



BroadWorks Accounting Call Detail Record

Interface Specification

Release 23.0
Version 1

BroadWorks® Guide

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1 Summary of Interface Changes

This section describes changes to the Accounting CDR interface specification.

1.1 Changes Introduced in Release 23.0

This section describes the changes introduced in Release 23.0.

1.1.1 Overview

Release 23.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 23.0 (not bound to any activatable feature).
- BW-12057 Reseller Level feature adds the following field to the Header module:
 - 448 *reseller*
- BW-13425 Accounting Enhancements for BroadWorks Mobility feature adds the following fields to the IP module:
 - 449 *imsi*
 - 450 *callRefInfo*
 - 451 *vlrNumber*
- BW-14330 Automatic Collect Call feature adds the following service extension to the Centrex Module:
 - *Automatic Collect Call*which contains the new fields:
 - 452 *automaticCollectCall.callType*
 - 453 *automaticCollectCall.connectTime*
- BW-9465 Call Correlation Identifier in Execution Server Mode feature does not add any fields, but it starts using an existing CDR field, 372 *extTrackingId*, initially implemented in the Application Server in Release 20.0.
- BW-11050 Mobile Network Integration Enhancements feature introduces the following changes:
 - When direct routing mode is enabled, the population of the CDR field 231 *ascalType* changes from *Network* to *Enterprise/Group*. This occurs on both the originating CDR and the terminating CDR.
 - When *markCDRAsEnterpriseGroupCall* mode is enabled, the population of the CDR field 231 *ascalType* changes from *Network* to *Enterprise/Group* and the CDR field 19 *callCategory* is set to "private" but only for the originating CDR. The terminating CDR is unaffected.

Those new behaviors do not apply to the Execution Server.

- BW-11930 Support GETS for Application Server feature does not add any fields, but it starts using the following existing CDR fields:
 - 378 *gets*, initially introduced by the Execution Server in Release 20.0.
 - 443 *getsOriginationType*, initially implemented by the Execution Server in Release 22.0.
- BW-12660 Ro Accounting Enhancements in Execution Server Mode feature introduces the following changes:
 - If the Directed Call Pickup with Barge-in service is triggered and the barged-into party is subject to OCS validation, if the OCS denies access to the barged-into party, the original call stays connected and there is no impact on the original CDRs. Prior to this feature, when the barged-into party was denied by the OCS, all parties were released and the original CDRs were populated with release times.

Those new behaviors do not apply to the Application Server.

- BW-12985 Group Configurable CLID Enhancement feature introduces the following change:

- Modified the description for CDR field 247 *configurableCLID* to allow the default user configurable CLID number to be populated.
- BW-13171 Hybrid Application Server for Mobility Deployments feature introduces the following changes:
 - Modified the description for CDR field 207 *primaryDeviceLinePort* to add the method of population when the Application Server is configured in hybrid mode.
 - Modified the description for CDR field 59 *key* to add the method of population when the server is configured in hybrid mode for non-IMS calls.

1.1.2 CDR Field Changes

Table 1: CDR Field Changes for Release 23.0

Feature	Service Extension	Field	Also Available
BW-12057		448 - reseller	R22.0
BW-13425		449 - imsi	R21.sp1, R22.0
BW-13425		450 - callReferenceNumber	R21.sp1, R22.0
BW-13425		451 - vlrNumber	R21.sp1, R22.0
BW-14330	Automatic Collect Call	452 - automaticCollectCall.callType	R22.0
BW-14330	Automatic Collect Call	453 - automaticCollectCall.connectTime	R22.0

1.2 Changes Introduced in Release 22.0

This section describes the changes introduced in Release 22.0.

1.2.1 Overview

Release 22.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 22.0 (not bound to any activatable feature).
- BW-2246 Custom Charging Aspects feature adds the following fields to the IP Module:

- *415 customInfoInPCV*
- *418 receivedChargingVector*

the following fields to the 3GPP Module:

- *416 receivedRoute*

the following service extension to the Centrex Module:

- *Alternate Carrier Selection* which contains the new field *417 alternateCarrierSelection.selectScheme*
- BW-2294 Phone List Lookup for Incoming Calls feature adds the following field to the Centrex Module:

- *419 phoneListCallingName*

- BW-2308 Rf Interface Enhancements feature adds the following fields to the 3GPP Module:

- *420 receivedTimeZone*
- *421 userEquipmentInfo*
- *422 chargingGroupId*
- *423 incomingReason*
- *424 outgoingReason*
- *425 requestedPartyAddress*
- *426 privateUserIdentity*
- *433 outgoingPrivacy*

- *447 receivedCalledAssertedIdentity*

the following field to the Centrex Module:

- *428 locationNetwork*

the following service extension to the Centrex Module:

- *Music On Hold* which contains the new field *427 musicOnHold.invocationTime*

This feature also ports the following accounting changes from Release 18.0 (which were initially implemented in the Application Server) to the Execution Server:

- Support interim CDR for location changes
- Support for CDR fields *312 location*, *313 locationType*, and *314 locationUsage*
- BW-2320 E911 Callback Support with Service Suppression feature adds the following field to the IP Module:
 - *429 e911PsapCallbackAttempt*
- BW-2309 Ro Interface Enhancements feature adds the following system parameters to the Execution Server:
 - *enableAccessNetworkChanges*
 - *supportNetworkProvidedPANI*

These parameters control, when the location changed after the call has been answered, whether the *144 accessNetworkInfo* CDR field is updated with the new location and an interim CDR is sent. This new behavior does not apply to the Application Server.

This feature also adds the value "Final Unit Redirection" to *relatedCallIdReason* and adds the following field to the IP Module:

- *430 accessNetworkInfoFromRegister*
- BW-6847 Direct Route Service feature adds the following service extension to the Centrex Module:
 - *Direct Route* which contains the new field *431 directRoute.directRouteNumber*
- BW-7406 Xsi Call Through for BroadWorks Anywhere feature adds the following field to the Centrex Module:
 - *432 imrnFromXsi*
- BW-8224 Push Notification Support for Calls feature adds the value "Push Notification Retrieval" to *relatedCallIdReason* and adds the following service extension to the Centrex Module:
 - *Push Notification Retrieval* which contains the new fields *434 pushNotificationRetrieve.invocationTime* and *435 pushNotificationRetrieve.facResult*
- BW-8832 MSCID Retrieval feature adds the following field to the "scc" service extension in the Centrex Module:
 - *436 scc.msclIdentity*
- BW-9123 Accounting Interface Enhancements for Multi-Leg Services feature adds the following service extensions to the Centrex Module:
 - *Call Parked* which contains the new field *437 callParked.parkedAgainst*
 - *Call Park Retrieve* which contains the new field *438 callParkRetrieve.retrievedAgainst*
 - *Call Pickup* which contains the new field *439 callPickup.pickedUpUser*
 - *Directed Call Pickup* which contains the new field *440 directedCallPickup.pickedUpUser*
 - *Directed CPU Barge-In* which contains the new field *441 directedCPUBargeIn.bargedInUser*
- BW-8998 DTG Info Capture in CDR feature adds the following field to the Centrex Module:
 - *442 outgoingTrunkGroup*
- BW-8290 eMPS/GETS Enhancements feature adds the following fields to the IP Module:

- *443 getsOriginationType*
- *444 getsPriorityLevel*
- BW-8675 CS-Originated Calls Location-based Translations feature adds the following fields to the "scc" service extension in the Centrex Module:
 - *445 scc.cellIdentity*
 - *446 scc.sectorIdentity*
- BW-2218 Silent Alerting and Secondary Call Forwarding feature adds the value "Call Forward Always Secondary" to *relatedCallIdReason*.
- BW-7638 Support Refer on Network Side feature adds the value "Network Refer" to *relatedCallIdReason*.
- BW-7737 Circuit-Switched to Packet-Switched Dual Radio Voice Call Continuity Support feature adds the following system parameters to the Execution Server:
 - *freezeSCCOnFirstReceived*: This parameter determines whether the first populated *P-Access-Network-Info* (PANI) value is kept in the *430 accessNetworkInfo* CDR field even when a new PANI is received.
 - *freezePANIONFirstReceived*: This parameter determines whether the first populated values are kept in the "scc" service extension even when new values are received.
 - *enableCentralizationContinuityChanges*: This parameter determines whether an interim CDR is triggered when the "scc" service extension is updated.

Those new behaviors do not apply to the Application Server.

This feature also adds the values "vdn" and "vdi" to *349 scc.sccCause* CDR field.

- BW-10461 Domain-Based Routing feature introduces the following change:

When Domain-Based Routing is applied to a call, the *9 calledNumber* CDR field captures the result of the Domain-Based Routing. This new behavior does not apply to the Application Server.
- BW-11119 Virtual On-Net Support in Execution Server Mode feature does not add any fields, but it starts using an existing CDR field, *275 virtualOnNetType*, initially implemented in the Application Server in Release 17.0.
- EV 192630 Authorization Code NCOS Capability feature introduces the following change:

When a user enters a Communication Barring authorization code, the Application Server overwrites the content of the already existing *242 cbfAuthorizationCode* CDR field. Therefore, this CDR field preserves only the final authorization code entered. This new behavior does not apply to the Execution Server.
- EV 223116 Transfer Notification for BroadWorks Mobility feature adds the value "Transfer Consult Internal" to *transfer.type* and introduces the following change:

When the fixed line persona (FLP) transfer is triggered, the Application Server releases the FLP BroadWorks Anywhere CDR and creates the FLP-originating CDR. The *14 releaseTime* CDR field of the FLP BroadWorks Anywhere CDR matches the *10 startTime* CDR field of the FLP-originating CDR. This new behavior does not apply to the Execution Server.

1.2.2 CDR Field Changes

Table 2: CDR Field Changes for Release 22.0

Feature	Service Extension	Field	Also Available
BW-2246		415 - customInfoInPCV	R21.sp1
BW-2246		416 - receivedRoute	R21.sp1
BW-2246	Alternate Carrier Selection	417 - alternateCarrierSelection.selectScheme	R21.sp1
BW-2246		418 - receivedChargingVector	R21.sp1
BW-2294		419 - phoneListCallingName	R21.sp1

Feature	Service Extension	Field	Also Available
BW-2308		420 - receivedTimeZone	R21.sp1, R21.sp2
BW-2308		421 - userEquipmentInfo	R21.sp1, R21.sp2
BW-2308		422 - chargingGroupId	R21.sp1, R21.sp2
BW-2308		423 - incomingReason	R21.sp1, R21.sp2
BW-2308		424 - outgoingReason	R21.sp1, R21.sp2
BW-2308		425 - requestedPartyAddress	R21.sp1, R21.sp2
BW-2308		426 - privateUserIdentity	R21.sp1, R21.sp2
BW-2308	Music on Hold	427 - musicOnHold.invocationTime	R21.sp1, R21.sp2
BW-2308		428 - locationNetwork	R21.sp1, R21.sp2
BW-2320		429 - e911PsapCallbackAttempt	R21.sp1, R21.sp2
BW-2309		430 - accessNetworkInfoFromRegister	R20.sp1, R21.sp2
BW-6847	Direct Route	431 - directRoute.directRouteNumber	R20.sp1, R21.sp1
BW-7406		432 - imrnFromXsi	R21.sp2
BW-2308		433 - outgoingPrivacy	R21.sp1, R21.sp2
BW-8224	Push Notification Retrieval	434 - pushNotificationRetrieve.invocationTime	R20.sp1, R21.sp1
BW-8224	Push Notification Retrieval	435 - pushNotificationRetrieve.facResult	R20.sp1, R21.sp1
BW-8832	scc	436 - scc.msclIdentity	R20.sp1
BW-9123	Call Parked	437 - callParked.parkedAgainst	R21.sp2
BW-9123	Call Park Retrieve	438 - callParkRetrieve.retrievedAgainst	R21.sp2
BW-9123	Call Pickup	439 - callPickup.pickedUpUser	R21.sp2
BW-9123	Directed Call Pickup	440 - directedCallPickup.pickedUpUser	R21.sp2
BW-9123	Directed CPU Barge-In	441 - directedCPUBargeIn.bargedInUser	R21.sp2
BW-8998		442 - outgoingTrunkGroup	R20.sp1
BW-8290		443 - getsOriginationType	R21.sp2
BW-8290		444 - getsPriorityLevel	R21.sp2
BW-8675	scc	445 - scc.cellIdentity	R20.sp1
BW-8675	scc	446 - scc.sectorIdentity	R20.sp1
BW-2308		447 - receivedCalledAssertedIdentity	R21.sp1, R21.sp2
BW-12057		448 - reseller	R23.0
BW-13425		449 - imsi	R21.sp1, R23.0
BW-13425		450 - callReferenceNumber	R21.sp1, R23.0
BW-13425		451 - vlrNumber	R21.sp1, R23.0
BW-14330	Automatic Collect Call	452 - automaticCollectCall.callType	R23.0
BW-14330	Automatic Collect Call	453 - automaticCollectCall.connectTime	R23.0

1.3 Changes Introduced in Release 21.0

This section describes the changes introduced in Release 21.0.

1.3.1 Overview

Release 21.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 21.0 (not bound to any activatable feature).
- EV 193116 Support for Number Portability feature adds the following service extensions to the Centrex Module:
 - *Number Portability*
which contains the new fields:
 - 379 npdi
 - 380 rn
 - 381 statusand
 - *Number Portability Announcement Activation*
which contains the new fields:
 - 382 invocationTime
 - 383 facResultand
 - *Number Portability Announcement Deactivation*
which contains the new fields:
 - 384 invocationTime
 - 385 facResult
 - EV 214978 Called Party Address Strict Compliance feature adds the following field to the 3GPP Module:
 - 386 calledPartyAddress
 - EV 203930 BroadWorks Mobility Persona Management feature adds the following service extensions to the Centrex Module:
 - *Mobility Call Anchoring Activation*
which contains the new fields:
 - 387 invocationTime
 - 388 facResultand
 - *Mobility Call Anchoring Deactivation*
which contains the new fields:
 - 389 invocationTime
 - 390 facResultand
 - *Mobility Call Anchoring Activation Per Call*
which contains the new fields:
 - 391 invocationTime
 - 392 facResultand
 - *Mobility Calling Line ID Activation*

which contains the new fields:

- 393 *invocationTime*
- 394 *facResult*

and

- *Mobility Calling Line ID Deactivation*

which contains the new fields:

- 395 *invocationTime*
- 396 *facResult*

and

- *Mobility Calling Line ID Activation Per Call*

which contains the new fields:

- 397 *invocationTime*
- 398 *facResult*

and

- *Mobility Calling Line ID Deactivation Per Call*

which contains the new fields:

- 399 *invocationTime*
- 400 *facResult*
- EV 204023 Personal Assistant feature adds the value "Personal Assistant" to *transfer.type* and adds the following service extensions to the Centrex Module:
 - *Personal Assistant*

which contains the new field:

- 401 *presence*
- EV 219574 Answer Confirmation Accounting Enhancements feature makes configurable the content of fields *answerIndication* and *answerTime* for unconfirmed answered calls, as controlled by the *setAnswerIndicatorToYesForUnconfirmedAnswer* CLI configuration. It also adds the following fields to the Centrex Module:
 - 402 *answerConfirmationInvocationTime*
 - 403 *answerConfirmationTime*
- EV 198534 Enterprise Trunk Enhancements feature adds the following service extensions to the Centrex Module:
 - *Route List*

which contains the new field:

- 404 *routeListNumber*
- EV 214095 Video Collaboration feature adds the following service extensions to the Centrex Module:
 - *Collaborate*

which contains the new field:

- 405 *collaborate.invocationTime*
- 406 *collaborate.roomID*
- 407 *collaborate.role*
- 408 *collaborate.bridge*
- 409 *collaborate.owner*

- 410 *collaborate.ownerDN*
- 411 *collaborate.roomName*
- 412 *collaborate.roomType*
- EV 231974 Enterprise Trunk and Trunk Group Capacity Management Enhancements adds the following fields to the Centrex Module:
 - 413 *btluExceeded*
 - 414 *enterpriseTrunkCapacityExceeded*
- The length for fields 269 *pCamelLocInfo*, 270 *pCamelMscAddress* and 271 *pCamelCellIDorLAI* has been changed to 50. This has no functional impact as BroadWorks always provides the full value, even if it exceeds the documented length value.

1.3.2 CDR Field Changes

Table 3: CDR Field Changes for Release 21.0

Feature	Service Extension	Field	Also Available
EV-193116	Number Portability	379 - numberPortability.npdi	R20.sp1
EV-193116	Number Portability	380 - numberPortability.rn	R20.sp1
EV-193116	Number Portability	381 - numberPortability.status	R20.sp1
EV-193116	Number Portability Announcement Activation	382 - numberPortabilityAnnouncementActivation.invocationTime	R20.sp1
EV-193116	Number Portability Announcement Activation	383 - numberPortabilityAnnouncementActivation.facResult	R20.sp1
EV-193116	Number Portability Announcement Deactivation	384 - numberPortabilityAnnouncementDeactivation.invocationTime	R20.sp1
EV-193116	Number Portability Announcement Deactivation	385 - numberPortabilityAnnouncementDeactivation.facResult	R20.sp1
EV-214978		386 - calledPartyAddress	None
EV-210489	Mobility Call Anchoring Activation	387 - mobilityCallAnchoringActivation.invocationTime	None
EV-210489	Mobility Call Anchoring Activation	388 - mobilityCallAnchoringActivation.facResult	None
EV-210489	Mobility Call Anchoring Deactivation	389 - mobilityCallAnchoringDeactivation.invocationTime	None
EV-210489	Mobility Call Anchoring Deactivation	390 - mobilityCallAnchoringDeactivation.facResult	None
EV-210489	Mobility Call Anchoring Activation Per Call	391 - mobilityCallAnchoringActivationPerCall.invocationTime	None
EV-210489	Mobility Call Anchoring Activation Per Call	392 - mobilityCallAnchoringActivationPerCall.facResult	None
EV-210489	Mobility Calling Line ID Activation	393 - mobilityCallingLineIDActivation.invocationTime	None
EV-210489	Mobility Calling Line ID Activation	394 - mobilityCallingLineIDActivation.facResult	None
EV-210489	Mobility Calling Line ID Deactivation	395 - mobilityCallingLineIDDeactivation.invocationTime	None

Feature	Service Extension	Field	Also Available
EV-210489	Mobility Calling Line ID Deactivation	396 - mobilityCallingLineIDDeactivation.facResult	None
EV-210489	Mobility Calling Line ID Activation Per Call	397 - mobilityCallingLineIDActivationPerCall.invocationTime	None
EV-210489	Mobility Calling Line ID Activation Per Call	398 - mobilityCallingLineIDActivationPerCall.facResult	None
EV-210489	Mobility Calling Line ID Deactivation Per Call	399 - mobilityCallingLineIDDeactivationPerCall.invocationTime	None
EV-210489	Mobility Calling Line ID Deactivation Per Call	400 - mobilityCallingLineIDDeactivationPerCall.facResult	None
EV-204023	Personal Assistant	401 - personalAssistant.presence	None
EV-219574		402 - answerConfirmationInvocationTime	R20.sp1
EV-219574		403 - answerConfirmationTime	R20.sp1
EV-198534	Route List	404 - routeList.routeListNumber	None
EV-214095	Collaborate	405 - collaborate.invocationTime	R20.sp1
EV-214095	Collaborate	406 - collaborate.roomID	R20.sp1
EV-214095	Collaborate	407 - collaborate.role	R20.sp1
EV-214095	Collaborate	408 - collaborate.bridge	R20.sp1
EV-214095	Collaborate	409 - collaborate.owner	R20.sp1
EV-214095	Collaborate	410 - collaborate.ownerDN	R20.sp1
EV-214095	Collaborate	411 - collaborate.roomName	R20.sp1
EV-214095	Collaborate	412 - collaborate.roomType	R20.sp1
EV-231974		413 - btluExceeded	R20.sp1
EV-231974		414 - enterpriseTrunkCapacityExceeded	R20.sp1

1.4 Overview

Release 20.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 20.0 (not bound to any activatable feature).
- EV 160554 Executive and Assistant Services feature adds the "Executive", "Executive Forward", "Executive-Assistant Divert", "Executive-Assistant Initiate Call" and "Executive-Assistant Call Push" Related Call Id reasons. It adds the "executive-assistant call push" value to the *recallType* field and the "Executive Assistant" value to the *locationType* field. It also adds the following service extension to the Centrex Module:
 - Executive-Assistant Initiate Call*
which contains the new fields:
 - 350 invocationTime*
 - 351 facResult*
 and
 - Executive-Assistant Call Push*
which contains the new fields:
 - 352 invocationTime*

- 353 *facResult*

and

- *Executive Call Filtering Activation*

which contains the new fields:

- 354 *invocationTime*
- 355 *facResult*

and

- *Executive Call Filtering Deactivation*

which contains the new fields:

- 356 *invocationTime*
- 357 *facResult*

and

- *Executive-Assistant Opt-in*

which contains the new fields:

- 358 *invocationTime*
- 359 *facResult*

and

- *Executive-Assistant Opt-out*

which contains the new fields:

- 360 *invocationTime*
- 361 *facResult*

- EV 179232 CIC as CAC in CDR adds the following field to the Centrex Module:

- 362 *cicInsertedAsCac*

- EV 170831 Calling Party Address Strict Compliance adds the following field to the 3GPP Module:

- 363 *callingPartyAddress*

- EV 170972 Call Recording – Start/Stop/Pause/Resume User Control adds the values "always-pause-resume" and "on-demand-user-start" to the field *callRecording.recordingTrigger*. It add the "Call Recording" value to the *relatedCallIdReason* field. It also adds the following service extensions to the Centrex Module:

- *On-Demand-Start Call Recording*

which contains the new fields:

- 364 *invocationTime*
- 365 *facResult*

and

- *On-Demand-Stop Call Recording*

which contains the new fields:

- 366 *invocationTime*
- 367 *facResult*

and

- *Pause Call Recording*

which contains the new fields:

- *368 invocationTime*
- *369 facResult*

and

- *Resume Call Recording*

which contains the new fields:

- *370 invocationTime*
- *371 facResult*
- EV 170355 Call Correlation Identifier adds the following field to the Centrex Module:
 - *372 extTrackingId*
- EV 114601 Flexible Seating Service adds the value "Flexible Seating Guest" to the *locationType* field and adds the following service extension to the Centrex Module:
 - *Flexible Seating Guest*

which contains the new fields:

- *373 invocationTime*
- *374 hostGroup*
- *375 hostUserId*
- *376 hostUserNumber*
- *377 hostGroupNumber*
- EV 191436 GETS Support adds the following field to the IP Module:
 - *378 gets*
- EV 181047 3GPP2 VCC Application Server Support adds the value "imrn" to the field *scc.sccCause* for call terminations.
- EV 175541 Diversion Information Availability for Queued Calls modifies the value of the fields *originalCalledNumber*, *originalCalledPresentationIndicator* and *originalCalledReason* for call center calls to carry the information for the first redirecting party instead of the call center itself when the call is redirected prior to the call center.

1.5 Changes for Release 19.0

Release 19.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 19.0 (not bound to any activatable feature).
- EV 125258 Find-Me Follow-Me Service feature adds the "Find-me/Follow-me" and "FMFM Call Push" Related Call Id reasons, and adds the following service extension to the Centrex Module:

- *FMFM Call Push*

which contains the new fields:

- *347 fmfmCallPush.invocationTime*
- *348 fmfmCallPush.facResult*
- EV 142137 Network Voice Portal Enhancements feature does not introduce any new fields. However, it is a system service that may generate CDRs with no associated Group or Service Provider/Enterprise.
- EV 146251 Group Night Forwarding feature adds the "Group Night Forwarding" Related Call Id reason.
- EV 146324 Hunt Group Call Busy feature adds the following service extensions to the Centrex Module:

- *HGBusy Activation*

which contains the new fields:

- *337 huntGroupBusyActivation.invocationTime*
- *338 huntGroupBusyActivation.facResult*

- 339 *huntGroupBusyActivation.targetHuntGroupId*

and

- *HGBusy Deactivation*

which contains the new fields:

- 340 *huntGroupBusyDeactivation.invocationTime*
- 341 *huntGroupBusyDeactivation.facResult*
- 342 *huntGroupBusyDeactivation.targetHuntGroupId*

and

- *HGBusy Interrogation*

which contains the new fields:

- 343 *huntGroupBusyInterrogation.invocationTime*
- 344 *huntGroupBusyInterrogation.facResult*
- 345 *huntGroupBusyInterrogation.targetHuntGroupId*
- EV 149593 Service Centralization and Continuity Enhancements feature adds the following field to the "scc" service extension in the Centrex module:
 - 349 *scc.sccCause*
- EV 151841 User Agent Header Enhancements feature adds the following field in the IP module:
 - 346 *userAgent*

1.6 Changes for Release 18.0

Release 18.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 18.0 (not bound to any activatable feature).
- EV 92408 *Group Paging* feature introduces the following changes (also available in the Release 16.sp2 and Release 17.sp3 service packs):

When *Group Paging* is invoked, a terminating CDR is generated for the paging group identity and any number of originating CDRs, one for each alerted member of the paging group. Each of these CDRs contains the new service extension in the Centrex Module:

- *Group Paging*

which contains the new fields:

- 295 *groupPaging.invocationTime*
- 296 *groupPaging.relatedCallId* (origination only)
- EV 100929 *Dialable Caller ID* feature adds the following new field to the Basic module (also available in the Release 16.sp2 and Release 17.sp3 service packs):
 - 297 *dialableCallingNumber*
- EV 110764 *Meet-Me Conferencing* adds the following service extension to the Centrex module (also available in the Release 16.sp2 and Release 17.sp3 service packs):

- *Meet Me Conference*

which contains the following new fields:

- 298 *meetmeConference.invocationTime*
- 302 *meetmeConference.conferenceId*
- 303 *meetmeConference.role*
- 304 *meetmeConference.bridge*
- 305 *meetmeConference.owner*

- 306 *meetmeConference.ownerDN*
- 307 *meetmeConference.title*
- 308 *meetmeConference.projectCode*
- 309 *meetmeConference.recordingDuration*

This feature replaces the Instant Conference service, and therefore the following obsolete fields have been made into spares:

- 48 *instantConference.invocationTime*
- 49 *instantConference.callId*
- 50 *instantConference.to*
- 51 *instantConference.from*
- 52 *instantConference.conferenceId*
- 53 *instantConference.role*
- 54 *instantConference.bridge*
- 55 *instantConference.owner*
- 56 *instantConference.ownerDN*
- 57 *instantConference.title*
- 58 *instantConference.projectCode*
- 136 *instantConference.recordingDuration*
- EV 97691 *Call Me Now* feature introduces the following changes (also available in the Release 17.sp3 service pack):

When *Call Me Now* is invoked successfully, the following CDRs are generated:

- Origination from the target user to the external party;
- Origination from the target user to himself;
- Termination to the target user from himself.

Each of these CDRs contains a new service extension in the Centrex Module:

- *Call Me Now*

which contains the following new fields:

- 299 *callMeNow.type*
- 300 *callMeNow.transactionId* (origination to external party only)
- 301 *callMeNow.relatedCallId* (originations only)
- EV 119810 *BroadWorks Mobility* feature adds the following service extension to the Centrex module (also available in the Release 17.sp3 service pack):
 - *BroadWorks Mobility*

which contains the following new fields:

- 310 *broadworksMobility.mobilityNumber*
- 311 *broadworksMobility.mobilityRoutingNumber*
- EV 121049 *Per Device Charging* feature adds the following new fields to the Centrex module (also available in the Release 17.sp3 service pack):
 - 312 *location*
 - 313 *locationType*
 - 314 *locationUsage*
- EV 46941 *Call Recording Interface* feature adds the following service extensions to the Centrex module (also available in the Release 17.sp4 service pack):
 - *On-Demand Call Recording*
 - *Call Recording*

On-Demand Call Recording contains the following new fields:

- 315 *callRecording.invocationTime*
- 316 *callRecording.facResult*

Call Recording contains the following new fields:

- 317 *callRecording.recordingTrigger*
- 318 *callRecording.recordingDestination*
- 319 *callRecording.recordingResult*
- EV 116923 *Calling Line Identity Compliance Enhancements* feature adds the following new fields to the basic Module (also available in the Release 17.sp4 service pack):
 - 320 *callingPresentationNumber*
 - 321 *callingPresentationNumberContext*
 - 322 *callingAssertedNumber*
 - 323 *callingAssertedNumberContext*
- EV 143533 *Service Centralization and Continuity* feature adds the following service extension to the Centrex module:
 - *Scc*

which contains the following new fields:

- 324 *scc.invocationTime*
- 325 *scc.sccCallId*
- 326 *scc.sccNumber*
- EV 97685 *Interrogation FACs for CW/SCR/ACR/CLIR/COLR* feature adds the following service extensions to the Centrex module (also available in the Release 16.sp2 and Release 17.sp3 service packs):
 - *ACR Interrogation*
 - *Call Waiting Interrogation*
 - *CLID Blocking Interrogation*
 - *COLR Interrogation*
 - *SCR Interrogation*

ACR Interrogation contains the following new fields:

- 327 *acrInterrogation.invocationTime*
- 328 *acrInterrogation.facResult*

Call Waiting Interrogation contains the following new fields:

- 329 *cwInterrogation.invocationTime*
- 330 *cwInterrogation.facResult*

CLID Blocking Interrogation contains the following new fields:

- 331 *clidBlockingInterrogation.invocationTime*
- 332 *clidBlockingInterrogation.facResult*

COLR Interrogation contains the following new fields:

- 333 *colrInterrogation.invocationTime*
- 334 *colrInterrogation.facResult*

SCR Interrogation contains the following new fields:

- 335 *scrInterrogation.invocationTime*
- 336 *scrInterrogation.facResult*
- EV 140952 *IPv6 Support – Application Server* feature introduces the following changes to the RADIUS interface:

A new RADIUS standard attribute (NAS-IPv6-Address) is added if and only if one or more RADIUS servers are configured with an IPv6 address. The NAS-IPv6-Address AVP contains the public IPv6 address of the Application Server.

- EV 140685 *Call Forwarding Not Reachable for Hunt Groups* feature introduces the following change (also available in the Release 17.sp4 service pack):

When triggered, the *relatedCallIdReason* "Call Forward Not Reachable" is used. This reason already existed prior to this feature, but was not used by Hunt Groups.

- EV 115436 *Accounting Configuration Enhancements* feature introduces the following change (also available in the Release 17.sp3 service pack):

A new configuration is added at the command line interface (CLI) to decide whether quotation marks should be removed from field 59 key (if any). The default is to report the *icid-value* as received as in previous releases.

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface> get  
enableAVPQuotes = false
```

1.7 Changes for Release 17.0

Release 17.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 17.0 (not bound to any activatable feature).
- EV 98104 *Call Center Barge-In Enhancements* introduces the following changes.

First, an agent can now escalate a call (talk to a supervisor). This Feature Access Code (FAC)-based service populates its own *invocationTime* and *facResult* fields. The new service extension is:

- *CC Escalated Call*

And the new fields are:

- 279 *ccEscalatedCall.invocationTime*
- 280 *ccEscalatedCall.facResult*

Second, a Call Center emergency escalation mechanism is introduced. When invoked, the new service extension:

- *CC Emergency Call*

is added, with field:

- 287 *ccEmergencyBl.invocationTime*

Third, a supervisor can now silently monitor an agent call. This is similar to *Directed Call Pickup with Barge-In (DPUBI)*. This FAC-based service populates its own *invocationTime* and *facResult* fields. The new service extension is:

- *CC Monitoring BI*

And the new fields are:

- 281 *ccMonitoringBl.invocationTime*
- 282 *ccMonitoringBl.facResult*

In addition, the new *relatedCallIdReason* is introduced:

- *CC-Monitoring-BI*

Fourth, a Call Center agent can perform a Customer Originated Trace during a call. When invoked, the service extension:

- *Mid-Call Customer Originated Trace*

is added, with field:

- *283 midCallCustomerOriginatedTrace.invocationTime*
- EV 87520 Route Point feature introduces the following:
 - A new redirection reason, "route-point"
 - A new relatedCallId reason, "Route Point"

In addition, a supervisor can now silently monitor the *next call* to agent. Once the next call comes in to the agent, the monitoring starts and is reported in the CDR using the CC-Monitoring-BI relatedCallIdReason introduced with EV98104 listed above. That monitoring is initiated with a new FAC-based service that populates its own *invocationTime* and *facResult* fields. The new service extension is:

- *Monitoring Next Call*

and the new fields are:

- *288 monitoringNextCall.invocationTime*
- *289 monitoringNextCall.facResult*
- EV 98106 *Call Center Disposition Codes* feature introduces the following new service extension:
 - *CC Disposition Code Tagging*

Which includes the following new fields:

- *277 ccDispositionCodeTagging.invocationTime*
- *278 ccDispositionCodeTagging.result*
- EV 98945 *Legacy ACB* feature introduces two feature access code (FAC) based services that now populate their own *invocationTime* and *facResult* fields. Their new service extensions are:
 - *Legacy ACB Activation*
 - *Legacy ACB Deactivation*

And the new fields are:

- *290 legacyAcbActivation.invocationTime*
- *291 legacyAcbActivation.facResult*
- *292 legacyAcbDeactivation.invocationTime*
- *293 legacyAcbDeactivation.facResult*
- EV 99279 *Pre-Announcement Service* feature introduces a new service extension:
 - *PreAlertingAnnouncement*

And it includes the following new field:

- *276 preAlertingAnnouncement.preAlertingDuration*
- EV 95519 *Enterprise Virtual On-Net Destinations* feature the following new field to the Centrex module:
 - *275 virtualOnNetType*
- EV 101360 *Location-Based Calling Restrictions* feature introduces the following new fields in the Centrex module:
 - *284 officeZone*
 - *285 primaryZone*
 - *286 roamingMscAddress*
- EV 105603 Charge Number in Terminating CDR makes the chargeNumber appear in terminating CDR when applicable.
- EV 95361 *Diameter Stack* feature has no impact on the CDR fields, but introduces new configurable options (such as the routingMode).
- EV 108584 *Configurable CDR External IDs* feature introduces a new field in the Centrex module:

- 294 *customSchemaVersion*

And also allows to:

- Enable or disable individually each non mandatory field of the CDR
- Use alternate IDs externally rather than the internal IDs
- EV 95374 *Call Center Enhancements II* feature adds the following new fields in the *Call Center* service extension of the Centrex module:
 - 252 *callCenter.outgoingCallCenterCallFACResult*
 - 253 *callCenter.outgoingPersonalCallFACResult*
 - 254 *callCenter.outgoingCallCenterPhoneNumber*
 - 273 *callCenter.outgoingCallCenterUserId*
 - 274 *callCenter.outgoingCallCenterGroupNumber*
- EV 95515 *Calling Name and Number Delivery Split* feature adds the following new field in the Basic module:
 - 272 *namePermitted*
- EV 95520 *P-CAMEL Header Content in BroadWorks CDRs* feature adds the following new fields in the IP module:
 - 269 *pCamelLocInfo*
 - 270 *pCamelMscAddress*
 - 271 *pCamelCellIDorLAI*

1.8 Changes for Release 16.sp1

Release 16.sp1 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 16.1 (requiring activation of EV 96854).
- EV 51781 *Communication Barring - User Controlled* feature adds three feature access code (FAC) based services that now populate their own *invocationTime* and *facResult* fields. Their new service extensions are:
 - *CB Activation*
 - *CB Deactivation*
 - *CB Query*

The new fields are:

- 257 *cbActivation.invocationTime*
- 258 *cbActivation.facResult*
- 259 *cbDeactivation.invocationTime*
- 260 *cbDeactivation.facResult*
- 261 *cbQuery.invocationTime*
- 262 *cbQuery.facResult*
- EV 91795 *Intercept Enhancements* feature adds the following new fields in the Centrex module:
 - 255 *interceptUser.routingNumber*
 - 256 *interceptGroup.routingNumber*
- EV 92406 *Voice Mail Retrieval FAC* feature adds 2 feature access code (FAC) based services that now populate their own *invocationTime* and *facResult* fields. Their new service extensions are:
 - *VMR Dialing*
 - *VP Dialing*

And the new fields are:

- 265 *vmrDialing.invocationTime*

- *266 vmrDialing.facResult*
- *267 vpDialing.invocationTime*
- *268 vpDialing.facResult*
- EV 95007 *Directed and All MSN Support for Call Forwarding* feature adds 1 feature access code (FAC) based services that now populate their own *invocationTime* and *facResult* fields. The new service extension is:

- *CFNRc Interrogation*

And the new fields are:

- *263 cfnrcInterrogation.invocationTime*
- *264 cfnrcInterrogation.facResult*

1.9 Changes for Release 16.0

Release 16.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 16.0 (not bound to any activatable feature).
- EV 51778 *Interrogation FAC* feature adds the following new fields:
 - *cfaInterrogation.invocationTime*
 - *cfaInterrogation.facResult*
 - *cfnalInterrogation.invocationTime*
 - *cfnalInterrogation.facResult*
 - *cfnalInterrogation.invocationTime*
 - *cfnalInterrogation.facResult*
- EV 62932 *Advice of Charge* feature adds the following new fields:
 - *adviceOfCharge.aocType*
 - *adviceOfCharge.charge*
 - *adviceOfCharge.currency*
 - *adviceOfCharge.time*
 - *adviceOfCharge.sum*
 - *adviceOfCharge.invocationTime*
 - *adviceOfCharge.result*
- EV 64013 *IMS Accounting Ro Interface* feature adds the following new field: *prepaidStatus*. In addition, the *eventCounter* field is now padded to 10 characters using leading zeros. Ro is the prepaid interface for BroadWorks Application Server and is fully defined in companion document, *BroadWorks Rf and Ro Interface Specification, Release 16.0*.
- EV 67352 *Call Type in CDR* feature adds the following new field: *asCallType*.
- EV 70179 *SIP Bridged Line* feature adds the following new field: *callBridge.callBridgeResult*.
- EV 84059 *Confirm Call Return* feature adds the following new field: *returnCallNumberDeletion.invocationTime*.
- EV 84063 *Configurable Calling Party Category Values* feature allows the system administrator to define new CPC values. As a result, this string-type field is not limited to a fixed set of values, and its maximum length is extended.
- EV 84295 *Charging Enhancement* feature adds the following new field: *configurableCLID*.
- EV 87519 *Call Center Enhancements* feature adds the following new fields:
 - *callCenter.nightServiceActivationMOResult*
 - *callCenter.nightServiceDeactivationMOResult*
 - *callCenter.forcedForwardingActivationResult*
 - *callCenter.forcedForwardingDeactivationResult*

- EV 88400 *Selective Call Forwarding Enhancements* feature adds the following new fields:
 - *scfActivation.invocationTime*
 - *scfActivation.facResult*
 - *scfDeactivation.invocationTime*
 - *scfDeactivation.facResult*

1.10 Changes for Release 14.sp9 and Release 15.sp2

Release 14.sp9 and Release 15.sp2 add the following information to BroadWorks CDRs:

- With Release 14.0 of the Application Server, the version of the CDR schema is now 14.9 (requires activation of EV 70258).
- With Release 15.0 of the Application Server, the version of the CDR schema is now 15.2 (requires activation of EV 83792).
- EV 66069 adds the *otherInfoInPCV* field (221) to the IP module to report any non-standard information that may be present in the *P-ChargingVector* header. The *correlationInfo* group field can now also be present in an originating CDR in non-IMS mode if a *P-ChargingVector* is received in a 200 OK (answer).
- EV 64960 Trunk Group enhancements introduces the following changes:
 - The *receivedCallingNumber* field (222) has been added to the Basic module.
 - The new value “Trunk Group Forward Unconditional” can now be used in the *relatedCallIdReason* field.
 - The new value “Unconditional” can now be used in the *trunkGroupInfo* field.
 - The *userNumber* field can now be empty in some cases. The definition of this field has been updated to provide the details of this impact.
 - With the patch AP.as.14.sp9.123.ap88160, there is support of Shared Call Appearance Call Retrieval for Enterprise Trunking. As a result, the new device involved in the call may go through a different trunk group. The definitions of the *trunkGroupName* and *trunkGroupInfo* fields have been updated to capture the impact. The new value “None” is also introduced for *trunkGroupInfo*.
- EV 68025 Automatic Call Back with Polling introduces the following changes:

NOTE: This enhancement is available in Release 15.sp2, but not in Release 14.sp9.

The existing field *originationMethod* can take an additional value, “AutomaticCallbackPolling”.

- EV 67719 User Defined Custom Ringback and Music On Hold introduces the following changes:

NOTE: This enhancement is available in Release 15.sp2, but not in Release 14.sp9.

The *mediaSelection* field (223) has been added to the Centrex module.

- EV 69412 Communication Barring Fixed introduces the following changes:

NOTE: This enhancement is available in Release 15.sp2, but not in Release 14.sp9.

- Spare fields 224 to 241 are added in CSV file format.
- The *cbfAuthorizationCode* field (242) has been added to the Centrex module.

1.11 Changes for Release 15.0

Release 15.0 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 15.0 (not bound to any activatable feature).
- A new *recallType* value is introduced “call park”.

- A new originationMethod value “automaticCallback” is introduced.
- The IMS Rf interface is introduced. This interface is described in a distinct companion document entitled *Rf Interface Specification*, Release 15.0. However, it introduces a new CDR module “tgppModule”, which includes the following new fields:
 - primaryDeviceLinePort
 - calledAssertedIdentity
 - calledAssertedPresentationIndicator
 - sdp
 - mediaInitiatorFlag
 - earlyMedia info:
 - sdpOfferTimestamp
 - sdpAnswerTimestamp
 - earlyMediaSdp
 - earlyMediaInitiatorFlag
 - messageBody info:
 - bodyContentType
 - bodyContentLength
 - bodyContentDisposition
 - bodyOriginator
 - sipErrorCode
 - earlyMediaList messageBodyList

The earlyMedia and messageBody info can be repeated in the same CDR to form a list. Encoding rules of these lists vary with the encoding format, and are described in their respective sections (XML, CSV, and Radius).

1.12 Changes for Release 14.sp6

Release 14.sp6 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 14.6 (requiring activation of EV 59433).
- Two feature access code (FAC) based services now populate their own *invocationTime* and *facResult* fields. They are:
 - Anonymous Call Rejection (ACR) Activation
 - Anonymous Call Rejection (ACR) Deactivation
- The *outsideAccessCode* field has been added to the Centrex module. The *dialedDigits* field now also always contains the outside access code prefix if dialed by the user. The *calledNumber* may or may not include this access code, depending on the configuration of the *includeCodeForNetworkTranslationsAndRouting* system parameter in *AS_CLI/SubscriberMgmt/ServiceProvider/Policy/DialPlan/AccessCodes*.
- The *accessNetworkInfo* field can now be present in terminating CDRs, when a *PANI* header is present in the 18x/200 response for an initial INVITE request.

1.13 Changes for Release 14.sp4

Release 14.sp4 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 14.4 (requiring activation of EV 53646).
- The *callParked.invocationTime* field has been added to the Centrex module.
- The *relatedCallId* for the BroadWorks Anywhere service extension has been added to the Centrex module.

- There are two new values, “BroadWorks Anywhere Portal” and “BroadWorks Anywhere Location”, for *relatedCallIdReason*.
- In eXtensible Markup Language (XML) format, the service names are now “Location Control” and “Call Retrieve” (rather than “Shared Call Appearance”) when the feature access codes (FAC) are used to enable or disable a location and retrieve a call, since the same FAC codes are now shared by the Shared Call Appearance service and the BroadWorks Anywhere service.
- The value of the *trunkGroupName* is now populated with a combination of the group ID and the trunk group name, rather than using the trunk group ID.

In addition, the new system parameter *use3xxAsRouteConfirmationForAccounting* is introduced in the CLI context *AS_CLI/Interface/Accounting/BroadWorksCDRInterface*.

1.14 Changes for Release 14.sp3

Release 14.sp3 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 14.3 (requiring activation of EV 49454).
- The *routingNumber* has been added to the IP module.
- The *originationMethod* has been added to the Centrex module.

1.15 Changes for Release 14.sp2

Release 14.sp2 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 14.2 (requiring activation of EV 41589).
- The *q850Cause* has been added to the Basic module.
- The *locationActivationResult* field has been added to the Centrex module.
- The *locationDeactivationResult* field has been added to the Centrex module.
- The *callRetrieveResult* field has been added to the Centrex module.
- The *dialedDigitsContext* field has been added to the Basic module.
- The *calledNumberContext* field has been added to the Basic module.
- The *callingNumberContext* field has been added to the Basic module.
- The *networkTranslatedNumberContext* field has been added to the Basic module.
- The *originalCalledNumberContext* field has been added to the Centrex module.
- The *redirectingNumberContext* field has been added to the Centrex module.

1.16 Changes for Release 14.sp1

Release 14.sp1 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 14.1 (requiring activation of EV 40122).
- The *trunkGroupName* has been added to the Centrex module.
- The *trunkGroupInfo* field has been added to the Centrex module.
- The following values for the *relatedCallIdReason* field have been added:
 - Trunk Group Forward Capacity Exceeded
 - Trunk Group Forward Unreachable

Release 14.sp1 also reorganizes the configuration of the Long Duration CDRs (enabler and timer); in particular, the *AS_CLI/System/CallIP/LongCallAcctg* context is removed.

1.17 Changes for Release 14.0

Some patches on Release 13.0 up to MP9 have introduced new CDR fields in both Release 13.0 and Release 14.0. Those changes were already documented in various updates to the Release 13.0 version of this document, and are still listed in the subsections below. This section only covers the following changes introduced in Release 14.0:

- The version of the CDR schema is now 14.0.
- The *faxMessaging* field has been added in the Centrex module.
- The *Conference* service extension has been added in the Centrex module for conferences performed on the media server. This is not for conferences performed on the conferencing server via the *Instant Conference* service.
- The *codecUsage* field has been added in the IP module.
- A new CDR Type has been added, named “interim” CDRs.
- The following values for the *relatedCallIdReason* field have been added:
 - Directory Number Hunting
 - Fax Deposit
- The following value for the type field within the service extension of the *Transfer* service has been added:
 - Third-Party Deflection
- A retry mechanism when the FTP-push mechanism is used and a file fails to be transmitted has been added.
- The following configurable system parameters have been added under *AS_CLI/Interface/Accounting/BroadWorksCDRInterface*:
 - enableCDRCodecChanges
 - enableCDRInternalConference

1.18 Changes for Release 13.0 MP16

Release 13.0, Maintenance Patch (MP) 16 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 13.6.

NOTE: The CDR schema is actually reported as 13.4 in MP16 until patch MP16-45507 has been applied.

- Two feature access code-based services now populate their own *invocationTime* and *facResult* fields. They are:
 - Call Forwarding Not Reachable (CFNRc) Activation
 - Call Forwarding Not Reachable (CFNRc) Deactivation

1.19 Changes for Release 13.0 MP15 and EP 13.0 MP14-40619

Release 13.0, Maintenance Patch (MP) 15 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 13.5.

NOTE: The CDR schema is actually reported as 13.4, which is due to a known issue.

- The *recallType* field has been added to the Centrex module.

1.20 Changes for Release 13.0 MP14

Release 13.0, Maintenance Patch (MP) 14 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 13.4.
- The *twoStageDialingDigits* field has been added to the Centrex module.

1.21 Changes for Release 13.0 MP9

Release 13.0, Maintenance Patch (MP) 9 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 13.3.
- Eleven feature access code (FAC) based services now populate their own *invocationTime* and *facResult* fields. They are:
 - Call Waiting Activation
 - Call Waiting Deactivation
 - Calling Line ID (CLID) Blocking Activation
 - Calling Line (CLID) Blocking Deactivation
 - No Answer Timer Set
 - Voice Mail (VM) Busy Activation
 - Voice Mail (VM) Busy Deactivation
 - Voice Mail (VM) No Answer Activation
 - Voice Mail (VM) No Answer Deactivation
 - Voice Mail (VM) Always Activation
 - Voice Mail (VM) Always Deactivation

The above names are used to populate the “serviceName” tag in XML format.

In Comma Separated Value (CSV) and Radius format, the fields 158 to 179 are added.

1.22 Changes for Release 13.0 MP7

Release 13.0, Maintenance Patch (MP) 7 adds the following information to BroadWorks CDRs:

- The version of the CDR schema is now 13.2.
- A new value for the *serviceName* field has been added:
 - “transfer”
- The following fields have been added in the Centrex module:
 - *relatedCallId* (used for many services)
 - *relatedCallIdReason* (identifying the cause or service for the relatedCallId)
 - *invocationTime* for the Transfer service
 - *result* for the Transfer service
 - *relatedCallId* for the Transfer service
 - *type* for the Transfer service

1.23 Changes for Release 13.0 MP6

Release 13.0, Maintenance Patch (MP) 6 adds the following information to BroadWorks CDRs:

- The *chargeNumber* field has been added in the Centrex module.
- The version of the CDR schema is now 13.1 rather than 13.0 (with EP EP.as.13.0.362.mp6-31513).

1.24 Changes for Release 13.0 MP4

Release 13.0, Maintenance Patch (MP) 4 adds the following information to BroadWorks CDRs:

- The following fields have been added in the IP module:
 - accessNetworkInfo
 - chargingFunctionAddresses

Release 13.0 MP4 also adds the ability for Application Servers to deliver accounting messages to multiple RADIUS servers using a round-robin load balancing method, described in section [CDR Output in Realtime Over Radius](#) on page 57.

2 Overview

This document describes the BroadWorks Call Detail Record (CDR) interface. It covers the following topics:

- Functional description
- CDR definitions
- CDR correlation rules
- Call scenarios
- Command Line Interface configuration
- CDR stream example

3 Functional Description

This chapter describes the following:

- Accounting interface
- Automatic CDR Transmission
- CDR Output in Realtime Over Radius
- Accounting operations, administration, maintenance, and provisioning

3.1 Accounting Interface

The following figure shows the BroadWorks CDR interface between BroadWorks and a system provider's billing system. The transmission of accounting data is performed either by sending accounting files with many CDRs over FTP, or by sending CDRs one at a time, in real-time, using the Radius protocol ([RFC 2866](#) compliant). These two output streams (File/FTP or Radius) can be enabled or disabled independently from each other. Enabling either one or both is allowed.

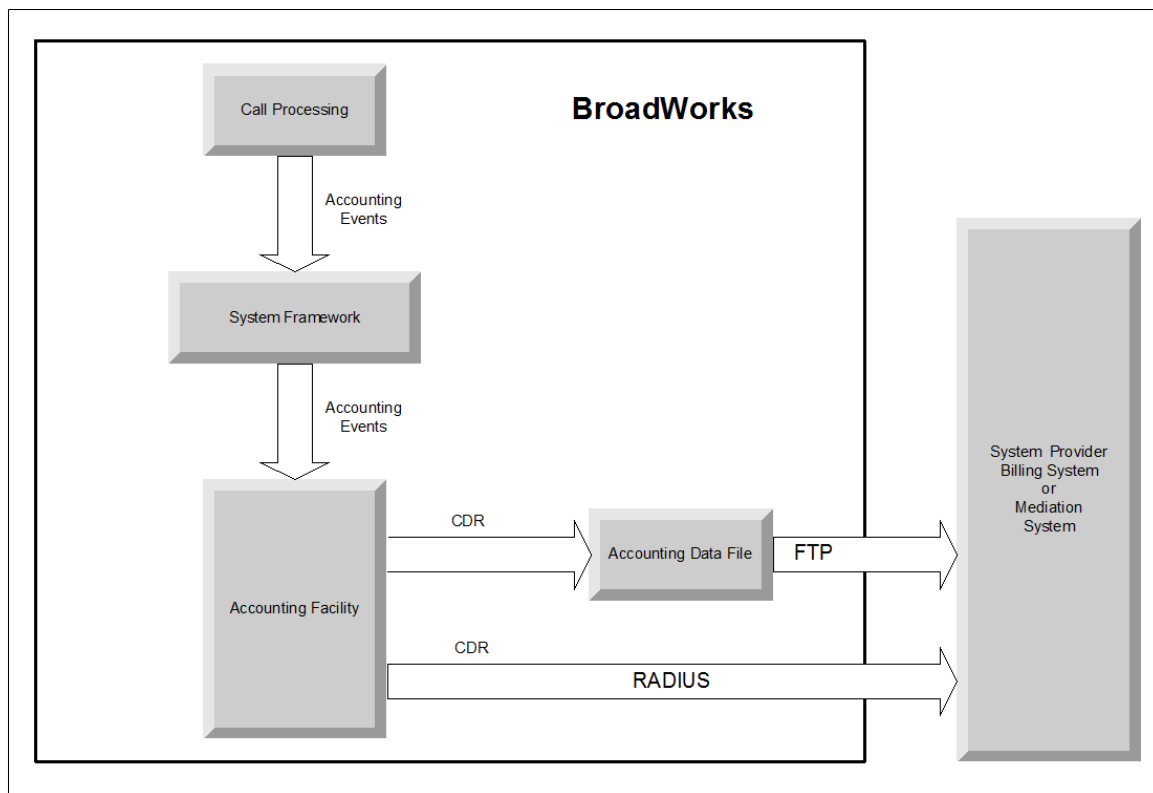


Figure 1: Accounting Interface Between BroadWorks and System Provider's Billing System

3.2 CDR Output to File, File Transmission, File Archiving

When the file output is enabled, CDRs are written to files, and these files must be transferred to an external billing system. A single mode of transmission is supported, which is batch-mode FTP. In this mode, CDR files are transferred via FTP periodically to the system provider's billing system or mediation device. The CDR files can be optionally archived for a configurable number of days.

3.2.1 Directory Structure

The following subdirectories are created (*under /var/broadworks/billing*) and are used as described in the following table:

Table 4: Directory Structure

Subdirectory	Description
<i>active</i>	Stores the active CDR file (the file being updated).
<i>latest</i>	Stores the latest complete CDR file. When an active file is completed, it is closed and moved from the active to the latest subdirectory. It is then sent automatically using FTP to the billing system if so configured.
<i>archive</i>	If the <i>billingHoldPeriod</i> is set to a value greater than "0", CDR files are moved from the latest to the archive subdirectory upon file rotation (otherwise, the old file is deleted from the latest subdirectory). CDR files are deleted from this subdirectory once the <i>billingHoldPeriod</i> has ended.
<i>not_sent</i>	If automatic FTP upload is enabled but a failure occurs, an alarm is generated and the CDR file is copied to this subdirectory, and remains there until it is retried and successfully retransmitted, or is expired.

3.2.2 File Naming Conventions

The following naming conventions are used for files generated by BroadWorks CDR accounting:

