\_TAG(243) to Table [Tag Values](#)  
Added Direction to AGENT\_STATE\_EVENT Table [Tag Values](#)  
Added DIRECTION\_TAG(244) to Table [Tag Values](#)

## Protocol Version 15

The following is a list of additions and changes made to the CTI Server in Protocol Version 15 (Unified CCE Version 8.5(x)).

- Added three message types to Table [Tag Values](#).  
Added CALL\_AGENT\_GREETING\_MASK to Table [Unsolicited Call Event Message Masks](#).  
Added CALL\_AGENT\_GREETING\_EVENT in Table [Unsolicited Call Event Message Masks](#).  
Added AGENT\_GREETING\_CONTROL\_REQ in Table [Message Types](#).  
Added AGENT\_GREETING\_CONTROL\_CONF in Table [Message Types](#).  
Added CF\_AGENT\_GREETING\_CONTROL\_OPERATION\_FAILURE Extended Control Failure Code to Table [ControlFailureCode Values](#).

## Protocol Version 14

The following is a list of additions and changes made to the CTI Server in Protocol Version 14 (Unified CCE Version 8.0(x)).

- Changed the VersionNumber field in OPEN\_REQ to 14 from 13.  
Added new floating field tags to Table [Tag Values](#):
  - REQUESTING\_DEVICE\_ID\_TAG (219)
  - REQUESTING\_DEVICE\_ID\_TYPE\_TAG (220)
  - PRE\_CALL\_INVOKE\_ID\_TAG (221)
  - ENTERPRISE\_QUEUE\_TIME (222)
  - CALL\_REFERENCE\_ID\_TAG (223)
  - MULTI\_LINE\_AGENT\_CONTROL\_TAG (224)
  - NETWORK\_CONTROLLED\_TAG (225)
  - CLIENT\_ADDRESS\_IPV6\_TAG (226)
  - SENDING\_ADDRESS\_IPV6\_TAG(227)
  - NUM\_PERIPHERALS\_TAG(228)

COC\_CONNECTION\_CALL\_ID\_TAG(229)  
 COC\_CALL\_CONNECTION\_DEVICE\_ID\_TYPE\_TAG(230)  
 COC\_CALL\_CONNECTION\_DEVICE\_ID\_TYPE\_TAG(231)  
 CALL\_ORIGINATED\_FROM\_TAG(232)  
 SET\_APPDATA\_CALLID\_TAG(233)  
 CLIENT\_SHARE\_KEY\_TAG(234)

- Added SkillGroupNumber field to MAKE\_CALL\_REQ.
- Added RouterCallKeyDay, RouterCallKeyCallID, and RouterCallKeySequenceNumber fields to SET\_CALL\_DATA.
- Added floating CallTypeID field and floating PreCallInvokeID field to AGENT\_PRE\_CALL\_EVENT and SET\_APP\_DATA.
- Added CallReferenceIDfield (for solution call trace) to BEGIN\_CALL\_EVENT, CALL\_DATA\_UPDATE\_EVENT, and SNAPSHOT\_CALL\_CONF.
- Added optional parms RequestingDeviceID and RequestingDeviceIDType to CLEAR\_CONNECTION\_REQ.
- Added DEVID\_NON\_ACD\_DEVICE\_IDENTIFIER and DEVID\_SHARED\_DEVICE\_IDENTIFIER to Table [DeviceIDType Values](#).
- Added non ACD line types LINETYPE\_NON\_ACD\_IN and LINETYPE\_NON\_ACD\_OUT to Table [LineType Values](#).
- Added calltype CALLTYPE\_NON\_ACD (27) to Table [CallType Values](#).
- Added the NumPeripherals, FltPeripheralID, and MultilineAgentControl fields to OPEN\_CONF.
- Added the following status codes to Table [PGStatusCode Values](#):
  - E\_CTI\_INVALID\_CONFIG\_MSG\_MASK
  - E\_CTI\_AUTO\_CONFIG\_RESET
  - E\_CTI\_INVALID\_MONITOR\_STATUS
  - E\_CTI\_INVALID\_REQUEST\_ID\_TYPE
- Added the following ControlFailureCode values to Table [ControlFailureCode Values](#):
  - CF\_INVALID\_TRUNK\_ID\_SPECIFIED
  - CF\_SPECIFIED\_EXTENSION\_ALREADY\_IN\_USE
  - CF\_ARBITRARY\_CONF\_OR\_XFER\_NOT\_SUPPORTED
  - CF\_NETWORK\_TRANSFER\_OR\_CONSULT
  - CF\_NETWORK\_TRANSFER\_OR\_CONSULT\_FAILED
  - CF\_DEVICE\_RESTRICTED
  - CF\_LINE\_RESTRICTED
  - CF\_AGENT\_ACCOUNT\_LOCKED\_OUT