```
BW-CDR-yyyymmddhhmmss-pri-systemid-seqnum.xml
```

-or-

```
BW-CDR-yyyymmddhhmmss-pri-systemid-seqnum.csv
```

Each component is as follows:

Table 5: File Naming Conventions

Component	Semantics	Type	Length
File ID	Identifies this file as containing BroadWorks CDR accounting data.	Literal string "BW-CDR"	6 characters
Timestamp	Time at which file was closed by the network element, in the network element's time zone.	yyyymmddhhmmss	14 characters
Priority	Priority of this file.	Integer in the range 1 through 4. Always set to "2".	1 character
System ID	Network-wide unique identifier (on Solaris: <i>hostid</i>). (on Linux: MAC address or Universally Unique Identifier (UUID) ¹)	Hexadecimal number	on Solaris: 8 characters on Linux: 12 characters with MAC address, 36 characters with UUID
Sequence Number	Monotonically increasing sequence number. This sequence number continues incrementing regardless of BroadWorks restarts.	Integer in the range 000001 through 999999, zero-filled.	6 characters

Each of the file name components is separated by a hyphen "-" character and the extension is *.xml* if the file is in XML format or *.csv* if the file is in Comma Separated Value (CSV) format. The following are examples of file names, where the system ID is shown in bold:

On Solaris:

```
BW-CDR-20020522143356-2-80F4135A-000034.xml
```

¹ On Linux systems, the system ID captures the MAC address by default. It can capture the UUID if the *bw.accounting.useuuidforlinuxsystemid* property is set to "true".

On Linux with UUID:

```
BW-CDR-20090703000000-2-EFE01FC4-04CC-3CF0-A3DC-4F715E2AF966-000096.xml
```

On Linux with MAC address:

```
BW-CDR-20090703154256-2-00163E137A95-000002.xml
```

3.2.3 File Rotation Rules

File rotation is controlled by the *billingRotationHour*, *billingRotationMinutes*, and *billingRotationsPerDay* CLI parameters.

If parameter *billingRotationsPerDay* is set to “1”, then the rotation occurs daily at exactly the time specified by *billingRotationHour* and *billingRotationMinutes*.

If parameter *billingRotationsPerDay* is greater than 1, there are several rotations per day, one of these occurring at exactly the time specified by *billingRotationHour* and *billingRotationMinutes*. The other file rotations are spread equally throughout the day. For example, with four rotations per day and rotation hour/minutes of 16:30, there are rotations at 04:30, 10:30, 16:30, and 22:30.

At file rotation time, the current file (stored in the active subdirectory) is moved to the latest subdirectory, and the file already in latest subdirectory is moved to the archive subdirectory.

3.2.4 Automatic CDR Transmission

At file rotation time, if the *CLI/Interface/Accounting/BroadWorksCDRInterface/File/FTP* enabled flag is set, the Application Server uploads (using FTP) the latest CDR file to the billing system or mediation device, as configured with the *remoteHostName* parameter. The configured user ID and password are used (the *remotePassword* parameter is not shown in the Get command output however, but can be set nevertheless).

The CDR file is placed in the *remoteDirectory*, which can specify either a relative path (without a leading “/” character) or an absolute directory (with a leading “/” character). This parameter can also be left blank so that the file is put in the default FTP login directory. Since the *remoteDirectory* prefixes the CDR file name, it must be terminated with a “/” character (or a “\” character, depending on the target platform) if not empty.

In the advent of a transmission failure, an alarm is generated, and the CDR file is copied in the *not_sent* subdirectory (under */var/broadworks/billing*).

When the *not_sent* directory is not empty, an FTP retry mechanism applies.

Overall, the processing done at each rotation time is as follows when FTP sending is enabled:

- 1) The “active” file is renamed and moved to the “latest” directory (which should now be empty; see below).
- 2) The Execution Server (XS) attempts to FTP the file in the “latest” directory to the remote server.
 - On success, the file is moved to the “archive” directory
 - On failure, the file is moved to the “not_sent” directory
- 3) Expired files (older than *billingHoldTime*) are deleted from the “archive” directory.
- 4) Expired files (older than *billingHoldTime* + 7 days) are deleted from the “not_sent” directory.
- 5) The Execution Server attempts to FTP files from the “not_sent” directory to the remote server (no more than four at a time in the event that there are more than four files in the directory. The four oldest files are sent in such a case).
 - On success, the file is moved to the “archive” directory.
 - On failure, the file remains in the “not_sent” directory.

This leads to sending up to five files (the previously active, and four files from the “not_sent” directory) via FTP to the remote server at any given rotation time. In such a case, they are sent in sequence, one after the other, to avoid having too many FTP connections simultaneously.

A file that has failed to be transferred on the first attempt is retried at the next rotation time. For example, the next day if *billingRotationsPerDay* is set to “1”, after 15 minutes if *billingRotationsPerDay* is set to “96”, and so on. The retry continues for up to *billingHoldTime* + 7 days, at every file rotation.

3.2.5 Redundancy Implications

If Application Server redundancy is enabled, both servers generate their own separate set of CDRs and independently transmit the files to the billing system. The CDRs generated by both servers are complementary and contain different CDRs. Both are required by the billing system to have a complete set of billing CDRs.

3.3 CDR Output in Realtime Over Radius

When the Radius output is enabled, CDRs are encoded using a Radius [RFC 2866](#) compliant binary format, and sent in real-time using the Radius protocol to an external billing system, which must also have an [RFC 2866](#) compliant Radius interface.

When fully enabled, CDRs are sent upon the start of a call (origination or termination), upon answer, at the end of each Long Duration period, and upon release. Whether or not CDRs are sent upon start and/or answer is configurable, as well as generation of Long Duration CDRs. A CDR is always sent upon release. The content of a call's CDRs is cumulative, that is, each call detail record contains all available call information at the time it is generated.

Each Application Server uses a configurable pool of Radius servers that are used in a round-robin fashion. For details of this algorithm, including handling of failed destination servers, see the EV25550 IMS Radius Server Selection Feature Description for Release 14.

To configure the pool of Radius servers available to your Application Server, use the *Interface/Accounting/BroadWorksCRDInterface/RADIUS* level of the Application Server CLI. For details, see the [BroadWorks Application Server Command Line Interface Administration Guide](#).

3.4 Accounting Operations, Administration, Maintenance, and Provisioning

The BroadWorks CDR context at the CLI allows the system provider to control the following items. For the list of available CLI commands, see section [Command Line Interface Configuration](#) on page 352.

- Enable or disable the BroadWorks CDR accounting interface.
- CDR type options – The system provider can enable or disable the Start and End CDR types, the Long Duration CDR type, Interim CDR type generated for codec changes, and Interim CDR type generated for internal conferences.
- Centrex module option – The system provider can enable or disable the Centrex module.
- IP module option – The system provider can enable or disable the IP module.
- 3gpp module option – The system provider can enable or disable the 3gpp module.
- Failover information option – The system provider can enable or disable failover CDRs.
- Call type CDR generation – The system provider can enable or disable 1) intra-group CDR generation, and/or 2) terminating call CDR generation.
- Handle the *302 Moved Temporarily* on the network side for *route* setting.
- FieldIdMapping – Each individual CDR field can be enabled, disabled, or presented with a customizable *Field Id* on external interfaces rather than the internal ID (applies to all interfaces, file (CSV and XML), Radius, diameter [Rf and Ro]). When such a custom mapping is used, the system automatically adds a suffix “-custom” to the version of the CDR schema (that is, “r17.0” becomes “r17.0-custom”). The system parameter *customSchemaVersion* can be used to define a customized schema version string.

When defined, that value is reported in the field “customSchemaVersion” (if that field is enabled) of the Centrex module (if that module is itself enabled too) of all CDRs.

- Enable AVP Quotes option – Controls whether or not eventual surrounding quotes are removed or preserved from field 59 key.
- File options – The Application Server can write the CDRs file to local disk. The system provider must:
 - Enable or disable the file output.
 - Configure the file rotation rules.
 - Select the CDR format – The system provider can select the extensible markup language (XML) format or the comma-separated values (CSV) format.
 - Define the CDR buffer size – As CDRs are generated, they are buffered in RAM before being written to disk. The number of buffered CDRs ranges from 1 through 100, and is set to “10” by default.
 - Set FTP options – The system provider can enable and configure FTP parameters that allow the Application Server to send the latest CDR file to the billing system.
- Radius options – The Application Server can send CDRs in real-time using Radius. The system provider must:
 - Enable or disable the Radius output.
 - Select whether or not to send CDRs upon call start and/or call answer.
 - Define the shared secret (must be the same as the one defined on the destination server(s) – If two destination servers are used, the shared secret must be the same on both of them for a given Application Server).
 - Define the maximum number of transmissions and the delay between two subsequent transmissions.
 - Define a list of destination devices (Radius servers), with address and port.
- Diameter options – With the *useRealmFromCapabilitiesExchange* parameter, the Application Server can be configured to populate the Destination-Realm AVP in ACRs and CCRs with the one obtained during the CER/CEA exchange, rather than using the host part of the User-Name AVP recommended in [RFC 3588](#). For failover CDRs, the realm may not be available, and when so, the Application Server uses the one defined in the *defaultDestinationRealm* system parameter.
- Diameter offline billing options – The Application Server can send CDRs in real-time for offline accounting using Diameter. The system provider must:
 - Enable or disable the Offline Diameter output.
 - Select whether to send regular BroadWorks CDR information using vendor-specific attribute-value pairs (AVPs).
 - Select whether to send 3gpp-specific CDR information using standard AVPs.
 - Select whether to queue CDRs in non-volatile storage when the destination is not reachable, and if so, for how many hours.
 - Select the routing mode.
- Diameter online billing options – The Application Server can send CDRs in real-time for online accounting using Diameter. The system provider must:
 - Enable or disable the Online Diameter output.
 - Enable or disable simultaneous online and offline billing.
 - Select whether to send regular BroadWorks CDR information using vendor-specific attribute-value pairs (AVPs).
 - Select default values for the type of unit determination (centralized or decentralized), the default amount of credits requested during interrogation, the amount of time re-authorization occurs before credit exhaustion, and the default credit control failure handling.
 - The time at which the low credit warning tone is generated.
 - Select the routing mode.
 - Configure the timeout value for Ro transactions done during call setup (txTimerSeconds).
- Diameter default charging function addresses (CFA) – These addresses are common to offline and online billing. The system provider must:

- Define a list of default charging function addresses (CFA). The CFA defines where the diameter accounting requests (ACRs) and diameter credit control requests (CCRs) are sent. In IP Multimedia Subsystem (IMS) mode, the Application Server uses the values received over Session Initiation Protocol (SIP) in the P-Charging-Function-Addresses (P-CFA) header if present, or else it uses the configured default values as the destination of the ACRs and CCRs, as well as for generating a P-CFA value in SIP messages. In non-IMS mode, the Application Server always uses the configured default value as ACR and CCR destinations.

4 Call Detail Record Definition

The BroadWorks CDR structure is designed to provide the operator with a simple method to extract information required for call billing. This chapter describes the following:

- CDR types
- CDR modules
- Field descriptions
- OriginalCalledReason and RedirectingReason
- Related Call Id
- Redirection example
- CDR format

4.1 Call Detail Record Types

BroadWorks supports the following BroadWorks CDR types:

- **Start:** This type of CDR is optional and is enabled or disabled via the *enableCDRStartEnd* parameter. It is generated at the beginning of a cycle. This CDR is generated at the beginning of an accounting file or when the Radius output is enabled.
- **End:** This type of CDR is optional and is enabled or disabled via the *enableCDRStartEnd* parameter. It is generated at the end of a cycle. This CDR is generated at the end of an accounting file or when the Radius output is disabled.
- **Long Duration:** This type of CDR is optional and is enabled or disabled via the *enableCDRLongDuration* parameter. It is generated when a call lasts more than the configured long call duration (for example, 10 minutes). The long call duration is configurable via the *CLI/Interface/Accounting/BroadWorksCDRInterface* context. It is repeated as often as required for a given call.
- **Interim:** This type of CDR is optional and is used for the following cases:
 - codec changes
 - conference reporting
 - location changes
 - Access Network Information changes (apply only to the Execution Server)
 - "scc" service extension changes (apply only to the Execution Server)

Each case can be enabled or disabled independently, through the following parameters:

- For reporting codec changes during a call:
 - Application Server: *enableCDRCodecChanges*
 - Execution Server: *enableCodecChanges*
- For reporting the end of conference participation when it happens before the end of a call:
 - Application Server: *enableCDRInternalConference*
 - Execution Server: *enableInternalConference*
- For reporting location changes during a call:
 - Application Server: *enableCDRLocationChange*
 - Execution Server: *enableLocationChanges*
- For reporting Access Network Information changes during a call:
 - Application Server: N/A
 - Execution Server: *enableAccessNetworkChanges*
- For reporting "scc" service extension changes during a call:
 - Application Server: N/A
 - Execution Server: *enableCentralizationContinuityChanges*

- **Normal:** This type of CDR is generated for every call originated by or terminated to a BroadWorks user.
- **Failover:** This type of CDR is optional and is enabled or disabled via the *enableFailoverInfo* parameter. It is generated when a party hangs up after a failover condition.

4.2 Call Detail Record Modules

Call detail records (CDR) are made up of the following modules:

- **Header:** This module of the CDR indicates the beginning and type of the record and provides information that uniquely identifies the CDR.
- **Basic:** This module of the CDR provides the basic accounting information required for duration-based billing. It includes information about the parties in the call, and times (start, answer, release). A service provider interested only in time-based billing could use only this module and could disable or ignore the other modules.
- **Centrex:** This module of the CDR provides group, department, account/authorization codes, redirection, carrier identification code, and services information.
- **IP:** This module of the CDR provides IP-level information for the route, network call-id, codec, and access device's IP address and access side call-id. The two formers can be used for inter-switch CDR correlation.
- **3gpp:** This module of the CDR provides 3rd Generation Partnership Project (3gpp)-specific information.
- **PartialCallBegin:** This module of the CDR provides correlation information for partial CDRs. These are generated because of an Application Server shutdown, force lock, or a session audit failure.
- **PartialCallEnd:** This module of Failover CDRs provides correlation information.

Not all modules are used for all CDRs. Depending on the CDR type, only a subset of modules is used. The following table maps the CDR types to modules. Note that *M* represents *mandatory* and *O* represents *optional*.

Table 6: CDR Types to Modules

CDR Type/ Module	Header	Basic	Centrex	IP	3gpp	PartialCall Begin	PartialCall End
Start	M						
End	M						
Long Duration	M	M	O	O	O		
Interim	M	M	O	O	O		
Normal	M	M	O	O	O	O	
Failover	M	M					M

Section [Field Description](#) on page 61 defines the module each field belongs to. In addition, section [XML File Format](#) on page 309 shows the XML structure with the fields grouped inside module elements.

4.3 Field Description

The following table describes each of the fields of the BroadWorks CDRs. The following information is provided:

Table 7: Call Detail Record Field Descriptions

Field	Description
<i>Field Id</i>	This row contains the field number.
<i>Failover Id</i>	This row contains the CSV column for failover CDRs (applicable to the CSV format only). Note that only fields from the Header and Basic modules have Failover Ids.

Field	Description
<i>Module</i>	This row identifies the module containing this field: one of Header, Basic, Centrex, IP, 3gpp, Partial Call Begin, or Partial Call End.
<i>Feature</i>	For fields introduced in or after Release 18.0, this row identifies the ID of the Feature Request that introduced this field.
<i>Release</i>	For fields introduced in or after Release 13.0, this row identifies the first major release where this field appears.
<i>CLI Name</i>	This row identifies the name used in the command line interface for this field.
<i>XML Tag</i>	This row contains the XML tag for this field (applicable to XML format only).
<i>Service Name</i>	This row contains the value of the <serviceName> XML tag for service extensions (applicable to the XML format only).
<i>Length</i>	This row provides an indication of the maximum length of all CDR fields. Note that many fields report data that is unbounded in nature and CDRs report the full values. For this reason, billing mediation systems must either be flexible enough to accept longer values than indicated in the following table, or truncate the fields to the lengths indicated in the following table and accept the loss of information occasionally.
<i>Example Data</i>	This row provides a possible value for this field.
<i>Description</i>	This row provides a description of the field.

Note that all fields are optional, except for the following two mandatory fields:

- [recordId \(1\)](#)
- [type \(3\)](#)

4.3.1 version (0)

The following table describes the CDR field *version* (0).

Table 8: Field version (0)

Field Id	0
Failover Id	0
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	version
XML tag	Not applicable
Service Name	Not applicable
Length	6
Example Data	18.0
Description	Version of the CDR content. This field is used only for the Radius output. File outputs (CSV and XML formats) carry this information in the file header rather than per CDR.

4.3.2 recordId (1)

The following table describes the CDR field *recordId* (1).

Table 9: Field recordId (1)

Field Id	1
Failover Id	1
Module	Header
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	date, eventCounter, systemId or systemTimeZone
XML tag	recordId
Service Name	Not applicable
Length	72
Example Data	000000012380da145220020517142536.8541-040000
Description	<p>This field is comprised of four parts: <i>eventCounter</i>, <i>systemId</i>, <i>date</i>, and <i>systemTimeZone</i>. Together, these values uniquely identify the CDR. In XML the <i>recordId</i> element contains the <i>eventCounter</i>, <i>systemId</i>, <i>date</i>, and <i>systemTimeZone</i> elements. In the other formats, the four parts are concatenated into a single field.</p> <p>The <i>eventCounter</i> is a sequential number starting at 1, and wraps again to 1 after reaching 2147483647. The sequence is restarted if the Application Server is restarted. When this happens, a CDR of type "start" is generated with an eventCounter of 1. The counter is padded to 10 characters with leading zeros.</p> <p>The <i>systemId</i> is a unique identifier for the system that generated the CDR; this corresponds to the UNIX host ID. It is 8 characters on Solaris and either 12 or 36 characters on Linux².</p>

4.3.3 serviceProvider (2)

The following table describes the CDR field *serviceProvider* (2).

Table 10: Field serviceProvider (2)

Field Id	2
Failover Id	2
Module	Header
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	serviceProvider
XML tag	serviceProvider
Service Name	Not applicable
Length	30
Example Data	XYZCompany
Description	The service provider ID. This field is omitted for system services.

² On Linux systems, the system ID captures the MAC address by default. In this case, the length is 12. It can capture the UUID if the property *bw.accounting.useuuidforlinuxsystemid* is set to "true". In this case, the length is 36.

4.3.4 type (3)

The following table describes the CDR field *type* (3).

Table 11: Field type (3)

Field Id	3
Failover Id	3
Module	Header
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	type
XML tag	type
Service Name	Not applicable
Length	13
Example Data	Start
Description	Values can be "Start", "End", "Long Duration", "Normal", "Interim", or "Failover".

4.3.5 userNumber (4)

The following table describes the CDR field *userNumber* (4).

Table 12: Field userNumber (4)

Field Id	4
Failover Id	4
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	userNumber
XML tag	userNumber
Service Name	Not applicable
Length	16
Example Data	+12403641500
Description	<p>The E.164 number of the user generating (that is, accountable for) this CDR³ or the extension if the user has no national number.</p> <p>Always present except in some failover-type CDRs when a network party hangs up.</p> <p>With the introduction of the Enterprise Trunking feature (EV 64960), it is possible for the <i>userNumber</i> CDR field to be empty, in this scenario, that is, when a non-BroadWorks user originates a call through a trunk group, and the Application Server is in IMS mode, the trunk group allows unscreened calls, and its pilot user has no DN and no extension.</p> <p>For a system service, this field is the system service number. If the system service is the System Voice Portal, this field is the System Voice Portal number if assigned, or the Network Voice Portal Number otherwise.</p> <p>NOTE: If the <i>userNumber</i> field is empty, then the identity of the user responsible for the charges can be retrieved from the:</p> <ul style="list-style-type: none"> • User ID in the Basic module • <i>primaryDeviceLinePort</i> field in the 3gpp module (IMS mode only)

³ For the voice mail "transfer on 0" option during message recording, and for automatic callback of the caller when listening to a voice message in the voice portal, the *userNumber* is set to the number of the voice mailbox owner rather than the voice portal number.

4.3.6 groupNumber (5)

The following table describes the CDR field *groupNumber* (5).

Table 13: Field groupNumber (5)

Field Id	5
Failover Id	5
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	groupNumber
XML tag	groupNumber
Service Name	Not applicable
Length	16
Example Data	+12403641000
Description	The E.164 group CLID of the user generating the CDR. This field is omitted for system services or if the group CLID is not configured.

4.3.7 direction (6)

The following table describes the CDR field *direction* (6).

Table 14: Field direction (6)

Field Id	6
Failover Id	6
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	direction
XML tag	direction
Service Name	Not applicable
Length	11
Example Data	Originating
Description	Values can be "Originating" or "Terminating". "Originating" is used when the user only activates a service and hangs up (for example, CFA programming). Always present except in failover-type CDRs.

4.3.8 callingNumber (7)

The following table describes the CDR field *callingNumber* (7).

Table 15: Field callingNumber (7)

Field Id	7
Failover Id	7
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callingNumber
XML tag	callingNumber
Service Name	Not applicable
Length	161
Example Data	+12403641500
Description	<p>This is the Calling party's number. It always reflects the actual calling party, even when redirection occurs. Provided as an E.164 number except in the following cases:</p> <ul style="list-style-type: none"> The calling party is a BroadWorks user and this user only has an extension provisioned; this field contains the user's extension. The calling party is not a BroadWorks user, and the calling party information was obtained from a third-party system. In this case, this field may contain a URL. <p>Always present except in failover-type CDRs.</p>

4.3.9 callingPresentationIndicator (8)

The following table describes the CDR field *callingPresentationIndicator* (8).

Table 16: Field callingPresentationIndicator (8)

Field Id	8
Failover Id	8
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callingPresentationIndicator
XML tag	callingPresentationIndicator
Service Name	Not applicable
Length	20
Example Data	public
Description	The presentation indicator of the calling number. Values can be "Public", "Unavailable", or "Anonymous".

4.3.10 calledNumber (9)

The following table describes the CDR field *calledNumber* (9).

Table 17: Field calledNumber (9)

Field Id	9
Failover Id	9
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	calledNumber
XML tag	calledNumber
Service Name	Not applicable
Length	161
Example Data	6600
Description	<p>For originating CDRs, this is the result of the Application Server translations⁴ of the dialed digits (before the query to the Network Server). Identical to the dialed digits if pre-translations have no effect.</p> <p>The <i>calledNumber</i> may or may not include the outside access code, depending on the configuration of the <i>includeCodeForNetworkTranslationsAndRouting</i> system parameter in <i>AS_CLI/SubscriberMgmt/ServiceProvider/Policy/DialPlan/AccessCodes</i>.</p> <p>For terminating CDRs, this is the number of the user generating the CDR.</p> <p>Format is a number that can be dialed, (which includes E.164), and possibly a URL, if URL-dialing was used.</p> <p>Always present except in failover-type CDRs.</p>

4.3.11 startTime (10)

The following table describes the CDR field *startTime* (10).

Table 18: Field startTime (10)

Field Id	10
Failover Id	10
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	startTime
XML tag	startTime
Service Name	Not applicable
Length	18
Example Data	20020509180345.186
Description	<p>The time when the address is sent to or received from the system.</p> <p>The <i>startTime</i> is presented in the Coordinated Universal Time (UTC)/Greenwich Mean Time (GMT) time zone.</p> <p>Always present except in failover-type CDRs.</p>

⁴ Application Server translations handle digits, such as, feature access codes or speed codes, or resolve an extension to an E.164 number for intra-group calls.

4.3.12 userTimeZone (11)

The following table describes the CDR field *userTimeZone* (11).

Table 19: Field userTimeZone (11)

Field Id	11
Failover Id	11
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	userTimeZone
XML tag	userTimeZone
Service Name	Not applicable
Length	8
Example Data	0-040000
Description	<p>The time zone of the user (an offset from GMT). The format is 0 (standard time) or 1 (daylight savings), followed by + or -, followed by the 6-digit offset (HHMMSS). The offset is adjusted for daylight savings.</p> <p>The <i>userTimeZone</i> is the one that was effective at the beginning of the call.</p> <p>Always present except in some failover-type CDRs, that is, when a network party hangs up.</p>

4.3.13 answerIndicator (12)

The following table describes the CDR field *answerIndicator* (12).

Table 20: Field answerIndicator (12)

Field Id	12
Failover Id	12
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	answerIndicator
XML tag	answerIndicator
Service Name	Not applicable
Length	19
Example Data	Yes
Description	<p>Yes, No, or Yes-PostRedirection. The latter means the call was answered, but at a post-redirection location (such as, voice mail or a call forward destination) rather than at the user's phone.</p> <p>Always present except in failover-type CDRs.</p> <p>When answer confirmation is used and the answer is unconfirmed, the value depends on the <code>bw.accounting.setAnswerIndicatorToYesForUnconfirmedAnswer</code> container option. When false, the default, the field is set to No. When true, the field is set to Yes.</p>

4.3.14 answerTime (13)

The following table describes the CDR field *answerTime* (13).

Table 21: Field answerTime (13)

Field Id	13
Failover Id	13
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	answerTime
XML tag	answerTime
Service Name	Not applicable
Length	18
Example Data	20020509180350.186
Description	<p>The time when the two-way media connection is established between the user and the other party. This happens when the terminating endpoint answers the call.⁵</p> <p>The answer time is presented in the UTC/GMT time zone.</p> <p>This field is omitted if the answer message is not received.</p> <p>When answer confirmation is used and the answer is unconfirmed, the value depends on the <code>bw.accounting.setAnswerIndicatorToYesForUnconfirmedAnswer</code> container option. When false, the default, the field is empty. When true, the field is set to the same value as <code>answerConfirmationInvocationTime</code>.</p>

⁵ The timestamps for answer and release are recorded when a packet is received on the UDP or TCP listening port on the Application Server.

For *answerTime*, the timestamp is recorded when a 200 OK comes to the Application Server in response to an INVITE, that is:

- The Application Server reads a packet on its UDP port at t1. An event is created, and t1 is recorded with the event.
- The event is placed in a sequence of queues for decoding and processing. The total queue delays may be up to 200 ms with an average total queue delay of less than 10 ms before the event is actually processed.
- Once the event is processed, the t1 timestamp is recorded in the CDR.

For *releaseTime*, the timestamp is recorded when a BYE comes to the Application Server, that is:

- The Application Server reads a packet on its UDP port at t2. An event is created, and t2 is recorded with the event.
- The event is placed in a sequence of queues for decoding and processing. The total queue delays may be up to 200 ms with an average total queue delay of less than 10 ms before the event is actually processed.
- Once the event is processed, the t2 timestamp is recorded into the CDR.

The call duration is computed as the difference between the release time and answer time. Given that the Application Server records the timestamps as soon as the packets are received on the socket, there is virtually no delay (that is, well under one ms processing time to receive the packet from the socket and record the timestamp) in the recorded timestamp for the packet. Decode and call processing queue delays have no impact on the recorded timestamps. Therefore, the Application Server timestamps used to determine the duration of the call are accurate, and well within the 500 ms tolerance defined by regulations in some countries.

It is not possible in general to guaranty that messages from different subscribers are processed in the same order they are received. In rare race conditions, an answer message from the terminator may be processed before the originator release, even if the release message was received a few milliseconds before the answer. This would result in a call release time occurring before the answer time, which is a direct consequence of the timestamp being taken when the message was received instead of processed. Other similar scenarios are possible. For billing purposes, if the release time occurs before the answer time, this call should be considered unanswered, or having a zero call duration.

4.3.15 releaseTime (14)

The following table describes the CDR field *releaseTime* (14).

Table 22: Field releaseTime (14)

Field Id	14
Failover Id	14
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	releaseTime
XML tag	releaseTime
Service Name	Not applicable
Length	18
Example Data	20020509180420.186
Description	<p>The time when the call is released.</p> <p>This time should correspond to the moment the call is released by the system, and not necessarily when one party hangs up, since this does not always mean the call is released (for example, Emergency/911 calls).</p> <p>The release time is presented in the UTC/GMT time zone.</p> <p>This field is always included for normal and failover CDRs, but omitted for <i>LongDuration</i> CDRs.</p>

4.3.16 terminationCause (15)

The following table describes the CDR field *terminationCause* (15).

Table 23: Field terminationCause (15)

Field Id	15
Failover Id	15
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	terminationCause
XML tag	terminationCause
Service Name	Not applicable
Length	3
Example Data	016
Description	<p>Code capturing what action caused the call release.</p> <p>The following causes are used by the Application Server by default (that is, if not customized using feature EV 18143).</p> <ul style="list-style-type: none"> • 001 - Unassigned number (user not found) • 003 - No route to destination (request failure or unavailable failure) • 016 - Normal • 017 - User busy • 019 - User alerted, no answer • 020 - User not available (for example, SIP phone not registered) • 021 - Call rejected (forbidden or global failure) • 027 - Destination out of order (server request failure) • 031 - Network disconnect (Normal unspecified) • 041 - Temporary Failure • 086 - Call Cleared • 111 - Protocol error (unknown release code) <p>This field is always included for normal CDRs, but omitted for LongDuration CDRs.</p> <p>041 is used when a CDR is generated, although the actual call may still be active (as a result of an audit that timed out, because the Application was force locked or due to a graceful shutdown of the Application Server).</p> <p>086 is used when a call is forced to release as a result of the Kill or Release command of the diagnostic tool in the CLI interface. 086 is also used when the remote party is intra-group and its call is killed or released with the CLI.</p> <p>019 is used when a call is torn down by the Application Server because it has reached the "Maximum Call Time for Unanswered Calls".</p> <p>031 is used when a call is torn down by the Application Server because it has reached the "Maximum Call Time for Answered Calls".</p>

4.3.17 networkType (16)

The following table describes the CDR field *networkType* (16).

Table 24: Field networkType (16)

Field Id	16
Failover Id	16
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	4
Example Data	VoIP
Description	Always set to "VoIP". Not generated in XML format.

4.3.18 carrierIdentificationCode (17)

The following table describes the CDR field *carrierIdentificationCode* (17).

Table 25: Field carrierIdentificationCode (17)

Field Id	17
Failover Id	17
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	carrierIdentificationCode
XML tag	carrierIdentificationCode
Service Name	Not applicable
Length	4
Example Data	7788
Description	The Carrier Identification Code, if and as returned, by the Network Server contacts list in a "302 Moved temporarily" SIP message. In the case of CAC dialing (101xxxx dialed), this field is not populated with xxxx.

4.3.19 dialedDigits (18)

The following table describes the CDR field *dialedDigits* (18).

Table 26: Field dialedDigits (18)

Field Id	18
Failover Id	18
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	dialedDigits
XML tag	dialedDigits
Service Name	Not applicable
Length	161
Example Data	*66
Description	<p>Digits as dialed by the user, before pre-translations. As a result, this field reports feature access codes (FAC) used for invoking features such as Last Number Redial or Call Return. When a user must dial an outside access code (for example, 9+) before dialing a number, this access code is reported, as well as the digits dialed thereafter.</p> <p>When pre-translations have no effect, the <i>dialedDigits</i> field contains the same data as the <i>calledNumber</i> field.</p> <p>This field is only used for originating CDRs, and is omitted for terminating CDRs.</p>

4.3.20 callCategory (19)

The following table describes the CDR field *callCategory* (19).

Table 27: Field *callCategory* (19)

Field Id	19
Failover Id	19
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callCategory
XML tag	callCategory
Service Name	Not applicable
Length	8
Example Data	private
Description	<p>For intra-group calls, this field is set to "private".⁶</p> <p>For non-intra-group calls, this field captures the call category computed by the Network Server and returned in the 302 response. It can be "private", "local", "national", "internat", "intra-lat", "inter-lat", "emerg", and "other". For more information, see Appendix A: Information Reported by Network Server.</p> <p>This field can only be reported in originating CDRs, and is always omitted for terminating CDRs. It is also omitted if the Network Server does not return a call category in the 302 response.</p>

4.3.21 networkCallType (20)

The following table describes the CDR field *networkCallType* (20).

Table 28: Field *networkCallType* (20)

Field Id	20
Failover Id	20
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	networkCallType
XML tag	networkCallType
Service Name	Not applicable
Length	4
Example Data	nil
Description	<p>For intra-group calls, this field is omitted.</p> <p>For non-intra-group calls, this field captures the call type identified by the Network Server and returned in the 302 response. For more information, see Appendix A: Information Reported by Network Server.</p> <p>This field can only be reported in originating CDRs and is always omitted for terminating CDRs. It is also omitted if the Network Server does not return a call type in the 302 response.</p>

⁶ Note that Remote Office termination/origination legs and BroadWorks Anywhere termination legs always use a network (non-intra-group) call to reach the remote location. If the network destination is the Network Server, the enhanced translations are run and the CDR contains the usual information obtained from the Network Server. If the network destination is not the Network Server (for example, the INVITE is sent to a CSCF in IMS deployments, and translations are performed by the CSCF), then the Application Server does not obtain the enhanced translation information from the Network Server and as a result, the CDR does not report that enhanced translation information.

4.3.22 networkTranslatedNumber (21)

The following table describes the CDR field *networkTranslatedNumber* (21).

Table 29: Field networkTranslatedNumber (21)

Field Id	21
Failover Id	21
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	networkTranslatedNumber
XML tag	networkTranslatedNumber
Service Name	Not applicable
Length	161
Example Data	600
Description	<p>This field captures the result of the translations of the <i>calledNumber</i> by the Network Server, as returned in the user part of the contact within the 302 response. The Execution Server can apply Domain-Based Routing on top of the Network Server translation result, adding a prefix to the <i>calledNumber</i> returned in the Network Server 302 response. When Domain-Based Routing is applied to a call, this field captures the result of the Domain-Based Routing.</p> <p>This field is only provided in CDRs of originating, non-intra-group calls.</p>

4.3.23 networkTranslatedGroup (22)

The following table describes the CDR field *networkTranslatedGroup* (22).

Table 30: Field networkTranslatedGroup (22)

Field Id	22
Failover Id	22
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	networkTranslatedGroup
XML tag	networkTranslatedGroup
Service Name	Not applicable
Length	32
Example Data	CompanyA
Description	<p>This field reports the optional group ID of the called number, if any (such as when the called number maps to a private dial plan), in the result of the translations of the <i>calledNumber</i> by the Network Server, as returned in the user part of the contact within the 302 response.</p> <p>This field is only provided in CDRs of originating, non-intra-group calls, and only if returned by the Network Server.</p>

4.3.24 releasingParty (23)

The following table describes the CDR field *releasingParty* (23).

Table 31: Field releasingParty (23)

Field Id	23
Failover Id	23
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	releasingParty
XML tag	releasingParty
Service Name	Not applicable
Length	6
Example Data	local
Description	<p>Indicates which party released the call first. Values can be "local", "remote" or "none".</p> <p>Value "local" is used when the local user (for which the CDR is generated) has released the call first, and value "remote" is used when the far-end party releases the call first.</p> <p>Value "none" is used when the call has not been released, but a partial CDR is generated because of an Application Server shut down or force lock, or because of a session audit failure. These events do not cause the Application Server to actually release the calls. In this case, the <i>terminationCause</i> is 041.</p> <p>For failover-type CDRs, the value is "local" if the releasing user is hosted on BroadWorks and "remote" otherwise (for example, call release coming from a network gateway).</p>

4.3.25 route (24)

The following table describes the CDR field *route* (24).

Table 32: Field route (24)

Field Id	24
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	route
XML tag	route
Service Name	Not applicable
Length	86
Example Data	192.168.8.52:5060
Description	<p>This field is set to "Group" for non-distributed intra-group calls.</p> <p>This field is set to "Enterprise" for non-distributed Application Server enterprise calls (calls between two users of the same enterprise, where the enterprise is defined on the Application Server).</p> <p>For network calls:</p> <p>For originating call detail records, it is the host portion of the request-URI of the outgoing SIP INVITE, for which a proper response is received⁷</p> <p>NOTE 1: If the caller releases before a proper response is received, this field is populated with "unconfirmed".</p> <p>NOTE 2: Proper response includes the second <i>302 Moved Temporarily</i> if <i>use3xxAsRouteConfirmationForAccounting</i> is set to "true". Otherwise, the 302 response is not considered as a proper response for route confirmation.</p> <p>For terminating call detail records, it is the host portion of the caller's identity taken from the appropriate header of the incoming INVITE⁸</p> <p>If the host portion is not present (in case of a tel-url), the route is set to "unavailable".</p> <p>Network calls that originate and terminate on the same Application Server (spiraling) generate two independent call detail records and the route is set as described here, therefore showing the Application Server itself as the route.</p>

⁷ This usually corresponds to the route over which the call is sent, but can be a domain with URL dialing.

⁸ This usually corresponds to the route over which the call arrived, but could be a domain if the caller's identity is a SIP-URL.

4.3.26 networkCallID (25)

The following table describes the CDR field *networkCallID* (25).

Table 33: Field networkCallID (25)

Field Id	25
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	networkCallID
XML tag	networkCallID
Service Name	Not applicable
Length	161
Example Data	BW181215444875452823@192.168.8.18
Description	<p>This field is omitted for intra-group calls.</p> <p>For non-intra-group calls:</p> <ul style="list-style-type: none"> For originating call detail records, it is the SIP Call ID of the outgoing SIP INVITE. For terminating call detail records, it is the SIP Call ID of the incoming SIP INVITE. This field is omitted for network calls sent out over non-SIP route (for example, MGCP trunks). <p>In IMS mode, all calls that generate CDRs are routed through the network, including intra-group calls. Therefore, the <i>networkCallID</i> field is always present in all CDRs.</p>

4.3.27 codec (26)

The following table describes the CDR field *codec* (26).

Table 34: Field codec (26)

Field Id	26
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	codec
XML tag	codec
Service Name	Not applicable
Length	30
Example Data	L16/16000/2
Description	<p>The first choice in the codec list negotiated during call setup.</p> <p>For multi-media calls, a list of codecs (space separated) is provided, reporting the first codec choice for each media.</p> <p>This field is omitted if the call is released before the codec negotiation is completed.</p> <p>This field is present when the codec changes (in Interim CDRs) and when a call ends (in Normal CDRs, and only if a codec is present). When codecs change during a call, an Interim CDR is issued reporting the previous codec(s) and codecUsage.</p>

4.3.28 accessDeviceAddress (27)

The following table describes the CDR field *accessDeviceAddress* (27).

Table 35: Field *accessDeviceAddress* (27)

Field Id	27
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	accessDeviceAddress
XML tag	accessDeviceAddress
Service Name	Not applicable
Length	80
Example Data	192.168.13.30
Description	<p>The IP address (numerical or FQDN) where the user (as reported in the Basic module) receives the media of the session. The format is IP/n, where "n" is provided only if used in the user's SDP, and if so, denotes a range of IP addresses as defined in RFC 2327: Session Description Protocol.</p> <p>If the session involves multiple media streams (for example, audio and video), the IP address for each stream is provided as space-separated values. The count and order shown matches the count and order of the <i>codec</i> field (when the <i>codec</i> field is present). The <i>accessDeviceAddress</i> may change from one interim CDR to the next CDR (interim or normal).</p> <p>When Remote Office is active, two call detail records are always generated for any call (incoming or outgoing) involving the user. One call detail record is the usual call detail record generated for the user, and the extra call detail record is the one that captures the call made to reach the remote location.</p> <p>In the call detail record associated with the normal call leg, the <i>accessDeviceAddress</i> reflects the address of the remote location instead of the user's normal access device.</p> <p>In the call detail record associated with the call to the remote location, the <i>accessDeviceAddress</i> field is not provided.</p> <p>This field is omitted if the call is redirected.</p> <p>This field is omitted from the terminating CDR if the call is released before the terminating device provided its SDP.</p> <p>NOTE: If the user's access device is behind a Relay Server or some other proxy, the <i>accessDeviceAddress</i> field is populated with the Relay Server or proxy address. This may be the case only for devices that register to the Application Server (such as, SIP phones, ATA, Windows Messenger client, and so on).</p>

4.3.29 accessCallID (28)

The following table describes the CDR field *accessCallID* (28).

Table 36: Field *accessCallID* (28)

Field Id	28
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	accessCallID
XML tag	accessCallID
Service Name	Not applicable
Length	161
Example Data	1477660951mkkp@192.168.8.73
Description	<p>This field is present when the Application Server reaches a BroadWorks user's device, either directly or <i>via</i> CSCF in IMS mode. It records the SIP Call ID that allowed the Application Server to make the connection to the device.</p> <p>For originating call detail records, it records the SIP Call ID of the incoming SIP INVITE.</p> <p>For terminating call detail records, it records the SIP Call ID of the outgoing SIP INVITE.</p> <p>It is omitted for MGCP users as well as for virtual subscribers, such as the voice portal, who do not have physical devices. It is also omitted when the user's device is not active during the call (for example, when the call is forwarded automatically without the user's device ringing).</p>

4.3.30 spare (29)

The following table describes the CDR spare field (29).

Table 37: Field (29)

Field Id	29
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsolete

4.3.31 failoverCorrelationId (30)

The following table describes the CDR field *failoverCorrelationId* (30).

Table 38: Field failoverCorrelationId (30)

Field Id	30
Failover Id	24
Module	Partial Call Begin ⁹ and Partial Call End
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	failoverCorrelationId
XML tag	failoverCorrelationId
Service Name	Not applicable
Length	161
Example Data	aaln/s1/2@[192.168.13.30]
Description	<p>In the PartialCallBegin module, this field contains the local call ID that is used to correlate the call detail records when the user then hangs up.</p> <p>In the PartialCallEnd module, this field contains the local call ID that can be used to correlate the failover CDR with the Normal type partial CDR (containing a PartialCallBegin module) that was previously generated.</p> <p>Note that the format is different depending on the endpoint type (for example, or MGCP).</p>

4.3.32 spare (31)

The following table describes the CDR spare field (31).

Table 39: Field (31)

Field Id	31
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsolete

⁹ A PartialCallBegin module is not present in the case of virtual users such as Auto Attendants or call centers, as well as parties involved in certain redirections (such as Call Forwarding Always), since these users do not have a physical device. There is no failover-type CDR for these parties.

4.3.33 group (32)

The following table describes the CDR field *group* (32).

Table 40: Field group (32)

Field Id	32
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	group
XML tag	group
Service Name	Not applicable
Length	30
Example Data	pizzapizza
Description	The user's customer group ID. This field is omitted for system services.

4.3.34 department (33)

The following table describes the CDR field *department* (33).

Table 41: Field department (33)

Field Id	33
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	department
XML tag	department
Service Name	Not applicable
Length	255
Example Data	marketing
Description	The user's department name.

4.3.35 accountCode (34)

The following table describes the CDR field *accountCode* (34).

Table 42: Field accountCode (34)

Field Id	34
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	accountCode
XML tag	accountCode
Service Name	Not applicable
Length	14
Example Data	4567
Description	The account code, if dialed.

4.3.36 authorizationCode (35)

The following table describes the CDR field *authorizationCode* (35).

Table 43: Field authorizationCode (35)

Field Id	35
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	authorizationCode
XML tag	authorizationCode
Service Name	Not applicable
Length	14
Example Data	
Description	<p>The authorization code collected by the Account/Authorization Codes or Enhanced Outgoing Calling Plan services, if dialed.</p> <p>Note: This field does not record authorization codes collected by the various Communication Barring services.</p>

4.3.37 originalCalledNumber (36)

The following table describes the CDR field *originalCalledNumber* (36).

Table 44: Field originalCalledNumber (36)

Field Id	36
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	originalCalledNumber
XML tag	originalCalledNumber
Service Name	Not applicable
Length	161
Example Data	+13331111534
Description	When the call has been redirected one or more times, this field reports the first redirecting number. For a system service, this field is the system service number. If the system service is the System Voice Portal, this field is the System Voice Portal number if assigned, or the Network Voice Portal number otherwise. The format follows the same rules as those of the callingNumber (7).

4.3.38 originalCalledPresentationIndicator (37)

The following table describes the CDR field *originalCalledPresentationIndicator* (37).

Table 45: Field originalCalledPresentationIndicator (37)

Field Id	37
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	originalCalledPresentationIndicator
XML tag	originalCalledPresentationIndicator
Service Name	Not applicable
Length	20
Example Data	Public
Description	Presentation Indicator for the OriginalCalledNumber. For values, see the callingPresentationIndicator (8).

4.3.39 originalCalledReason (38)

The following table describes the CDR field *originalCalledReason* (38).

Table 46: Field originalCalledReason (38)

Field Id	38
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	originalCalledReason
XML tag	originalCalledReason
Service Name	Not applicable
Length	40
Example Data	unconditional
Description	Redirection Reason for the OriginalCalledNumber.

4.3.40 redirectingNumber (39)

The following table describes the CDR field *redirectingNumber* (39).

Table 47: Field redirectingNumber (39)

Field Id	39
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	redirectingNumber
XML tag	redirectingNumber
Service Name	Not applicable
Length	161
Example Data	+13331111534
Description	<p>When the call has been redirected one or more times, this field reports the last redirecting number.</p> <p>This value is the same as <i>userNumber</i> in an originating CDR generated for a BroadWorks user initiating a redirection (Call Forwarding, Transfer, Simultaneous Ringing, and so on)¹⁰.</p> <p>When the call has been redirected only once, this field is equal to the <i>originalCalledNumber</i>.</p> <p>The format follows the same rules as those for the <i>callingNumber</i>.</p>

¹⁰ Used, except for the voice mail "transfer on 0" option during message recording and for automatic callback of the caller when listening to a voice message. In these scenarios, the redirecting number is set to the voice portal number, whereas noted earlier; the *userNumber* is set to the number of the voice mailbox owner rather than the voice portal number.

4.3.41 redirectingPresentationIndicator (40)

The following table describes the CDR field *redirectingPresentationIndicator* (40).

Table 48: Field redirectingPresentationIndicator (40)

Field Id	40
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	redirectingPresentationIndicator
XML tag	redirectingPresentationIndicator
Service Name	Not applicable
Length	20
Example Data	Public
Description	Presentation Indicator for the RedirectingNumber. For values, see the callingPresentationIndicator (8) .

4.3.42 redirectingReason (41)

The following table describes the CDR field *redirectingReason* (41).

Table 49: Field redirectingReason (41)

Field Id	41
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	redirectingReason
XML tag	redirectingReason
Service Name	Not applicable
Length	40
Example Data	deflection
Description	Redirection Reason for the <i>RedirectingNumber</i> .

4.3.43 chargeIndicator (42)

The following table describes the CDR field *chargeIndicator* (42).

Table 50: Field chargeIndicator (42)

Field Id	42
Failover Id	25
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	chargeIndicator
XML tag	chargeIndicator
Service Name	Not applicable
Length	1
Example Data	n
Description	<p>Indicates whether the call is chargeable or not.</p> <p>The following values are valid for the field per ITU-T Q.GTD.1:</p> <ul style="list-style-type: none"> • 0 - no indication • y - charge • n - no charge <p>When the call is unanswered, the value is always "n", except for a terminating CDR where the call is not intra-group, or Application Server enterprise, and blocked by one of the following service: Anonymous Call Rejection (ACR), Selective Call Acceptance (SCA), or Selective Call Rejection (SCR).</p> <p>For answered intra-group calls, the value is "n".</p> <p>For answered Application Server enterprise calls, the value is "n".</p> <p>For answered originating calls to the network, the value is "y" unless the remote terminating end provides an "n" indication in the Answer.</p> <p>For answered terminating calls from the network, the value is "y".</p> <p>Finally, the value is "n" when the call is intercepted by the Intercept feature (User or Group), regardless if the call is answered or not.</p>

4.3.44 typeOfNetwork (43)

The following table describes the CDR field *typeOfNetwork* (43).

Table 51: Field typeOfNetwork (43)

Field Id	43
Failover Id	26
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	typeOfNetwork
XML tag	typeOfNetwork
Service Name	Not applicable
Length	7
Example Data	private
Description	<p>For intra-group calls, this field is omitted.</p> <p>For non-intra-group calls, this field captures the type of network computed by the Network Server and returned in the 302 response. These can be "private" or "public". For more information, see Appendix A: Information Reported by Network Server.</p> <p>This field can only be reported in originating CDRs, and is always omitted for terminating CDRs. It is also omitted if the Network Server does not return a type of network in the 302 response.</p>

4.3.45 voicePortalCalling.invocationTime (44)

The following table describes the CDR field *voicePortalCalling.invocationTime* (44).

Table 52: Field voicePortalCalling.invocationTime (44)

Field Id	44
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	voicePortalCalling.invocationTime
XML tag	invocationTime
Service Name	Voice Portal Calling
Length	18
Example Data	20020509180427.186
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.46 localCallId (45)

The following table describes the CDR field *localCallId* (45).

Table 53: Field localCallId (45)

Field Id	45
Failover Id	30
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	localCallId
XML tag	localCallId
Service Name	Not applicable
Length	40
Example Data	12:0
Description	This field contains a string that uniquely identifies the session that processed the call. The field is present in every type of CDR, except for failover CDRs.

4.3.47 remoteCallId (46)

The following table describes the CDR field *remoteCallId* (46).

Table 54: Field remoteCallId (46)

Field Id	46
Failover Id	31
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	remoteCallId
XML tag	remoteCallId
Service Name	Not applicable
Length	40
Example Data	11:0A
Description	This field is only present for intra-group calls. This field contains a string that uniquely identifies the session that processed the remote party's call.

4.3.48 callingPartyCategory (47)

The following table describes the CDR field *callingPartyCategory* (47).

Table 55: Field callingPartyCategory (47)

Field Id	47
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callingPartyCategory
XML tag	callingPartyCategory
Service Name	Not applicable
Length	20
Example Data	Payphone
Description	<p>The category of the calling party.</p> <p>This field is included in originating CDRs only and is populated with the category configured for the originating BroadWorks user.</p> <p>CPC values can be configured by the system administrator and any string can show up in this field, even if the system is initially loaded with only six usable values: "Ordinary", "Payphone", "Prison", "Hotel", "Hospital", or "Special".</p>

4.3.49 spare (48)

The following table describes the CDR spare field (48).

Table 56: Field (48)

Field Id	48
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.50 spare (49)

The following table describes the CDR spare field (49).

Table 57: Field (49)

Field Id	49
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.51 spare (50)

The following table describes the CDR spare field (50).

Table 58: Field (50)

Field Id	50
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.52 spare (51)

The following table describes the CDR spare field (51).

Table 59: Field (51)

Field Id	51
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.53 spare (52)

The following table describes the CDR spare field (52).

Table 60: Field (52)

Field Id	52