- CF\_ARBITRARY\_CONF\_OR\_XFER\_NOT\_SUPPORTED
- CF\_MAXIMUM\_LINE\_LIMIT\_EXCEEDED
- CF\_SHARED\_LINES\_NOT\_SUPPORTED
- CF\_EXTENSION\_NOT\_UNIQUE
- Added CTI\_SERVICE\_ACD\_LINE\_ONLY and CTI\_SERVICE\_IGNORE\_CONF to Table [CTI Service Masks](#).
- Added the ClientAddressIPv6 field to the following events:
  - RTP\_STARTED\_EVENT
  - RTP\_STOPPED\_EVENT
  - CLIENT\_SESSION\_OPENED\_EVENT
  - CLIENT\_SESSION\_CLOSED\_EVENT
  - EMERGENCY\_CALL\_EVENT
  - START\_RECORDING\_REQ
  - START\_RECORDING\_CONF
  - STOP\_RECORDING\_REQ
  - STOP\_RECORDING\_CONF
- Added the SendingAddressIPv6 field to RTP\_STARTED\_EVENT and RTP\_STOPPED\_EVENT.
- Added the COCCConnectionCallID, COCCallConnectionDeviceIDType, and COCCallConnectionDeviceID fields to CALL\_SERVICE\_INITIATED\_EVENT and SNAPSHOT\_CALL\_CONF.
- Added device types DEVT\_CTI\_PORT\_SCCP, and DEVT\_CTI\_PORT\_SIP to Table [TypeOfDevice Values](#).

## Protocol Versions 10-13

The following is a list of additions and changes made to the CTI Server in Protocol Versions 10-13 (ICM Version 7.0(x)).

- Added New Types to Existing Tables, New fields to existing Messages, New fields added to existing messages
- Added following fields to AGENT\_STATE\_EVENT: Duration (optional), NextAgentState, FltSkillGroupNumber, FltSkillGroupID, FltSkillGroupPriority, FltSkillGroupState
- Changed Version Number in OPEN\_REQ to 13 from 6.
- Added DeviceIDType to SNAPSHOT\_CALL\_REQ to allow for Queues and Agent extensions with the same number.
- Added ForcedFlag and AgentServiceReq to SET\_AGENT\_STATE\_REQ
- Added CTI\_AGENT\_STATE\_CONTROL\_ONLY, CTI\_DEVICE\_STATE\_CONTROL, CTI\_ROUTING, CTI\_SERVICE\_MINIMIZE\_EVENTS, CTI\_SERVICE\_CONFIG\_EVENTS,

CTI\_SERVICE\_UPDATE\_EVENTS, and CTI\_SERVICE\_IGNORE\_DUPLICATE\_AGENT\_EVENTS in the CTI Service Masks table.