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.54 spare (53)

The following table describes the CDR spare field (53).

Table 61: Field (53)

Field Id	53
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.55 spare (54)

The following table describes the CDR spare field (54).

Table 62: Field (54)

Field Id	54
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.56 spare (55)

The following table describes the CDR spare field (55).

Table 63: Field (55)

Field Id	55
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.57 spare (56)

The following table describes the CDR spare field (56).

Table 64: Field (56)

Field Id	56
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.58 spare (57)

The following table describes the CDR spare field (57).

Table 65: Field (57)

Field Id	57
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.59 spare (58)

The following table describes the CDR spare field (58).

Table 66: Field (58)

Field Id	58
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.60 key (59)

The following table describes the CDR field *key* (59).

Table 67: Field key (59)

Field Id	59
Failover Id	46
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	key
XML tag	key
Service Name	Not applicable
Length	161
Example Data	16092950705034730916@192.168.1.27
Description	<p>This field records the <i>icid-value</i> parameter from the SIP P-Charging-Vector for the call.</p> <p>In a Hybrid Application Server system, this field records a BroadWorks-generated value for non-IMS calls when no <i>icid-value</i> is available.</p> <p>If the <i>icid-value</i> is received with quotation marks, the value in the CDR depends on the <i>enableAVPQuotes</i> CLI configuration. When set to "false" (default), the reported value contains the quotation marks. When set to "true", the quotation marks are removed.</p> <p>In XML, the <i>key</i>, <i>creator</i>, <i>originatorNetwork</i>, <i>terminatorNetwork</i>, and <i>otherInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.</p>

4.3.61 creator (60)

The following table describes the CDR field *creator* (60).

Table 68: Field creator (60)

Field Id	60
Failover Id	47
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	creator
XML tag	creator
Service Name	Not applicable
Length	80
Example Data	192.168.6.8
Description	<p>This field records the <i>icid-generated-at</i> parameter from the SIP P-Charging-Vector for the call.</p> <p>In XML, the <i>key</i>, <i>creator</i>, <i>originatorNetwork</i>, <i>terminatorNetwork</i>, and <i>otherInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.</p>

4.3.62 originatorNetwork (61)

The following table describes the CDR field *originatorNetwork* (61).

Table 69: Field originatorNetwork (61)

Field Id	61
Failover Id	48
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	originatorNetwork
XML tag	originatorNetwork
Service Name	Not applicable
Length	80
Example Data	abc1.net
Description	This field records the <i>orig-ioi</i> parameter from the SIP P-Charging-Vector for the call. In XML, the <i>key</i> , <i>creator</i> , <i>originatorNetwork</i> , <i>terminatorNetwork</i> , and <i>otherInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.

4.3.63 terminatorNetwork (62)

The following table describes the CDR field *terminatorNetwork* (62).

Table 70: Field terminatorNetwork (62)

Field Id	62
Failover Id	49
Module	IP
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	terminatorNetwork
XML tag	terminatorNetwork
Service Name	Not applicable
Length	80
Example Data	Xyz2.net
Description	This field records the <i>term-ioi</i> parameter from the SIP P-Charging-Vector for the call. In XML, the <i>key</i> , <i>creator</i> , <i>originatorNetwork</i> , <i>terminatorNetwork</i> , and <i>otherInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.

4.3.64 accountCodePerCall.invocationTime (63)

The following table describes the CDR field *accountCodePerCall.invocationTime* (63).

Table 71: Field accountCodePerCall.invocationTime (63)

Field Id	63
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	accountCodePerCall.invocationTime
XML tag	invocationTime
Service Name	Account Code Per Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.65 accountCodePerCall.facResult (64)

The following table describes the CDR field *accountCodePerCall.facResult* (64).

Table 72: Field accountCodePerCall.facResult (64)

Field Id	64
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	accountCodePerCall.facResult
XML tag	facResult
Service Name	Account Code Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.66 acbActivation.invocationTime (65)

The following table describes the CDR field *acbActivation.invocationTime* (65).

Table 73: Field acbActivation.invocationTime (65)

Field Id	65
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	acbActivation.invocationTime
XML tag	invocationTime
Service Name	ACB Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.67 acbActivation.facResult (66)

The following table describes the CDR field *acbActivation.facResult* (66).

Table 74: Field acbActivation.facResult (66)

Field Id	66
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	acbActivation.facResult
XML tag	facResult
Service Name	ACB Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.68 acbDeactivation.invocationTime (67)

The following table describes the CDR field *acbDeactivation.invocationTime* (67).

Table 75: Field acbDeactivation.invocationTime (67)

Field Id	67
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	acbDeactivation.invocationTime
XML tag	invocationTime
Service Name	ACB Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.69 acbDeactivation.facResult (68)

The following table describes the CDR field *acbDeactivation.facResult* (68).

Table 76: Field acbDeactivation.facResult (68)

Field Id	68
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	acbDeactivation.facResult
XML tag	facResult
Service Name	ACB Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.70 callPark.invocationTime (69)

The following table describes the CDR field *callPark.invocationTime* (69).

Table 77: Field callPark.invocationTime (69)

Field Id	69
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callPark.invocationTime
XML tag	invocationTime
Service Name	Call Park
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.71 callPark.facResult (70)

The following table describes the CDR field *callPark.facResult* (70).

Table 78: Field callPark.facResult (70)

Field Id	70
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callPark.facResult
XML tag	facResult
Service Name	Call Park
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.72 callParkRetrieve.invocationTime (71)

The following table describes the CDR field *callParkRetrieve.invocationTime* (71).

Table 79: Field callParkRetrieve.invocationTime (71)

Field Id	71
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callParkRetrieve.invocationTime
XML tag	invocationTime
Service Name	Call Park Retrieve
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.73 callParkRetrieve.facResult (72)

The following table describes the CDR field *callParkRetrieve.facResult* (72).

Table 80: Field callParkRetrieve.facResult (72)

Field Id	72
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callParkRetrieve.facResult
XML tag	facResult
Service Name	Call Park Retrieve
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.74 callPickup.invocationTime (73)

The following table describes the CDR field *callPickup.invocationTime* (73).

Table 81: Field callPickup.invocationTime (73)

Field Id	73
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callPickup.invocationTime
XML tag	invocationTime
Service Name	Call Pickup
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.75 callPickup.facResult (74)

The following table describes the CDR field *callPickup.facResult* (74).

Table 82: Field callPickup.facResult (74)

Field Id	74
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	callPickup.facResult
XML tag	facResult
Service Name	Call Pickup
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.76 directedCallPickup.invocationTime (75)

The following table describes the CDR field *directedCallPickup.invocationTime* (75).

Table 83: Field directedCallPickup.invocationTime (75)

Field Id	75
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directedCallPickup.invocationTime
XML tag	invocationTime
Service Name	Directed Call Pickup
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.77 directedCallPickup.facResult (76)

The following table describes the CDR field *directedCallPickup.facResult* (76).

Table 84: Field directedCallPickup.facResult (76)

Field Id	76
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directedCallPickup.facResult
XML tag	facResult
Service Name	Directed Call Pickup
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.78 directedCPUBargeIn.invocationTime (77)

The following table describes the CDR field *directedCPUBargeIn.invocationTime* (77).

Table 85: Field directedCPUBargeIn.invocationTime (77)

Field Id	77
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directedCPUBargeIn.invocationTime
XML tag	invocationTime
Service Name	Directed CPU Barge-In
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.79 directedCPUBargeIn.facResult (78)

The following table describes the CDR field *directedCPUBargeIn.facResult* (78).

Table 86: Field directedCPUBargeIn.facResult (78)

Field Id	78
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directedCPUBargeIn.facResult
XML tag	facResult
Service Name	Directed CPU Barge-In
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.80 cancelCWTperCall.invocationTime (79)

The following table describes the CDR field *cancelCWTperCall.invocationTime* (79).

Table 87: Field cancelCWTperCall.invocationTime (79)

Field Id	79
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cancelCWTperCall.invocationTime
XML tag	invocationTime
Service Name	Cancel CWT per Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.81 cancelCWTperCall.facResult (80)

The following table describes the CDR field *cancelCWTperCall.facResult* (80).

Table 88: Field cancelCWTperCall.facResult (80)

Field Id	80
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cancelCWTperCall.facResult
XML tag	facResult
Service Name	Cancel CWT per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.82 cfaActivation.invocationTime (81)

The following table describes the CDR field *cfaActivation.invocationTime* (81).

Table 89: Field cfaActivation.invocationTime (81)

Field Id	81
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfaActivation.invocationTime
XML tag	invocationTime
Service Name	CFA Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.83 cfaActivation.facResult (82)

The following table describes the CDR field *cfaActivation.facResult* (82).

Table 90: Field cfaActivation.facResult (82)

Field Id	82
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfaActivation.facResult
XML tag	facResult
Service Name	CFA Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.84 cfaDeactivation.invocationTime (83)

The following table describes the CDR field *cfaDeactivation.invocationTime* (83).

Table 91: Field cfaDeactivation.invocationTime (83)

Field Id	83
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfaDeactivation.invocationTime
XML tag	invocationTime
Service Name	CFA Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.85 cfaDeactivation.facResult (84)

The following table describes the CDR field *cfaDeactivation.facResult* (84).

Table 92: Field cfaDeactivation.facResult (84)

Field Id	84
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfaDeactivation.facResult
XML tag	facResult
Service Name	CFA Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.86 cfbActivation.invocationTime (85)

The following table describes the CDR field *cfbActivation.invocationTime* (85).

Table 93: Field cfbActivation.invocationTime (85)

Field Id	85
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfbActivation.invocationTime
XML tag	invocationTime
Service Name	CFB Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.87 cfbActivation.facResult (86)

The following table describes the CDR field *cfbActivation.facResult* (86).

Table 94: Field cfbActivation.facResult (86)

Field Id	86
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfbActivation.facResult
XML tag	facResult
Service Name	CFB Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.88 cfbDeactivation.invocationTime (87)

The following table describes the CDR field *cfbDeactivation.invocationTime* (87).

Table 95: Field cfbDeactivation.invocationTime (87)

Field Id	87
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfbDeactivation.invocationTime
XML tag	invocationTime
Service Name	CFB Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.89 cfbDeactivation.facResult (88)

The following table describes the CDR field *cfbDeactivation.facResult* (88).

Table 96: Field cfbDeactivation.facResult (88)

Field Id	88
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfbDeactivation.facResult
XML tag	facResult
Service Name	CFB Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.90 cfnaActivation.invocationTime (89)

The following table describes the CDR field *cfnaActivation.invocationTime* (89).

Table 97: Field cfnaActivation.invocationTime (89)

Field Id	89
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfnaActivation.invocationTime
XML tag	invocationTime
Service Name	CFNA Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.91 cfnaActivation.facResult (90)

The following table describes the CDR field *cfnaActivation.facResult* (90).

Table 98: Field cfnaActivation.facResult (90)

Field Id	90
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfnaActivation.facResult
XML tag	facResult
Service Name	CFNA Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.92 cfnaDeactivation.invocationTime (91)

The following table describes the CDR field *cfnaDeactivation.invocationTime* (91).

Table 99: Field cfnaDeactivation.invocationTime (91)

Field Id	91
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfnaDeactivation.invocationTime
XML tag	invocationTime
Service Name	CFNA Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.93 cfnaDeactivation.facResult (92)

The following table describes the CDR field *cfnaDeactivation.facResult* (92).

Table 100: Field cfnaDeactivation.facResult (92)

Field Id	92
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	cfnaDeactivation.facResult
XML tag	facResult
Service Name	CFNA Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.94 clidDeliveryPerCall.invocationTime (93)

The following table describes the CDR field *clidDeliveryPerCall.invocationTime* (93).

Table 101: Field clidDeliveryPerCall.invocationTime (93)

Field Id	93
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clidDeliveryPerCall.invocationTime
XML tag	invocationTime
Service Name	CLID Delivery Per Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.95 clidDeliveryPerCall.facResult (94)

The following table describes the CDR field *clidDeliveryPerCall.facResult* (94).

Table 102: Field clidDeliveryPerCall.facResult (94)

Field Id	94
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clidDeliveryPerCall.facResult
XML tag	facResult
Service Name	CLID Delivery Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.96 clidBlockingPerCall.invocationTime (95)

The following table describes the CDR field *clidBlockingPerCall.invocationTime* (95).

Table 103: Field clidBlockingPerCall.invocationTime (95)

Field Id	95
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clidBlockingPerCall.invocationTime
XML tag	invocationTime
Service Name	CLID Blocking Per Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.97 clidBlockingPerCall.facResult (96)

The following table describes the CDR field *clidBlockingPerCall.facResult* (96).

Table 104: Field clidBlockingPerCall.facResult (96)

Field Id	96
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clidBlockingPerCall.facResult
XML tag	facResult
Service Name	CLID Blocking Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.98 customerOriginatedTrace.invocationTime (97)

The following table describes the CDR field *customerOriginatedTrace.invocationTime* (97).

Table 105: Field customerOriginatedTrace.invocationTime (97)

Field Id	97
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	customerOriginatedTrace.invocationTime
XML tag	invocationTime
Service Name	Customer Originated Trace
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.99 customerOriginatedTrace.facResult (98)

The following table describes the CDR field *customerOriginatedTrace.facResult* (98).

Table 106: Field customerOriginatedTrace.facResult (98)

Field Id	98
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	customerOriginatedTrace.facResult
XML tag	facResult
Service Name	Customer Originated Trace
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.100 directVMTransfer.invocationTime (99)

The following table describes the CDR field *directVMTransfer.invocationTime* (99).

Table 107: Field directVMTransfer.invocationTime (99)

Field Id	99
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directVMTransfer.invocationTime
XML tag	invocationTime
Service Name	Direct VM Transfer
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.101 directVMTransfer.facResult (100)

The following table describes the CDR field *directVMTransfer.facResult* (100).

Table 108: Field directVMTransfer.facResult (100)

Field Id	100
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	directVMTransfer.facResult
XML tag	facResult
Service Name	Direct VM Transfer
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.102 dndActivation.invocationTime (101)

The following table describes the CDR field *dndActivation.invocationTime* (101).

Table 109: Field dndActivation.invocationTime (101)

Field Id	101
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	dndActivation.invocationTime
XML tag	invocationTime
Service Name	DND Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.103 dndActivation.facResult (102)

The following table describes the CDR field *dndActivation.facResult* (102).

Table 110: Field dndActivation.facResult (102)

Field Id	102
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	dndActivation.facResult
XML tag	facResult
Service Name	DND Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.104 dndDeactivation.invocationTime (103)

The following table describes the CDR field *dndDeactivation.invocationTime* (103).

Table 111: Field dndDeactivation.invocationTime (103)

Field Id	103
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	dndDeactivation.invocationTime
XML tag	invocationTime
Service Name	DND Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.105 dndDeactivation.facResult (104)

The following table describes the CDR field *dndDeactivation.facResult* (104).

Table 112: Field dndDeactivation.facResult (104)

Field Id	104
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	dndDeactivation.facResult
XML tag	facResult
Service Name	DND Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.106 sacLocking.invocationTime (105)

The following table describes the CDR field *sacLocking.invocationTime* (105).

Table 113: Field sacLocking.invocationTime (105)

Field Id	105
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sacLocking.invocationTime
XML tag	invocationTime
Service Name	SAC Locking
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.107 sacLocking.facResult (106)

The following table describes the CDR field *sacLocking.facResult* (106).

Table 114: Field sacLocking.facResult (106)

Field Id	106
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sacLocking.facResult
XML tag	facResult
Service Name	SAC Locking
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.108 sacUnlocking.invocationTime (107)

The following table describes the CDR field *sacUnlocking.invocationTime* (107).

Table 115: Field sacUnlocking.invocationTime (107)

Field Id	107
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sacUnlocking.invocationTime
XML tag	invocationTime
Service Name	SAC Unlocking
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.109 sacUnlocking.facResult (108)

The following table describes the CDR field *sacUnlocking.facResult* (108).

Table 116: Field sacUnlocking.facResult (108)

Field Id	108
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sacUnlocking.facResult
XML tag	facResult
Service Name	SAC Unlocking
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.110 flashCallHold.invocationTime (109)

The following table describes the CDR field *flashCallHold.invocationTime* (109).

Table 117: Field flashCallHold.invocationTime (109)

Field Id	109
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	flashCallHold.invocationTime
XML tag	invocationTime
Service Name	Flash Call Hold
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.111 flashCallHold.facResult (110)

The following table describes the CDR field *flashCallHold.facResult* (110).

Table 118: Field flashCallHold.facResult (110)

Field Id	110
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	flashCallHold.facResult
XML tag	facResult
Service Name	Flash Call Hold
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.112 lastNumberRedial.invocationTime (111)

The following table describes the CDR field *lastNumberRedial.invocationTime* (111).

Table 119: Field lastNumberRedial.invocationTime (111)

Field Id	111
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	lastNumberRedial.invocationTime
XML tag	invocationTime
Service Name	Last Number Redial
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.113 lastNumberRedial.facResult (112)

The following table describes the CDR field *lastNumberRedial.facResult* (112).

Table 120: Field lastNumberRedial.facResult (112)

Field Id	112
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	lastNumberRedial.facResult
XML tag	facResult
Service Name	Last Number Redial
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.114 returnCall.invocationTime (113)

The following table describes the CDR field *returnCall.invocationTime* (113).

Table 121: Field returnCall.invocationTime (113)

Field Id	113
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	returnCall.invocationTime
XML tag	invocationTime
Service Name	Return Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.115 returnCall.facResult (114)

The following table describes the CDR field *returnCall.facResult* (114).

Table 122: Field returnCall.facResult (114)

Field Id	114
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	returnCall.facResult
XML tag	facResult
Service Name	Return Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.116 sd100Programming.invocationTime (115)

The following table describes the CDR field *sd100Programming.invocationTime* (115).

Table 123: Field sd100Programming.invocationTime (115)

Field Id	115
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sd100Programming.invocationTime
XML tag	invocationTime
Service Name	SD100 Programming
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.117 sd100Programming.facResult (116)

The following table describes the CDR field *sd100Programming.facResult* (116).

Table 124: Field sd100Programming.facResult (116)

Field Id	116
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sd100Programming.facResult
XML tag	facResult
Service Name	SD100 Programming
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.118 sd8Programming.invocationTime (117)

The following table describes the CDR field *sd8Programming.invocationTime* (117).

Table 125: Field sd8Programming.invocationTime (117)

Field Id	117
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sd8Programming.invocationTime
XML tag	invocationTime
Service Name	SD8 Programming
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.119 sd8Programming.facResult (118)

The following table describes the CDR field *sd8Programming.facResult* (118).

Table 126: Field sd8Programming.facResult (118)

Field Id	118
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	sd8Programming.facResult
XML tag	facResult
Service Name	SD8 Programming
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.120 clearMWI.invocationTime (119)

The following table describes the CDR field *clearMWI.invocationTime* (119).

Table 127: Field clearMWI.invocationTime (119)

Field Id	119
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clearMWI.invocationTime
XML tag	invocationTime
Service Name	Clear MWI
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.121 clearMWI.facResult (120)

The following table describes the CDR field *clearMWI.facResult* (120).

Table 128: Field clearMWI.facResult (120)

Field Id	120
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clearMWI.facResult
XML tag	facResult
Service Name	Clear MWI
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.122 *userId* (121)

The following table describes the CDR field *userId* (121).

Table 129: Field *userId* (121)

Field Id	121
Failover Id	27
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	userId
XML tag	userId
Service Name	Not applicable
Length	161
Example Data	john@broadsoft.com
Description	The login ID (including the domain) of the user generating (accountable for) this CDR. The <i>userId</i> field identifies the same user as that reported in the <i>userNumber</i> field. Always present except in some failover-type CDRs when a network party hangs up.

4.3.123 *otherPartyName* (122)

The following table describes the CDR field *otherPartyName* (122).

Table 130: Field *otherPartyName* (122)

Field Id	122
Failover Id	28
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	otherPartyName
XML tag	otherPartyName
Service Name	Not applicable
Length	80
Example Data	John Doe
Description	Name of the calling party for terminating CDRs. Name of the called party for originating CDRs. Present when the other party is a BroadWorks user, or if available from the network.

4.3.124 otherPartyNamePresentationIndicator (123)

The following table describes the CDR field *otherPartyNamePresentationIndicator* (123).

Table 131: Field otherPartyNamePresentationIndicator (123)

Field Id	123
Failover Id	29
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	otherPartyNamePresentationIndicator
XML tag	otherPartyNamePresentationIndicator
Service Name	Not applicable
Length	20
Example Data	Public
Description	The presentation indicator of the <i>otherPartyName</i> . Values can be "Public", "Unavailable", "Anonymous", "Operator", "Payphone", and "Overseas". When the <i>otherPartyName</i> field is omitted, this field is set to "Unavailable".

4.3.125 musicOnHoldPerCallDeactivation.invocationTime (124)

The following table describes the CDR field *musicOnHoldPerCallDeactivation.invocationTime* (124).

Table 132: Field musicOnHoldPerCallDeactivation.invocationTime (124)

Field Id	124
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	musicOnHoldPerCallDeactivation.invocationTime
XML tag	invocationTime
Service Name	Music On Hold Per-Call Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.126 musicOnHoldPerCallDeactivation.facResult (125)

The following table describes the CDR field *musicOnHoldPerCallDeactivation.facResult* (125).

Table 133: Field musicOnHoldPerCallDeactivation.facResult (125)

Field Id	125
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	musicOnHoldPerCallDeactivation.facResult
XML tag	facResult
Service Name	Music On Hold Per-Call Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.127 pushtoTalk.invocationTime (126)

The following table describes the CDR field *pushtoTalk.invocationTime* (126).

Table 134: Field pushtoTalk.invocationTime (126)

Field Id	126
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	pushtoTalk.invocationTime
XML tag	invocationTime
Service Name	Push to Talk
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.128 pushtoTalk.facResult (127)

The following table describes the CDR field *pushtoTalk.facResult* (127).

Table 135: Field pushtoTalk.facResult (127)

Field Id	127
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	pushtoTalk.facResult
XML tag	facResult
Service Name	Push to Talk
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.129 hoteling.invocationTime (128)

The following table describes the CDR field *hoteling.invocationTime* (128).

Table 136: Field hoteling.invocationTime (128)

Field Id	128
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	hoteling.invocationTime
XML tag	invocationTime
Service Name	Hoteling
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.130 hoteling.group (129)

The following table describes the CDR field *hotelings.group* (129).

Table 137: Field hotelings.group (129)

Field Id	129
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	hotelings.group
XML tag	group
Service Name	Hoteling
Length	30
Example Data	HostGroup
Description	The customer group ID for the hosting user. In XML, this field is included in a <host> element.

4.3.131 hoteling.userId (130)

The following table describes the CDR field *hotelings.userId* (130).

Table 138: Field hotelings.userId (130)

Field Id	130
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	hotelings.userId
XML tag	userId
Service Name	Hoteling
Length	161
Example Data	hostUser@broadsoft.com
Description	The <i>userId</i> for the hosting user. In XML, this field is included in a <host> element.

4.3.132 hoteling.userNumber (131)

The following table describes the CDR field *hotelings.userNumber* (131).

Table 139: Field *hotelings.userNumber* (131)

Field Id	131
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	hotelings.userNumber
XML tag	userNumber
Service Name	Hoteling
Length	16
Example Data	+14165551234
Description	The <i>userNumber</i> for the hosting user. In XML, this field is included in a <host> element.

4.3.133 hoteling.groupNumber (132)

The following table describes the CDR field *hotelings.groupNumber* (132).

Table 140: Field *hotelings.groupNumber* (132)

Field Id	132
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	hotelings.groupNumber
XML tag	groupNumber
Service Name	Hoteling
Length	16
Example Data	+14165559999
Description	The <i>groupNumber</i> for the hosting user. In XML, this field is included in a <host> element.

4.3.134 diversionInhibitor.invocationTime (133)

The following table describes the CDR field *diversionInhibitor.invocationTime* (133).

Table 141: Field diversionInhibitor.invocationTime (133)

Field Id	133
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	diversionInhibitor.invocationTime
XML tag	invocationTime
Service Name	Diversion Inhibitor
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.135 diversionInhibitor.facResult (134)

The following table describes the CDR field *diversionInhibitor.facResult* (134).

Table 142: Field diversionInhibitor.facResult (134)

Field Id	134
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	diversionInhibitor.facResult
XML tag	facResult
Service Name	Diversion Inhibitor
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.136 trunkGroupName (135)

The following table describes the CDR field *trunkGroupName* (135).

Table 143: Field trunkGroupName (135)

Field Id	135
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	trunkGroupName
XML tag	trunkGroupName
Service Name	Not applicable
Length	255
Example Data	trunkGroupOne
Description	<p>The identity of the user's trunk group, if the user is subject to trunk group call capacity control.</p> <p>This field may contain multiple values (separated by spaces), showing the identities of all trunk groups to which the Application Server made a termination attempt and the identities of all trunk groups used to serve a call. The trunk group used to serve a call can change when a user invokes the Call Retrieval function of the Shared Call Appearance service. If the new Shared Call Appearance location involved in the call is not subject to a trunk group, the value "NONE" is reported.</p> <p>Up to Release 14.sp3, the identity was populated with the trunk group ID.</p> <p>From Release 14.sp4 and later, the identity is a construct made by concatenating the following elements: the group ID, a slash character, and the trunk group name. Furthermore, any space in the group ID and the trunk group name is replaced by an underscore to prevent ambiguity between the spaces used to separate different trunk groups with eventual spaces in the identifier.</p>

4.3.137 spare (136)

The following table describes the CDR spare field (136).

Table 144: Field (136)

Field Id	136
Failover Id	Not applicable
Module	Not applicable
Feature	Not applicable
Release	Not applicable
CLI name	Not applicable
XML tag	Not applicable
Service Name	Not applicable
Length	Not applicable
Example Data	Not applicable
Description	Obsoleted by EV-110764

4.3.138 instantGroupCall.invocationTime (137)

The following table describes the CDR field *instantGroupCall.invocationTime* (137).

Table 145: Field instantGroupCall.invocationTime (137)

Field Id	137
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	instantGroupCall.invocationTime
XML tag	invocationTime
Service Name	Instant Group Call
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.139 instantGroupCall.pushToTalk (138)

The following table describes the CDR field *instantGroupCall.pushToTalk* (138).

Table 146: Field instantGroupCall.pushToTalk (138)

Field Id	138
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	instantGroupCall.pushToTalk
XML tag	pushToTalk
Service Name	Instant Group Call
Length	7
Example Data	two-way
Description	Indicates if the Instant Group Call was subject to Push To Talk (PTT). This field is included in the Instant Group Call service extension of the terminating CDR. Values can be "no", "one-way" or "two-way". The "no" value is used to indicate that Instant Group Call was not subject to PTT. The PTT feature access code was not used to initiate the call to the Instant Group Call virtual user. The "one-way" value is used to indicate that Instant Group Call was subject to PTT. The PTT feature access code was used to initiate the call to the Instant Group Call virtual user and the originator's PTT profile was configured for one-way media (that is, broadcast). The "two-way" value is used to indicate that Instant Group Call was subject to PTT. The PTT feature access code was used to initiate the call to the Instant Group Call virtual user and the originator's PTT profile was configured for two-way media (that is, conference).

4.3.140 instantGroupCall.relatedCallId (139)

The following table describes the CDR field *instantGroupCall.relatedCallId* (139).

Table 147: Field instantGroupCall.relatedCallId (139)

Field Id	139
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	instantGroupCall.relatedCallId
XML tag	relatedCallId
Service Name	Instant Group Call
Length	40
Example Data	17:0
Description	<p>This field provides the call identifier of a different call that created or was created by this call as a consequence of service activation. The call identifier is the value found in the <i>localCallId</i> field of the related call.</p> <p>For more information, see section Related Call Id on page 303, which provides a description of the <i>relatedCallId</i> field.</p>

4.3.141 customRingback.invocationTime (140)

The following table describes the CDR field *customRingback.invocationTime* (140).

Table 148: Field customRingback.invocationTime (140)

Field Id	140
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	customRingback.invocationTime
XML tag	invocationTime
Service Name	Custom Ringback
Length	18
Example Data	20040526174426.576
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.142 clidPermitted (141)

The following table describes the CDR field *clidPermitted* (141).

Table 149: Field clidPermitted (141)

Field Id	141
Failover Id	32
Module	Basic
Feature	In use before Release 17.0
Release	In use before Release 13.0
CLI name	clidPermitted
XML tag	clidPermitted
Service Name	Not applicable
Length	3
Example Data	Yes
Description	This field is only reported in terminating CDRs, and is always omitted for originating CDRs. "Yes" if the number of the caller was delivered to the user (to his phone and/or call logs).

4.3.143 automaticHoldRetrieve.invocationTime (142)

The following table describes the CDR field *automaticHoldRetrieve.invocationTime* (142).

Table 150: Field automaticHoldRetrieve.invocationTime (142)

Field Id	142
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	automaticHoldRetrieve.invocationTime
XML tag	invocationTime
Service Name	Automatic Hold/Retrieve
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.144 automaticHoldRetrieve.action (143)

The following table describes the CDR field *automaticHoldRetrieve.action* (143).

Table 151: Field automaticHoldRetrieve.action (143)

Field Id	143
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	automaticHoldRetrieve.action
XML tag	action
Service Name	Automatic Hold/Retrieve
Length	8
Example Data	Retrieve
Description	The type of the action performed by the Automatic Hold/Retrieve feature on this call, which is either hold, retrieve, or recall.

4.3.145 accessNetworkInfo (144)

The following table describes the CDR field *accessNetworkInfo* (144).

Table 152: Field accessNetworkInfo (144)

Field Id	144
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	accessNetworkInfo
XML tag	accessNetworkInfo
Service Name	Not applicable
Length	1024
Example Data	xDSL;a12b34c56d78e90f12g3;33;1234;12345;1a2b1a2b3c
Description	<p>The <i>accessNetworkInfo</i> field captures the contents of the <i>P-Access-Network-Info</i> header for BroadWorks user originations. This can be the contents of the <i>P-ANI</i> header received in the INVITE from a trusted device, or the contents of the header built using the configured physical location for the user's device.</p> <p>The <i>accessNetworkInfo</i> field also captures the contents of the <i>P-Access-Network-Info</i> header for BroadWorks user terminations, when a <i>P-ANI</i> header is present in the 18x/200 response for an initial INVITE request</p> <p>CDRs encoded in XML or CSV format contain the full value of the <i>P-Access-Network-Info</i> header. CDRs encoded for Radius however, has the <i>P-Access-Network-Info</i> value truncated to the first 247 bytes, which is the maximum size allowed by the Radius protocol.</p> <p>If multiple <i>P-Access-Network-Info</i> headers are received, CDRs contain the <i>P-Access-Network-Info</i> headers' value combined in a comma-separated list.</p>

4.3.146 chargingFunctionAddresses (145)

The following table describes the CDR field *chargingFunctionAddresses* (145).

Table 153: Field chargingFunctionAddresses (145)

Field Id	145
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	chargingFunctionAddresses
XML tag	chargingFunctionAddresses
Service Name	Not applicable
Length	250
Example Data	ccf=192.1.1.1; ccf=192.1.1.2; ecf=192.1.1.3; ecf=192.1.1.4
Description	This field indicates the value of the <i>P-Charging-Function-Addresses</i> header was received or generated during the initial invitation. The field is omitted for failover-type CDRs and when no value is available.

4.3.147 chargeNumber (146)

The following table describes the CDR field *chargeNumber* (146).

Table 154: Field chargeNumber (146)

Field Id	146
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	chargeNumber
XML tag	chargeNumber
Service Name	Not applicable
Length	16
Example Data	+15143331234
Description	For originating or terminating CDRs, this is the configurable charge number for that user in E.164 format. This field is not present if no such number is configured for the user.

4.3.148 relatedCallId (147)

The following table describes the CDR field *relatedCallId* (147).

Table 155: Field relatedCallId (147)

Field Id	147
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	relatedCallId
XML tag	relatedCallId
Service Name	Not applicable
Length	40
Example Data	17:0
Description	<p>This field provides the call identifier of a different call that created or was created by this call as a consequence of service activation. The call identifier is the value found in the <i>localCallId</i> field of the related call.</p> <p>For more information, see the table in section Related Call Id on page 303, which provides a description of the <i>relatedCallId</i> field.</p>

4.3.149 relatedCallIdReason (148)

The following table describes the CDR field *relatedCallIdReason* (148).

Table 156: Field relatedCallIdReason (148)

Field Id	148
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	relatedCallIdReason
XML tag	relatedCallIdReason
Service Name	Not applicable
Length	40
Example Data	Call Forward Always
Description	<p>When the <i>relatedCallId</i> field is present outside of a <i>serviceExtension</i>, this field indicates the reason (or service) that triggered the presence of the <i>relatedCallId</i> field.</p>

4.3.150 transfer.invocationTime (149)

The following table describes the CDR field *transfer.invocationTime* (149).

Table 157: Field transfer.invocationTime (149)

Field Id	149
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	transfer.invocationTime
XML tag	invocationTime
Service Name	Transfer
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.151 transfer.result (150)

The following table describes the CDR field *transfer.result* (150).

Table 158: Field transfer.result (150)

Field Id	150
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	transfer.result
XML tag	result
Service Name	Transfer
Length	7
Example Data	Success
Description	This field indicates the result of the transfer attempt. Possible values are "Success" or "Failure".

4.3.152 transfer.relatedCallId (151)

The following table describes the CDR field *transfer.relatedCallId* (151).

Table 159: Field transfer.relatedCallId (151)

Field Id	151
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	transfer.relatedCallId
XML tag	relatedCallId
Service Name	Transfer
Length	40
Example Data	17:0
Description	<p>This field provides the call identifier of the other call involved in the transfer. The call identifier is the value found in the <i>localCallId</i> field of the related call.</p> <p>For more information, see section Related Call Id on page 303, which provides a description of the <i>relatedCallId</i> field.</p>

4.3.153 transfer.type (152)

The following table describes the CDR field *transfer.type* (152).

Table 160: Field transfer.type (152)

Field Id	152
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	transfer.type
XML tag	type
Service Name	Transfer
Length	40
Example Data	Deflection
Description	<p>This field indicates the type of the transfer attempt. Possible values are "Transfer Consult", "Transfer Consult Internal", "Deflection", "FMFM Call Push", "Personal Assistant" and "Third Party Deflection" (the latter being used when the last redirection is performed by a BroadWorks user hosted on a PBX with the PBX Integration feature).</p>

4.3.154 conference.startTime (153)

The following table describes the CDR field *conference.startTime* (153).

Table 161: Field conference.startTime (153)

Field Id	153
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	conference.startTime
XML tag	startTime
Service Name	Conference
Length	18
Example Data	20040526174426.576
Description	This field indicates the time at which the call joined a conference.

4.3.155 conference.stopTime (154)

The following table describes the CDR field *conference.stopTime* (154).

Table 162: Field conference.stopTime (154)

Field Id	154
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	conference.stopTime
XML tag	stopTime
Service Name	Conference
Length	18
Example Data	20040526174426.576
Description	This field indicates the time at which the call left a conference.

4.3.156 conference.confld (155)

The following table describes the CDR field *conference.confld* (155).

Table 163: Field conference.confld (155)

Field Id	155
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	conference.confld
XML tag	confld
Service Name	Conference
Length	40
Example Data	711c3:0
Description	This field indicates the ID of the conference. This is the key to correlate all participants to the same conference.

4.3.157 conference.type (156)

The following table describes the CDR field *conference.type* (156).

Table 164: Field conference.type (156)

Field Id	156
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	conference.type
XML tag	type
Service Name	Conference
Length	10
Example Data	Flash
Description	This field indicates the method used to initiate the conference. Possible values are: <ul style="list-style-type: none"> Flash Device Client DPUBargeln

4.3.158 codecUsage (157)

The following table describes the CDR field *codecUsage* (157).

Table 165: Field codecUsage (157)

Field Id	157
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	codecUsage
XML tag	codecUsage
Service Name	Not applicable
Length	20
Example Data	20.512
Description	<p>Indicates the time (in seconds, with three decimal digits) the codec(s) described in the <i>codec</i> field were in use.</p> <p>This field is present when the codec changes (in Interim CDRs) and when a call ends (in Normal CDRs, and only if a codec is present). When codecs change during a call, an Interim CDR is issued reporting the previous codec(s) and <i>codecUsage</i>, and <i>codecUsage</i> is reset for the next segment.</p> <p>It is possible in some situations (for example for treatments, when the <i>terminationCause</i> is not 016) to have a <i>codecUsage</i> longer than the recorded call time (<i>releaseTime</i> - <i>answerTime</i>).</p>

4.3.159 vmBusyActivation.invocationTime (158)

The following table describes the CDR field *vmBusyActivation.invocationTime* (158).

Table 166: Field vmBusyActivation.invocationTime (158)

Field Id	158
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmBusyActivation.invocationTime
XML tag	invocationTime
Service Name	VM Busy Activation
Length	18
Example Data	20040526174426.576
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.160 vmBusyActivation.facResult (159)

The following table describes the CDR field *vmBusyActivation.facResult* (159).

Table 167: Field vmBusyActivation.facResult (159)

Field Id	159
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmBusyActivation.facResult
XML tag	facResult
Service Name	VM Busy Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.161 vmBusyDeactivation.invocationTime (160)

The following table describes the CDR field *vmBusyDeactivation.invocationTime* (160).

Table 168: Field vmBusyDeactivation.invocationTime (160)

Field Id	160
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmBusyDeactivation.invocationTime
XML tag	invocationTime
Service Name	VM Busy Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.162 vmBusyDeactivation.facResult (161)

The following table describes the CDR field *vmBusyDeactivation.facResult* (161).

Table 169: Field vmBusyDeactivation.facResult (161)

Field Id	161
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmBusyDeactivation.facResult
XML tag	facResult
Service Name	VM Busy Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.163 vmNoAnswerActivation.invocationTime (162)

The following table describes the CDR field *vmNoAnswerActivation.invocationTime* (162).

Table 170: Field vmNoAnswerActivation.invocationTime (162)

Field Id	162
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmNoAnswerActivation.invocationTime
XML tag	invocationTime
Service Name	VM No Answer Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.164 vmNoAnswerActivation.facResult (163)

The following table describes the CDR field *vmNoAnswerActivation.facResult* (163).

Table 171: Field vmNoAnswerActivation.facResult (163)

Field Id	163
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmNoAnswerActivation.facResult
XML tag	facResult
Service Name	VM No Answer Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.165 vmNoAnswerDeactivation.invocationTime (164)

The following table describes the CDR field *vmNoAnswerDeactivation.invocationTime* (164).

Table 172: Field vmNoAnswerDeactivation.invocationTime (164)

Field Id	164
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmNoAnswerDeactivation.invocationTime
XML tag	invocationTime
Service Name	VM No Answer Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.166 vmNoAnswerDeactivation.facResult (165)

The following table describes the CDR field *vmNoAnswerDeactivation.facResult* (165).

Table 173: Field vmNoAnswerDeactivation.facResult (165)

Field Id	165
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmNoAnswerDeactivation.facResult
XML tag	facResult
Service Name	VM No Answer Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.167 vmAlwaysActivation.invocationTime (166)

The following table describes the CDR field *vmAlwaysActivation.invocationTime* (166).

Table 174: Field vmAlwaysActivation.invocationTime (166)

Field Id	166
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmAlwaysActivation.invocationTime
XML tag	invocationTime
Service Name	VM Always Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.168 vmAlwaysActivation.facResult (167)

The following table describes the CDR field *vmAlwaysActivation.facResult* (167).

Table 175: Field vmAlwaysActivation.facResult (167)

Field Id	167
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmAlwaysActivation.facResult
XML tag	facResult
Service Name	VM Always Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.169 vmAlwaysDeactivation.invocationTime (168)

The following table describes the CDR field *vmAlwaysDeactivation.invocationTime* (168).

Table 176: Field vmAlwaysDeactivation.invocationTime (168)

Field Id	168
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmAlwaysDeactivation.invocationTime
XML tag	invocationTime
Service Name	VM Always Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.170 vmAlwaysDeactivation.facResult (169)

The following table describes the CDR field *vmAlwaysDeactivation.facResult* (169).

Table 177: Field vmAlwaysDeactivation.facResult (169)

Field Id	169
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	vmAlwaysDeactivation.facResult
XML tag	facResult
Service Name	VM Always Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.171 noAnswerTimerSet.invocationTime (170)

The following table describes the CDR field *noAnswerTimerSet.invocationTime* (170).

Table 178: Field noAnswerTimerSet.invocationTime (170)

Field Id	170
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	noAnswerTimerSet.invocationTime
XML tag	invocationTime
Service Name	No Answer Timer Set
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.172 noAnswerTimerSet.facResult (171)

The following table describes the CDR field *noAnswerTimerSet.facResult* (171).

Table 179: Field noAnswerTimerSet.facResult (171)

Field Id	171
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	noAnswerTimerSet.facResult
XML tag	facResult
Service Name	No Answer Timer Set
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.173 clidBlockingActivation.invocationTime (172)

The following table describes the CDR field *clidBlockingActivation.invocationTime* (172).

Table 180: Field clidBlockingActivation.invocationTime (172)

Field Id	172
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	clidBlockingActivation.invocationTime
XML tag	invocationTime
Service Name	CLID Blocking Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.174 clidBlockingActivation.facResult (173)

The following table describes the CDR field *clidBlockingActivation.facResult* (173).

Table 181: Field clidBlockingActivation.facResult (173)

Field Id	173
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	clidBlockingActivation.facResult
XML tag	facResult
Service Name	CLID Blocking Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.175 clidBlockingDeactivation.invocationTime (174)

The following table describes the CDR field *clidBlockingDeactivation.invocationTime* (174).

Table 182: Field clidBlockingDeactivation.invocationTime (174)

Field Id	174
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	clidBlockingDeactivation.invocationTime
XML tag	invocationTime
Service Name	CLID Blocking Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.176 clidBlockingDeactivation.facResult (175)

The following table describes the CDR field *clidBlockingDeactivation.facResult* (175).

Table 183: Field clidBlockingDeactivation.facResult (175)

Field Id	175
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	clidBlockingDeactivation.facResult
XML tag	facResult
Service Name	CLID Blocking Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.177 callWaitingActivation.invocationTime (176)

The following table describes the CDR field *callWaitingActivation.invocationTime* (176).

Table 184: Field callWaitingActivation.invocationTime (176)

Field Id	176
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	callWaitingActivation.invocationTime
XML tag	invocationTime
Service Name	Call Waiting Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.178 callWaitingActivation.facResult (177)

The following table describes the CDR field *callWaitingActivation.facResult* (177).

Table 185: Field callWaitingActivation.facResult (177)

Field Id	177
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	callWaitingActivation.facResult
XML tag	facResult
Service Name	Call Waiting Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.179 callWaitingDeactivation.invocationTime (178)

The following table describes the CDR field *callWaitingDeactivation.invocationTime* (178).

Table 186: Field callWaitingDeactivation.invocationTime (178)

Field Id	178
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	callWaitingDeactivation.invocationTime
XML tag	invocationTime
Service Name	Call Waiting Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.180 callWaitingDeactivation.facResult (179)

The following table describes the CDR field *callWaitingDeactivation.facResult* (179).

Table 187: Field callWaitingDeactivation.facResult (179)

Field Id	179
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	callWaitingDeactivation.facResult
XML tag	facResult
Service Name	Call Waiting Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.181 faxMessaging (180)

The following table describes the CDR field *faxMessaging* (180).

Table 188: Field faxMessaging (180)

Field Id	180
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	faxMessaging
XML tag	faxMessaging
Service Name	Not applicable
Length	9
Example Data	Printing
Description	Indicates the call involves the Fax Messaging service. Values are: <ul style="list-style-type: none"> Printing: The voice portal is originating a call to a fax number to print a fax message. Receiving: The call to the voice portal is made to record a new fax.

4.3.182 twoStageDialingDigits (181)

The following table describes the CDR field *twoStageDialingDigits* (181).

Table 189: Field twoStageDialingDigits (181)

Field Id	181
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	twoStageDialingDigits
XML tag	twoStageDialingDigits
Service Name	Not applicable
Length	30
Example Data	88
Description	<p>The <i>twoStageDialingDigits</i> field is present when the Two Stage Dialing service is invoked and successfully collects digits. It reports the collected digits.</p> <p>When the service is not triggered or fails to collect digits, this field is omitted.</p>

4.3.183 trunkGroupInfo (182)

The following table describes the CDR field *trunkGroupInfo* (182).

Table 190: Field trunkGroupInfo (182)

Field Id	182
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	trunkGroupInfo
XML tag	trunkGroupInfo
Service Name	Not applicable
Length	255
Example Data	capacityExceeded
Description	<p>For an origination, the field contains the action taken by the Application Server to allow or deny the origination attempt. The permitted values are:</p> <ul style="list-style-type: none"> • Normal - The Application Server allowed the origination to proceed. • Bursting - The Application Server allowed the origination to proceed even though it detected a bursting condition. • CapacityExceeded - The Application Server denied the origination because the trunk group reached its capacity. • None - see the description for "None" below. <p>For a termination, the field indicates the results of the attempts to complete a call to a trunk group user. The field may contain multiple values (separated by spaces). The permitted values are:</p> <ul style="list-style-type: none"> • Normal - The Application Server allowed the termination to proceed, and it detected no <i>unreachable</i>, <i>capacity exceeded</i>, or <i>bursting</i> condition. • Bursting - The Application Server allowed the termination to proceed even though it detected a <i>bursting</i> condition and detected no <i>unreachable</i> condition. • Unreachable - The Application Server attempted a termination, but then detected an <i>unreachable</i> condition. • CapacityExceeded - The Application Server denied the termination because the trunk group reached its capacity. • Unconditional - The Application Server forwarded the call due to the execution of the Call Forwarding Always service running on the trunk group. • None - see the description for "None" below. <p>For "None", note that for either originations or terminations, the list is augmented with the value "Normal" upon retrieval of a call on a Shared Call Appearance location if that location is subject to a trunk group or "None" if the location is not subject to a trunk group.</p>

4.3.184 recallType (183)

The following table describes the CDR field *recallType* (183).

Table 191: Field recallType (183)

Field Id	183
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	recallType
XML tag	recallType
Service Name	Not applicable
Length	40
Example Data	transfer
Description	<p>Indicates that the CDR is for a recall and that the content is determined by the service for which the recall is being performed. This field is set only in the terminating CDR for a recall.</p> <p>Call Transfer Recall uses the value "transfer".</p> <p>Call Park recall uses the value "call park".</p> <p>Automatic Hold Retrieve uses the value "automatic hold/retrieve".</p> <p>Executive-Assistant Call Push uses the value "executive-assistant call push".</p>

4.3.185 cfncrcActivation.invocationTime (184)

The following table describes the CDR field *cfncrcActivation.invocationTime* (184).

Table 192: Field cfncrcActivation.invocationTime (184)

Field Id	184
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	cfncrcActivation.invocationTime
XML tag	invocationTime
Service Name	CFNRC Activation
Length	18
Example Data	20040526174426.576
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.186 cfncActivation.facResult (185)

The following table describes the CDR field *cfncActivation.facResult* (185).

Table 193: Field cfncActivation.facResult (185)

Field Id	185
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	cfncActivation.facResult
XML tag	facResult
Service Name	CFNRc Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.187 cfncDeactivation.invocationTime (186)

The following table describes the CDR field *cfncDeactivation.invocationTime* (186).

Table 194: Field cfncDeactivation.invocationTime (186)

Field Id	186
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	cfncDeactivation.invocationTime
XML tag	invocationTime
Service Name	CFNRc Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.188 cfncDeactivation.facResult (187)

The following table describes the CDR field *cfncDeactivation.facResult* (187).

Table 195: Field cfncDeactivation.facResult (187)