- Corrected CALL\_QUEUED\_EVENT scenarios to reflect a QueueDeviceIDType of DEVID\_NONE and remove the QueueDeviceID floating field.
- Added DEVID\_QUEUE to the device ID type table.
- Removed CallsInQueue from the QUERY\_AGENT\_STATISTICS\_CONF message.
- In CALL\_DELIVERED\_EVENT, changed AlertingDevice to required.
- Removed Duplicate tag SKILL\_GROUP\_PRIORITY\_TAG.
- Added DEVICE\_TYPE\_TAG to the tag value table.
- Removed OldestCallInQueue from the QUERY\_AGENT\_STATISTICS\_CONF message.
- Added AgentAvailabilityStatus to QUERY\_AGENT\_STATE\_CONF and AGENT\_STATE\_EVENT.
- Added AgentsICMAvailable, and AgentsApplicationAvailable to QUERY\_SKILL\_GROUP\_STATISTICS\_CONF.
- Added ICMAvailableTimeSession, RoutableTimeSession, ICMAvailableTimeToday, and RoutableTimeToday to QUERY\_AGENT\_STATISTICS\_CONF.
- Added AGENT\_UPDATED\_EVENT and QUEUE\_UPDATED\_EVENT to the message type table. The individual messages were covered but they were missing from the table.
- Corrected EMERGENCY\_CALL\_CONF table.
- Changed PauseDuration in SEND\_DTMF\_SIGNAL\_REQ from USHORT to UINT. The type was mistakenly changed and there is special code to cover the backward compatibility.
- Added EventDeviceType and EventDeviceID in SYSTEM\_EVENT to allow specifying a non-numeric device on the in and out of service events.
- Corrected CustomerPhoneNumber, and CustomerAccountNumber to be optional in CALL\_DATA\_UPDATE\_EVENT and SET\_CALL\_DATA\_REQ
- Added NumFltSkillGroups field and floating fields for FltSkillGroupNumber, FltSkillGroupID, FltSkillGroupState, and FltSkillGroupPriority to allow specifying more than 1 skill group in the event to AGENT\_STATE\_EVENT
- Added RA\_CALL\_BY\_CALL and RA\_NAILED\_CONNECTION in AgentWorkMode table.
- Updated following messages with new fields:
  - AGENT\_STATE\_EVENT: NextAgentState, Duration
  - CALL\_DEQUEUED\_EVENT: DeQueueType
  - OPEN\_REQ: EventMsgMask
  - RTP\_STARTED\_EVENT: SendingAddress, SendingPort
  - RTP\_STOPPED\_EVENT: SendingAddress, SendingPort
  - SET\_AGENT\_STATE\_REQ: ForcedFlag
- Updated tables with various new values.
- Updated tables with various new values.

## Protocol Version 9

The following is a list of additions and changes made to the CTI Server in Protocol Version 9 (ICM Version 5.0).

- Added Server Service. See the section “Server Service” in Chapter 5, “Application Level Interfaces.”
- Added the CampaignID and QueryRuleID fields to the SET\_CALL\_DATA\_REQ and CALL\_DATA\_UPDATE\_EVENT messages.
- During an OPEN\_REQ of an ALL\_EVENTS client session, additional SYSTEM\_EVENTS are now sent to the ALL\_EVENTS client to indicate the status of each peripheral associated with the PG.
- Added AgentAvailabilityStatus and ICMAgentID fields to QUERY\_AGENT\_STATE\_CONF and AGENT\_STATE\_EVENT.
- Added field AgentsICMAvailable and AgentsApplicationAvailable to QUERY\_SKILL\_GROUP\_STATISTICS\_CONF.
- Added fields ICMAvailableTimeSession, RoutableTimeSession, ICMAvailableTimeToday, and RoutableTimeToday to QUERY\_AGENT\_STATISTICS\_CONF.
- Added ICMAgentID, AgentExtension, AgentID, and AgentInstrument fields to QUERY\_AGENT\_STATE\_REQ.
- Updates to several tables in Chapter 6, “Constants and Status Codes.”

## Protocol Version 8

The following is a list of additions and changes made to the CTI Server in Protocol Version 8 (ICM Version 4.6).

- Moved the RTP\_STARTED\_EVENT and RTP\_STOPPED\_EVENT messages to the ClientEvents Service.
- Added AgentInstrument optional field to the following messages:
  - ALTERNATE\_CALL\_REQ
  - CLEAR\_CALL\_REQ
  - CONFERENCE\_CALL\_REQ
  - DEFLECT\_CALL\_REQ
  - HOLD\_CALL\_REQ
  - RECONNECT\_CALL\_REQ
  - RETRIEVE\_CALL\_REQ
  - TRANSFER\_CALL\_REQ
  - SEND\_DTMF\_SIGNAL\_REQ



- Added CalledPartyDisposition field to the BEGIN\_CALL\_EVENT, CALL\_DATA\_UPDATE\_EVENT, and SNAPSHOT\_CALL\_CONF messages.
- Added CallType and CalledPartyDisposition fields to the SET\_CALL\_DATA\_REQ message.
- Added BlendedAgent support.
- Add CALLTYPE\_PREVIEW and CALLTYPE\_RESERVATION call types (see table [CallType Values](#)).
- Add CallType and/or CalledPartyDisposition fields to the set\_call\_data\_req, BEGIN\_CALL\_EVENT, CALL\_DATA\_UPDATE\_EVENT, and snapshot\_call\_conf messages.
- Added CampaignID and QueryRuleID fields to the SET\_CALL\_DATA\_REQ and CALL\_DATA\_UPDATE\_EVENT messages.
- Add real time and 5 minutes fields to the query\_skill\_group\_statistics\_conf message.
- Add new AutoOut, Preview, and Reservation call metrics to the query\_AGENT\_statistics\_conf and query\_skill\_group\_statistics\_conf messages.
- Added SessionID field to the AGENT\_STATE\_EVENT message.
- Add new BargeIn, Intercept, Monitor, Whisper, and Emergency call metrics to the query\_AGENT\_statistics\_conf and query\_skill\_group\_statistics\_conf messages.
- Added Supervisor services. See [Supervisor Service](#) in Chapter 5, “Application Level Interfaces.”
- Added the following new messages:
  - SET\_DEVICE\_ATTRIBUTES\_REQ / CONF
  - SUPERVISOR\_ASSIST\_REQ/CONF
  - EMERGENCY\_CALL\_REQ/CONF
  - SUPERVISE\_CALL\_REQ/CONF
  - AGENT\_TEAM\_CONFIG\_REQ/CONF/EVENT
  - SET\_APP\_DATA\_REQ/CONF
  - AGENT\_DESK\_SETTINGS\_REQ/CONF
  - LIST\_AGENT\_TEAM\_REQ/CONF
  - MONITOR\_AGENT\_TEAM\_START\_REQ/CONF
  - MONITOR\_AGENT\_TEAM\_STOP\_REQ/CONF
  - BAD\_CALL\_REQ/CONF
  - SET\_DEVICE\_ATTRIBUTES\_REQ/CONF
  - REGISTER\_SERVICE\_REQ/CONF
  - UNREGISTER\_SERVICE\_REQ/CONF
  - START\_RECORDING\_REQ/CONF
  - STOP\_RECORDING\_REQ/CONF
- Added the CustomerPhoneNumber, and CustomerAccountNumber fields. Developers may receive these fields in the CALL\_DATA\_UPDATE\_EVENT messages.

## Protocol Version 7

The following is a list of additions and changes made to the CTI Server in Protocol Version 7 (ICM Version 4.5).

- Added the RTP\_STARTED\_EVENT and RTP\_STOPPED\_EVENT messages
- Added skill group parameters to the CALL\_DELIVERED\_EVENT message.
- Added LineHandle and LineType parameters to the CALL\_REACHED\_NETWORK\_EVENT message.

## Protocol Version 6

The following is a list of additions and changes made to the CTI Server in Protocol Version 6 (ICM Version 4.1).