Field Id	187
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 13.0
CLI name	cfncDeactivation.facResult
XML tag	facResult
Service Name	CFNRC Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.189 q850Cause (188)

The following table describes the CDR field *q850Cause* (188).

Table 196: Field q850Cause (188)

Field Id	188
Failover Id	33
Module	Basic
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	q850Cause
XML tag	q850Cause
Service Name	Not applicable
Length	3
Example Data	29
Description	Indicates the Q.850 reason for call release. This field can have a value between 1 and 255. It is set only when a treatment is used and if this treatment was configured with an outgoing Q.850 value. For more information, see the <i>Configurable Treatment Handling Feature Description</i> (Release 14.sp2, EV 18143).

4.3.190 dialedDigitsContext (189)

The following table describes the CDR field *dialedDigitsContext* (189).

Table 197: Field dialedDigitsContext (189)

Field Id	189
Failover Id	34
Module	Basic
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	dialedDigitsContext
XML tag	dialedDigitsContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	<p>Contains the originally dialed phone-context for a user origination or redirection. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if there is no dialed phone-context or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.191 calledNumberContext (190)

The following table describes the CDR field *calledNumberContext* (190).

Table 198: Field calledNumberContext (190)

Field Id	190
Failover Id	35
Module	Basic
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	calledNumberContext
XML tag	calledNumberContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	<p>Contains the called number phone-context for a user origination or redirection. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if there is no dialed phone-context or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.192 networkTranslatedNumberContext (191)

The following table describes the CDR field *networkTranslatedNumberContext* (191).

Table 199: Field networkTranslatedNumberContext (191)

Field Id	191
Failover Id	36
Module	Basic
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	networkTranslatedNumberContext
XML tag	networkTranslatedNumberContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	<p>Contains the network translated number phone-context for a user origination or redirection. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if the <i>networkTranslatedNumber</i> is not set, if there is no phone-context for the <i>networkTranslatedNumber</i>, or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.193 callingNumberContext (192)

The following table describes the CDR field *callingNumberContext* (192).

Table 200: Field callingNumberContext (192)

Field Id	192
Failover Id	37
Module	Basic
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	callingNumberContext
XML tag	callingNumberContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	<p>Contains the phone-context for the calling number. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if the calling number has no phone-context or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.194 originalCalledNumberContext (193)

The following table describes the CDR field *originalCalledNumberContext* (193).

Table 201: Field originalCalledNumberContext (193)

Field Id	193
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	originalCalledNumberContext
XML tag	originalCalledNumberContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	Contains the phone-context for the original called number. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com. This field is not set if the original called number has no phone-context or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".

4.3.195 redirectingNumberContext (194)

The following table describes the CDR field *redirectingNumberContext* (194).

Table 202: Field redirectingNumberContext (194)

Field Id	194
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	redirectingNumberContext
XML tag	redirectingNumberContext
Service Name	Not applicable
Length	161
Example Data	+1
Description	Contains the phone-context for the redirecting number. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com. This field is not set if the redirecting number has no phone-context or if the <i>supportRFC3966PhoneContext</i> system parameter is set to "false".

4.3.196 locationControl.locationActivationResult (195)

The following table describes the CDR field *locationControl.locationActivationResult* (195).

Table 203: Field locationControl.locationActivationResult (195)

Field Id	195
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	locationControl.locationActivationResult
XML tag	locationActivationResult
Service Name	Location Control
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Shared Call Appearance Location Activation feature access code. The value "success" means the feature was invoked and processed successfully.

4.3.197 locationControl.locationDeactivationResult (196)

The following table describes the CDR field *locationControl.locationDeactivationResult* (196).

Table 204: Field locationControl.locationDeactivationResult (196)

Field Id	196
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	locationControl.locationDeactivationResult
XML tag	locationDeactivationResult
Service Name	Location Control
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Shared Call Appearance Location Deactivation feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.198 callRetrieve.callRetrieveResult (197)

The following table describes the CDR field *callRetrieve.callRetrieveResult* (197).

Table 205: Field callRetrieve.callRetrieveResult (197)

Field Id	197
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	callRetrieve.callRetrieveResult
XML tag	callRetrieveResult
Service Name	Call Retrieve
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Retrieve feature access code. The value "Success" means that a call was successfully identified and retrieved.

4.3.199 routingNumber (198)

The following table describes the CDR field *routingNumber* (198).

Table 206: Field routingNumber (198)

Field Id	198
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	routingNumber
XML tag	routingNumber
Service Name	Not applicable
Length	255
Example Data	16D1
Description	<p>Indicates the portability number routing number, if present. The routing number is always associated with the terminating party.</p> <ul style="list-style-type: none"> For originating CDRs, this is associated with the remote party. For terminating CDRs, this is associated with the local user. <p>The routing number is copied "as is" from the <i>rn</i> parameter, from a request URI, or a P-Charging-Vector, and may include an embedded <i>rn-context</i> parameter (for example, the value could be "1699;rn-context=+15551112222").</p>

4.3.200 originationMethod (199)

The following table describes the CDR field *originationMethod* (199).

Table 207: Field originationMethod (199)

Field Id	199
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	originationMethod
XML tag	originationMethod
Service Name	Not applicable
Length	30
Example Data	clickToDial-remoteOffice
Description	<p>This field only appears in originating CDRs, when the call is initiated by the Application Server. It does not appear for terminating calls, nor does it appear when it is not initiated by the Application Server. It has four possible values:</p> <ul style="list-style-type: none"> • clickToDial-normal • clickToDial-remoteOffice • automaticCallback • automaticCallbackPolling <p>When set to "clickToDial-normal", it indicates that a standard Click-To-Dial was performed for this call.</p> <p>When set to "clickToDial-remoteOffice", it indicates that a Remote Office origination was made. For example, if A, who has remote office to ROA, calls B, the <i>originationMethod</i> is set to "clickToDial-remoteOffice" in the originating CDR for the A to B call.</p> <p>When set to "automaticCallback", it indicates that the call origination was initiated by the Application Server when it first called back the caller at the moment the monitored called party became available.</p> <p>When set to "automaticCallbackPolling", it indicates that the call origination was initiated by the Application Server when it is performing an attempt to reach the called party for polling. Note that if the called party is still busy at the moment an automatic call back (ACB) polling attempt is made, no attempt is made to reach the calling party, and the CDR <i>terminationCause</i> is set to "017" (busy).</p>

4.3.201 callParked.invocationTime (200)

The following table describes the CDR field *callParked.invocationTime* (200).

Table 208: Field callParked.invocationTime (200)

Field Id	200
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	callParked.invocationTime
XML tag	invocationTime
Service Name	Call Parked
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.202 broadworksAnywhere.relatedCallId (201)

The following table describes the CDR field *broadworksAnywhere.relatedCallId* (201).

Table 209: Field broadworksAnywhere.relatedCallId (201)

Field Id	201
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	broadworksAnywhere.relatedCallId
XML tag	relatedCallId
Service Name	BroadWorks Anywhere
Length	40
Example Data	CM14:0
Description	During an origination through the BroadWorks Anywhere portal, in the BroadWorks Anywhere user origination CDR, this field provides the <i>localCallId</i> of termination from the portal to the BroadWorks Anywhere user. For more information, see section Related Call Id on page 303, which provides a description of the <i>relatedCallId</i> field.

4.3.203 acrActivation.invocationTime (202)

The following table describes the CDR field *acrActivation.invocationTime* (202).

Table 210: Field acrActivation.invocationTime (202)

Field Id	202
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	acrActivation.invocationTime
XML tag	invocationTime
Service Name	ACR Activation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.204 acrActivation.facResult (203)

The following table describes the CDR field *acrActivation.facResult* (203).

Table 211: Field acrActivation.facResult (203)

Field Id	203
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	acrActivation.facResult
XML tag	facResult
Service Name	ACR Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.205 acrDeactivation.invocationTime (204)

The following table describes the CDR field *acrDeactivation.invocationTime* (204).

Table 212: Field *acrDeactivation.invocationTime* (204)

Field Id	204
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	acrDeactivation.invocationTime
XML tag	invocationTime
Service Name	ACR Deactivation
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.206 acrDeactivation.facResult (205)

The following table describes the CDR field *acrDeactivation.facResult* (205).

Table 213: Field *acrDeactivation.facResult* (205)

Field Id	205
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	acrDeactivation.facResult
XML tag	facResult
Service Name	ACR Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.207 outsideAccessCode (206)

The following table describes the CDR field *outsideAccessCode* (206).

Table 214: Field outsideAccessCode (206)

Field Id	206
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 14.0
CLI name	outsideAccessCode
XML tag	outsideAccessCode
Service Name	Not applicable
Length	5
Example Data	9
Description	<p>This field is included in an originating CDR when a user dials an outside access code. The field contains the actual outside access code dialed by the user.</p> <p>This field is only used for originating CDRs, and is omitted for terminating CDRs.</p>

4.3.208 primaryDeviceLinePort (207)

The following table describes the CDR field *primaryDeviceLinePort* (207).

Table 215: Field primaryDeviceLinePort (207)

Field Id	207
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	primaryDeviceLinePort
XML tag	primaryDeviceLinePort
Service Name	Not applicable
Length	161
Example Data	noel@domain.com
Description	<p>In IMS, this field captures the user's primary SIP Public User Identity.</p> <p>When not in IMS, this field captures the user's primary device line/port. For subscribers without a primary device line/port, this field contains the <i>userID</i>.</p> <p>In a Hybrid Application Server system, this field captures the user's primary device line/port. For subscribers without a primary device line/port, this field is populated with the SIP Public User Identity of the user's primary mobile location if available; otherwise, the field contains the user ID.</p>

4.3.209 calledAssertedIdentity (208)

The following table describes the CDR field *calledAssertedIdentity* (208).

Table 216: Field calledAssertedIdentity (208)

Field Id	208
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	calledAssertedIdentity
XML tag	calledAssertedIdentity
Service Name	Not applicable
Length	161
Example Data	tel:3335550100;phone-context=+1
Description	<p>If the remote subscriber is not a BroadWorks user, this field contains the connected line identity value.</p> <p>If the remote subscriber is a BroadWorks user, this field contains the remote subscriber's phone number (or group number for phantom users).</p> <p>The value is frozen after answer.</p> <p>The value is the full URI, including the sip: or tel: prefix. It also contains any eventual <i>phone-context</i> parameter.</p> <p>The value is not provided for Remote Office or BroadWorks Anywhere network call legs.</p>

4.3.210 calledAssertedPresentationIndicator (209)

The following table describes the CDR field *calledAssertedPresentationIndicator* (209).

Table 217: Field calledAssertedPresentationIndicator (209)

Field Id	209
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	calledAssertedPresentationIndicator
XML tag	calledAssertedPresentationIndicator
Service Name	Not applicable
Length	20
Example Data	Public
Description	<p>This field contains the presentation indicator for the <i>calledAssertedIdentity</i> field.</p> <p>The value is frozen after answer.</p> <p>Values can be "Public", "Unavailable", or "Anonymous".</p>

4.3.211 sdp (210)

The following table describes the CDR field *sdp* (210).

Table 218: Field sdp (210)

Field Id	210
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	sdp
XML tag	sdp
Service Name	Not applicable
Length	1024
Example Data	v=0 o=- 3144 3144 IN IP4 192.168.8.114 s=- c=IN IP4 192.168.8.114 t=0 0 m=audio 16438 RTP/AVP 0 100 101 a=rtpmap:0 PCMU/8000 a=rtpmap:100 NSE/8000 a=rtpmap:101 telephone-event/8000 a=fmtp:101 0-15 a=ptime:20 a=sendrecv
Description	This field includes the last answer SDP received. Prior to call answer, this field is not present.

4.3.212 mediaInitiatorFlag (211)

The following table describes the CDR field *mediaInitiatorFlag* (211).

Table 219: Field mediaInitiatorFlag (211)

Field Id	211
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	mediaInitiatorFlag
XML tag	mediaInitiatorFlag
Service Name	Not applicable
Length	4
Example Data	0
Description	This field identifies the party that initiated the last SDP negotiation. It contains "0" for the terminating party and "1" for the originating party. The value is set to "none" once the call is redirected. Prior to answer, this field is not present.

4.3.213 sdpOfferTimestamp (212)

The following table describes the CDR field *sdpOfferTimestamp* (212).

Table 220: Field sdpOfferTimestamp (212)

Field Id	212
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	sdpOfferTimestamp
XML tag	sdpOfferTimestamp
Service Name	Not applicable
Length	18 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is n times the length of a single element plus the required spaces (n being the number of elements on the list).
Example Data	20041220170250.608
Description	<p>This field captures the timestamp of the Offer SDP for early media. If early media is renegotiated, then this field contains all the Offer SDP timestamps as a list of subfields. If no early media is provided, this field is not present.</p> <p>In XML, the <i>sdpOfferTimestamp</i>, <i>sdpAnswerTimestamp</i>, <i>earlyMediaSdp</i>, and <i>earlyMediaInitiatorFlag</i> are grouped together in an "earlyMedia" element. The "earlyMedia" elements are grouped together in an "earlyMediaList" element.</p>

4.3.214 sdpAnswerTimestamp (213)

The following table describes the CDR field *sdpAnswerTimestamp* (213).

Table 221: Field sdpAnswerTimestamp (213)

Field Id	213
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	sdpAnswerTimestamp
XML tag	sdpAnswerTimestamp
Service Name	Not applicable
Length	18 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is n times the length of a single element plus the required spaces (n being the number of elements on the list).
Example Data	20041220170251.608
Description	<p>This field captures the timestamp of the Answer SDP for early media. If early media is renegotiated, then this field contains all the Answer SDP timestamps as a list of subfields. If no early media is provided, this field is not present.</p> <p>In XML, the <i>sdpOfferTimestamp</i>, <i>sdpAnswerTimestamp</i>, <i>earlyMediaSdp</i>, and <i>earlyMediaInitiatorFlag</i> are grouped together in an "earlyMedia" element. The "earlyMedia" elements are grouped together in an "earlyMediaList" element.</p>

4.3.215 earlyMediaSdp (214)

The following table describes the CDR field *earlyMediaSdp* (214).

Table 222: Field earlyMediaSdp (214)

Field Id	214
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	earlyMediaSdp
XML tag	earlyMediaSdp
Service Name	Not applicable
Length	1024 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is <i>n</i> times the length of a single element plus the required spaces (<i>n</i> being the number of elements on the list).
Example Data	v=0 o=- 3144 3144 IN IP4 192.168.8.114 s=- c=IN IP4 192.168.8.114 t=0 0 m=audio 16438 RTP/AVP 0 100 101 a=rtpmap:0 PCMU/8000 a=rtpmap:100 NSE/8000 a=rtpmap:101 telephone-event/8000 a=fmtp:101 0-15 aptime:20 a=sendrecv
Description	This field captures the early media Answer SDP. If early media is renegotiated, then this field contains all the Answer SDPs as a list of subfields. If no early media is provided, this field is not present. In XML, the <i>sdpOfferTimestamp</i> , <i>sdpAnswerTimestamp</i> , <i>earlyMediaSdp</i> , and <i>earlyMediaInitiatorFlag</i> are grouped together in an "earlyMedia" element. The "earlyMedia" elements are grouped together in an "earlyMediaList" element.

4.3.216 earlyMediaInitiatorFlag (215)

The following table describes the CDR field *earlyMediaInitiatorFlag* (215).

Table 223: Field earlyMediaInitiatorFlag (215)

Field Id	215
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	earlyMediaInitiatorFlag
XML tag	earlyMediaInitiatorFlag
Service Name	Not applicable
Length	4 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is n times the length of a single element plus the required spaces (n being the number of elements on the list).
Example Data	1
Description	<p>This field captures the party initiating the early media SDP negotiation (sending the offer SDP). The value "0" represents the terminating party. The value "1" represents the originating party. If early media is renegotiated, then this field contains multiple values as a list of subfields. If no early media is provided, this field is not present. The value is set to "none" once the call is redirected.</p> <p>In XML, the <i>sdpOfferTimestamp</i>, <i>sdpAnswerTimestamp</i>, <i>earlyMediaSdp</i>, and <i>earlyMediaInitiatorFlag</i> are grouped together in an "earlyMedia" element. The "earlyMedia" elements are grouped together in an "earlyMediaList" element.</p>

4.3.217 bodyContentType (216)

The following table describes the CDR field *bodyContentType* (216).

Table 224: Field bodyContentType (216)

Field Id	216
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	bodyContentType
XML tag	bodyContentType
Service Name	Not applicable
Length	255 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is <i>n</i> times the length of a single element plus the required spaces (<i>n</i> being the number of elements on the list).
Example Data	application/pkcs7-mime; smime-type=enveloped-data; name=smime.p7m
Description	<p>This field contains the media type of all message bodies exchanged during the call excluding SDP bodies. Since multiple bodies can be exchanged, this field is implemented as a list of subfields, one for each exchanged body. The media type is provided with its parameters.</p> <p>Multipart bodies are not reported. Instead, individual body parts are reported separately.</p> <p>In XML, the <i>bodyContentType</i>, <i>bodyContentLength</i>, <i>bodyContentDisposition</i>, and <i>bodyOriginator</i> are grouped together in a "messageBody" element. The "messageBody" elements are grouped together in a "messageBodyList" element.</p>

4.3.218 bodyContentLength (217)

The following table describes the CDR field *bodyContentLength* (217).

Table 225: Field bodyContentLength (217)

Field Id	217
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	bodyContentLength
XML tag	bodyContentLength
Service Name	Not applicable
Length	10 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is <i>n</i> times the length of a single element plus the required spaces (<i>n</i> being the number of elements on the list).
Example Data	100
Description	<p>This field contains body size of all message bodies exchanged during the call excluding SDP bodies. Since multiple bodies can be exchanged, this field is implemented as a list of subfields, one for each exchanged body.</p> <p>Multipart bodies are not reported. Instead, individual body parts are reported separately.</p> <p>In XML, the <i>bodyContentType</i>, <i>bodyContentLength</i>, <i>bodyContentDisposition</i>, and <i>bodyOriginator</i> are grouped together in a "messageBody" element. The "messageBody" elements are grouped together in a "messageBodyList" element.</p>

4.3.219 bodyContentDisposition (218)

The following table describes the CDR field *bodyContentDisposition* (218).

Table 226: Field *bodyContentDisposition* (218)

Field Id	218
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	bodyContentDisposition
XML tag	bodyContentDisposition
Service Name	Not applicable
Length	255 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is <i>n</i> times the length of a single element plus the required spaces (<i>n</i> being the number of elements on the list).
Example Data	attachment; filename=smime.p7m
Description	<p>This field contains content disposition of all message bodies exchanged during the call excluding SDP bodies. Since multiple bodies can be exchanged, this field is implemented as a list of subfields, one for each exchanged body. The content disposition is provided with its parameters.</p> <p>Multipart bodies are not reported. Instead, individual body parts are reported separately. If no content disposition is provided with the body, the value "none" is generated to preserve subfield's alignment in CSV, Radius, and Diameter formats.</p> <p>In XML, the <i>bodyContentType</i>, <i>bodyContentLength</i>, <i>bodyContentDisposition</i>, and <i>bodyOriginator</i> are grouped together in a "messageBody" element. The "messageBody" elements are grouped together in a "messageBodyList" element.</p>

4.3.220 bodyOriginator (219)

The following table describes the CDR field *bodyOriginator* (219).

Table 227: Field bodyOriginator (219)

Field Id	219
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	bodyOriginator
XML tag	bodyOriginator
Service Name	Not applicable
Length	1 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is <i>n</i> times the length of a single element plus the required spaces (<i>n</i> being the number of elements on the list).
Example Data	0
Description	<p>This field contains the identity of the originator of each message body exchanged during the call excluding SDP bodies. The value "0" represents the originator; the value "1" represents the terminator. Note that this is the reverse of <i>earlyMediaInitiatorFlag</i> and <i>mediaInitiatorFlag</i>, as specified by the 3GPP. The value is set to "none" once the call is redirected. Since multiple bodies can be exchanged, this field is implemented as a list of subfields, one for each exchanged body.</p> <p>Multipart bodies are not reported. Instead, individual body parts are reported separately.</p> <p>In XML, the <i>bodyContentType</i>, <i>bodyContentLength</i>, <i>bodyContentDisposition</i>, and <i>bodyOriginator</i> are grouped together in a "messageBody" element. The "messageBody" elements are grouped together in a "messageBodyList" element.</p>

4.3.221 sipErrorCode (220)

The following table describes the CDR field *sipErrorCode* (220).

Table 228: Field sipErrorCode (220)

Field Id	220
Failover Id	Not applicable
Module	3gpp
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	sipErrorCode
XML tag	sipErrorCode
Service Name	Not applicable
Length	3
Example Data	486
Description	<p>When the call is released before answer due to a SIP error code received (4xx, 5xx and 6xx), this error code is captured in this field. If the release is generated internally by a service or received post-answer, it is not captured here. The received value is captured independently from any configurable treatment setting.</p>

4.3.222 otherInfoInPCV (221)

The following table describes the CDR field *otherInfoInPCV* (221).

Table 229: Field otherInfoInPCV (221)

Field Id	221
Failover Id	Not applicable
Module	IP
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	otherInfoInPCV
XML tag	otherInfoInPCV
Service Name	Not applicable
Length	128
Example Data	Char=123456;bar=foo
Description	<p>This field records all other extra parameters from the <i>SIP P-Charging-Vector</i> received in the SIP 200 OK response (if any) for answered calls. They appear in their original format, thus separated by semi-colons.</p> <p>In XML, the <i>key</i>, <i>creator</i>, <i>originatorNetwork</i>, <i>terminatorNetwork</i>, and <i>otherInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.</p>

4.3.223 receivedCallingNumber (222)

The following table describes the CDR field *receivedCallingNumber* (222).

Table 230: Field receivedCallingNumber (222)

Field Id	222
Failover Id	38
Module	Basic
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	receivedCallingNumber
XML tag	receivedCallingNumber
Service Name	Not applicable
Length	161
Example Data	+15143330000
Description	<p>For trunk group originations, the field captures the identity received in the <i>From</i> header of the SIP request sent by the trunk group device (for example, a PBX), when the call is originated by a user not specifically known by the Application Server.</p> <p>The field typically contains a phone number, obtained from the <i>From</i> header. However, it may also be the SIP URI from the <i>From</i> header if the Application Server determines that the <i>From</i> header does not contain a phone number</p>

4.3.224 customRingback.mediaSelection (223)

The following table describes the CDR field *customRingback.mediaSelection* (223).

Table 231: Field customRingback.mediaSelection (223)

Field Id	223
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 15.0
CLI name	customRingback.mediaSelection
XML tag	mediaSelection
Service Name	Custom Ringback
Length	20
Example Data	Call Waiting
Description	Indicates the type of media selected for Custom Ringback. This field is populated either with the string "Standard" or with the string "Call Waiting" based on the type of Custom Ringback invoked.

4.3.225 adviceOfCharge.aocType (224)

The following table describes the CDR field *adviceOfCharge.aocType* (224).

Table 232: Field adviceOfCharge.aocType (224)

Field Id	224
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.aocType
XML tag	type
Service Name	Advice Of Charge
Length	5
Example Data	aoc-d
Description	This field indicates for which type of Advice of Charge (AoC) the information was inserted in the CDR. Possible values are "aoc-d" (during call) or "aoc-e" (end of call).

4.3.226 adviceOfCharge.charge (225)

The following table describes the CDR field *adviceOfCharge.charge* (225).

Table 233: Field adviceOfCharge.charge (225)

Field Id	225
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.charge
XML tag	charge
Service Name	Advice Of Charge
Length	20
Example Data	2345.73
Description	This field indicates the charge generated for the current call.

4.3.227 adviceOfCharge.currency (226)

The following table describes the CDR field *adviceOfCharge.currency* (226).

Table 234: Field adviceOfCharge.currency (226)

Field Id	226
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.currency
XML tag	currency
Service Name	Advice Of Charge
Length	4
Example Data	USD
Description	This field indicates the currency associated with the charge generated for the current call.

4.3.228 adviceOfCharge.time (227)

The following table describes the CDR field *adviceOfCharge.time* (227).

Table 235: Field adviceOfCharge.time (227)

Field Id	227
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.time
XML tag	time
Service Name	Advice Of Charge
Length	18
Example Data	20080215220738.796
Description	This field indicates the time at which the charge was calculated for this call and sent to the access device.

4.3.229 adviceOfCharge.sum (228)

The following table describes the CDR field *adviceOfCharge.sum* (228).

Table 236: Field adviceOfCharge.sum (228)

Field Id	228
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.sum
XML tag	sum
Service Name	Advice Of Charge
Length	20
Example Data	1765.95
Description	This field indicates the sum of all charges for all contributing calls associated with the current call. If there are calls with unknown charges, this field is populated with the value "incomplete".

4.3.230 adviceOfCharge.invocationTime (229)

The following table describes the CDR field *adviceOfCharge.invocationTime* (229).

Table 237: Field adviceOfCharge.invocationTime (229)

Field Id	229
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.invocationTime
XML tag	invocationTime
Service Name	Advice Of Charge Activation
Length	18
Example Data	20080215220738.796
Description	This field indicates the advice of charge activation feature access code (FAC) invocation time.

4.3.231 adviceOfCharge.result (230)

The following table describes the CDR field *adviceOfCharge.result* (230).

Table 238: Field adviceOfCharge.result (230)

Field Id	230
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	adviceOfCharge.result
XML tag	result
Service Name	Advice Of Charge Activation
Length	7
Example Data	Success
Description	This field indicates whether the advice of charge activation for the next call was successful or not. The possible values are "success" and "failure".

4.3.232 asCallType (231)

The following table describes the CDR field *asCallType* (231).

Table 239: Field asCallType (231)

Field Id	231
Failover Id	39
Module	Basic
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	asCallType
XML tag	asCallType
Service Name	Not applicable
Length	11
Example Data	Group
Description	This field indicates the call type. Values can be "Group", "Enterprise", "Network", "Network URL", "Emergency", "Repair", or "Internal".

4.3.233 scfActivation.invocationTime (232)

The following table describes the CDR field *scfActivation.invocationTime* (232).

Table 240: Field scfActivation.invocationTime (232)

Field Id	232
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	scfActivation.invocationTime
XML tag	invocationTime
Service Name	SCF Activation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.234 scfActivation.facResult (233)

The following table describes the CDR field *scfActivation.facResult* (233).

Table 241: Field *scfActivation.facResult* (233)

Field Id	233
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	scfActivation.facResult
XML tag	facResult
Service Name	SCF Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.235 scfDeactivation.invocationTime (234)

The following table describes the CDR field *scfDeactivation.invocationTime* (234).

Table 242: Field *scfDeactivation.invocationTime* (234)

Field Id	234
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	scfDeactivation.invocationTime
XML tag	invocationTime
Service Name	SCF Deactivation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.236 scfDeactivation.facResult (235)

The following table describes the CDR field *scfDeactivation.facResult* (235).

Table 243: Field scfDeactivation.facResult (235)

Field Id	235
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	scfDeactivation.facResult
XML tag	facResult
Service Name	SCF Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.237 cfaInterrogation.invocationTime (236)

The following table describes the CDR field *cfaInterrogation.invocationTime* (236).

Table 244: Field cfaInterrogation.invocationTime (236)

Field Id	236
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfaInterrogation.invocationTime
XML tag	invocationTime
Service Name	CFA Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.238 cfaInterrogation.facResult (237)

The following table describes the CDR field *cfaInterrogation.facResult* (237).

Table 245: Field cfaInterrogation.facResult (237)

Field Id	237
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfaInterrogation.facResult
XML tag	facResult
Service Name	CFA Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.239 cfnaInterrogation.invocationTime (238)

The following table describes the CDR field *cfnaInterrogation.invocationTime* (238).

Table 246: Field cfnaInterrogation.invocationTime (238)

Field Id	238
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfnaInterrogation.invocationTime
XML tag	invocationTime
Service Name	CFNA Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.240 cfnaInterrogation.facResult (239)

The following table describes the CDR field *cfnaInterrogation.facResult* (239).

Table 247: Field cfnaInterrogation.facResult (239)

Field Id	239
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfnaInterrogation.facResult
XML tag	facResult
Service Name	CFNA Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.241 cfbInterrogation.invocationTime (240)

The following table describes the CDR field *cfbInterrogation.invocationTime* (240).

Table 248: Field cfbInterrogation.invocationTime (240)

Field Id	240
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfbInterrogation.invocationTime
XML tag	invocationTime
Service Name	CFB Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.242 cfbInterrogation.facResult (241)

The following table describes the CDR field *cfbInterrogation.facResult* (241).

Table 249: Field cfbInterrogation.facResult (241)

Field Id	241
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cfbInterrogation.facResult
XML tag	facResult
Service Name	CFB Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.243 cbfAuthorizationCode (242)

The following table describes the CDR field *cbfAuthorizationCode* (242).

Table 250: Field cbfAuthorizationCode (242)

Field Id	242
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	cbfAuthorizationCode
XML tag	cbfAuthorizationCode
Service Name	Not applicable
Length	14
Example Data	1234
Description	The authorization code collected by any Communication Barring service, if dialed.

4.3.244 callBridge.callBridgeResult (243)

The following table describes the CDR field *callBridge.callBridgeResult* (243).

Table 251: Field callBridge.callBridgeResult (243)

Field Id	243
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	callBridge.callBridgeResult
XML tag	callBridgeResult
Service Name	Call Bridge
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Bridge feature access code. The value "Success" means that a call was successfully identified and an SCA-Bridge was created or joined.

4.3.245 returnCallNumberDeletion.invocationTime (244)

The following table describes the CDR field *returnCallNumberDeletion.invocationTime* (244).

Table 252: Field returnCallNumberDeletion.invocationTime (244)

Field Id	244
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	returnCallNumberDeletion.invocationTime
XML tag	invocationTime
Service Name	Return Call Number Deletion
Length	18
Example Data	20090218213542.750
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.246 returnCallNumDel.facResult (245)

The following table describes the CDR field *returnCallNumDel.facResult* (245).

Table 253: Field returnCallNumDel.facResult (245)

Field Id	245
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	returnCallNumDel.facResult
XML tag	facResult
Service Name	Return Call Number Deletion
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.247 prepaidStatus (246)

The following table describes the CDR field *prepaidStatus* (246).

Table 254: Field prepaidStatus (246)

Field Id	246
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	prepaidStatus
XML tag	prepaidStatus
Service Name	Not applicable
Length	22
Example Data	charged
Description	<p>If present, this field indicates that this was a prepaid user and that an OCS_Charging query was made for the call. It indicates the call's outcome from an online billing perspective. Values can be "notApplicable", "charged", "creditsRanOut", "insufficientCredits", "errorInitialContinue", "errorInitialTerminated", "errorMidCallContinue", or "errorMidCallTerminated".</p> <p>This field can only be present in CCR [Terminated] for Ro, ACR [stop] for Rf, or Radius Stop records. It can be present in final Normal XML and CSV records.</p> <p>The "notApplicable" value is used if the Result-Code AVP returned in the CCA was set to "DIAMETER_CREDIT_CONTROL_NOT_APPLICABLE".</p> <p>The "charged" value is used if a call was credited normally and ran to completion without credits running out or any Diameter error.</p> <p>"creditsRanOut" is used if credits ran out during the call, but the call could proceed as usual until then.</p> <p>"insufficientCredits" is used if the prepaid subscriber was already out of credits during CCR [Initial] processing, so that call setup could not even complete.</p> <p>"errorInitialContinue" is used if the OCS_Charging(s) could not be contacted during call setup, or if there was an error, but the call was allowed to continue nevertheless.</p> <p>"errorInitialTerminated" is used if the OCS_Charging(s) could not be contacted during call setup, or if there was an error, and the call was terminated as a result.</p> <p>"errorMidCallContinue" is used if there was a mid-call connection or other error (typically with a CCR [Update]), but the call was allowed to continue nevertheless.</p> <p>"errorMidCallTerminated" is used if there was a mid-call connection or other error (typically with a CCR [Update]) and the call was terminated as a result.</p>

4.3.248 configurableCLID (247)

The following table describes the CDR field *configurableCLID* (247).

Table 255: Field configurableCLID (247)

Field Id	247
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	configurableCLID
XML tag	configurableCLID
Service Name	Not applicable
Length	20
Example Data	+14056668888
Description	This field can only be present in originating CDRs. It reports the value set in the user's or the group-level default user's configurable CLID. If neither is set, this field is omitted.

4.3.249 callCenter.nightServiceActivationMOResult (248)

The following table describes the CDR field *callCenter.nightServiceActivationMOResult* (248).

Table 256: Field callCenter.nightServiceActivationMOResult (248)

Field Id	248
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	callCenter.nightServiceActivationMOResult
XML tag	nightServiceActivationMOResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Night Service Activation Manual Override feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.250 callCenter.nightServiceDeactivationMOResult (249)

The following table describes the CDR field *callCenter.nightServiceDeactivationMOResult* (249).

Table 257: Field callCenter.nightServiceDeactivationMOResult (249)

Field Id	249
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	callCenter.nightServiceDeactivationMOResult
XML tag	nightServiceDeactivationMOResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Night Service Deactivation Manual Override feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.251 callCenter.forcedForwardingActivationResult (250)

The following table describes the CDR field *callCenter.forcedForwardingActivationResult* (250).

Table 258: Field callCenter.forcedForwardingActivationResult (250)

Field Id	250
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	callCenter.forcedForwardingActivationResult
XML tag	forcedForwardingActivationResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Forced Forwarding Activation feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.252 callCenter.forcedForwardingDeactivationResult (251)

The following table describes the CDR field *callCenter.forcedForwardingDeactivationResult* (251).

Table 259: Field callCenter.forcedForwardingDeactivationResult (251)

Field Id	251
Failover Id	Not applicable
Module	Centrex
Feature	In use before Release 17.0
Release	Release 16.0
CLI name	callCenter.forcedForwardingDeactivationResult
XML tag	forcedForwardingDeactivationResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Forced Forwarding Deactivation feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.253 callCenter.outgoingCallCenterCallFACResult (252)

The following table describes the CDR field *callCenter.outgoingCallCenterCallFACResult* (252).

Table 260: Field callCenter.outgoingCallCenterCallFACResult (252)

Field Id	252
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	callCenter.outgoingCallCenterCallFACResult
XML tag	outgoingCallCenterCallFACResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Make Call Center Call feature access code. The value "success" means the feature was invoked and processed successfully.

4.3.254 callCenter.outgoingPersonalCallFACResult (253)

The following table describes the CDR field *callCenter.outgoingPersonalCallFACResult* (253).

Table 261: Field callCenter.outgoingPersonalCallFACResult (253)

Field Id	253
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	callCenter.outgoingPersonalCallFACResult
XML tag	outgoingPersonalCallFACResult
Service Name	Call Center
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing the Call Center Make Personal Call feature access code. The value "success" means the feature was invoked and processed successfully.

4.3.255 callCenter.outgoingCallCenterPhoneNumber (254)

The following table describes the CDR field *callCenter.outgoingCallCenterPhoneNumber* (254).

Table 262: Field callCenter.outgoingCallCenterPhoneNumber (254)

Field Id	254
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	callCenter.outgoingCallCenterPhoneNumber
XML tag	outgoingCallCenterPhoneNumber
Service Name	Call Center
Length	16
Example Data	+15146999618
Description	This field captures the Dialed Number Identification Service (DNIS) number (E.164 formatted) or extension associated with the DNIS name used by the agent to make the outgoing call.

4.3.256 interceptUser.routingNumber (255)

The following table describes the CDR field *interceptUser.routingNumber* (255).

Table 263: Field interceptUser.routingNumber (255)

Field Id	255
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	interceptUser.routingNumber
XML tag	routingNumber
Service Name	Intercept User
Length	161
Example Data	John.doe@abc.com
Description	This field captures the destination to which the outbound call from an intercepted user is routed. The value can be a phone number or a URL.

4.3.257 interceptGroup.routingNumber (256)

The following table describes the CDR field *interceptGroup.routingNumber* (256).

Table 264: Field interceptGroup.routingNumber (256)

Field Id	256
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	interceptGroup.routingNumber
XML tag	routingNumber
Service Name	Intercept Group
Length	161
Example Data	9726980601
Description	This field captures the destination to which the outbound call from an intercepted user is routed. The value can be a phone number or a URL.

4.3.258 cbActivation.invocationTime (257)

The following table describes the CDR field *cbActivation.invocationTime* (257).

Table 265: Field cbActivation.invocationTime (257)

Field Id	257
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbActivation.invocationTime
XML tag	invocationTime
Service Name	CB Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.259 cbActivation.facResult (258)

The following table describes the CDR field *cbActivation.facResult* (258).

Table 266: Field cbActivation.facResult (258)

Field Id	258
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbActivation.facResult
XML tag	facResult
Service Name	CB Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.260 cbDeactivation.invocationTime (259)

The following table describes the CDR field *cbDeactivation.invocationTime* (259).

Table 267: Field cbDeactivation.invocationTime (259)

Field Id	259
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbDeactivation.invocationTime
XML tag	invocationTime
Service Name	CB Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.261 cbDeactivation.facResult (260)

The following table describes the CDR field *cbDeactivation.facResult* (260).

Table 268: Field cbDeactivation.facResult (260)

Field Id	260
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbDeactivation.facResult
XML tag	facResult
Service Name	CB Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.262 cbQuery.invocationTime (261)

The following table describes the CDR field *cbQuery.invocationTime* (261).

Table 269: Field cbQuery.invocationTime (261)

Field Id	261
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbQuery.invocationTime
XML tag	invocationTime
Service Name	CB Query
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.263 cbQuery.facResult (262)

The following table describes the CDR field *cbQuery.facResult* (262).

Table 270: Field cbQuery.facResult (262)

Field Id	262
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cbQuery.facResult
XML tag	facResult
Service Name	CB Query
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.264 cfncInterrogation.invocationTime (263)

The following table describes the CDR field *cfncInterrogation.invocationTime* (263).

Table 271: Field cfncInterrogation.invocationTime (263)

Field Id	263
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cfncInterrogation.invocationTime
XML tag	invocationTime
Service Name	CFNRC Interrogation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.265 cfncInterrogation.facResult (264)

The following table describes the CDR field *cfncInterrogation.facResult* (264).

Table 272: Field cfncInterrogation.facResult (264)

Field Id	264
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	cfncInterrogation.facResult
XML tag	facResult
Service Name	CFNRC Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.266 vmrDialing.invocationTime (265)

The following table describes the CDR field *vmrDialing.invocationTime* (265).

Table 273: Field vmrDialing.invocationTime (265)

Field Id	265
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	vmrDialing.invocationTime
XML tag	invocationTime
Service Name	VMR Dialing
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.267 vmrDialing.facResult (266)

The following table describes the CDR field *vmrDialing.facResult* (266).

Table 274: Field vmrDialing.facResult (266)

Field Id	266
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	vmrDialing.facResult
XML tag	facResult
Service Name	VMR Dialing
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.268 vpDialing.invocationTime (267)

The following table describes the CDR field *vpDialing.invocationTime* (267).

Table 275: Field vpDialing.invocationTime (267)

Field Id	267
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	vpDialing.invocationTime
XML tag	invocationTime
Service Name	VP Dialing
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.269 vpDialing.facResult (268)

The following table describes the CDR field *vpDialing.facResult* (268).

Table 276: Field vpDialing.facResult (268)

Field Id	268
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	vpDialing.facResult
XML tag	facResult
Service Name	VP Dialing
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.270 pCamelLocInfo (269)

The following table describes the CDR field *pCamelLocInfo* (269).

Table 277: Field pCamelLocInfo (269)

Field Id	269
Failover Id	Not applicable
Module	IP
Feature	0
Release	Release 17.0
CLI name	pCamelLocInfo
XML tag	pCamelLocInfo
Service Name	Not applicable
Length	50
Example Data	33609004540
Description	This field is present in the originating or terminating CDR when the <i>P-CAMEL-Loc-Info</i> header is received in the initial incoming INVITE (of the access-side for originating CDR, of the network-side for terminating CDR).

4.3.271 pCamelMscAddress (270)

The following table describes the CDR field *pCamelMscAddress* (270).

Table 278: Field pCamelMscAddress (270)

Field Id	270
Failover Id	Not applicable
Module	IP
Feature	0
Release	Release 17.0
CLI name	pCamelMscAddress
XML tag	pCamelMscAddress
Service Name	Not applicable
Length	50
Example Data	2125558888
Description	This field is present in the originating or terminating CDR when the <i>P-CAMEL-MSC-Address</i> header is received in the initial incoming INVITE (of the access-side for originating CDR, of the network-side for terminating CDR).

4.3.272 pCamelCellIDorLAI (271)

The following table describes the CDR field *pCamelCellIDorLAI* (271).

Table 279: Field pCamelCellIDorLAI (271)

Field Id	271
Failover Id	Not applicable
Module	IP
Feature	0
Release	Release 17.0
CLI name	pCamelCellIDorLAI
XML tag	pCamelCellIDorLAI
Service Name	Not applicable
Length	50
Example Data	2080101900018327
Description	<p>This field is present in the originating or terminating CDR when the <i>P-CAMEL-CellIDorLAI</i> header is received in the initial incoming INVITE (of the access side for originating CDR, and of the network side for terminating CDR).</p> <p>For a BroadWorks Mobility termination, if the Application Server performs a location query (or similar query) and receives a <i>P-CAMEL-CellIDorLAI</i> header in the response, then the Application Server captures the header value in the originating CDR for the call leg to the mobile device.</p>

4.3.273 namePermitted (272)

The following table describes the CDR field *namePermitted* (272).

Table 280: Field namePermitted (272)

Field Id	272
Failover Id	40
Module	Basic
Feature	0
Release	Release 17.0
CLI name	namePermitted
XML tag	namePermitted
Service Name	Not applicable
Length	3
Example Data	Yes
Description	<p>This field is only reported in terminating CDRs, and is always omitted for originating CDRs.</p> <p>"Yes" if the name of the caller were delivered to the user (to his phone and/or call logs).</p>

4.3.274 callCenter.outgoingCallCenterUserId (273)

The following table describes the CDR field *callCenter.outgoingCallCenterUserId* (273).

Table 281: Field callCenter.outgoingCallCenterUserId (273)

Field Id	273
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	callCenter.outgoingCallCenterUserId
XML tag	outgoingCallCenterUserId
Service Name	Call Center
Length	161
Example Data	CallCenter@mtlasdev99.net
Description	This field captures the Call Center ID that the DNIS name used by the agent to make the outgoing call belongs to.

4.3.275 callCenter.outgoingCallCenterGroupNumber (274)

The following table describes the CDR field *callCenter.outgoingCallCenterGroupNumber* (274).

Table 282: Field callCenter.outgoingCallCenterGroupNumber (274)

Field Id	274
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	callCenter.outgoingCallCenterGroupNumber
XML tag	outgoingCallCenterGroupNumber
Service Name	Call Center
Length	16
Example Data	+15146999618
Description	This field captures the calling line ID group number (E.164 formatted) configured for the group that the Call Center is associated with for the DNIS name used by an agent to make the outgoing call.

4.3.276 virtualOnNetType (275)

The following table describes the CDR field *virtualOnNetType* (275).

Table 283: Field virtualOnNetType (275)

Field Id	275
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	virtualOnNetType
XML tag	virtualOnNetType
Service Name	Not applicable
Length	6
Example Data	FON
Description	<p>This field is present in an originating CDR when the destination is a Virtual On-Net number.</p> <p>This field is present in a terminating CDR when originator is a Virtual On-Net number.</p> <p>Each Virtual On-Net Number is associated with one of the Virtual On-Net Type. Supported values of Virtual On-Net type are provisioned at the system level.</p>

4.3.277 preAlertingAnnouncement.preAlertingDuration (276)

The following table describes the CDR field *preAlertingAnnouncement.preAlertingDuration* (276).

Table 284: Field preAlertingAnnouncement.preAlertingDuration (276)

Field Id	276
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	preAlertingAnnouncement.preAlertingDuration
XML tag	preAlertingDuration
Service Name	PreAlertingAnnouncement
Length	10
Example Data	30
Description	<p>The service extension for the pre-alerting announcement service is present in a terminating CDR only when the pre-alerting announcement service is triggered and the pre-alerting announcement is given to the caller.</p> <p>This service extension contains the <i>preAlertingDuration</i> field, and it indicates the length of time, in seconds, that the announcement was played to the caller.</p>

4.3.278 ccDispositionCodeTagging.invocationTime (277)

The following table describes the CDR field *ccDispositionCodeTagging.invocationTime* (277).

Table 285: Field ccDispositionCodeTagging.invocationTime (277)

Field Id	277
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccDispositionCodeTagging.invocationTime
XML tag	invocationTime
Service Name	CC Disposition Code Tagging
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.279 ccDispositionCodeTagging.result (278)

The following table describes the CDR field *ccDispositionCodeTagging.result* (278).

Table 286: Field ccDispositionCodeTagging.result (278)

Field Id	278
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccDispositionCodeTagging.result
XML tag	result
Service Name	CC Disposition Code Tagging
Length	7
Example Data	Success
Description	This field indicates the result ("Success" or "Failure") of the tagging operation. The value "Success" confirms the tagging operation was invoked and processed successfully.

4.3.280 ccEscalatedCall.invocationTime (279)

The following table describes the CDR field *ccEscalatedCall.invocationTime* (279).

Table 287: Field ccEscalatedCall.invocationTime (279)

Field Id	279
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccEscalatedCall.invocationTime
XML tag	invocationTime
Service Name	CC Escalated Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.281 ccEscalatedCall.facResult (280)

The following table describes the CDR field *ccEscalatedCall.facResult* (280).

Table 288: Field ccEscalatedCall.facResult (280)

Field Id	280
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccEscalatedCall.facResult
XML tag	facResult
Service Name	CC Escalated Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.282 ccMonitoringBI.invocationTime (281)

The following table describes the CDR field *ccMonitoringBI.invocationTime* (281).

Table 289: Field ccMonitoringBI.invocationTime (281)

Field Id	281
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccMonitoringBI.invocationTime
XML tag	invocationTime
Service Name	CC Monitoring BI
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.283 ccMonitoringBI.facResult (282)

The following table describes the CDR field *ccMonitoringBI.facResult* (282).

Table 290: Field ccMonitoringBI.facResult (282)

Field Id	282
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccMonitoringBI.facResult
XML tag	facResult
Service Name	CC Monitoring BI
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.284 midCallCustomerOriginatedTrace.invocationTime (283)

The following table describes the CDR field *midCallCustomerOriginatedTrace.invocationTime* (283).

Table 291: Field midCallCustomerOriginatedTrace.invocationTime (283)

Field Id	283
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	midCallCustomerOriginatedTrace.invocationTime
XML tag	invocationTime
Service Name	Mid-Call Customer Originated Trace
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.285 officeZone (284)

The following table describes the CDR field *officeZone* (284).

Table 292: Field officeZone (284)

Field Id	284
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	officeZone
XML tag	officeZone
Service Name	Not applicable
Length	80
Example Data	TimesSquare
Description	<p>This field contains the name of the zone if the subscriber is within their office zone. If the subscriber is outside their office zone, this field is omitted.</p> <p>If the Location-Based Calling Restrictions feature is active for a mobile user, and the user is located within their office zone, this field records the name of the zone that matches their physical location as indicated in the initial INVITE. Depending on system configuration, the physical location is extracted from the <i>PCamelCellIDorLAI</i> header, the <i>P-Access-Network-Info</i> header, or it is disabled. If disabled, (that is, the <i>physicalLocationIndicator</i> system parameter is set to "disregardZones"), the <i>officeZone</i> field is omitted.</p> <p>The <i>officeZone</i> field can apply to either the originator of a call (if present in the Originating CDR), or to the recipient of a call (if present in the Terminating CDR). The <i>officeZone</i> field is not updated after the initial INVITE; if the subscriber changes location during the call, it is not reflected in the <i>officeZone</i> field.</p>

4.3.286 primaryZone (285)

The following table describes the CDR field *primaryZone* (285).

Table 293: Field *primaryZone* (285)

Field Id	285
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	primaryZone
XML tag	primaryZone
Service Name	Not applicable
Length	80
Example Data	EmpireStateBldg
Description	<p>This field contains the name of the zone if the subscriber is within their primary zone. This field may differ from the <i>officeZone</i> field if the user's physical location is included in more than one zone for the office. If the subscriber is outside their primary zone, this field is omitted.</p> <p>If the Location-Based Calling Restrictions feature is active for a mobile user, and the user is located within the primary zone of their office zone, this field records the name of the primary zone that matches their physical location as indicated in the initial INVITE. Depending on system configuration, the physical location is extracted from the <i>P-CAMEL-CellIDorLAI</i> header, the <i>P-Access-Network-Info</i> header, or it is disabled. If disabled (that is, the <i>physicalLocationIndicator</i> system parameter is set to "disregardZones"), the <i>primaryZone</i> field is omitted.</p> <p>The <i>primaryZone</i> field can apply to either the originator of a call (if present in the Originating CDR), or to the recipient of a call (if present in the Terminating CDR). The <i>primaryZone</i> field is not updated after the initial INVITE; if the subscriber changes location during the call, it is not reflected in the <i>primaryZone</i> field.</p> <p>When this field is present in the CDR, there is also an accompanying <i>OfficeZone</i> field. The <i>primaryZone</i> may differ from the <i>officeZone</i> if the user's physical location is included in more than one zone for the office.</p>