- Added the NAMEDVAR and NAMEDARRAY data types.
- Added ICRCentralControllerTime and SystemCapabilities fields to the OPEN\_CONF and SYSTEM\_EVENT messages.
- System Events Service renamed to Miscellaneous Services.
- NamedVariable and NamedArray optional fields added to the following messages:
  - BEGIN\_CALL\_EVENT
  - CALL\_DATA\_UPDATE\_EVENT
  - CALL\_TRANSLATION\_ROUTE\_EVENT
  - SET\_CALL\_DATA\_REQ
  - CONFERENCE\_CALL\_REQ
  - CONSULTATION\_CALL\_REQ
  - MAKE\_CALL\_REQ
  - MAKE\_PREDICTIVE\_CALL\_REQ
  - TRANSFER\_CALL\_REQ
  - SNAPSHOT\_CALL\_CONF
- EventReasonCode field added to the AGENT\_STATE\_EVENT message.
- AGENT\_PRE\_CALL\_EVENT and AGENT\_PRE\_CALL\_ABORT\_EVENT messages added .
- New messages added to Miscellaneous Services:
  - USER\_MESSAGE\_REQ/CONF
  - USER\_MESSAGE\_EVENT
  - SUPERVISOR\_ASSIST\_REQ/CONF
  - EMERGENCY\_CALL\_REQ/CONF

- QUERY\_AGENT\_STATISTICS\_REQ/CONF
- QUERY\_SKILL\_GROUP\_STATISTICS\_REQ/CONF
- AgentExtension and AgentID fields added to the QUERY\_AGENT\_STATE\_REQ message.
- New values SYS\_CTI\_SERVER\_OFFLINE, SYS\_CTI\_SERVER\_ONLINE, and SYS\_HALF\_HOUR\_CHANGE added to SystemEventID Values table (Table [SystemEventID Values](#)).
- Maximum length of all instances of the AgentInstrument field increased from 12 to 64 bytes.
- SystemCapabilities field removed from the OPEN\_CONF and SYSTEM\_EVENT messages.
- NumNamedVariables and NumNamedArrays fixed fields added to all messages that contain the NamedVariable and NamedArray floating fields.
- Supervisor Service removed.
- Queue information added to the QUERY\_SKILL\_GROUP\_STATISTICS\_CONF message.
- AgentInstrument field added to QUERY\_AGENT\_STATE\_CONF message.
- Added the following fields to the QUERY\_DEVICE\_INFO\_CONF message:
  - MaxActiveCalls
  - MaxHeldCalls
  - MaxDevicesInConference
  - MakeCallSetup
  - TransferConferenceSetup
  - CallEventsSupported
  - CallControlSupported
  - OtherFeaturesSupported
- New PGStatus code values PGS\_CTI\_SERVER\_OFFLINE and PGS\_LIMITED\_FUNCTION added to the PGStatusCode table (Table [PGStatusCode Values](#)).
- Added HandledCallsAfterCallTimeSession and HandledCallsAfterCallTimeToday fields to the QUERY\_AGENT\_STATISTICS\_CONF message.
- Added HandledCallsAfterCallTimeToHalf and HandledCallsAfterCallTimeToday fields to the QUERY\_SKILL\_GROUP\_STATISTICS\_CONF message.
- New Transfer/Conference Setup Mask values CONF\_SETUP\_SINGLE\_ACD\_CALL, TRANS\_SETUP\_SINGLE\_ACD\_CALL, and TRANS\_SETUP\_ANY\_SINGLE\_CALL added to the QUERY\_DEVICE\_INFO\_CONF message.
- New SystemEventIDs SYS\_INSTRUMENT\_OUT\_OF\_SERVICE and SYS\_INSTRUMENT\_BACK\_IN\_SERVICE added to the SystemEventID Values table (Table [SystemEventID Values](#)).
- Added REGISTER\_VARIABLES\_REQ and REGISTER\_VARIABLES\_CONF messages.
- Added MonitorID field to AGENT\_PRECALL\_EVENT and AGENT\_PRECALL\_ABORT\_EVENT messages.