4.3.287 roamingMscAddress (286)

The following table describes the CDR field *roamingMscAddress* (286).

Table 294: Field roamingMscAddress (286)

Field Id	286
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	roamingMscAddress
XML tag	roamingMscAddress
Service Name	Not applicable
Length	16
Example Data	+12125558888
Description	<p>This field contains the address of the mobile switching center (MSC) if the subscriber is roaming on a known network. This field is not included if the subscriber is in their home network or in an unknown network.</p> <p>If the Location-Based Calling Restrictions feature is active for a mobile user, and the user is roaming in a network for which a roaming agreement exists, this field records the address of the MSC associated with the user's physical location as indicated in the initial INVITE. The address of the MSC is extracted from the <i>P-CAMEL-MS-C-Address</i> header, and it is recorded as an E.164 number (a "+" character followed by up to 15 digits). If the <i>enforceMscValidation</i> system parameter is set to "false", the <i>roamingMscAddress</i> field is omitted.</p> <p>The <i>roamingMscAddress</i> field can apply to either the originator of a call (if present in the Originating CDR) or to the recipient of a call (if present in the Terminating CDR). The <i>roamingMscAddress</i> field is not updated after the initial INVITE; if the subscriber changes location during the call, it is not reflected in the <i>roamingMscAddress</i> field.</p>

4.3.288 ccEmergencyCall.invocationTime (287)

The following table describes the CDR field *ccEmergencyCall.invocationTime* (287).

Table 295: Field ccEmergencyCall.invocationTime (287)

Field Id	287
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	ccEmergencyCall.invocationTime
XML tag	invocationTime
Service Name	CC Emergency Call
Length	18
Example Data	20100208211551.420
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.289 monitoringNextCall.invocationTime (288)

The following table describes the CDR field *monitoringNextCall.invocationTime* (288).

Table 296: Field monitoringNextCall.invocationTime (288)

Field Id	288
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	monitoringNextCall.invocationTime
XML tag	invocationTime
Service Name	Monitoring Next Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.290 monitoringNextCall.facResult (289)

The following table describes the CDR field *monitoringNextCall.facResult* (289).

Table 297: Field monitoringNextCall.facResult (289)

Field Id	289
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	monitoringNextCall.facResult
XML tag	facResult
Service Name	Monitoring Next Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.291 legacyAcbActivation.invocationTime (290)

The following table describes the CDR field *legacyAcbActivation.invocationTime* (290).

Table 298: Field legacyAcbActivation.invocationTime (290)

Field Id	290
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	legacyAcbActivation.invocationTime
XML tag	invocationTime
Service Name	Legacy ACB Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.292 legacyAcbActivation.facResult (291)

The following table describes the CDR field *legacyAcbActivation.facResult* (291).

Table 299: Field legacyAcbActivation.facResult (291)

Field Id	291
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	legacyAcbActivation.facResult
XML tag	facResult
Service Name	Legacy ACB Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.293 legacyAcbDeactivation.invocationTime (292)

The following table describes the CDR field *legacyAcbDeactivation.invocationTime* (292).

Table 300: Field legacyAcbDeactivation.invocationTime (292)

Field Id	292
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	legacyAcbDeactivation.invocationTime
XML tag	invocationTime
Service Name	Legacy ACB Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.294 legacyAcbDeactivation.facResult (293)

The following table describes the CDR field *legacyAcbDeactivation.facResult* (293).

Table 301: Field legacyAcbDeactivation.facResult (293)

Field Id	293
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	legacyAcbDeactivation.facResult
XML tag	facResult
Service Name	Legacy ACB Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.295 customSchemaVersion (294)

The following table describes the CDR field *customSchemaVersion* (294).

Table 302: Field customSchemaVersion (294)

Field Id	294
Failover Id	Not applicable
Module	Centrex
Feature	0
Release	Release 17.0
CLI name	customSchemaVersion
XML tag	customSchemaVersion
Service Name	Not applicable
Length	255
Example Data	customizedSchemaR17.0v3
Description	This field reports the value configured by the system administrator for the system parameter <i>customSchemaVersion</i> in the <i>AS_CLI/Interface/Accounting/BroadWorksCDRInterface</i> context. If that value is not defined, this field is omitted.

4.3.296 groupPaging.invocationTime (295)

The following table describes the CDR field *groupPaging.invocationTime* (295).

Table 303: Field groupPaging.invocationTime (295)

Field Id	295
Failover Id	Not applicable
Module	Centrex
Feature	EV-92408
Release	Release 18.0
CLI name	groupPaging.invocationTime
XML tag	invocationTime
Service Name	Group Paging
Length	18
Example Data	20091116192726.296
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.297 groupPaging.relatedCallId (296)

The following table describes the CDR field *groupPaging.relatedCallId* (296).

Table 304: Field groupPaging.relatedCallId (296)

Field Id	296
Failover Id	Not applicable
Module	Centrex
Feature	EV-92408
Release	Release 18.0
CLI name	groupPaging.relatedCallId
XML tag	relatedCallId
Service Name	Group Paging
Length	40
Example Data	18:0
Description	This field is used to correlate the originating CDR generated in the context of a group page as it matches the <i>localCallId</i> of the terminating CDR that triggered the group page. For more information, see section Related Call Id on page 303, which provides a description of the relatedCallId field.

4.3.298 dialableCallingNumber (297)

The following table describes the CDR field *dialableCallingNumber* (297).

Table 305: Field dialableCallingNumber (297)

Field Id	297
Failover Id	41
Module	Basic
Feature	EV-100929
Release	Release 18.0
CLI name	dialableCallingNumber
XML tag	dialableCallingNumber
Service Name	Not applicable
Length	22
Example Data	011861062785001
Description	This field indicates the dialable calling number to be delivered to the BroadWorks user.

4.3.299 meetmeConference.invocationTime (298)

The following table describes the CDR field *meetmeConference.invocationTime* (298).

Table 306: Field meetmeConference.invocationTime (298)

Field Id	298
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.invocationTime
XML tag	invocationTime
Service Name	Meet Me Conference
Length	18
Example Data	20101231110327.132
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.300 callMeNow.type (299)

The following table describes the CDR field *callMeNow.type* (299).

Table 307: Field callMeNow.type (299)

Field Id	299
Failover Id	Not applicable
Module	Centrex
Feature	EV-97691
Release	Release 18.0
CLI name	callMeNow.type
XML tag	type
Service Name	Call Me Now
Length	13
Example Data	toRemoteParty
Description	Indicates the type of Call-Me-Now CDR. This field is always present for a Call-Me-Now CDR. The "toRemoteParty" value is used in the originating CDR for the target user to the external party. The "toSelf" value is used in the originating CDR for the target user to the target user, and for the terminating CDR for the target user.

4.3.301 callMeNow.transactionId (300)

The following table describes the CDR field *callMeNow.transactionId* (300).

Table 308: Field callMeNow.transactionId (300)

Field Id	300
Failover Id	Not applicable
Module	Centrex
Feature	EV-97691
Release	Release 18.0
CLI name	callMeNow.transactionId
XML tag	transactionId
Service Name	Call Me Now
Length	128
Example Data	remy@somewhere.com
Description	<p>Captures the content of the <i>transactionId</i> parameter from the Xsi-Actions Call-Me-Now request. The exact content is application-specific, but examples would be the user ID of the party invoking the Call-Me-Now action or the application ID of the application used to invoke the Call-Me-Now action.</p> <p>Only present in the originating CDR for the target user to the external party, and only present when the Xsi-Actions request is included the <i>transactionId</i> parameter.</p>

4.3.302 callMeNow.relatedCallId (301)

The following table describes the CDR field *callMeNow.relatedCallId* (301).

Table 309: Field callMeNow.relatedCallId (301)

Field Id	301
Failover Id	Not applicable
Module	Centrex
Feature	EV-97691
Release	Release 18.0
CLI name	callMeNow.relatedCallId
XML tag	relatedCallId
Service Name	Call Me Now
Length	40
Example Data	118:0
Description	<p>Contains the localCallId of the related Call-Me-Now CDR.</p> <p>This field is used to correlate the originating CDR for the target user to the external party with the originating CDR for the target user to the target user, and it is captured in both of these originating CDRs.</p> <p>This field is not present for Call-Me-Now failures since there is no originating CDR for the target user to the target user in that scenario.</p>

4.3.303 meetmeConference.conferenceld (302)

The following table describes the CDR field *meetmeConference.conferenceld* (302).

Table 310: Field meetmeConference.conferenceld (302)

Field Id	302
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.conferenceld
XML tag	conferenceld
Service Name	Meet Me Conference
Length	128
Example Data	1234567
Description	The conference identifier is the same for all calls for the same conference. This information is used to correlate all calls in the same conference.

4.3.304 meetmeConference.role (303)

The following table describes the CDR field *meetmeConference.role* (303).

Table 311: Field meetmeConference.role (303)

Field Id	303
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.role
XML tag	role
Service Name	Meet Me Conference
Length	12
Example Data	participant
Description	The role of the conference participant, which can be "participant" or "leader".

4.3.305 meetmeConference.bridge (304)

The following table describes the CDR field *meetmeConference.bridge* (304).

Table 312: Field meetmeConference.bridge (304)

Field Id	304
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.bridge
XML tag	bridge
Service Name	Meet Me Conference
Length	128
Example Data	Engineering Bridge
Description	The name of the bridge, as entered by bridge administrators when creating the conference bridge.

4.3.306 meetmeConference.owner (305)

The following table describes the CDR field *meetmeConference.owner* (305).

Table 313: Field meetmeConference.owner (305)

Field Id	305
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.owner
XML tag	owner
Service Name	Meet Me Conference
Length	161
Example Data	John.Smith@broadsoft.com
Description	The BroadWorks user ID for the conference owner.

4.3.307 meetmeConference.ownerDN (306)

The following table describes the CDR field *meetmeConference.ownerDN* (306).

Table 314: Field meetmeConference.ownerDN (306)

Field Id	306
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.ownerDN
XML tag	ownerDN
Service Name	Meet Me Conference
Length	32
Example Data	2405551234
Description	The DN of the conference owner. If the owner does not have a DN, then this field contains the group CLID of the owner's group.

4.3.308 meetmeConference.title (307)

The following table describes the CDR field *meetmeConference.title* (307).

Table 315: Field meetmeConference.title (307)

Field Id	307
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.title
XML tag	title
Service Name	Meet Me Conference
Length	80
Example Data	Weekly sales staff meeting
Description	The title of the conference call, as entered by bridge administrators when creating the conference call.

4.3.309 meetmeConference.projectCode (308)

The following table describes the CDR field *meetmeConference.projectCode* (308).

Table 316: Field meetmeConference.projectCode (308)

Field Id	308
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.projectCode
XML tag	projectCode
Service Name	Meet Me Conference
Length	40
Example Data	12345
Description	The project code as entered by the bridge administrator when creating the conference call.

4.3.310 meetmeConference.recordingDuration (309)

The following table describes the CDR field *meetmeConference.recordingDuration* (309).

Table 317: Field meetmeConference.recordingDuration (309)

Field Id	309
Failover Id	Not applicable
Module	Centrex
Feature	EV-110764
Release	Release 18.0
CLI name	meetmeConference.recordingDuration
XML tag	recordingDuration
Service Name	Meet Me Conference
Length	10
Example Data	3600
Description	The total conference recording duration, in seconds. This field is populated only in the CDR of the last party to leave a recorded conference.

4.3.311 broadworksMobility.mobilityNumber (310)

The following table describes the CDR field *broadworksMobility.mobilityNumber* (310).

Table 318: Field broadworksMobility.mobilityNumber (310)

Field Id	310
Failover Id	Not applicable
Module	Centrex
Feature	EV-119810
Release	Release 18.0
CLI name	broadworksMobility.mobilityNumber
XML tag	mobilityNumber
Service Name	BroadWorks Mobility
Length	16
Example Data	+12402220001
Description	<p>This field contains the subscriber's E164 mobile number. It is populated when the user originated the call with his mobile, or received the call when called on his mobile number.</p> <p>In a BroadWorks mobility termination scenario, this field is not present in the terminating CDR. It is rather added to the deflected originating CDR related to the terminating CDR.</p>

4.3.312 broadworksMobility.mobilityRoutingNumber (311)

The following table describes the CDR field *broadworksMobility.mobilityRoutingNumber* (311).

Table 319: Field broadworksMobility.mobilityRoutingNumber (311)

Field Id	311
Failover Id	Not applicable
Module	Centrex
Feature	EV-119810
Release	Release 18.0
CLI name	broadworksMobility.mobilityRoutingNumber
XML tag	mobilityRoutingNumber
Service Name	BroadWorks Mobility
Length	16
Example Data	+15555550001
Description	<p>This field contains the number used for routing from or to the mobile, in E.164 format, and used to anchor the call to the Application Server. It is populated only if anchoring with a temporary routing number was used for this call. The actual routing number used is reported in this field. If no anchoring was done, this field is omitted.</p>

4.3.313 location (312)

The following table describes the CDR field *location* (312).

Table 320: Field location (312)

Field Id	312
Failover Id	Not applicable
Module	Centrex
Feature	EV-121049
Release	Release 18.0
CLI name	location
XML tag	location
Service Name	Not applicable
Length	256 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is n times the length of a single element plus the required spaces (n being the number of elements on the list).
Example Data	9726991997@txasdev91.net
Description	This field contains the provisioned public identity of the originating/terminating devices. In XML, the location, locationType and locationNetwork are grouped together in a "locationInformation" element. The "locationInformation" elements are grouped together in a "locationList" element.

4.3.314 locationType (313)

The following table describes the CDR field *locationType* (313).

Table 321: Field locationType (313)

Field Id	313
Failover Id	Not applicable
Module	Centrex
Feature	EV-121049
Release	Release 18.0
CLI name	locationType
XML tag	locationType
Service Name	Not applicable
Length	32 This field may be reported as a space-separated list of items in some scenarios. As such, the maximum length is an indicator of the length for a single instance but not the length of the whole list. The full length of the list is n times the length of a single element plus the required spaces (n being the number of elements on the list).
Example Data	BroadWorks Anywhere
Description	This corresponds to the device type of the location. Possible values are "Primary Device", "Shared Call Appearance", "BroadWorks Anywhere", "BroadWorks Mobility", "Executive Assistant" or "Flexible Seating Guest". In XML, the location, locationType and locationNetwork are grouped together in a "locationInformation" element. The "locationInformation" elements are grouped together in a "locationList" element.

4.3.315 locationUsage (314)

The following table describes the CDR field *locationUsage* (314).

Table 322: Field locationUsage (314)

Field Id	314
Failover Id	Not applicable
Module	Centrex
Feature	EV-121049
Release	Release 18.0
CLI name	locationUsage
XML tag	locationUsage
Service Name	Not applicable
Length	32
Example Data	127.569
Description	<p>This field indicates the length of time (in seconds, with three decimal digits), the location(s) described in the <i>location</i> field, were in use.</p> <p>This field is present when the location changes (in interim CDRs) and when a call ends (in normal CDRs). When the location changes during a call, an interim CDR is issued reporting the previous <i>location(s)</i>, the previous <i>locationType</i>, and the <i>locationUsage</i>. The <i>locationUsage</i> is reset for the next segment (if the call is still active).</p>

4.3.316 callRecording.invocationTime (315)

The following table describes the CDR field *callRecording.invocationTime* (315).

Table 323: Field callRecording.invocationTime (315)

Field Id	315
Failover Id	Not applicable
Module	Centrex
Feature	EV-46941
Release	Release 18.0
CLI name	callRecording.invocationTime
XML tag	invocationTime
Service Name	On-Demand Call Recording
Length	18
Example Data	20110421215831.471
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.317 callRecording.facResult (316)

The following table describes the CDR field *callRecording.facResult* (316).

Table 324: Field callRecording.facResult (316)

Field Id	316
Failover Id	Not applicable
Module	Centrex
Feature	EV-46941
Release	Release 18.0
CLI name	callRecording.facResult
XML tag	facResult
Service Name	On-Demand Call Recording
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.318 callRecording.recordingTrigger (317)

The following table describes the CDR field *callRecording.recordingTrigger* (317).

Table 325: Field callRecording.recordingTrigger (317)

Field Id	317
Failover Id	Not applicable
Module	Centrex
Feature	EV-46941
Release	Release 18.0
CLI name	callRecording.recordingTrigger
XML tag	recordingTrigger
Service Name	Call Recording
Length	20
Example Data	on-demand
Description	This field indicates the user's recording mode for this call; the values for this field are "always", "always-pause-resume", "on-demand", or "on-demand-user-start".

4.3.319 callRecording.recordingDestination (318)

The following table describes the CDR field *callRecording.recordingDestination* (318).

Table 326: Field callRecording.recordingDestination (318)

Field Id	318
Failover Id	Not applicable
Module	Centrex
Feature	EV-46941
Release	Release 18.0
CLI name	callRecording.recordingDestination
XML tag	recordingDestination
Service Name	Call Recording
Length	161
Example Data	10.16.150.10
Description	This field indicates the identity or address of the third-party call recording platform where the media stream is sent. This destination could be in the format of an IP address, host name, or fully qualified domain name.

4.3.320 callRecording.recordingResult (319)

The following table describes the CDR field *callRecording.recordingResult* (319).

Table 327: Field callRecording.recordingResult (319)

Field Id	319
Failover Id	Not applicable
Module	Centrex
Feature	EV-46941
Release	Release 18.0
CLI name	callRecording.recordingResult
XML tag	recordingResult
Service Name	Call Recording
Length	23
Example Data	successful but not kept
Description	<p>This service extension field indicates the status of the recorded media; the values for this field can be "successful", "failed", or "successful but not kept".</p> <p>If the <i>recordingTrigger</i> is "always", "always-pause-resume" or "on-demand-user-start", then the <i>recordingResult</i> can be "successful" or "failed".</p> <p>If the <i>recordingTrigger</i> is "on-demand", then the <i>recordingResult</i> can be "successful", "failed", or "successful but not kept".</p> <p>A "successful" result means that there were no errors while the Application Server made the necessary connections on the Media Server and connected the media to the third-party call recording platform for recording.</p> <p>A "failed" result means that there was a general error encountered by the Application Server. This may include connection or communication issues with the Media Server and/or third party call recording platform, or it may be an internal error on the Application Server.</p> <p>A "successful but not kept" result means that the recording was successful, but the user did not request the recording to be saved to the third-party call recording platform. Calls made by users with the "on-demand" setting are automatically streamed to the third-party call recording platform by default; however, for the recording to be saved, the user must request it to be saved via a feature access code or the Xtended Services Interface (Xsi).</p>

4.3.321 callingPresentationNumber (320)

The following table describes the CDR field *callingPresentationNumber* (320).

Table 328: Field callingPresentationNumber (320)

Field Id	320
Failover Id	42
Module	Basic
Feature	EV-116923
Release	Release 18.0
CLI name	callingPresentationNumber
XML tag	callingPresentationNumber
Service Name	Not applicable
Length	161
Example Data	+12405551111
Description	<p>This reports the presentation number of the calling party. The format is E.164 when the calling party's presentation number is in E.164 format after any applicable E.164 normalization. The format is non-E.164 in all other scenarios (SIP URI instead of a phone number, extension or location code + extension for a group or enterprise call, non-E.164 phone number with E.164 normalization disabled or not applicable, and so on).</p> <p>If the calling presentation indicator (encoded into the <i>callingPresentationIndicator</i> field of the CDR) is an "unavailable" value, then this field is set to "Unavailable".</p> <p>This field is not set if the SIP <i>enableTS29163Compliance</i> system parameter is set to "false".</p>

4.3.322 callingPresentationNumberContext (321)

The following table describes the CDR field *callingPresentationNumberContext* (321).

Table 329: Field callingPresentationNumberContext (321)

Field Id	321
Failover Id	43
Module	Basic
Feature	EV-116923
Release	Release 18.0
CLI name	callingPresentationNumberContext
XML tag	callingPresentationNumberContext
Service Name	Not applicable
Length	161
Example Data	+1240
Description	<p>This contains the phone-context for the calling presentation number. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if the SIP <i>enableTS29163Compliance</i> system parameter is set to "false", the calling presentation number has no phone-context, or the SIP <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.323 callingAssertedNumber (322)

The following table describes the CDR field *callingAssertedNumber* (322).

Table 330: Field callingAssertedNumber (322)

Field Id	322
Failover Id	44
Module	Basic
Feature	EV-116923
Release	Release 18.0
CLI name	callingAssertedNumber
XML tag	callingAssertedNumber
Service Name	Not applicable
Length	161
Example Data	+12405559001
Description	<p>This reports the asserted number of the calling party. The format is E.164 when the calling party's asserted number is in E.164 format after any applicable E.164 normalization. The format is non-E.164 in all other scenarios (SIP URI instead of a phone number, non-E.164 phone number with E.164 normalization disabled/not applicable, and so on).</p> <p>This field is not set if the SIP <i>enableTS29163Compliance</i> system parameter is set to "false" and if the calling party's asserted identity is unknown.</p>

4.3.324 callingAssertedNumberContext (323)

The following table describes the CDR field *callingAssertedNumberContext* (323).

Table 331: Field callingAssertedNumberContext (323)

Field Id	323
Failover Id	45
Module	Basic
Feature	EV-116923
Release	Release 18.0
CLI name	callingAssertedNumberContext
XML tag	callingAssertedNumberContext
Service Name	Not applicable
Length	161
Example Data	+1240
Description	<p>This contains the phone-context for the calling asserted number. The contents of the phone-context are defined by RFC 3966 and can be either global-number-digits such as +1 or a domain name such as broadsoft.com.</p> <p>This field is not set if the SIP <i>enableTS29163Compliance</i> system parameter is set to "false", the calling asserted number has no phone-context, or the SIP <i>supportRFC3966PhoneContext</i> system parameter is set to "false".</p>

4.3.325 scc.invocationTime (324)

The following table describes the CDR field *scc.invocationTime* (324).

Table 332: Field scc.invocationTime (324)

Field Id	324
Failover Id	Not applicable
Module	Centrex
Feature	EV-143533
Release	Release 18.0
CLI name	scc.invocationTime
XML tag	invocationTime
Service Name	scc
Length	18
Example Data	20110423005247.368
Description	<p>This field indicates the time at which service centralization or continuity occurred. If service centralization occurred (at call setup), this time should be close to the <i>startTime</i>. If service continuity occurred (after call setup), this can be anytime during the call.</p> <p>For single calls, this corresponds to the time at which the XS received the call to the IMRN, SCC_AS_PSI_DN, STN_SR, ATU_STI, VDN, or VDI for the new leg, or the time at which the CSRN leg was initiated. For subsequent SCC calls in a session sharing the same CS bearer channel, this corresponds to the time at which the call's SCC topology was established.</p> <p>This field is only present if service centralization or continuity occurred.</p>

4.3.326 scc.sccCallId (325)

The following table describes the CDR field *scc.sccCallId* (325).

Table 333: Field scc.sccCallId (325)

Field Id	325
Failover Id	Not applicable
Module	Centrex
Feature	EV-143533
Release	Release 18.0
CLI name	scc.sccCallId
XML tag	sccCallId
Service Name	scc
Length	161
Example Data	access_side@192.168.8.8
Description	<p>This field indicates the SIP Call-ID of the service centralization or continuity CS call leg, which can be an outgoing call to a CSRN, or a received call to an IMRN, SCC_AS_PSI_DN, STN_SR, ATU_STI, VDN, or VDI.</p> <p>This field is only present if service centralization or continuity occurred, and can be shared between several calls (in the same session) if they share a single CS bearer channel.</p> <p>This field can be used for failover correlation purposes.</p>

4.3.327 scc.sccNumber (326)

The following table describes the CDR field *scc.sccNumber* (326).

Table 334: Field scc.sccNumber (326)

Field Id	326
Failover Id	Not applicable
Module	Centrex
Feature	EV-143533
Release	Release 18.0
CLI name	scc.sccNumber
XML tag	sccNumber
Service Name	scc
Length	161
Example Data	+12125556666
Description	<p>This field is the number or URI that was used by the device to establish the new leg for service centralization or continuity.</p> <p>The number can represent an SCC_AS_PSI_DN, IMRN, CSRN, STN_SR, ATU_STI, VDN, or VDI. The <i>scc.sccCause</i> field can be used to determine what type of information is contained in this field.</p> <p>This field is only present if service centralization or continuity occurred.</p>

4.3.328 acrInterrogation.invocationTime (327)

The following table describes the CDR field *acrInterrogation.invocationTime* (327).

Table 335: Field acrInterrogation.invocationTime (327)

Field Id	327
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	acrInterrogation.invocationTime
XML tag	invocationTime
Service Name	ACR Interrogation
Length	18
Example Data	20080208211551.420
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.329 acrlInterrogation.facResult (328)

The following table describes the CDR field *acrlInterrogation.facResult* (328).

Table 336: Field acrlInterrogation.facResult (328)

Field Id	328
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	acrlInterrogation.facResult
XML tag	facResult
Service Name	ACR Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.330 cwInterrogation.invocationTime (329)

The following table describes the CDR field *cwInterrogation.invocationTime* (329).

Table 337: Field cwInterrogation.invocationTime (329)

Field Id	329
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	cwInterrogation.invocationTime
XML tag	invocationTime
Service Name	Call Waiting Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.331 cwInterrogation.facResult (330)

The following table describes the CDR field *cwInterrogation.facResult* (330).

Table 338: Field cwInterrogation.facResult (330)

Field Id	330
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	cwInterrogation.facResult
XML tag	facResult
Service Name	Call Waiting Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.332 clidBlockingInterrogation.invocationTime (331)

The following table describes the CDR field *clidBlockingInterrogation.invocationTime* (331).

Table 339: Field clidBlockingInterrogation.invocationTime (331)

Field Id	331
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	clidBlockingInterrogation.invocationTime
XML tag	invocationTime
Service Name	CLID Blocking Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.333 clidBlockingInterrogation.facResult (332)

The following table describes the CDR field *clidBlockingInterrogation.facResult* (332).

Table 340: Field clidBlockingInterrogation.facResult (332)

Field Id	332
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	clidBlockingInterrogation.facResult
XML tag	facResult
Service Name	CLID Blocking Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.334 colrInterrogation.invocationTime (333)

The following table describes the CDR field *colrInterrogation.invocationTime* (333).

Table 341: Field colrInterrogation.invocationTime (333)

Field Id	333
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	colrInterrogation.invocationTime
XML tag	invocationTime
Service Name	COLR Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.335 colrInterrogation.facResult (334)

The following table describes the CDR field *colrInterrogation.facResult* (334).

Table 342: Field colrInterrogation.facResult (334)

Field Id	334
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	colrInterrogation.facResult
XML tag	facResult
Service Name	COLR Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.336 scrInterrogation.invocationTime (335)

The following table describes the CDR field *scrInterrogation.invocationTime* (335).

Table 343: Field scrInterrogation.invocationTime (335)

Field Id	335
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	scrInterrogation.invocationTime
XML tag	invocationTime
Service Name	SCR Interrogation
Length	18
Example Data	20080208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.337 scrInterrogation.facResult (336)

The following table describes the CDR field *scrInterrogation.facResult* (336).

Table 344: Field scrInterrogation.facResult (336)

Field Id	336
Failover Id	Not applicable
Module	Centrex
Feature	EV-97685
Release	Release 18.0
CLI name	scrInterrogation.facResult
XML tag	facResult
Service Name	SCR Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.338 huntGroupBusyActivation.invocationTime (337)

The following table describes the CDR field *huntGroupBusyActivation.invocationTime* (337).

Table 345: Field huntGroupBusyActivation.invocationTime (337)

Field Id	337
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyActivation.invocationTime
XML tag	invocationTime
Service Name	HGBusy Activation
Length	18
Example Data	20110901121551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.339 huntGroupBusyActivation.facResult (338)

The following table describes the CDR field *huntGroupBusyActivation.facResult* (338).

Table 346: Field huntGroupBusyActivation.facResult (338)

Field Id	338
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyActivation.facResult
XML tag	facResult
Service Name	HGBusy Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.340 huntGroupBusyActivation.targetHuntGroupId (339)

The following table describes the CDR field *huntGroupBusyActivation.targetHuntGroupId* (339).

Table 347: Field huntGroupBusyActivation.targetHuntGroupId (339)

Field Id	339
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyActivation.targetHuntGroupId
XML tag	targetHuntGroupId
Service Name	HGBusy Activation
Length	160
Example Data	huntgroup01@broadsoft.com
Description	This service extension field captures the user ID of the hunt group for which this action was targeted.

4.3.341 huntGroupBusyDeactivation.invocationTime (340)

The following table describes the CDR field *huntGroupBusyDeactivation.invocationTime* (340).

Table 348: Field huntGroupBusyDeactivation.invocationTime (340)

Field Id	340
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyDeactivation.invocationTime
XML tag	invocationTime
Service Name	HGBusy Deactivation
Length	18
Example Data	20110901121551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.342 huntGroupBusyDeactivation.facResult (341)

The following table describes the CDR field *huntGroupBusyDeactivation.facResult* (341).

Table 349: Field huntGroupBusyDeactivation.facResult (341)

Field Id	341
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyDeactivation.facResult
XML tag	facResult
Service Name	HGBusy Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.343 huntGroupBusyDeactivation.targetHuntGroupId (342)

The following table describes the CDR field *huntGroupBusyDeactivation.targetHuntGroupId* (342).

Table 350: Field huntGroupBusyDeactivation.targetHuntGroupId (342)

Field Id	342
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyDeactivation.targetHuntGroupId
XML tag	targetHuntGroupId
Service Name	HGBusy Deactivation
Length	160
Example Data	huntgroup01@broadsoft.com
Description	This service extension field captures the user ID of the hunt group for which this action was targeted.

4.3.344 huntGroupBusyInterrogation.invocationTime (343)

The following table describes the CDR field *huntGroupBusyInterrogation.invocationTime* (343).

Table 351: Field huntGroupBusyInterrogation.invocationTime (343)

Field Id	343
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyInterrogation.invocationTime
XML tag	invocationTime
Service Name	HGBusy Interrogation
Length	18
Example Data	20110901121551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.345 huntGroupBusyInterrogation.facResult (344)

The following table describes the CDR field *huntGroupBusyInterrogation.facResult* (344).

Table 352: Field huntGroupBusyInterrogation.facResult (344)

Field Id	344
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyInterrogation.facResult
XML tag	facResult
Service Name	HGBusy Interrogation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.346 huntGroupBusyInterrogation.targetHuntGroupId (345)

The following table describes the CDR field *huntGroupBusyInterrogation.targetHuntGroupId* (345).

Table 353: Field huntGroupBusyInterrogation.targetHuntGroupId (345)

Field Id	345
Failover Id	Not applicable
Module	Centrex
Feature	EV-146324
Release	Release 19.0
CLI name	huntGroupBusyInterrogation.targetHuntGroupId
XML tag	targetHuntGroupId
Service Name	HGBusy Interrogation
Length	160
Example Data	huntgroup01@broadsoft.com
Description	This service extension field captures the user ID of the hunt group for which this action was targeted.

4.3.347 userAgent (346)

The following table describes the CDR field *userAgent* (346).

Table 354: Field *userAgent* (346)

Field Id	346
Failover Id	Not applicable
Module	IP
Feature	EV-151841
Release	Release 19.0
CLI name	userAgent
XML tag	userAgent
Service Name	Not applicable
Length	1024
Example Data	Bria for BroadWorks release 2.5.5.1 stamp 63349
Description	<p>This field is captured for originating and terminating CDRs.</p> <p>For originating CDRs, it captures the first local <i>User-Agent</i> header it receives from the originating party, and for terminating CDRs, it captures the local <i>User-Agent</i> or <i>Server</i> header in the 200 OK answer response to the INVITE from the terminating party.</p> <p>In a Shared Call Appearance (SCA) scenario, the CDR captures the local <i>User-Agent</i> or <i>Server</i> header belonging to the SCA's active location that is used to initiate or answer the call.</p> <p>This field is only captured in the CDR if the other access device fields are also present in the CDR and if all values are captured from the same SIP dialog.</p>

4.3.348 fmfmCallPush.invocationTime (347)

The following table describes the CDR field *fmfmCallPush.invocationTime* (347).

Table 355: Field *fmfmCallPush.invocationTime* (347)

Field Id	347
Failover Id	Not applicable
Module	Centrex
Feature	EV-125258
Release	Release 19.0
CLI name	fmfmCallPush.invocationTime
XML tag	invocationTime
Service Name	FMFM Call Push
Length	18
Example Data	20110901121551.420
Description	<p>Time at which the service was invoked during the call.</p> <p>The invocation time is shown using the UTC/GMT time zone.</p>

4.3.349 fmfmCallPush.facResult (348)

The following table describes the CDR field *fmfmCallPush.facResult* (348).

Table 356: Field fmfmCallPush.facResult (348)

Field Id	348
Failover Id	Not applicable
Module	Centrex
Feature	EV-125258
Release	Release 19.0
CLI name	fmfmCallPush.facResult
XML tag	facResult
Service Name	FMFM Call Push
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.350 scc.sccCause (349)

The following table describes the CDR field *scc.sccCause* (349).

Table 357: Field scc.sccCause (349)

Field Id	349
Failover Id	Not applicable
Module	Centrex
Feature	EV-159744
Release	Release 19.0
CLI name	scc.sccCause
XML tag	sccCause
Service Name	scc
Length	10
Example Data	sccAsPsiDn
Description	<p>This field indicates which scenario led to service centralization or continuity.</p> <p>When set to "sccAsPsiDn", it indicates that the reception of a call to an SCC_AS_PSI_DN established service centralization or continuity.</p> <p>When set to "imrn", it indicates that the reception of a call to an IMRN established service centralization for this originating or terminating call.</p> <p>When set to "csrn", it indicates that a call to a CSRN was made to establish service centralization for this terminating call. The CSRN can either be fetched from an SCF_Server, or computed using a prefix.</p> <p>When set to "stn-sr", it indicates that the reception of a call to the STN_SR (from an MSC server) established service continuity.</p> <p>When set to "atu-sti", it indicates that the reception of a call to the ATU_STI (from an ATCF) established service continuity.</p> <p>When set to "vdn", it indicates that the reception of a call to the STN_SR established service continuity from packet switched to circuit switched network with the use of the configured VDN for validation check.</p> <p>When set to "vdi", it indicates that the reception of a call to the VDI established service continuity from circuit switched to packet switched network.</p> <p>The <i>scc.sccNumber</i> field contains the related SCC_AS_PSI_DN, IMRN, CSRN, STN_SR, ATU_STI, VDN, or VDI, according to this field's value.</p> <p>In case of multiple SCC service invocations, only the first such invocation is reported in the CDR. For example, it may occur if an IMRN termination is followed by CSRN access or if it is later followed by STN_SR continuity. In this case, only the IMRN termination is reported and this field contains the value "imrn"</p>

4.3.351 executiveAssistantInitiateCall.invocationTime (350)

The following table describes the CDR field *executiveAssistantInitiateCall.invocationTime* (350).

Table 358: Field executiveAssistantInitiateCall.invocationTime (350)

Field Id	350
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantInitiateCall.invocationTime
XML tag	invocationTime
Service Name	Executive-Assistant Initiate Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.352 executiveAssistantInitiateCall.facResult (351)

The following table describes the CDR field *executiveAssistantInitiateCall.facResult* (351).

Table 359: Field executiveAssistantInitiateCall.facResult (351)

Field Id	351
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantInitiateCall.facResult
XML tag	facResult
Service Name	Executive-Assistant Initiate Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.353 executiveAssistantCallPush.invocationTime (352)

The following table describes the CDR field *executiveAssistantCallPush.invocationTime* (352).

Table 360: Field executiveAssistantCallPush.invocationTime (352)

Field Id	352
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantCallPush.invocationTime
XML tag	invocationTime
Service Name	Executive-Assistant Call Push
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.354 executiveAssistantCallPush.facResult (353)

The following table describes the CDR field *executiveAssistantCallPush.facResult* (353).

Table 361: Field executiveAssistantCallPush.facResult (353)

Field Id	353
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantCallPush.facResult
XML tag	facResult
Service Name	Executive-Assistant Call Push
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.355 executiveCallFilteringActivation.invocationTime (354)

The following table describes the CDR field *executiveCallFilteringActivation.invocationTime* (354).

Table 362: Field executiveCallFilteringActivation.invocationTime (354)

Field Id	354
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveCallFilteringActivation.invocationTime
XML tag	invocationTime
Service Name	Executive Call Filtering Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.356 executiveCallFilteringActivation.facResult (355)

The following table describes the CDR field *executiveCallFilteringActivation.facResult* (355).

Table 363: Field executiveCallFilteringActivation.facResult (355)

Field Id	355
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveCallFilteringActivation.facResult
XML tag	facResult
Service Name	Executive Call Filtering Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.357 executiveCallFilteringDeactivation.invocationTime (356)

The following table describes the CDR field *executiveCallFilteringDeactivation.invocationTime* (356).

Table 364: Field executiveCallFilteringDeactivation.invocationTime (356)

Field Id	356
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveCallFilteringDeactivation.invocationTime
XML tag	invocationTime
Service Name	Executive Call Filtering Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.358 executiveCallFilteringDeactivation.facResult (357)

The following table describes the CDR field *executiveCallFilteringDeactivation.facResult* (357).

Table 365: Field executiveCallFilteringDeactivation.facResult (357)

Field Id	357
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveCallFilteringDeactivation.facResult
XML tag	facResult
Service Name	Executive Call Filtering Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.359 executiveAssistantOptIn.invocationTime (358)

The following table describes the CDR field *executiveAssistantOptIn.invocationTime* (358).

Table 366: Field executiveAssistantOptIn.invocationTime (358)

Field Id	358
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantOptIn.invocationTime
XML tag	invocationTime
Service Name	Executive-Assistant Opt-in
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.360 executiveAssistantOptIn.facResult (359)

The following table describes the CDR field *executiveAssistantOptIn.facResult* (359).

Table 367: Field executiveAssistantOptIn.facResult (359)

Field Id	359
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantOptIn.facResult
XML tag	facResult
Service Name	Executive-Assistant Opt-in
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.361 executiveAssistantOptOut.invocationTime (360)

The following table describes the CDR field *executiveAssistantOptOut.invocationTime* (360).

Table 368: Field executiveAssistantOptOut.invocationTime (360)

Field Id	360
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantOptOut.invocationTime
XML tag	invocationTime
Service Name	Executive-Assistant Opt-out
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.362 executiveAssistantOptOut.facResult (361)

The following table describes the CDR field *executiveAssistantOptOut.facResult* (361).

Table 369: Field executiveAssistantOptOut.facResult (361)

Field Id	361
Failover Id	Not applicable
Module	Centrex
Feature	EV-160554
Release	Release 20.0
CLI name	executiveAssistantOptOut.facResult
XML tag	facResult
Service Name	Executive-Assistant Opt-out
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.363 cicInsertedAsCac (362)

The following table describes the CDR field *cicInsertedAsCac* (362).

Table 370: Field cicInsertedAsCac (362)

Field Id	362
Failover Id	Not applicable
Module	Centrex
Feature	EV-179232
Release	Release 20.0
CLI name	cicInsertedAsCac
XML tag	cicInsertedAsCac
Service Name	Not applicable
Length	4
Example Data	1880
Description	The Carrier Identification Code used as Carrier Access Code returned by the Network Server contact list.

4.3.364 callingPartyAddress (363)

The following table describes the CDR field *callingPartyAddress* (363).

Table 371: Field callingPartyAddress (363)

Field Id	363
Failover Id	Not applicable
Module	3gpp
Feature	EV-170831
Release	Release 20.0
CLI name	callingPartyAddress
XML tag	callingPartyAddress
Service Name	Not applicable
Length	165
Example Data	tel:+15146996606 or unknown
Description	<p>This field contains the complete "addr-spec" value taken from the P-Asserted-Identity (PAI) header of the SIP INVITE.</p> <p>This field is defined as a list which can accommodate the presence of multiple identities in the PAI.</p> <p>The PAI is taken from:</p> <ul style="list-style-type: none"> The outgoing initial SIP INVITE request for Broadworks origination. The outgoing SIP INVITE request for deflected origination CDR. The incoming SIP INVITE request for all other cases. <p>Note that the value is set to unknown when there is no SIP INVITE associated with the CDR.</p>

4.3.365 callRecordingStart.invocationTime (364)

The following table describes the CDR field *callRecordingStart.invocationTime* (364).

Table 372: Field callRecordingStart.invocationTime (364)

Field Id	364
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingStart.invocationTime
XML tag	invocationTime
Service Name	On-Demand-Start Call Recording
Length	18
Example Data	20110421215831.471
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.366 callRecordingStart.facResult (365)

The following table describes the CDR field *callRecordingStart.facResult* (365).

Table 373: Field callRecordingStart.facResult (365)

Field Id	365
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingStart.facResult
XML tag	facResult
Service Name	On-Demand-Start Call Recording
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.367 callRecordingStop.invocationTime (366)

The following table describes the CDR field *callRecordingStop.invocationTime* (366).

Table 374: Field callRecordingStop.invocationTime (366)

Field Id	366
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingStop.invocationTime
XML tag	invocationTime
Service Name	On-Demand-Stop Call Recording
Length	18
Example Data	20110421215831.471
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.368 callRecordingStop.facResult (367)

The following table describes the CDR field *callRecordingStop.facResult* (367).

Table 375: Field callRecordingStop.facResult (367)

Field Id	367
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingStop.facResult
XML tag	facResult
Service Name	On-Demand-Stop Call Recording
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.369 callRecordingPause.invocationTime (368)

The following table describes the CDR field *callRecordingPause.invocationTime* (368).

Table 376: Field callRecordingPause.invocationTime (368)

Field Id	368
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingPause.invocationTime
XML tag	invocationTime
Service Name	Pause Call Recording
Length	18
Example Data	20110421215831.471
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.370 callRecordingPause.facResult (369)

The following table describes the CDR field *callRecordingPause.facResult* (369).

Table 377: Field callRecordingPause.facResult (369)

Field Id	369
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingPause.facResult
XML tag	facResult
Service Name	Pause Call Recording
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.371 callRecordingResume.invocationTime (370)

The following table describes the CDR field *callRecordingResume.invocationTime* (370).

Table 378: Field callRecordingResume.invocationTime (370)

Field Id	370
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingResume.invocationTime
XML tag	invocationTime
Service Name	Resume Call Recording
Length	18
Example Data	20110421215831.471
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.372 callRecordingResume.facResult (371)

The following table describes the CDR field *callRecordingResume.facResult* (371).

Table 379: Field callRecordingResume.facResult (371)

Field Id	371
Failover Id	Not applicable
Module	Centrex
Feature	EV-170972
Release	Release 20.0
CLI name	callRecordingResume.facResult
XML tag	facResult
Service Name	Resume Call Recording
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.373 extTrackingId (372)

The following table describes the CDR field *extTrackingId* (372).

Table 380: Field extTrackingId (372)

Field Id	372
Failover Id	Not applicable
Module	Centrex
Feature	EV-170355
Release	Release 20.0
CLI name	extTrackingId
XML tag	extTrackingId
Service Name	Not applicable
Length	72
Example Data	4aafc99-8e9c-420f-b081-ed6a43491ea9
Description	This field contains a string that identifies a session uniquely on the BroadWorks Application Server that processed the call. This field can be used to associate accounting records, protocol messages, and logs on BroadWorks Servers for a call.

4.3.374 flexibleSeatingGuest.invocationTime (373)

The following table describes the CDR field *flexibleSeatingGuest.invocationTime* (373).

Table 381: Field flexibleSeatingGuest.invocationTime (373)

Field Id	373
Failover Id	Not applicable
Module	Centrex
Feature	EV-114601
Release	Release 20.0
CLI name	flexibleSeatingGuest.invocationTime
XML tag	invocationTime
Service Name	Flexible Seating Guest
Length	18
Example Data	20040526174426.576
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.375 flexibleSeatingGuest.hostGroup (374)

The following table describes the CDR field *flexibleSeatingGuest.hostGroup* (374).

Table 382: Field flexibleSeatingGuest.hostGroup (374)

Field Id	374
Failover Id	Not applicable
Module	Centrex
Feature	EV-114601
Release	Release 20.0
CLI name	flexibleSeatingGuest.hostGroup
XML tag	hostGroup
Service Name	Flexible Seating Guest
Length	30
Example Data	HostGroup
Description	The customer group ID for the flexible seating host user. In XML, this field is included in a <flexibleSeatingHost> element.

4.3.376 flexibleSeatingGuest.hostUserId (375)

The following table describes the CDR field *flexibleSeatingGuest.hostUserId* (375).

Table 383: Field flexibleSeatingGuest.hostUserId (375)

Field Id	375
Failover Id	Not applicable
Module	Centrex
Feature	EV-114601
Release	Release 20.0
CLI name	flexibleSeatingGuest.hostUserId
XML tag	hostUserId
Service Name	Flexible Seating Guest
Length	161
Example Data	hostUser@broadsoft.com
Description	The <i>userId</i> for the flexible seating host user. In XML, this field is included in a <flexibleSeatingHost> element.

4.3.377 flexibleSeatingGuest.hostUserNumber (376)

The following table describes the CDR field *flexibleSeatingGuest.hostUserNumber* (376).

Table 384: Field flexibleSeatingGuest.hostUserNumber (376)

Field Id	376
Failover Id	Not applicable
Module	Centrex
Feature	EV-114601
Release	Release 20.0
CLI name	flexibleSeatingGuest.hostUserNumber
XML tag	hostUserNumber
Service Name	Flexible Seating Guest
Length	16
Example Data	+14165551234
Description	The <i>userNumber</i> for the flexible seating host user. In XML, this field is included in a <flexibleSeatingHost> element.

4.3.378 flexibleSeatingGuest.hostGroupNumber (377)

The following table describes the CDR field *flexibleSeatingGuest.hostGroupNumber* (377).

Table 385: Field flexibleSeatingGuest.hostGroupNumber (377)

Field Id	377
Failover Id	Not applicable
Module	Centrex
Feature	EV-114601
Release	Release 20.0
CLI name	flexibleSeatingGuest.hostGroupNumber
XML tag	hostGroupNumber
Service Name	Flexible Seating Guest
Length	16
Example Data	+14165559999
Description	The <i>groupNumber</i> for the flexible seating host user. In XML, this field is included in a <flexibleSeatingHost> element.

4.3.379 gets (378)

The following table describes the CDR field *gets* (378).

Table 386: Field gets (378)

Field Id	378
Failover Id	Not applicable
Module	IP
Feature	EV-191436
Release	Release 20.0
CLI name	gets
XML tag	gets
Service Name	Not applicable
Length	3
Example Data	Yes
Description	This field is only present for GETS calls. If present, its value is "Yes".

4.3.380 numberPortability.npdi (379)

The following table describes the CDR field *numberPortability.npdi* (379).

Table 387: Field numberPortability.npdi (379)

Field Id	379
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortability.npdi
XML tag	npdi
Service Name	Number Portability
Length	3
Example Data	Yes
Description	This field captures the presence of the npdi parameter in the results of the number portability query. The value "Yes" means a successful Number Portability query occurred. The value "No" means a successful Number Portability query occurred, but portability information was not obtained.

4.3.381 numberPortability.rn (380)

The following table describes the CDR field *numberPortability.rn* (380).

Table 388: Field numberPortability.rn (380)

Field Id	380
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortability.rn
XML tag	rn
Service Name	Number Portability
Length	255
Example Data	+1E22009725551234
Description	The rn parameter contains the routing information when the requested number is ported. The routing number is copied "as is" from the rn parameter, from a number portability query DNS NAPTR response and may include an embedded rn-context parameter (for example, the value could be "E2200;rn-context="+15551112222"). If the rn parameter is not returned in the portability query, this field is not present.

4.3.382 numberPortability.status (381)

The following table describes the CDR field *numberPortability.status* (381).

Table 389: Field numberPortability.status (381)

Field Id	381
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortability.status
XML tag	status
Service Name	Number Portability
Length	40
Example Data	Fixed Ported-in number
Description	This field captures number portability status of the call. The portability status is derived from the normalized routing number and device type. If the portability status cannot be determined, this field is not present.

4.3.383 numberPortabilityAnnouncementActivation.invocationTime (382)

The following table describes the CDR field *numberPortabilityAnnouncementActivation.invocationTime* (382).

Table 390: Field numberPortabilityAnnouncementActivation.invocationTime (382)

Field Id	382
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortabilityAnnouncementActivation.invocationTime
XML tag	invocationTime
Service Name	Number Portability Announcement Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call.

4.3.384 numberPortabilityAnnouncementActivation.facResult (383)

The following table describes the CDR field *numberPortabilityAnnouncementActivation.facResult* (383).

Table 391: Field numberPortabilityAnnouncementActivation.facResult (383)

Field Id	383
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortabilityAnnouncementActivation.facResult
XML tag	facResult
Service Name	Number Portability Announcement Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.385 numberPortabilityAnnouncementDeactivation.invocationTime (384)

The following table describes the CDR field *numberPortabilityAnnouncementDeactivation.invocationTime* (384).

Table 392: Field numberPortabilityAnnouncementDeactivation.invocationTime (384)

Field Id	384
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortabilityAnnouncementDeactivation.invocationTime
XML tag	invocationTime
Service Name	Number Portability Announcement Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call.

4.3.386 numberPortabilityAnnouncementDeactivation.facResult (385)

The following table describes the CDR field *numberPortabilityAnnouncementDeactivation.facResult* (385).

Table 393: Field numberPortabilityAnnouncementDeactivation.facResult (385)

Field Id	385
Failover Id	Not applicable
Module	Centrex
Feature	EV-193116
Release	Release 21.0
CLI name	numberPortabilityAnnouncementDeactivation.facResult
XML tag	facResult
Service Name	Number Portability Announcement Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.387 calledPartyAddress (386)

The following table describes the CDR field *calledPartyAddress* (386).

Table 394: Field calledPartyAddress (386)

Field Id	386
Failover Id	Not applicable
Module	3gpp
Feature	EV-214978
Release	Release 21.0
CLI name	calledPartyAddress
XML tag	calledPartyAddress
Service Name	Not applicable
Length	165
Example Data	sip:5146996501@10.9.17.101:5061
Description	The request-URI of the outgoing SIP INVITE. For non-distributed intra-group originating CDR, this field is omitted. When a call is redirected or blocked by a BroadWorks service, this field is omitted.

4.3.388 mobilityCallAnchoringActivation.invocationTime (387)

The following table describes the CDR field *mobilityCallAnchoringActivation.invocationTime* (387).

Table 395: Field mobilityCallAnchoringActivation.invocationTime (387)

Field Id	387
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringActivation.invocationTime
XML tag	invocationTime
Service Name	Mobility Call Anchoring Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.389 mobilityCallAnchoringActivation.facResult (388)

The following table describes the CDR field *mobilityCallAnchoringActivation.facResult* (388).

Table 396: Field mobilityCallAnchoringActivation.facResult (388)

Field Id	388
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringActivation.facResult
XML tag	facResult
Service Name	Mobility Call Anchoring Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.390 mobilityCallAnchoringDeactivation.invocationTime (389)

The following table describes the CDR field *mobilityCallAnchoringDeactivation.invocationTime* (389).

Table 397: Field mobilityCallAnchoringDeactivation.invocationTime (389)

Field Id	389
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringDeactivation.invocationTime
XML tag	invocationTime