- PeripheralID field added to the USER\_MESSAGE\_REQ message.
- Updated StatusCodes table (Table [Failure Indication Message Status Codes](#)).
- New LineTypes LINETYPE\_OUTBOUND and LINETYPE\_DID added to the LineTypes table (Table 6-14 LineType Values).
- Added ServiceNumber, ServiceID, SkillGroupNumber, SkillGroupID, and SkillGroupPriority fields to AGENT\_PRECALL\_EVENT message.
- Added note for CALL\_ESTABLISHED\_EVENT for Spectrum ACDs.
- Added /CCT (Call Control Table) optional field to the MAKE\_CALL\_REQ and MAKE\_PREDICTIVE\_CALL\_REQ messages.

## Protocol Version 5

The following is a list of additions and changes made to the CTI Server in Protocol Version 5 (ICM Version 4.0).

- Added Peripheral Monitor service and related messages.
- Added a new MonitorID field to all Call and Agent Event messages.
- Added Client Monitor service and related messages.
- Added CallingDeviceType and CallingDeviceID fields to the CALL\_SERVICE\_INITIATED\_EVENT message.
- Increased the maximum number of skill groups from 10 to 20.
- Added AlertRings, CallOption, AuthorizationCode, and AccountCode fields to the CONSULTATION\_CALL\_REQ, MAKE\_CALL\_REQ, and TRANSFER\_CALL\_REQ messages.
- Readded MAKE\_PREDICTIVE\_CALL\_REQ and MAKE\_PREDICTIVE\_CALL\_CONF messages.
- Added new SYS\_PERIPHERAL\_GATEWAY\_OFFLINE System Event ID to the SystemEventID Values table (Table [PeripheralType Values](#)).
- Added new AM\_NONE, AM\_NONE\_NO\_MODEM and AM\_CONNECT\_NO\_MODEM AnsweringMachine values to the AnsweringMachine Values table (Table [AnsweringMachine Values](#)).
- ANSWER\_CALL\_REQ message (Table [SystemEventID Values](#)) revised for peripherals that do not provide alerting call identification.
- Added fields for single step conference to the CONFERENCE\_CALL\_REQ message:
  - CallPlacementType
  - CallMannerType
  - AlertRings
  - CallOption
  - FacilityType
  - Priority
  - PostRoute

- DialedNumber
  - UserToUserInfo
  - CallVariable1 – CallVariable10
  - CallWrapupData
  - FacilityCode
  - AuthorizationCode
  - AccountCode
- Replaced the AgentInstrument field in the MAKE\_PREDICTIVE\_CALL\_REQ message with the OriginatingDevice field.
  - Added the following new fields to the MAKE\_PREDICTIVE\_CALL\_REQ message:
    - AnswerDetectMode
    - AnswerDetectTime
    - AnswerDetectControl1
    - AnswerDetectControl2
    - DestinationCountry
    - OriginatingLineID
  - PeripheralOnline field added to the OPEN\_CONF message.
  - ClientPort field added to the CLIENT\_SESSION\_OPENED\_EVENT and CLIENT\_SESSION\_CLOSED\_EVENT messages.
  - Optional AgentInstrument field added to the CLEAR\_CONNECTION\_REQ message.
  - AnsweringMachine field added to the CONFERENCE\_CALL\_REQ and TRANSFER\_CALL\_REQ messages.
  - Optional AgentInstrument field added to the CONSULTATION\_CALL\_REQ message.
  - Added the symbolic constant NULL\_CALL\_ID to the Special Values table (Table [Special Values](#) Special Values).
  - New peripheral types PT\_SIEMENS\_9005 and PT\_ALCATEL added to the PeripheralType Values table (Table [PeripheralType Values](#)).