Service Name	Mobility Call Anchoring Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.391 mobilityCallAnchoringDeactivation.facResult (390)

The following table describes the CDR field *mobilityCallAnchoringDeactivation.facResult* (390).

Table 398: Field mobilityCallAnchoringDeactivation.facResult (390)

Field Id	390
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringDeactivation.facResult
XML tag	facResult
Service Name	Mobility Call Anchoring Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.392 mobilityCallAnchoringActivationPerCall.invocationTime (391)

The following table describes the CDR field *mobilityCallAnchoringActivationPerCall.invocationTime* (391).

Table 399: Field mobilityCallAnchoringActivationPerCall.invocationTime (391)

Field Id	391
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringActivationPerCall.invocationTime
XML tag	invocationTime
Service Name	Mobility Call Anchoring Activation Per Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.393 mobilityCallAnchoringActivationPerCall.facResult (392)

The following table describes the CDR field *mobilityCallAnchoringActivationPerCall.facResult* (392).

Table 400: Field mobilityCallAnchoringActivationPerCall.facResult (392)

Field Id	392
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallAnchoringActivationPerCall.facResult
XML tag	facResult
Service Name	Mobility Call Anchoring Activation Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.394 mobilityCallingLineIDActivation.invocationTime (393)

The following table describes the CDR field *mobilityCallingLineIDActivation.invocationTime* (393).

Table 401: Field mobilityCallingLineIDActivation.invocationTime (393)

Field Id	393
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDActivation.invocationTime
XML tag	invocationTime
Service Name	Mobility Calling Line ID Activation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.395 mobilityCallingLineIDActivation.facResult (394)

The following table describes the CDR field *mobilityCallingLineIDActivation.facResult* (394).

Table 402: Field mobilityCallingLineIDActivation.facResult (394)

Field Id	394
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDActivation.facResult
XML tag	facResult
Service Name	Mobility Calling Line ID Activation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.396 mobilityCallingLineIDDeactivation.invocationTime (395)

The following table describes the CDR field *mobilityCallingLineIDDeactivation.invocationTime* (395).

Table 403: Field mobilityCallingLineIDDeactivation.invocationTime (395)

Field Id	395
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDDeactivation.invocationTime
XML tag	invocationTime
Service Name	Mobility Calling Line ID Deactivation
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.397 mobilityCallingLineIDDeactivation.facResult (396)

The following table describes the CDR field *mobilityCallingLineIDDeactivation.facResult* (396).

Table 404: Field mobilityCallingLineIDDeactivation.facResult (396)

Field Id	396
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDDeactivation.facResult
XML tag	facResult
Service Name	Mobility Calling Line ID Deactivation
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.398 mobilityCallingLineIDActivationPerCall.invocationTime (397)

The following table describes the CDR field *mobilityCallingLineIDActivationPerCall.invocationTime* (397).

Table 405: Field mobilityCallingLineIDActivationPerCall.invocationTime (397)

Field Id	397
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDActivationPerCall.invocationTime
XML tag	invocationTime
Service Name	Mobility Calling Line ID Activation Per Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.399 mobilityCallingLineIDActivationPerCall.facResult (398)

The following table describes the CDR field *mobilityCallingLineIDActivationPerCall.facResult* (398).

Table 406: Field mobilityCallingLineIDActivationPerCall.facResult (398)

Field Id	398
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDActivationPerCall.facResult
XML tag	facResult
Service Name	Mobility Calling Line ID Activation Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.400 mobilityCallingLineIDDeactivationPerCall.invocationTime (399)

The following table describes the CDR field *mobilityCallingLineIDDeactivationPerCall.invocationTime* (399).

Table 407: Field mobilityCallingLineIDDeactivationPerCall.invocationTime (399)

Field Id	399
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDDeactivationPerCall.invocationTime
XML tag	invocationTime
Service Name	Mobility Calling Line ID Deactivation Per Call
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.401 mobilityCallingLineIDDeactivationPerCall.facResult (400)

The following table describes the CDR field *mobilityCallingLineIDDeactivationPerCall.facResult* (400).

Table 408: Field mobilityCallingLineIDDeactivationPerCall.facResult (400)

Field Id	400
Failover Id	Not applicable
Module	Centrex
Feature	EV-210489
Release	Release 21.0
CLI name	mobilityCallingLineIDDeactivationPerCall.facResult
XML tag	facResult
Service Name	Mobility Calling Line ID Deactivation Per Call
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.402 personalAssistant.presence (401)

The following table describes the CDR field *personalAssistant.presence* (401).

Table 409: Field personalAssistant.presence (401)

Field Id	401
Failover Id	Not applicable
Module	Centrex
Feature	EV-204023
Release	Release 21.0
CLI name	personalAssistant.presence
XML tag	presence
Service Name	Personal Assistant
Length	17
Example Data	Business Trip
Description	This field captures the Personal Assistant presence setting when the Personal Assistant service is invoked. The possible values: Business Trip, Gone for the Day, Lunch, Meeting, Out of the Office, Temporarily Out, Training, Unavailable and Vacation.

4.3.403 answerConfirmationInvocationTime (402)

The following table describes the CDR field *answerConfirmationInvocationTime* (402).

Table 410: Field answerConfirmationInvocationTime (402)

Field Id	402
Failover Id	Not applicable
Module	Centrex
Feature	EV-219574
Release	Release 21.0
CLI name	answerConfirmationInvocationTime
XML tag	answerConfirmationInvocationTime
Service Name	Not applicable
Length	18
Example Data	20140604012420.804
Description	This field captures the time at which a terminator involved in an Answer Confirmation scenario went off-hook (200 OK received) but was still unconfirmed.

4.3.404 answerConfirmationTime (403)

The following table describes the CDR field *answerConfirmationTime* (403).

Table 411: Field answerConfirmationTime (403)

Field Id	403
Failover Id	Not applicable
Module	Centrex
Feature	EV-219574
Release	Release 21.0
CLI name	answerConfirmationTime
XML tag	answerConfirmationTime
Service Name	Not applicable
Length	18
Example Data	20140604012426.804
Description	This field captures the time at which a terminator involved in an Answer Confirmation scenario confirmed the answer.

4.3.405 routeList.routeListNumber (404)

The following table describes the CDR field *routeList.routeListNumber* (404).

Table 412: Field routeList.routeListNumber (404)

Field Id	404
Failover Id	Not applicable
Module	Centrex
Feature	EV-198534
Release	Release 21.0
CLI name	routeList.routeListNumber
XML tag	routeListNumber
Service Name	Route List
Length	16
Example Data	+12405551234
Description	This field captures the E.164 Route List DN in use for a Route List origination, termination, or redirection.

4.3.406 collaborate.invocationTime (405)

The following table describes the CDR field *collaborate.invocationTime* (405).

Table 413: Field collaborate.invocationTime (405)

Field Id	405
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.invocationTime
XML tag	invocationTime
Service Name	Collaborate
Length	18
Example Data	20101231110327.132
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.407 collaborate.roomID (406)

The following table describes the CDR field *collaborate.roomID* (406).

Table 414: Field collaborate.roomID (406)

Field Id	406
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.roomID
XML tag	roomID
Service Name	Collaborate
Length	15
Example Data	1234567
Description	The roomID is the same for all calls to the same conference room. This information is used to correlate all calls in the same conference.

4.3.408 collaborate.role (407)

The following table describes the CDR field *collaborate.role* (407).

Table 415: Field collaborate.role (407)

Field Id	407
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.role
XML tag	role
Service Name	Collaborate
Length	11
Example Data	participant
Description	The role of the conference participant, which can be "participant" or "leader".

4.3.409 collaborate.bridge (408)

The following table describes the CDR field *collaborate.bridge* (408).

Table 416: Field collaborate.bridge (408)

Field Id	408
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.bridge
XML tag	bridge
Service Name	Collaborate
Length	128
Example Data	Engineering Bridge
Description	The name of the bridge, as entered by bridge administrators when creating the conference bridge.

4.3.410 collaborate.owner (409)

The following table describes the CDR field *collaborate.owner* (409).

Table 417: Field collaborate.owner (409)

Field Id	409
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.owner
XML tag	owner
Service Name	Collaborate
Length	161
Example Data	John.Smith@broadsoft.com
Description	The BroadWorks user ID of the collaborate room owner.

4.3.411 collaborate.ownerDN (410)

The following table describes the CDR field *collaborate.ownerDN* (410).

Table 418: Field collaborate.ownerDN (410)

Field Id	410
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.ownerDN
XML tag	ownerDN
Service Name	Collaborate
Length	16
Example Data	2405551234
Description	The DN of the collaborate owner. If the owner does not have a DN, then this field contains the group CLID of the owner's group.

4.3.412 collaborate.roomName (411)

The following table describes the CDR field *collaborate.roomName* (411).

Table 419: Field collaborate.roomName (411)

Field Id	411
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.roomName
XML tag	roomName
Service Name	Collaborate
Length	80
Example Data	Weekly sales staff meeting
Description	The name of the collaborate room, as entered by admin/user.

4.3.413 collaborate.roomType (412)

The following table describes the CDR field *collaborate.roomType* (412).

Table 420: Field collaborate.roomType (412)

Field Id	412
Failover Id	Not applicable
Module	Centrex
Feature	EV-214095
Release	Release 21.0
CLI name	collaborate.roomType
XML tag	roomType
Service Name	Collaborate
Length	12
Example Data	My Room
Description	The type of the collaborate room which is either "My Room", "Instant Room" or "Project Room".

4.3.414 btluExceeded (413)

The following table describes the CDR field *btluExceeded* (413).

Table 421: Field btluExceeded (413)

Field Id	413
Failover Id	Not applicable
Module	Centrex
Feature	EV-231974
Release	Release 21.0
CLI name	btluExceeded
XML tag	btluExceeded
Service Name	Not applicable
Length	3
Example Data	Yes
Description	This field indicates a BTLU unavailable condition. "Yes" is the only value. This field is present only when a BTLU unavailable condition blocks the call.

4.3.415 enterpriseTrunkCapacityExceeded (414)

The following table describes the CDR field *enterpriseTrunkCapacityExceeded* (414).

Table 422: Field enterpriseTrunkCapacityExceeded (414)

Field Id	414
Failover Id	Not applicable
Module	Centrex
Feature	EV-231974
Release	Release 21.0
CLI name	enterpriseTrunkCapacityExceeded
XML tag	enterpriseTrunkCapacityExceeded
Service Name	Not applicable
Length	3
Example Data	Yes
Description	This field indicates an enterprise trunk capacity exceeded condition. "Yes " is the only value. This field is present only when an enterprise trunk capacity exceeded condition blocks the call.

4.3.416 customInfoInPCV (415)

The following table describes the CDR field *customInfoInPCV* (415).

Table 423: Field customInfoInPCV (415)

Field Id	415
Failover Id	Not applicable
Module	IP
Feature	BW-2246
Release	Release 22.0
CLI name	customInfoInPCV
XML tag	customInfoInPCV
Service Name	Not applicable
Length	128
Example Data	oaid=o.hpbx;taid=p1.cscf
Description	This field records all parameters from the received P-Charging-Vector SIP header, excluding <i>icid-generated-at</i> , <i>orig-voi</i> and <i>term-voi</i> (recorded in other fields). Multiple parameters are separated by semicolons. In XML, the <i>key</i> , <i>creator</i> , <i>originatorNetwork</i> , <i>terminatorNetwork</i> , <i>otherInfoInPCV</i> and <i>customInfoInPCV</i> are grouped into a <i>correlationInfo</i> element.

4.3.417 receivedRoute (416)

The following table describes the CDR field *receivedRoute* (416).

Table 424: Field receivedRoute (416)

Field Id	416
Failover Id	Not applicable
Module	3gpp
Feature	BW-2246
Release	Release 22.0
CLI name	receivedRoute
XML tag	receivedRoute
Service Name	Not applicable
Length	255
Example Data	<sip:10.9.39.33:5060;lr;call=orig;mobile>
Description	This field records the topmost Route entry.

4.3.418 alternateCarrierSelection.selectScheme (417)

The following table describes the CDR field *alternateCarrierSelection.selectScheme* (417).

Table 425: Field alternateCarrierSelection.selectScheme (417)

Field Id	417
Failover Id	Not applicable
Module	Centrex
Feature	BW-2246
Release	Release 22.0
CLI name	alternateCarrierSelection.selectScheme
XML tag	selectScheme
Service Name	Alternate Carrier Selection
Length	12
Example Data	call_by_call
Description	This field records the type of alternate carrier selection. Possible values are "suppress", "call_by_call", "pre_selection", "no_action", "error".

4.3.419 receivedChargingVector (418)

The following table describes the CDR field *receivedChargingVector* (418).

Table 426: Field receivedChargingVector (418)

Field Id	418
Failover Id	Not applicable
Module	IP
Feature	BW-2246
Release	Release 22.0
CLI name	receivedChargingVector
XML tag	receivedChargingVector
Service Name	Not applicable
Length	255
Example Data	icid-value=5A09115DD7C4913B;orig-voi=601.rtx.com;oid=a1.pcscf
Description	When the Application Server generates a new OOTB INVITE with a generated <i>icid</i> value, this field records the content of the incoming P-Charging-Vector of the INVITE request.

4.3.420 phoneListCallingName (419)

The following table describes the CDR field *phoneListCallingName* (419).

Table 427: Field phoneListCallingName (419)

Field Id	419
Failover Id	Not applicable
Module	Centrex
Feature	BW-2294
Release	Release 22.0
CLI name	phoneListCallingName
XML tag	phoneListCallingName
Service Name	Not applicable
Length	80
Example Data	Good Friend
Description	This field records the calling name obtained from a phone list lookup.

4.3.421 receivedTimeZone (420)

The following table describes the CDR field *receivedTimeZone* (420).

Table 428: Field receivedTimeZone (420)

Field Id	420
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	receivedTimeZone
XML tag	receivedTimeZone
Service Name	Not applicable
Length	4
Example Data	0800
Description	This field indicates the content of the P-com.TimeZone header as received in a 18x, 200 OK, PRACK or ACK message. The value is expected to be a set of four ASCII characters representing two semi-octets, without enclosing quotes. The field is omitted when no value is available.

4.3.422 userEquipmentInfo (421)

The following table describes the CDR field *userEquipmentInfo* (421).

Table 429: Field userEquipmentInfo (421)

Field Id	421
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	userEquipmentInfo
XML tag	userEquipmentInfo
Service Name	Not applicable
Length	128
Example Data	uei-type=0; uei-value="4488951064550101"
Description	This field indicates the content of the P-com.User-Equipment-Info header as received in a 18x, 200 OK, PRACK or ACK message. The field is omitted when no value is available.

4.3.423 chargingGroupId (422)

The following table describes the CDR field *chargingGroupId* (422).

Table 430: Field chargingGroupId (422)

Field Id	422
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	chargingGroupId
XML tag	chargingGroupId
Service Name	Not applicable
Length	64
Example Data	"25489"
Description	This field indicates the content of the P-com.Charging-Group-Id header as received in a SIP INVITE, or from 18x or 200 OK responses. The field is omitted when no value is available.

4.3.424 incomingReason (423)

The following table describes the CDR field *incomingReason* (423).

Table 431: Field incomingReason (423)

Field Id	423
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	incomingReason
XML tag	incomingReason
Service Name	Not applicable
Length	256
Example Data	SIP;cause=503;text="Session released - loss of bearer"
Description	This field indicates the content of the "Reason" header present in incoming SIP BYE or SIP CANCEL message. Since multiple Reason headers can be received, this field is implemented as a list of subfields, one for each received Reason header. When a single header contains multiple reasons, they are reported separately. In XML, the value of the Reason header is grouped in a "incomingReason" element. The "incomingReason" elements are grouped together in a "incomingReasonList" element. The field is omitted when no value is available.

4.3.425 outgoingReason (424)

The following table describes the CDR field *outgoingReason* (424).

Table 432: Field outgoingReason (424)

Field Id	424
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	outgoingReason
XML tag	outgoingReason
Service Name	Not applicable
Length	256
Example Data	SIP;text="Ring Splash";cause=200
Description	This field indicates the content of the "Reason" header present in outgoing SIP BYE or SIP CANCEL message. The field is omitted when no value is available.

4.3.426 requestedPartyAddress (425)

The following table describes the CDR field *requestedPartyAddress* (425).

Table 433: Field requestedPartyAddress (425)

Field Id	425
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	requestedPartyAddress
XML tag	requestedPartyAddress
Service Name	Not applicable
Length	165
Example Data	sip:+12125551212@example.net;user=phone
Description	This field indicates the content of the the incoming Request-URI. It is not present for Out-of-the-Blue (OOB) originations. The field is omitted when no value is available.

4.3.427 privateUserIdentity (426)

The following table describes the CDR field *privateUserIdentity* (426).

Table 434: Field privateUserIdentity (426)

Field Id	426
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	privateUserIdentity
XML tag	privateUserIdentity
Service Name	Not applicable
Length	165
Example Data	sip:+12125551212@example.net;user=phone
Description	<p>This field indicates the private user identity of the user.</p> <p>The value of this field is the configured private user identity of the user if available. If not, then the username parameter of the Authorization header received in the SIP REGISTER from the main device is used.</p> <p>In all cases, the presence of the P-com.PrivateUserID header, in the SIP INVITE message for originations, or in the 200 OK message for terminations, supersedes the other possible values.</p> <p>The field is omitted when no value is available.</p>

4.3.428 musicOnHold.invocationTime (427)

The following table describes the CDR field *musicOnHold.invocationTime* (427).

Table 435: Field musicOnHold.invocationTime (427)

Field Id	427
Failover Id	Not applicable
Module	Centrex
Feature	BW-2308
Release	Release 22.0
CLI name	musicOnHold.invocationTime
XML tag	invocationTime
Service Name	Music on Hold
Length	18
Example Data	20150128198026.626
Description	<p>Time at which the service was first invoked during the call. The invocation time is shown using the UTC/GMT time zone.</p>

4.3.429 locationNetwork (428)

The following table describes the CDR field *locationNetwork* (428).

Table 436: Field locationNetwork (428)

Field Id	428
Failover Id	Not applicable
Module	Centrex
Feature	BW-2308
Release	Release 22.0
CLI name	locationNetwork
XML tag	locationNetwork
Service Name	Not applicable
Length	32
Example Data	Fixed
Description	<p>This field indicates the type of network used by the location described in the location field. Possible values are "Fixed", and "Mobile" and "Network".</p> <p>In XML, the location, locationType and locationNetwork are grouped together in a "locationInformation" element. The "locationInformation" elements are grouped together in a "locationList" element.</p>

4.3.430 e911PsapCallbackAttempt (429)

The following table describes the CDR field *e911PsapCallbackAttempt* (429).

Table 437: Field e911PsapCallbackAttempt (429)

Field Id	429
Failover Id	Not applicable
Module	IP
Feature	BW-2320
Release	Release 22.0
CLI name	e911PsapCallbackAttempt
XML tag	e911PsapCallbackAttempt
Service Name	Not applicable
Length	3
Example Data	Yes
Description	<p>This field indicates if the call is identified as an E911 PSAP callback attempt to a user who previously made an emergency call.</p> <p>The value "Yes" means that the call is a PSAP callback regardless of whether the user answered the call. Otherwise, the field is omitted.</p>

4.3.431 accessNetworkInfoFromRegister (430)

The following table describes the CDR field *accessNetworkInfoFromRegister* (430).

Table 438: Field *accessNetworkInfoFromRegister* (430)

Field Id	430
Failover Id	Not applicable
Module	IP
Feature	BW-2309
Release	Release 22.0
CLI name	accessNetworkInfoFromRegister
XML tag	accessNetworkInfoFromRegister
Service Name	Not applicable
Length	1024
Example Data	xDSL;a12b34c56d78e90f12g3;33;1234;12345;1a2b1a2b3c
Description	<p>This field captures the value of the P-Access-Network-Info header previously received by the device during registration. This field is present even if the <i>P-Access-Network-Info</i> header is available in the initial SIP INVITE message and populated in the <i>accessNetworkInfoCDR</i> field.</p> <p>This field is only present if the <i>use3rdPartyRegistrationForLocation</i> system parameter is enabled.</p> <p>The presence and contents of the field depend on which device was involved in the call. Once set, it is not updated again in the CDR, even if another device later retrieves or bridges on the call.</p>

4.3.432 directRoute.directRouteNumber (431)

The following table describes the CDR field *directRoute.directRouteNumber* (431).

Table 439: Field *directRoute.directRouteNumber* (431)

Field Id	431
Failover Id	Not applicable
Module	Centrex
Feature	BW-6847
Release	Release 22.0
CLI name	directRoute.directRouteNumber
XML tag	directRouteNumber
Service Name	Direct Route
Length	16
Example Data	2145550000
Description	For a direct route call, this field captures the called number from the Request-URI of the INVITE request received from the network.

4.3.433 imrnFromXsi (432)

The following table describes the CDR field *imrnFromXsi* (432).

Table 440: Field imrnFromXsi (432)

Field Id	432
Failover Id	Not applicable
Module	Centrex
Feature	BW-7406
Release	Release 22.0
CLI name	imrnFromXsi
XML tag	imrnFromXsi
Service Name	Not applicable
Length	23
Example Data	+12125556666
Description	This field indicates the IMRN allocated via the Xsi IMRN request. This field is only present if a BroadWorks Anywhere location requests an IMRN with the Xsi Call Through functionality and makes a call to this allocated IMRN.

4.3.434 outgoingPrivacy (433)

The following table describes the CDR field *outgoingPrivacy* (433).

Table 441: Field outgoingPrivacy (433)

Field Id	433
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	outgoingPrivacy
XML tag	outgoingPrivacy
Service Name	Not applicable
Length	64
Example Data	userid;critical
Description	This field indicates the contents of the Privacy header for an outgoing SIP INVITE. The field is omitted when no value is available.

4.3.435 pushNotificationRetrieve.invocationTime (434)

The following table describes the CDR field *pushNotificationRetrieve.invocationTime* (434).

Table 442: Field pushNotificationRetrieve.invocationTime (434)

Field Id	434
Failover Id	Not applicable
Module	Centrex
Feature	BW-8224
Release	Release 22.0
CLI name	pushNotificationRetrieve.invocationTime
XML tag	invocationTime
Service Name	Push Notification Retrieval
Length	18
Example Data	20100208211551.420
Description	Time at which the service was invoked during the call. The invocation time is shown using the UTC/GMT time zone.

4.3.436 pushNotificationRetrieve.facResult (435)

The following table describes the CDR field *pushNotificationRetrieve.facResult* (435).

Table 443: Field pushNotificationRetrieve.facResult (435)

Field Id	435
Failover Id	Not applicable
Module	Centrex
Feature	BW-8224
Release	Release 22.0
CLI name	pushNotificationRetrieve.facResult
XML tag	facResult
Service Name	Push Notification Retrieval
Length	7
Example Data	Success
Description	This field captures the result ("Success" or "Failure") of dialing a feature access code. The value "Success" means the feature was invoked and processed successfully.

4.3.437 scc.msclidentity (436)

The following table describes the CDR field *scc.msclidentity* (436).

Table 444: Field scc.msclidentity (436)

Field Id	436
Failover Id	Not applicable
Module	Centrex
Feature	BW-8832
Release	Release 22.0
CLI name	scc.msclidentity
XML tag	msclidentity
Service Name	scc
Length	10
Example Data	10b701
Description	<p>This field indicates the Mobile Switch Center (MSC) identifier provides by the Service Control Function (SCF_Server).</p> <p>This field is only present when IMRN and CSRN scenarios led to service centralization or continuity. The <i>scc.sccCause</i> field can be used to determine which scenario led to service centralization or continuity.</p>

4.3.438 callParked.parkedAgainst (437)

The following table describes the CDR field *callParked.parkedAgainst* (437).

Table 445: Field callParked.parkedAgainst (437)

Field Id	437
Failover Id	Not applicable
Module	Centrex
Feature	BW-9123
Release	Release 22.0
CLI name	callParked.parkedAgainst
XML tag	parkedAgainst
Service Name	Call Parked
Length	16
Example Data	+13331111534
Description	<p>This field captures the number of the user against which the call is parked.</p> <p>Provided as an E.164 number except when the user against which the call is parked only has an extension provisioned, in which case this field contains the user's extension.</p>

4.3.439 callParkRetrieve.retrievedAgainst (438)

The following table describes the CDR field *callParkRetrieve.retrievedAgainst* (438).

Table 446: Field callParkRetrieve.retrievedAgainst (438)

Field Id	438
Failover Id	Not applicable
Module	Centrex
Feature	BW-9123
Release	Release 22.0
CLI name	callParkRetrieve.retrievedAgainst
XML tag	retrievedAgainst
Service Name	Call Park Retrieve
Length	16
Example Data	+13331111534
Description	This field captures the number of the user against which the call was parked when it was retrieved. Provided as an E.164 number except when the user against which the call is retrieved from only has an extension provisioned, in which case this field contains the user's extension.

4.3.440 callPickup.pickedUpUser (439)

The following table describes the CDR field *callPickup.pickedUpUser* (439).

Table 447: Field callPickup.pickedUpUser (439)

Field Id	439
Failover Id	Not applicable
Module	Centrex
Feature	BW-9123
Release	Release 22.0
CLI name	callPickup.pickedUpUser
XML tag	pickedUpUser
Service Name	Call Pickup
Length	16
Example Data	+13331111534
Description	This field captures the number of the alerting user that was picked up by the service invocation. Provided as an E.164 number except when the alerting user only has an extension provisioned, in which case this field contains the user's extension.

4.3.441 directedCallPickup.pickedUpUser (440)

The following table describes the CDR field *directedCallPickup.pickedUpUser* (440).

Table 448: Field directedCallPickup.pickedUpUser (440)

Field Id	440
Failover Id	Not applicable
Module	Centrex
Feature	BW-9123
Release	Release 22.0
CLI name	directedCallPickup.pickedUpUser
XML tag	pickedUpUser
Service Name	Directed Call Pickup
Length	16
Example Data	+13331111534
Description	This field captures the number of the user who was barged in on by the service invocation. Provided as an E.164 number except when the alerting user only has an extension provisioned, in which case this field contains the user's extension.

4.3.442 directedCPUBargeIn.bargedInUser (441)

The following table describes the CDR field *directedCPUBargeIn.bargedInUser* (441).

Table 449: Field directedCPUBargeIn.bargedInUser (441)

Field Id	441
Failover Id	Not applicable
Module	Centrex
Feature	BW-9123
Release	Release 22.0
CLI name	directedCPUBargeIn.bargedInUser
XML tag	bargedInUser
Service Name	Directed CPU Barge-In
Length	16
Example Data	+13331111534
Description	This field captures the number of the user who was barged in on by the service invocation. Provided as an E.164 number except when the barged-in user only has an extension provisioned, in which case this field contains the user's extension.

4.3.443 outgoingTrunkGroup (442)

The following table describes the CDR field *outgoingTrunkGroup* (442).

Table 450: Field outgoingTrunkGroup (442)

Field Id	442
Failover Id	Not applicable
Module	Centrex
Feature	BW-8998
Release	Release 22.0
CLI name	outgoingTrunkGroup
XML tag	outgoingTrunkGroup
Service Name	Not applicable
Length	255
Example Data	trunkGroupOne
Description	This field captures in an originating CDR the name of the outgoing DTG received in a SIP 302 response. This field is not present if the DTG information is not received during the translation or routing phase of the request.

4.3.444 getsOriginationType (443)

The following table describes the CDR field *getsOriginationType* (443).

Table 451: Field getsOriginationType (443)

Field Id	443
Failover Id	Not applicable
Module	IP
Feature	BW-8290
Release	Release 22.0
CLI name	getsOriginationType
XML tag	getsOriginationType
Service Name	Not applicable
Length	15
Example Data	GETSFCAN
Description	This field captures the GETS/eMPS origination type ("GETSFC", "GETSAN", "GETSNT", "GETSFCAN", "GETSFCNT", "UnknownGETS", "GETS") of a GETS/eMPS origination session. "UnknownGETS" is not used by Application Server deployments. "GETS" is not used by Execution Dataless deployments.

4.3.445 getsPriorityLevel (444)

The following table describes the CDR field *getsPriorityLevel* (444).

Table 452: Field getsPriorityLevel (444)

Field Id	444
Failover Id	Not applicable
Module	IP
Feature	BW-8290
Release	Release 22.0
CLI name	getsPriorityLevel
XML tag	getsPriorityLevel
Service Name	Not applicable
Length	1
Example Data	1
Description	This field captures the GETS/eMPS service user priority level of a GETS/eMPS call.

4.3.446 scc.cellIdentity (445)

The following table describes the CDR field *scc.cellIdentity* (445).

Table 453: Field scc.cellIdentity (445)

Field Id	445
Failover Id	Not applicable
Module	Centrex
Feature	BW-8675
Release	Release 22.0
CLI name	scc.cellIdentity
XML tag	cellIdentity
Service Name	scc
Length	4
Example Data	724
Description	This field indicates the Cell identity provided by the Service Control Function. This field is only present when an IMRN origination lead to Service Centralization. It is never populated in Continuity scenarios.

4.3.447 scc.sectorIdentity (446)

The following table describes the CDR field *scc.sectorIdentity* (446).

Table 454: Field scc.sectorIdentity (446)

Field Id	446
Failover Id	Not applicable
Module	Centrex
Feature	BW-8675
Release	Release 22.0
CLI name	scc.sectorIdentity
XML tag	sectorIdentity
Service Name	scc
Length	2
Example Data	3
Description	<p>This field indicates the Sector identity provided by the Service Control Function.</p> <p>This field is only present when an IMRN origination lead to Service Centralization. It is never populated in Continuity scenarios.</p>

4.3.448 receivedCalledAssertedIdentity (447)

The following table describes the CDR field *receivedCalledAssertedIdentity* (447).

Table 455: Field receivedCalledAssertedIdentity (447)

Field Id	447
Failover Id	Not applicable
Module	3gpp
Feature	BW-2308
Release	Release 22.0
CLI name	receivedCalledAssertedIdentity
XML tag	receivedCalledAssertedIdentity
Service Name	Not applicable
Length	161
Example Data	tel:+15146996606 or unknown
Description	<p>This field contains the complete "addr-spec" value taken from the P-Asserted-Identity (PAI) header of the SIP 2xx.</p> <p>This field is defined as a list which can accommodate the presence of multiple identities in the PAI.</p> <p>The address is obtained from the PAI SIP header field of the 2xx responses corresponding to a SIP request either initiating a dialog or a standalone transaction.</p>

4.3.449 reseller (448)

The following table describes the CDR field *reseller* (448).

Table 456: Field reseller (448)

Field Id	448
Failover Id	50
Module	Basic
Feature	BW-12057
Release	Release 23.0
CLI name	reseller
XML tag	reseller
Service Name	Not applicable
Length	30
Example Data	XZYReseller
Description	The reseller ID. This field is omitted when the user's service provider is not associated with a reseller

4.3.450 imsi (449)

The following table describes the CDR field *imsi* (449).

Table 457: Field imsi (449)

Field Id	449
Failover Id	Not applicable
Module	IP
Feature	BW-13425
Release	Release 23.0
CLI name	imsi
XML tag	imsi
Service Name	Not applicable
Length	16
Example Data	310150123456789
Description	This field captures the International Mobile Subscriber Identity (IMSI) for a BroadWorks Mobility origination or termination.

4.3.451 callReferenceNumber (450)

The following table describes the CDR field *callReferenceNumber* (450).

Table 458: Field callReferenceNumber (450)

Field Id	450
Failover Id	Not applicable
Module	IP
Feature	BW-13425
Release	Release 23.0
CLI name	callReferenceNumber
XML tag	callReferenceNumber
Service Name	Not applicable
Length	20
Example Data	123456
Description	This field captures the call reference number for a BroadWorks Mobility origination or termination.

4.3.452 vlrNumber (451)

The following table describes the CDR field *vlrNumber* (451).

Table 459: Field vlrNumber (451)

Field Id	451
Failover Id	Not applicable
Module	IP
Feature	BW-13425
Release	Release 23.0
CLI name	vlrNumber
XML tag	vlrNumber
Service Name	Not applicable
Length	20
Example Data	+19985551234
Description	This field captures the Visitor Location Register (VLR) number from the location information for a BroadWorks Mobility origination or termination.

4.3.453 automaticCollectCall.callType (452)

The following table describes the CDR field *automaticCollectCall.callType* (452).

Table 460: Field automaticCollectCall.callType (452)

Field Id	452
Failover Id	Not applicable
Module	Centrex
Feature	BW-14330
Release	Release 23.0
CLI name	automaticCollectCall.callType
XML tag	callType
Service Name	Automatic Collect Call
Length	21
Example Data	Backward Collect Call
Description	This service extension field identifies the call as an automatic collect call. It also identifies the specific type of automatic collect call ("Backward Collect Call" or "Collect Call"). The value "Backward Collect Call" means BroadWorks provides tones and announcements. The value "Collect Call" means the PSTN provides tones and announcements.

4.3.454 automaticCollectCall.connectTime (453)

The following table describes the CDR field *automaticCollectCall.connectTime* (453).

Table 461: Field automaticCollectCall.connectTime (453)

Field Id	453
Failover Id	Not applicable
Module	Centrex
Feature	BW-14330
Release	Release 23.0
CLI name	automaticCollectCall.connectTime
XML tag	connectTime
Service Name	Automatic Collect Call
Length	18
Example Data	20170829203936.971
Description	This service extension field indicates the time at which the two parties involved in an automatic collect call were connected. This field is only present when the service code is Backward Collect Call.

4.4 OriginalCalledReason and RedirectingReason

Possible values for the OriginalCalledReason and RedirectingReason, as well as associated meanings are shown in the following table (additional reasons can be received from the network and appear unchanged in the CDRs):

Table 462: OriginalCalledReason and RedirectingReason

Redirection Reason	Pre or Post Answer	BroadWorks Usage
unknown	Pre	CF by SIP phone using a 302 with no reason
user-busy	Pre	CF/busy
	Pre	VM/busy
no-answer	Pre	CF/busy
	Pre	VM/busy
unavailable	Pre	CommPilot Call Manager/"send to voice mail"
	Pre	VM, for example, user has no device
unconditional	Pre	CF/always
	Pre	CPL script/forward
	Pre	Group Night Forwarding
time-of-day	Pre	CF/selective
	Pre	Group Night Forwarding
do-not-disturb	Pre	Unused (handled, if received from network)
deflection	Post	Auto Attendant transfer
	Post	Out of service line/transfer to new number on 0
	Post	SIP phone initiated blind transfer
	Post	VM – Transfer on 0 while leaving a VM
	Post	VM – Automatic callback of caller while listening to a VM
	Post	CommPilot Call Manager/transfer while active/held/remote held
	Pre	CommPilot Call Manager/transfer while alerting
follow-me	Pre	CommPilot Call Manager originating call leg
	Pre	Remote Office
	Pre	Simultaneous Ringing
	Pre	BroadWorks Mobility
	Pre	Find-Me/Follow-Me
out-of-service	Pre	Unused (handled, if received from network)
away	Pre	Remote Office in deployments with Service Control (SC) proxy
BW-ImplicitID	Pre	Enterprise voice portal redirection to user's home voice portal
BW-ExplicitID.xxx	Post	Enterprise voice portal redirection to user's home voice portal; the "xxx" part are the digits collected from the caller, identifying the target mailbox (extension or DN)
ic-user-outdial	Pre	Conferencing Server out-dialing
hunt-group	Pre	Hunt Group call to an agent
call-center	Post	Call Center call to an agent
route-point	Post	Route Point call to an agent (for incoming call to the route point)

4.5 Related Call Id

The following table expands the description of the *relatedCallId* field used outside of the transfer *serviceExtension*:

Table 463: Related Call Id

Triggering Service	relatedCallIdReason	CDR containing the relatedCallId	relatedCall (value of relatedCallId)
Instant Group Call	Not applicable (<i>relatedCallId</i> field used within the <i>serviceExtension</i> of Instant Group Call service).	Each originating CDR spawned by the Instant Group Call service.	The terminating call that triggered the Instant Group Call service.
BroadWorks Anywhere	Not applicable (<i>relatedCallId</i> field used within the <i>serviceExtension</i> of BroadWorks Anywhere service).	The originating CDR that resumes the call origination when a user originates a call via the BroadWorks Anywhere portal.	The terminating call that reached the user after the BroadWorks Anywhere portal redirected the call to the user before the actual origination is attempted.
BroadWorks Anywhere	BroadWorks Anywhere Location	Call origination towards the BroadWorks Anywhere location.	Regular call leg.
BroadWorks Anywhere	BroadWorks Anywhere Portal	Call origination towards the user identified by the BroadWorks Anywhere portal	Terminating call to the BroadWorks Anywhere portal.
BroadWorks Anywhere Shared Call Appearance	Call Retrieve	Origination of the Call Retrieve FAC.	Call retrieved.
Automatic Hold/Retrieve	Automatic Hold/Retrieve	The termination of the Call Retrieve. NOTE: Identified by Retrieve in the Automatic Hold/Retrieve service extension.	The termination of the call on hold.
Directed Call Pickup with Barge-in when barge-in occurs	Barge-in	Originating call of the barging-in user (who dialed the DPUBI FAC) to the barged-in user. NOTE: Identified by the DPUBI service extension.	Original call of the barged-in user.
	Barge-in	Other call of the barging-in user, connected to the third party. NOTE: Identified by the absence of the DPUBI service extension.	Originating call of the barging-in user to the barged-in user.
Call Center Monitoring with Barge-In Monitoring Next Call	CC-Monitoring-BI	Originating call of the barging-in user (the supervisor who dialed the CC Monitoring BI FAC, or the Monitoring Next Call FAC) to the barged-in user. NOTE: Identified by the presence of either the CC Monitoring BI service extension, or the Monitoring Next Call service extension	Original call of the barged-in user (agent).

Triggering Service	relatedCallIdReason	CDR containing the relatedCallId	relatedCall (value of relatedCallId)
	CC-Monitoring-BI	Other call of the barging-in user, connected to the third party. NOTE: Identified by the absence of the CC Monitoring BI service extension or the Monitoring Next Call service extension.	Originating call of the barging-in user (supervisor) to the barged-in user (agent).
Call Center	Call Center	Call origination from the Call Center to the agent.	Call termination to the Call Center from the caller.
Route Point	Route Point	Call origination from the route point to the agent.	Call termination to the route point from the caller.
Call Forwarding Always	Call Forward Always	Origination of the second leg.	Termination of the first leg.
Call Forwarding Busy Transfer to voice mail for BUSY reason	Call Forward Busy	Origination of the second leg.	Termination of the first leg.
Call Forwarding No Answer Hunt Group redirection for no answer Call Center redirection for no answer Transfer to voice mail for no answer	Call Forward No Answer	Origination of the second leg.	Termination of the first leg.
Call Forwarding Selective	Call Forward Selective	Origination of the second leg.	Termination of the first leg.
Call Forwarding Not Reachable Hunt Group redirection for Not Reachable	Call Forward Not Reachable	Origination of the second leg.	Termination of the first leg.
Call Park	Call Park	Call that activates the Call Park.	Call being parked (origination or termination).
Call Park Retrieve	Call Park Retrieve	Call that activates the Call Park Retrieve.	Call being retrieved (origination or termination).
Call Pickup	Call Pickup	Termination of the call picked up. NOTE: Identified by Terminating in the <i>Direction</i> field.	Origination of the call picking up.
	Call Pickup	Origination of the call picking up. NOTE: Identified by Originating in the <i>Direction</i> field.	Termination or the call picked up.
Call Processing Language forward	Call Processing Language	Origination of the second leg.	Termination of the first leg.
Directed Call Pickup Directed Call Pickup with Barge-in when no barge-in occurs	Directed Call Pickup	Termination of the call picked up. NOTE: Identified by Terminating in the <i>Direction</i> field.	Origination of the call picking up.

Triggering Service	relatedCallIdReason	CDR containing the relatedCallId	relatedCall (value of relatedCallId)
	Directed Call Pickup	Origination of the call picking up. NOTE: Identified by Originating in the <i>Direction</i> field.	Termination or the call picked up.
Hunt Group	Hunt Group	Call origination from the Hunt Group to the agent.	Call termination to the Hunt Group from the client.
Remote Office	Remote Office	Call leg to the remote office user.	Regular call leg.
Sequential Ringing	Sequential Ringing	Originating call to an alternated number.	Terminating call to the base number.
Series Completion	Series Completion	Originating call to one of the subsequent numbers in the series.	Terminating call from the first number of the series.
Simultaneous Ringing Family	Simultaneous Ringing Family	Originating call to an alternated number.	Terminating call to the base number.
Simultaneous Ringing Personal	Simultaneous Ringing Personal	Originating call to an alternate number.	Terminating call to the base number.
Directory Number Hunting	Directory Number Hunting	Originating call from the called agent back to the Hunt Group or Call Center.	Terminating call to the called agent.
Fax	Fax Deposit	Originating call of the user with Fax service towards the voice portal.	Terminating call to the user with Fax service.
Business Trunking	Trunk Group Forward Capacity Exceeded	Origination of the second leg.	Termination or the first leg
	Trunk Group Forward Unreachable	Origination of the second leg.	Termination or the first leg.
Call Forwarding Always on a Business Trunk	Trunk Group Forward Unconditional	Origination of the second leg.	Termination or the first leg.
BroadWorks Mobility	BroadWorks Mobility	Originating CDR toward the mobile handset.	Regular terminating call leg.
Find-Me Follow-Me	Find-me/Follow-me	Origination of the second leg.	Termination of the first leg.
Group Night Forwarding	Group Night Forwarding	Origination to the group night forwarding destination.	Terminating call being forwarded.
Executive	Executive	Origination of the leg to the assistant for the filtered call or call push recall.	Termination to the executive from the calling party for a filtered call. Termination to the executive from the calling party or origination from the executive to the destination address for a call push recall.
	Executive Forward	Origination of the leg to the forward destination.	Termination to the executive for the filtered call.
Executive-Assistant	Executive-Assistant Divert	Origination of the leg to the divert destination.	Termination to the assistant for the filtered call.
	Executive-Assistant Initiate Call	Termination of the leg to the executive.	Origination from the executive to the destination address for the call initiation.

Triggering Service	relatedCallIdReason	CDR containing the relatedCallId	relatedCall (value of relatedCallId)
	Executive-Assistant Call Push	Origination of the call for the Executive-Assistant Call Push feature access code.	Termination to the assistant for the filtered call being pushed, or origination from the assistant to the executive for the call initiation being pushed.
Call Recording	Call Recording	Origination FAC call to keep the call recording.	The call that has the recording that is being kept.
	Call Recording	Origination FAC call to start recording the call.	The call that has the recording that is being started.
	Call Recording	Origination FAC call to pause recording the call.	The call that has the recording that is being paused.
	Call Recording	Origination FAC call to resume recording the call.	The call that has the recording that is being resumed.
	Call Recording	Origination FAC call to stop recording the call.	The call that has the recording that is being stopped.
Call Forward Always Secondary	Call Forward Always Secondary	Origination of the second leg.	Termination of the first leg.
Prepaid	Final Unit Redirection	Originating call to the redirect server.	The call that was terminated because it ran out of credits.
Push Notification Retrieval	Push Notification Retrieval	Origination of the call answering the call identified in the push notification.	The call being answered by the Push Notification Retrieval FAC.
Refer from Network Side	Network Refer	Origination CDR for network SIP REFER leg. Origination from BroadWorks user to transferred-to user.	Call ID of the original call from BroadWorks user to network user.

The following table provides more details on the transfer *serviceExtension* and its *relatedCallId* values:

Triggering Service	Type	CDR containing the Related Call Id	Related Call
Blind transfer initiated at the Call Manager	Deflection	Origination of the second leg. NOTE: Identified by originating in the <i>Direction</i> field.	Termination of the first leg.
Transfer initiated by the SIP REFER method			
Auto Attendant		Termination of the first leg. NOTE: Identified by terminating in the <i>Direction</i> field.	Origination of the second leg.
Intercept terminator			
Transfer out of a Call Center holding queue initiated by a CAP message			
User device redirection			
Transfer from one voice portal to another			
Transfer from the voice portal to the attendant (dial 0)			
Transfer to voice mail caused by release causes other than BUSY or FORBIDDEN			

Triggering Service	Type	CDR containing the Related Call Id	Related Call
Transfer Consult Transfer following a Directed Call Pickup with Barge-in (DPUBI) when the barge-in user is first to leave the call	Transfer Consult	One leg of the transfer.	The other leg of the transfer.
Transfer using the PBX Integration feature occurring with an out-of-dialog INVITE or when the origination is within the PBX	Third Party Deflection	None. (There is no <i>relatedCallId</i> field in this scenario.)	Not applicable.
Transfer using PBX Integration feature occurring within an existing dialog using a 302 response or the REFER method	Third Party Deflection	Origination from the PBX NOTE: Identified by originating in the <i>Direction</i> field.	Termination to the PBX.
		Termination to the PBX. NOTE: Identified by terminating in the <i>Direction</i> field.	Origination from the PBX.
Find-Me Follow-Me Call Push	FMFM Call Push	Termination to the user executing call push.	Call push origination.
		Call push origination.	Termination to the user executing call push.
Personal Assistant	Personal Assistant	Termination to the user transferring to the assistant.	Origination toward the assistant.
		Origination toward the assistant.	Termination to the user transferring to the assistant.
Fixed line persona (FLP) transfer	Transfer Consult Internal	One leg of the transfer.	The other leg of the transfer.

4.6 Redirection Example

The following table lists the relevant fields for the CDRs generated in the following scenario:

- User A (+15146982603) dials user B by extension (2604).
- User B is busy and has Call Forwarding Busy enabled, with the destination set to extension 2605 (user C).
- User C has Call Forwarding Always enabled, with the destination set to the extension 2606 (user D).

NOTE: The callingNumber always conveys the actual calling party and it is not modified by redirections.

Table 464: Redirection Example

CSV	XML Field	CDR1	CDR2	CDR3	CDR4	CDR5	CDR6
4	userNumber	+15146982603	+15146982604	+15146982604	+15146982605	+15146982605	+15146982606
5	groupNumber	+15146982600	+15146982600	+15146982600	+15146982600	+15146982600	+15146982600
6	direction	Originating	Terminating	Originating	Terminating	Originating	Terminating
7	callingNumber	+15146982603	+15146982603	+15146982603	+15146982603	+15146982603	+15146982603
9	calledNumber	+15146982604	+15146982604	+15146982605	+15146982605	+15146982606	+15146982606
18	dialedDigits	2604		2605		2606	

CSV	XML Field	CDR1	CDR2	CDR3	CDR4	CDR5	CDR6
36	originalCalledNumber			+15146982604	+15146982604	+15146982604	+15146982604
38	originalCalledReason			busy	busy	unconditional	unconditional
39	redirectingNumber			+15146982604	+15146982604	+15146982605	+15146982605
41	redirectingReason			busy	busy	unconditional	unconditional

4.7 Call Detail Record Format

Call detail records (CDRs) that are written to file can be encoded in XML format or comma-separated value (CSV) format. CDRs sent over Radius are encoded according to the Radius [RFC 2866](#) compliant scheme.

These formats are described in the following sections:

- For an XML example, see section [XML File Example](#) on page 358.
- For a CSV file example, see section [CSV File Example](#) on page 360.
- For a Radius packet example, see section [Radius Stream Example](#) on page 361.

4.7.1 XML File Format

Each field is encoded as an XML element with the name specified in section [Field Description](#) on page 61.

The fields are grouped into modules. Service fields, identified with a service name in section [Field Description](#) on page 61, are grouped into a `serviceExtensionList` element, each service in its own `serviceExtension` element, which contains the `serviceName` element and any field associated with this service.

Some fields are grouped together within a parent element. These are specified in the individual field description when applicable.

Some fields with multiple values appear multiple times within a list element. These are specified in the individual field description when applicable.

The following shows the basic structure of an XML file. Note that in an actual output, empty elements are omitted.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE broadWorksCDR>
<broadWorksCDR version="23.0">
  <cdrData>
    <headerModule>
      <recordId>
        <eventCounter>0000000000</eventCounter>
        <systemId> </systemId>
        <date> </date>
        <systemTimeZone> </systemTimeZone>
      </recordId>
      <serviceProvider> </serviceProvider>
      <type>Start</type>
    </headerModule>
  </cdrData>
  <cdrData>
    <headerModule>
      <recordId>
        <eventCounter>0000223344</eventCounter>
        <systemId> </systemId>
        <date> </date>
        <systemTimeZone> </systemTimeZone>
      </recordId>
```

```
<serviceProvider> </serviceProvider>
<type>Normal</type>
</headerModule>
<basicModule>
  <userNumber> </userNumber>
  <groupNumber> </groupNumber>
  <direction> </direction>
  <asCallType> </asCallType>
  <callingNumber> </callingNumber>
  <callingNumberContext> </callingNumberContext>
  <callingPresentationNumber> </callingPresentationNumber>
  <callingPresentationNumberContext> </callingPresentationNumberContext>
  <callingAssertedNumber> </callingAssertedNumber>
  <callingAssertedNumberContext> </callingAssertedNumberContext>
  <dialableCallingNumber> </dialableCallingNumber>
  <callingPresentationIndicator> </callingPresentationIndicator>
  <dialedDigits> </dialedDigits>
  <dialedDigitsContext> </dialedDigitsContext>
  <calledNumber> </calledNumber>
  <calledNumberContext> </calledNumberContext>
  <networkTranslatedNumber> </networkTranslatedNumber>
  <networkTranslatedNumberContext> </networkTranslatedNumberContext>
  <networkTranslatedGroup> </networkTranslatedGroup>
  <startTime> </startTime>
  <userTimeZone> </userTimeZone>
  <localCallId> </localCallId>
  <remoteCallId> </remoteCallId>
  <answerIndicator> </answerIndicator>
  <answerTime> </answerTime>
  <releaseTime> </releaseTime>
  <terminationCause> </terminationCause>
  <q850Cause> </q850Cause>
  <carrierIdentificationCode> </carrierIdentificationCode>
  <callCategory> </callCategory>
  <networkCallType> </networkCallType>
  <chargeIndicator> </chargeIndicator>
  <typeOfNetwork> </typeOfNetwork>
  <releasingParty> </releasingParty>
  <userId> </userId>
  <otherPartyName> </otherPartyName>
  <otherPartyNamePresentationIndicator> </otherPartyNamePresentationIndicator>
  <clidPermitted> </clidPermitted>
  <receivedCallingNumber> </receivedCallingNumber>
  <namePermitted> </namePermitted>
  <reseller> </reseller>
</basicModule>
<centrexModule>
  <group> </group>
  <department> </department>
  <accountCode> </accountCode>
  <authorizationCode> </authorizationCode>
  <cbfAuthorizationCode> </cbfAuthorizationCode>
  <callingPartyCategory> </callingPartyCategory>
  <outsideAccessCode> </outsideAccessCode>
  <originalCalledNumber> </originalCalledNumber>
  <originalCalledNumberContext> </originalCalledNumberContext>
  <originalCalledPresentationIndicator> </originalCalledPresentationIndicator>
  <originalCalledReason> </originalCalledReason>
  <redirectingNumber> </redirectingNumber>
  <redirectingNumberContext> </redirectingNumberContext>
  <redirectingPresentationIndicator> </redirectingPresentationIndicator>
  <redirectingReason> </redirectingReason>
```

```
<btluExceeded> </btluExceeded>
<enterpriseTrunkCapacityExceeded> </enterpriseTrunkCapacityExceeded>
<trunkGroupName> </trunkGroupName>
<trunkGroupInfo> </trunkGroupInfo>
<chargeNumber> </chargeNumber>
<relatedCallId> </relatedCallId>
<relatedCallIdReason> </relatedCallIdReason>
<faxMessaging> </faxMessaging>
<twoStageDialingDigits> </twoStageDialingDigits>
<recallType> </recallType>
<originationMethod> </originationMethod>
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      <sdpAnswerTimestamp> </sdpAnswerTimestamp>
      <earlyMediaSdp> </earlyMediaSdp>
      <earlyMediaInitiatorFlag> </earlyMediaInitiatorFlag>
    </earlyMedia>
  </earlyMediaList>
  <messageBodyList>
    <messageBody>
      <bodyContentType> </bodyContentType>
      <bodyContentLength> </bodyContentLength>
      <bodyContentDisposition> </bodyContentDisposition>
      <bodyOriginator> </bodyOriginator>
    </messageBody>
  </messageBodyList>
  <sipErrorCode> </sipErrorCode>
  <callingPartyAddressList>
    <callingPartyAddress> </callingPartyAddress>
  </callingPartyAddressList>
  <calledPartyAddress> </calledPartyAddress>
  <receivedRoute> </receivedRoute>
  <receivedTimeZone> </receivedTimeZone>
  <userEquipmentInfo> </userEquipmentInfo>
  <chargingGroupId> </chargingGroupId>
  <incomingReasonList>
    <incomingReason> </incomingReason>
  </incomingReasonList>
  <outgoingReason> </outgoingReason>
  <requestedPartyAddress> </requestedPartyAddress>
  <privateUserIdentity> </privateUserIdentity>
  <outgoingPrivacy> </outgoingPrivacy>
  <receivedCalledAssertedIdentityList>
    <receivedCalledAssertedIdentity> </receivedCalledAssertedIdentity>
  </receivedCalledAssertedIdentityList>
</tgppModule>
<partialCallBeginModule>
  <failoverCorrelationId> </failoverCorrelationId>
</partialCallBeginModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
```

```
<eventCounter>0000000000</eventCounter>
<systemId> </systemId>
<date> </date>
<systemTimeZone> </systemTimeZone>
</recordId>
<serviceProvider> </serviceProvider>
<type>Failover</type>
</headerModule>
<basicModule>
  <userNumber> </userNumber>
  <groupNumber> </groupNumber>
  <direction> </direction>
  <asCallType> </asCallType>
  <callingNumber> </callingNumber>
  <callingNumberContext> </callingNumberContext>
  <callingPresentationNumber> </callingPresentationNumber>
  <callingPresentationNumberContext> </callingPresentationNumberContext>
  <callingAssertedNumber> </callingAssertedNumber>
  <callingAssertedNumberContext> </callingAssertedNumberContext>
  <dialableCallingNumber> </dialableCallingNumber>
  <callingPresentationIndicator> </callingPresentationIndicator>
  <dialedDigits> </dialedDigits>
  <dialedDigitsContext> </dialedDigitsContext>
  <calledNumber> </calledNumber>
  <calledNumberContext> </calledNumberContext>
  <networkTranslatedNumber> </networkTranslatedNumber>
  <networkTranslatedNumberContext> </networkTranslatedNumberContext>
  <networkTranslatedGroup> </networkTranslatedGroup>
  <startTime> </startTime>
  <userTimeZone> </userTimeZone>
  <localCallId> </localCallId>
  <remoteCallId> </remoteCallId>
  <answerIndicator> </answerIndicator>
  <answerTime> </answerTime>
  <releaseTime> </releaseTime>
  <terminationCause> </terminationCause>
  <q850Cause> </q850Cause>
  <carrierIdentificationCode> </carrierIdentificationCode>
  <callCategory> </callCategory>
  <networkCallType> </networkCallType>
  <chargeIndicator> </chargeIndicator>
  <typeOfNetwork> </typeOfNetwork>
  <releasingParty> </releasingParty>
  <userId> </userId>
  <otherPartyName> </otherPartyName>
  <otherPartyNamePresentationIndicator> </otherPartyNamePresentationIndicator>
  <clidPermitted> </clidPermitted>
  <receivedCallingNumber> </receivedCallingNumber>
  <namePermitted> </namePermitted>
  <reseller> </reseller>
</basicModule>
<partialCallEndModule>
  <correlationInfo>
    <key> </key>
    <creator> </creator>
    <originatorNetwork> </originatorNetwork>
    <terminatorNetwork> </terminatorNetwork>
  </correlationInfo>
  <failoverCorrelationId> </failoverCorrelationId>
</partialCallEndModule>
</cdrData>
<cdrData>
```



```
<headerModule>
  <recordId>
    <eventCounter>0000000000</eventCounter>
    <systemId> </systemId>
    <date> </date>
    <systemTimeZone> </systemTimeZone>
  </recordId>
  <serviceProvider> </serviceProvider>
  <type>End</type>
</headerModule>
</cdrData>
</broadWorksCDR>
```

4.7.1.1 Encoding

The XML file header contains an encoding name. This encoding is the default system encoding (or character set) used by the Application Server, and depends on the locale of the system (or the `file.encoding` property, if set). The file should be interpreted according to this encoding.

Depending on the Application Server configuration and messaging content, BroadWorks CDR's may contain non-ASCII characters. It is important to use an encoding compatible with the expected characters, for example UTF-8.

4.7.1.2 Escaped "&" and "<" characters

The "&" and "<" characters have a special meaning in XML files. As a result, if elements such as a department, group, or service provider name, contain these characters, they are replaced with their XML equivalents, "&"; and "<"; respectively.

4.7.2 Comma-Separated Value (CSV) File Format

Each type of comma-separated value (CSV) record is explained in the following subsections. Note that empty fields are simply denoted by two consecutive commas. It is important to note that each record is only on one line.

4.7.2.1 Version and Encoding

The first line of all CSV files contains the version of the Application Server Accounting CDR, which is described in this document. It also shows which encoding has been used to produce the file. This is the default encoding (or character set) used by the Application Server, and depends on the locale of the system (or the `file.encoding` property, if set).

Depending on AS configuration and messaging content, BroadWorks CDR's may contain non-ASCII characters. It is important to use an encoding compatible with the expected characters, for example UTF-8.

A space separates the version and the encoding.

4.7.2.2 Normal Type Records

The Normal type records contain the fields defined in section [Field Description](#) on page 61. The *Field Id* indicates the column of each field in the normal-type record.

For example¹¹:

```
0000000109DEFAULT20090602175049.2501-040000,MtlASDev,Normal,+15146986604,
+15146986600,Terminating,+15146986603,Public,+15146986604,20090602175049.250,
1-040000,Yes,20090602175051.281,20090602175055.250,016,VoIP,,,private,,,local,Group,
,PCMU/8000,192.168.8.32,BW135049250020609271533085@192.168.8.249,,,South_as86,,,,,
,,,n,,,500:0,498:0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
,,,,,,south04@mtlasdev86.net,john3 south,Public,,,,,,,,,,,,,,,,,,,,Yes,,,,,,,,,
,3.969,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
```

¹¹ This is an example showing details for Release 17.0. Latest releases define additional fields but the structure remains the same.

[illegible]

NOTE: Spare fields are always (for this release) left empty and the *networkType* field is always set to “VoIP” on the Application Server.

4.7.2.3 Long Duration Type Records

The Long Duration type records contain the same fields as the Normal CDR type described above. However, the field's *releaseTime*, *terminationCause*, and *releasingParty* are always left empty.

4.7.2.4 Interim Type Records

The Interim type records contain the same fields as the Normal CDR type described above. However, the field's *releaseTime*, *terminationCause*, and *releasingParty* are always left empty.

4.7.2.5 Start- and End-type Records

These two CDR types contain only the Header module, as described in section [Call Detail Record Modules](#) on page 61. Therefore, the following fields comprise the Start- and End-type of records:

recordId, serviceProvider, type

For example:

12380da145220020517143535.6231-040000,XYZCompany,Start

4.7.2.6 Failover Type Records

Failover type records only have the fields identified with a failover Id in section [Field Description](#) on page 61. The failover Id indicates the column of each field in the failover-type record.

4.7.2.7 Escaped Commas and Backslashes

When a field contains commas or backslashes, they are “escaped”, which means they are prefixed with a backslash. For example, the “Sales, Support and \other\” department name would appear as:

...,Sales\, Support and \\other\\,...

A billing or mediation system must be able to handle this situation if a field contains the “,” or “\” characters. This is required because the comma is used as a field separator in a CSV file.

4.7.2.8 Escaped Carriage Returns and Line Feeds

As of Release 15.0, some fields can contain carriage return and line feed characters. If they do, they are also “escaped”, that is, they are reported as “\n” or “\r”, respectively.

For example, an SDP value such as:

```
Content-Type:application/sdp
Content-Length:196
v=0
o=BroadWorks 630 1 IN IP4 192.168.13.6
s=-
c=IN IP4 192.168.13.6
t=0 0
m=audio 10994 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
```

a=fmtp:101 0-15

... would be reported as follows in field 210 (sdp):

Content-Type:application/sdp\r\nContent-Length:196\r\n\r\nv=0\r\no=BroadWorks 630 1
IN IP4 192.168.13.6\r\ns=-\r\nnc=IN IP4 192.168.13.6\r\nnt=0 0\r\nnm=audio 10994 RTP/
AVP 0 101\r\na=rtpmap:0 PCMU/8000\r\na=rtpmap:101 telephone-event/8000\r\na=fmtp:101
0-15

A billing or mediation system must be able to handle this situation if a field contains the carriage return or line feed characters.

This is required because the carriage return is used as a CDR separator in the CSV file.

4.7.2.9 Escaped White Spaces in 3gpp Module

The following fields can hold multiple values, and if they do, they are delimited by spaces:

- earlyMedia info
 - sdpOfferTimestamp
 - sdpAnswerTimestamp
 - earlyMediaSdp
 - earlyMediaInitiatorFlag
- messageBody info
 - bodyContentType
 - bodyContentLength
 - bodyContentDisposition
 - bodyOriginator
- location info
 - location
 - locationType

As such, original space characters within a single value are “escaped” as “\ ”. For example, if field 216 (bodyContentType) contains two subfields with the following content:

application/dtmf-relay
Fictitious, with spaces

... the result is encoded as:

application/dtmf-relay Fictitious\,\ with\ spaces

4.7.3 Radius UDP Packet Format

BroadWorks CDRs are sent using RADIUS accounting requests carried by UDP packets. These accounting requests have the same generic format, as follows:

Table 465: Radius UDP Packet Format

Name	Length (bytes)	Value
Code	1	Type of Radius packet, whereby “4” means “Accounting Request”.
Identifier	1	Used to match requests and replies, in combination with source UDP port. An accounting-Response for a given Accounting-Request must be received on the same sending port used to send the request to the Radius Server.

Name	Length (bytes)	Value
Length	2	Length of the Radius message including the <i>Code</i> , <i>Identifier</i> , <i>Length</i> , <i>Authenticator</i> , and <i>Attribute</i> fields.
Authenticator	16	Used to authenticate the messages between the client and Radius accounting server. It consists of an MD5 hash over the bytes made of the concatenation of (Code + Identifier + Length + 16 zero octets + Attributes + Shared secret), where the shared secret is a string that must be configured (and match) on both the Radius client and Radius server.
Attributes	variable	Set of attributes in Type, Length, Value (TLV) format. Includes both standard and vendor-specific attributes, as described in the following table.

All attributes are in Type, Length, Value (TLV) format, whereby the *Type* field is 1 byte, the *Length* field is also 1 byte (and includes 2 bytes for the *Type* and *Length* elements), and the Value field can vary from 1 to 253 bytes (the value of *Length* ranges from 3 to 255 bytes).

Among the standard Radius attributes, BroadWorks uses only the mandatory ones, and the vendor-specific attribute, as follows:

Table 466: Radius UDP Packet Format (Vendor-Specific)

Radius Attribute Name	Type	Length (bytes) ¹²	Value
NAS-IP-Address ¹³	4	6	IPv4 Address of the Application Server sending the request.
NAS-IPv6-Address	95	18	IPv6 Address of the Application Server sending the request. Present only if at least one of the Radius servers is configured with an IPv6 address.
Acct-Status-Type	40	6	1: Start: Used upon call origination or termination. 2: Stop: Used upon call release and for the Start CDR and Stop CDR (when the Radius output is enabled/disabled). 3: Interim-Update (or just Interim): Used upon Answer and Long Duration, codec changes, and end of participation in a conference.
Acct-Session-Id	44	variable	Unique key to match Start/Interim/Stop records belonging to the same call. For example: 17:080c2cb5020040919200616.237. Uniqueness is obtained by concatenating the call's ID, the Application Server's host ID, and the call's <i>startTime</i> .
Vendor-specific	26	7-255	See the description below.

The CDR content is conveyed with one or more vendor-specific attributes (VSAs). The attribute portion of a VSA also follows a TLV format, for each of the one or more sub-attributes it contains. *Type* is 26 (vendor-specific), *Length* is the sum of the lengths of all sub-attributes, plus 1 for the *Type*, plus 1 for the *Length*, plus 4 for the Vendor ID. According to [RFC 2866](#), the value portion of a vendor-specific attribute is formatted as follows:

```
Vendor ID (4 bytes),
  Vendor Specific Type (1 byte), Length (1 byte), Value (1 or more bytes)
  [Vendor Specific Type (1 byte), Length (1 byte), Value (1 or more bytes)]
```

¹² Including *Type* and *Length*.

¹³ The *NAS-IP-Address* attribute *must not* be used by the Radius server to select the shared secret. The Radius server must use the source IP address of the UDP packet for this ([RFC 2865](#), section 5.4).

... where Vendor ID is a unique identification number attributed by the Internet Assigned Numbers Authority (IANA). BroadSoft's Vendor ID is 6431 (or 0x 00 00 19 1f).

A single VSA can carry many sub-attributes. However, because the payload is limited to 253 bytes, many but usually not all fields of a CDR can fit in a single VSA. BroadWorks accounting-requests can contain multiple VSAs. Each VSA contains a subset of the full CDR fields. The combination of all sub-attributes carried in all instances of vendor-specific attributes in a given accounting request provides all non-empty fields for a CDR.

The Type field for these sub-attributes uses the same numerical ID as the Field Id defined in section [Field Description](#) on page 61, up to field 254. Since the Radius encoding allocates a single byte for the vendor-specific type, there can be only 256 distinct vendor-specific types (IDs 0 through 255). BroadWorks CDR fields with the Field Id number at 255 or above are encoded using the Radius ID 255, and the value is prefixed with a string made of the *Field Id* and an equal sign. For example, if field 262 reports a value "yes", a Radius field 255 is added with value "262=yes". The Radius format carries one additional field, *CDR-version* (type 0). Radius servers can usually entirely decode accounting requests containing VSA when given an adequate vendor dictionary. A proper dictionary for the *freeRadius* server is provided in [Appendix B: Sample Radius Dictionary](#).

All values are strings of variable length, and are the same as those used for the XML and CSV format (except for the character encoding). Note that only non-null values are present in a Radius Accounting Request (that is, there are no 0-length attributes; null CDR fields are omitted).

4.7.3.1 Encoding

Characters in the *Radius* field values are encoded using UTF-8 ([RFC 3629](#)), no matter which default system encoding is used.

4.7.3.2 List Fields in 3gpp Module

The following fields can contain multiple values:

- earlyMedia info:
 - sdpOfferTimestamp
 - sdpAnswerTimestamp
 - earlyMediaSdp
 - earlyMediaInitiatorFlag
- messageBody info
 - bodyContentType
 - bodyContentLength
 - bodyContentDisposition
 - bodyOriginator
- location info
 - location
 - locationType

Each Radius AVP contains one subfield value. The same AVP code can appear multiple times, one for each subfield. Related subfields can match by their order in the message. For example, the first subfield of *bodyContentType* is associated with the first subfield of *bodyContentLength*, and so on. Missing subfields are replaced with the value "none" to preserve alignment.

4.7.3.3 Radius UDP Packet Example

A Radius-encoded CDR example¹⁴ is as follows:

¹⁴ This is an example showing details for Release 17.0. Latest releases define additional fields but the structure remains the same.

Wireshark Hexadecimal Dump

Legend:

<u>99</u>	UDP packet header
<u>99</u>	Radius packet header
<u>99</u>	Standard Attribute Id
<u>00 00 19 1f</u>	BroadSoft Vendor Id
<u>99</u>	BroadSoft Vendor Specific sub-attribute Id

```

0000  00 13 20 2d 00 c2 00 12 3f 77 bf 03 08 00 45 00  .. -....?w....E.
0010  01 9f db 94 00 00 80 11 cb 39 c0 a8 08 f9 c0 a8  .....9.....
0020  08 36 0c 2d 07 15 01 8b 8a d3 04 01 01 83 a6 c5  .6.-.....
0030  c2 6b 16 3e 20 8e 2d 7c cb cf 8e a7 56 a3 04 06  .k.> .-|....V...
0040  c0 a8 08 f9 28 06 00 00 00 01 2c 20 34 38 37 3a  ....(....., 487:
0050  30 44 45 46 41 55 4c 54 32 30 30 39 30 36 30 32  0DEFAULT20090602
0060  31 37 30 30 34 34 2e 35 36 32 1a fb 00 00 19 1f  170044.562.....
0070  00 06 31 37 2e 30 01 2d 30 30 30 30 30 30 32  ..17.0.-00000002
0080  33 34 44 45 46 41 55 4c 54 32 30 30 39 30 36 30  34DEFAULT2009060
0090  32 31 37 30 30 34 34 2e 35 36 32 31 2d 30 34 30  2170044.5621-040
00a0  30 30 30 02 0a 4d 74 6c 41 53 44 65 76 03 08 4e  000..MtlASDev..N
00b0  6f 72 6d 61 6c 04 0e 2b 31 35 31 34 36 39 38 36  ormal..+15146986
00c0  36 30 33 05 0e 2b 31 35 31 34 36 39 38 36 36 30  603..+1514698660
00d0  30 06 0d 4f 72 69 67 69 6e 61 74 69 6e 67 e7 07  0..Originating..
00e0  47 72 6f 75 70 07 0e 2b 31 35 31 34 36 39 38 36  Group..+15146986
00f0  36 30 33 08 08 50 75 62 6c 69 63 12 05 36 30 34  603..Public..604
0100  09 0e 2b 31 35 31 34 36 39 38 36 36 30 34 0a 14  ..+15146986604..
0110  32 30 30 39 30 36 30 32 31 37 30 30 34 34 2e 35  20090602170044.5
0120  36 32 0b 0a 31 2d 30 34 30 30 30 30 2d 07 34 38  62..1-040000-.48
0130  37 3a 30 0c 04 4e 6f 10 06 56 6f 49 50 2a 03 6e  7:0..No..VoIP*.n
0140  79 18 73 6f 75 74 68 30 33 40 6d 74 6c 61 73 64  y.south03@mtlasd
0150  65 76 38 36 2e 6e 65 74 7a 0d 6a 6f 68 6e 34 20  ev86.netz.john4
0160  73 6f 75 74 68 1a 48 00 00 19 1f 7b 08 50 75 62  south.H....{.Pub
0170  6c 69 63 1b 0e 31 39 32 2e 31 36 38 2e 38 2e 33  lic..192.168.8.3
0180  32 1c 20 66 33 39 38 38 38 36 37 2d 31 38 31 31  2. f3988867-1811
0190  34 38 33 38 40 31 39 32 2e 31 36 38 2e 38 2e 33  4838@192.168.8.3
01a0  32 20 0c 53 6f 75 74 68 5f 61 73 38 36  2 .South_as86

```

Wireshark decoding (using dictionary from [Appendix B: Sample Radius Dictionary](#)):

```

Frame 99 (429 bytes on wire, 429 bytes captured)
Ethernet II, Src: Dell_77:bf:03 (00:12:3f:77:bf:03), Dst: IntelCor_2d:00:c2
(00:13:20:2d:00:c2)
Internet Protocol, Src: 192.168.8.249 (192.168.8.249), Dst: 192.168.8.54
(192.168.8.54)
User Datagram Protocol, Src Port: mctet-jserv (3117), Dst Port: radius-acct (1813)
Radius Protocol
  Code: Accounting-Request (4)
  Packet identifier: 0x1 (1)
  Length: 387
  Authenticator: A6C5C26B163E208E2D7CCBCF8EA756A3
  Attribute Value Pairs
    AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
    AVP: l=6 t=Acct-Status-Type(40): Start(1)
    AVP: l=32 t=Acct-Session-Id(44): 487:0DEFAULT20090602170044.562
    AVP: l=251 t=Vendor-Specific(26) v=BroadSoft(6431)
      VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
      VSA: l=45 t=BWAS-Record-id(1):

```

```
0000000234DEFAULT20090602170044.5621-040000
VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
VSA: l=8 t=BWAS-Type(3): Normal
VSA: l=14 t=BWAS-User-Number(4): +15146986603
VSA: l=14 t=BWAS-Group-Number(5): +15146986600
VSA: l=13 t=BWAS-Direction(6): Originating
VSA: l=7 t=BWAS-AS-Call-Type(231): Group
VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
VSA: l=5 t=BWAS-Dialed-Digits(18): 604
VSA: l=14 t=BWAS-Called-Number(9): +15146986604
VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
VSA: l=7 t=BWAS-Local-Callid(45): 487:0
VSA: l=4 t=BWAS-Answer-Indic(12): No
VSA: l=6 t=BWAS-Network-Type(16): VoIP
VSA: l=3 t=BWAS-Charge-Indic(42): n
VSA: l=24 t=BWAS-UserId(121): south03@mtlasdev86.net
VSA: l=13 t=BWAS-Other-Party-Name(122): john4 south
AVP: l=72 t=Vendor-Specific(26) v=BroadSoft(6431)
VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
VSA: l=32 t=BWAS-Access-Callid(28):
f3988867-18114838@192.168.8.32
VSA: l=12 t=BWAS-Group(32): South_as86
```

5 Call Detail Record Correlation Rules

This chapter describes the following:

- Failover correlation rules
- Originating and terminating CDR correlation rules
- Correlation rules for conference participants with Conferencing Server
- Correlation rules for conference participants with Media Server
- Correlation rules for CDRs containing *relatedCallId* field
- Deployments with Call Session Control Function (CSCF)
- Correlation Rules for Recall Scenarios

5.1 Failover Correlation Rules

This section describes the failover correlation rules.

5.1.1 General Failover Correlation Rules

When a failure occurs, CDR report the call duration in two parts. The first part is captured in a “partial CDR”, which is reported upon detection of the failure (for example, an Application Server shutdown, a force lock, or an audit failure). The second part is captured in a “failover CDR”, which is reported upon receipt of a “release” signal (a BYE for SIP or a NTFY with L/hu for MGCP) by an Application Server from an access device or a network device, and for which the Application Server has no session already set up.

Correlating failover CDR may not be simple. A few different cases can occur, but the following general rules should be followed:

- GFC-1) A CDR is considered a partial CDR in terms of failover handling if (and only if) the *releasingParty* is “none”, and the *terminationCause* is 041. The type for such a CDR is always “Normal”. This CDR usually contains a PartialCallBegin module with a *failoverCorrelationId* (but may not when some services, such as Call Forwarding are involved).
- GCF-2) A CDR is considered an unreleased CDR, in terms of failover handling, if (and only if) the type is “Long Duration”, “Normal”, or “Interim” and the *releaseTime* is not set. If there is a more recent CDR (in the same file or a subsequent file on the same Application Server, or even a subsequent file on the other Application Server in the cluster) with the same *localCallId*, then only the most recent must be considered for correlation. If the most recent CDR contains a *releaseTime*, then there is no unreleased CDR for this call leg. In particular, a partial CDR contains a *releaseTime* and therefore always supersedes any unreleased CDR with the same *localCallId*.
- GFC -3) A CDR is considered a failover CDR in terms of failover handling if (and only if) its type is “Failover”. Such a CDR always contains a PartialCallEnd module with a *failoverCorrelationId* and the *terminationCause* is 041.
- GFC -4) Failover CDRs are often not in the same accounting file as the partial or unreleased CDRs. They can be in subsequent files, or on another Application Server (either primary or backup).
- GFC -5) When no failover CDRs exist (after enough time has elapsed), partial CDRs and unreleased CDRs can be used to bill for the first portion of the call.
- GFC -6) When two failover CDRs exist for a single call, only the one with the earliest release time should be used to bill the call appropriately.
- GFC -7) Failover CDRs without a corresponding partial or unreleased CDR should be ignored, (which can happen in certain failure scenarios).

5.1.2 Matching Rules Between Failover CDRs and Partial CDRs

The following rules should be used to correlate a failover CDR to its corresponding partial CDR. A match is found if any one of these rules applies:

- FCM-1) The failover CDR's *failoverCorrelationId* (from the PartialCallEnd module) equals the partial CDR's *failoverCorrelationId* in the PartialCallBegin module. (This happens when a local SIP or MGCP user hangs up.)
- FCM-2) The failover CDR's *failoverCorrelationId* equals the partial CDR's *networkCallId* in the IP module. (This happens when a network party hangs up.)

As previously shown, it is very important to enable the IP module (in addition to the failover-type CDRs) to enable complete failover handling, since the IP module's *networkCallId* is used in some scenarios. For an example of a failover scenario, see section [Failover](#) on page 348.

5.1.3 Matching Rules Between Failover CDRs and Unreleased CDRs

The following rules should be used to correlate a failover CDR to its corresponding unreleased CDR. A match is found if any one of these rules applies:

- FCM-3) The failover CDR's *failoverCorrelationId* (from the PartialCallEnd module) equals the unreleased CDR's *accessCallId* in the IP module. (This happens when a local SIP user hangs up.)
- FCM-4) The failover CDR's *failoverCorrelationId* (from the PartialCallEnd module) equals the unreleased CDR's *networkCallId* in the IP module. (This happens when a network party hangs up.)

As previously shown, it is very important to enable the IP module (in addition to the failover-type CDRs) to enable complete failover handling, since the IP module's *networkCallId* is used in some scenarios. For an example failover scenario, see section [Failover](#) on page 348.

5.1.4 Unmatched Partial, Unreleased, and Failover CDRs

The following rules should be used when CDRs cannot be correlated:

- FCM-5) If the above rules (FCM-1 through FCM-4) fail to identify a matching partial or unreleased CDR, the failover CDR should be ignored.
- FCM-6) It is also possible for a partial or unreleased CDR to have no matching failover CDR. It can still be used to bill for the first portion of the call, as mentioned earlier.

5.1.5 Special Rule for Failover CDR Matching for MGCP Users

The correlation key for a call involving a BroadWorks user using an MGCP device is the port ID and the device address, such as, *aal/s1/2@[192.168.13.30]*. If such a user performs a sequence of calls while the primary and secondary Application Servers are shut down and restarted many times, there may be more than one partial CDR (and more than one failover CDR as well) with the same *failoverCorrelationId*. This is an unlikely situation, but should it occur, the following rule must be applied.

- SR-1) If many partial CDRs are found with the same *failoverCorrelationKey*, then:
 - Given all CDRs with the same *failoverCorrelationKey* (partial + failover CDRs).
 - All partial CDRs, for example, C_1, C_2, C_3 , contain a *startTime*.
 - All failover CDRs, for example, F_1, F_2, F_3 , contain a *releaseTime*.
 - F_i matches with C_i if:
 - $C_i.startTime < F_i.releaseTime < C_{i+1}.startTime$, or,
 - $C_i.startTime < F_i.releaseTime$ and there is no $C_{i+1}.startTime > F_i.releaseTime$

5.2 Originating and Terminating CDR Correlation Rules

This section describes the originating and terminating CDR correlation rules.

5.2.1 BroadWorks Origination to PSTN

OTC-1) BroadWorks produces an originating CDR, which contains:

- A *route* field indicating what the remote network element is where the call was sent, and which is expected to have produced the matching terminating CDR.

- A *networkCallId*, containing the SIP call-id of outgoing INVITE sent to “route”. The matching terminating CDR on the “route” server should contain the same *networkCallId*.
- An *accessDeviceAddress* field indicating what the access element is where the call came from.
- An *accessCallId*, containing the SIP call-id of the incoming INVITE received from *accessDeviceAddress*. This can be used to correlate accounting records on the access device if applicable.

5.2.2 PSTN to BroadWorks Termination

OTC-2) BroadWorks produces a terminating CDR, which contains:

- A *route* field indicating the remote network element where the call came from, and which is expected to have produced the matching originating CDR.
- A *networkCallId*, containing the SIP call-id of incoming INVITE received from “route”. The matching originating CDR on the “route” server should contain the same *networkCallId*.
- An *accessDeviceAddress* field indicating what the access element is where the call was sent.
- An *accessCallId*, containing the SIP call-id of the outgoing INVITE sent to *accessDeviceAddress*. This can be used to correlate accounting records on the access device, if applicable.

5.2.3 Inter-group Call on Single Application Server (Spiraling INVITE)

BroadWorks produces both an originating CDR and a terminating CDR. They can be correlated using the above OTC-1 and OTC-2 rules. Since such calls involve a spiraling INVITE, the *route* field contains the Application Server itself in both CDRs.

5.2.4 Non-Redundant Intra-group Call

BroadWorks produces both an originating CDR and a terminating CDR. They can be correlated using the following rule:

- IGC-1) CDRs for a non-redundant intra-group call always have the *route* field set to “Group”. The originating and terminating CDRs for such calls are matching when the originating CDRs {*localCallId*, *remoteCallId*} equal the terminating CDRs {*remoteCallId*, *localCallId*}.

5.2.5 Redundant Intra-group Call

BroadWorks produces both an originating CDR and a terminating CDR. They can be correlated using the above OTC-1 and OTC-2 rules. Since such calls involve a spiraling INVITE, the *route* field contains the Application Server itself in both CDRs.

5.3 Correlation Rules for Conference Participants with Conferencing Server

CONF-1) All CDRs related to the same conference contain a field *conferenceId* with the same value.

Note that the set of CDRs related to a given conference can contain both originating and terminating CDRs (for users reached by the Conferencing Server dial-out capabilities, and users who called a bridge, respectively), and that these CDRs can be generated on either or both of the primary and secondary Application Servers.

5.4 Correlation Rules for Conference Participants with Media Server

CONF-2) All CDRs related to the same conference contain a field *confId* with the same value.

Note that the set of CDRs related to a given conference can contain both originating and terminating CDRs, and all belong to the user who initiated the conference.

5.5 Correlation Rules for CDRs Containing relatedCallId Field

RCID-1) When the *relatedCallId* field is present, its value matches the value of the localCallId field of the related CDR. For more information, see section [Related Call Id](#) on page 303.

5.6 Deployments with Call Session Control Function (CSCF)

CDR correlation in CSCF deployments makes use of the information carried in the *P-Charging-Vector* (PCV), as defined in [RFC 3455](#). The information of the PCV is reported in the *correlationInfo* field in BroadWorks CDRs.

5.7 Correlation Rules for Recall Scenarios

This section describes the CDR correlation rules between the original and the new terminating CDR of a recalled party.

When a recall scenario takes place, the original CDRs for the recalled party are released and a new terminating CDR is created. This new terminating CDR is populated as though the recalling party is calling the recalled party. In this context, the recalled party is the party that initiated the call transfer. The recalling party is the party that was originally connected to the recalled party. Note that no new originating CDR is created for the recalling party.

5.7.1 Recalled Party was the Originator Party

RSC-1) BroadWorks produces a terminating CDR, which contains:

- For non-redundant intra-group call, a *route* field set to "Group". Otherwise, the *route* field indicates the remote network element to where the call was sent, and which is expected to have produced the matching terminating CDR.
- A *recallType*, containing a string indicating the service for which the recall is being performed.
- For non-redundant intra-group call, in standalone mode, a *remoteCallId* field, containing the recalling party's call. The original originating CDR of the recalled party contains the same *remoteCallId*.
- Otherwise, including all IMS scenarios, a *networkCallId* field, containing the SIP call-id of outgoing INVITE sent to "route". The original originating CDR of the recalled party contains the same *networkCallId*.

5.7.2 Recalled Party was the Terminator Party

RSC-2) BroadWorks produces a terminating CDR, which contains:

- For non-redundant intra-group call, a *route* field set to "Group". Otherwise, the *route* field indicates the remote network element from where the call was sent, and which is expected to have produced the matching originating CDR.
- A *recallType*, containing a string indicating the service for which the recall is being performed.
- For non-redundant intra-group call, in standalone mode, a *remoteCallId* field, containing the recalling party's call. The original terminating CDR of the recalled party contains the same *remoteCallId*.
- Otherwise, including all IMS scenarios, a *networkCallId* field, containing the SIP call-id of incoming INVITE received from "route". The original terminating CDR of the recalled party contains the same *networkCallId*.

5.7.3 Multiple Recalls

BroadWorks produces a terminating CDR for each recalls. They can be correlated to the original CDR using the above RSC-1 and RSC-2 rules. The original CDR of the recalled party will always be the one with the earliest *startTime*.

6 Call Scenarios

This chapter describes the following:

- Intra-group call
- BroadWorks-initiated Network Call, Busy
- Network-initiated BroadWorks Terminating Call, No Answer
- Call Forwarding Always
- Intra-group Call to Voice Portal
- Failover

For simplicity, the following call scenario examples¹⁵ are shown in XML format only (and not in CSV nor Radius formats).

6.1 Intra-group Call

The following figure shows the event flow for a call from a BroadWorks originating user to a BroadWorks terminating user. The originating user dials an extension to reach the terminating user. The XML output below shows the CDRs generated for this call scenario. Note that there are two CDRs generated, one for each (non-network) call half.

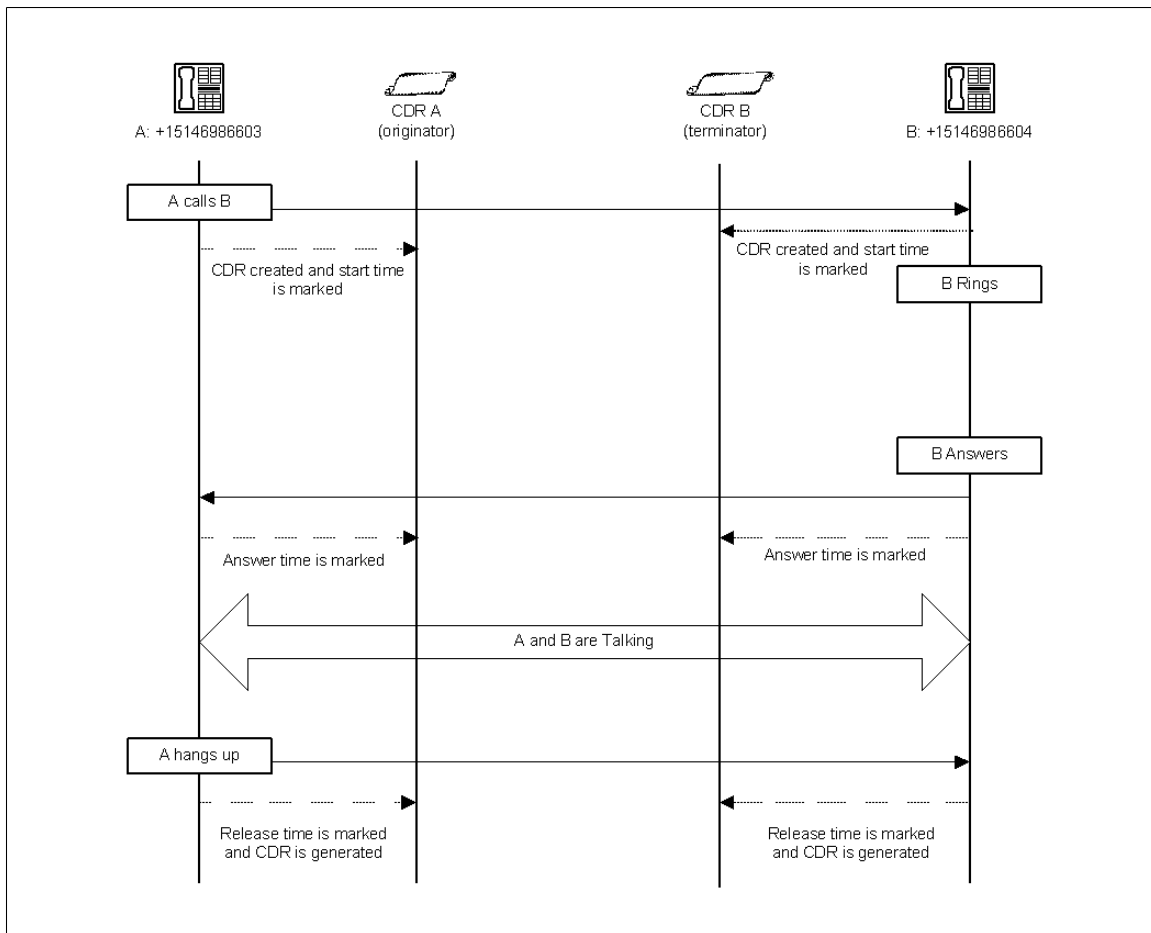


Figure 2: Accounting Scenario for Intra-group Call

¹⁵ These examples show details for Release 17.0. Latest releases define additional fields but the structure remains the same.

Example of XML output:

```
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000005</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529182731.581</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986603</userNumber>
    <direction>Originating</direction>
    <asCallType>Group</asCallType>
    <callingNumber>+15146986603</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <dialedDigits>604</dialedDigits>
    <calledNumber>+15146986604</calledNumber>
    <startTime>20090529182731.581</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>19:0</localCallId>
    <remoteCallId>21:0</remoteCallId>
    <answerIndicator>Yes</answerIndicator>
    <answerTime>20090529182735.206</answerTime>
    <releaseTime>20090529182740.096</releaseTime>
    <terminationCause>016</terminationCause>
    <callCategory>private</callCategory>
    <chargeIndicator>n</chargeIndicator>
    <releasingParty>local</releasingParty>
    <userId>south03@mtlasdev86.net</userId>
    <otherPartyName>john4 south</otherPartyName>
    <otherPartyNamePresentationIndicator>Public
    </otherPartyNamePresentationIndicator>
  </basicModule>
  <centrexModule>
    <group>South_as86</group>
  </centrexModule>
  <ipModule>
    <route>Group</route>
    <codec>PCMU/8000</codec>
    <accessDeviceAddress>192.168.8.28</accessDeviceAddress>
    <accessCallID>f8ef4bec-ed2ea@192.168.8.28</accessCallID>
    <codecUsage>4.890</codecUsage>
  </ipModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000006</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529182731.581</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986604</userNumber>
    <direction>Terminating</direction>
```

```
<asCallType>Group</asCallType>
<callingNumber>+15146986603</callingNumber>
<callingPresentationIndicator>Public</callingPresentationIndicator>
<calledNumber>+15146986604</calledNumber>
<startTime>20090529182731.581</startTime>
<userTimeZone>1-040000</userTimeZone>
<localCallId>21:0</localCallId>
<remoteCallId>19:0</remoteCallId>
<answerIndicator>Yes</answerIndicator>
<answerTime>20090529182735.206</answerTime>
<releaseTime>20090529182740.096</releaseTime>
<terminationCause>016</terminationCause>
<callCategory>private</callCategory>
<chargeIndicator>n</chargeIndicator>
<releasingParty>remote</releasingParty>
<userId>south04@mtlasdev86.net</userId>
<otherPartyName>john3 south</otherPartyName>
<otherPartyNamePresentationIndicator>Public
</otherPartyNamePresentationIndicator>
<clidPermitted>Yes</clidPermitted>
<namePermitted>Yes</namePermitted>
</basicModule>
<centrexModule>
  <group>South_as86</group>
</centrexModule>
<ipModule>
  <route>Group</route>
  <codec>PCMU/8000</codec>
  <accessDeviceAddress>192.168.8.28</accessDeviceAddress>
  <accessCallID>BW14273159629050981217528@192.168.8.249
  </accessCallID>
  <codecUsage>4.890</codecUsage>
</ipModule>
</cdrData>
```

6.2 BroadWorks-initiated Network Call, Busy

The following figure shows the event flow for a call from a BroadWorks originating user to a terminating user. The terminating user is on the network. The XML output below shows the CDR generated for this call scenario.

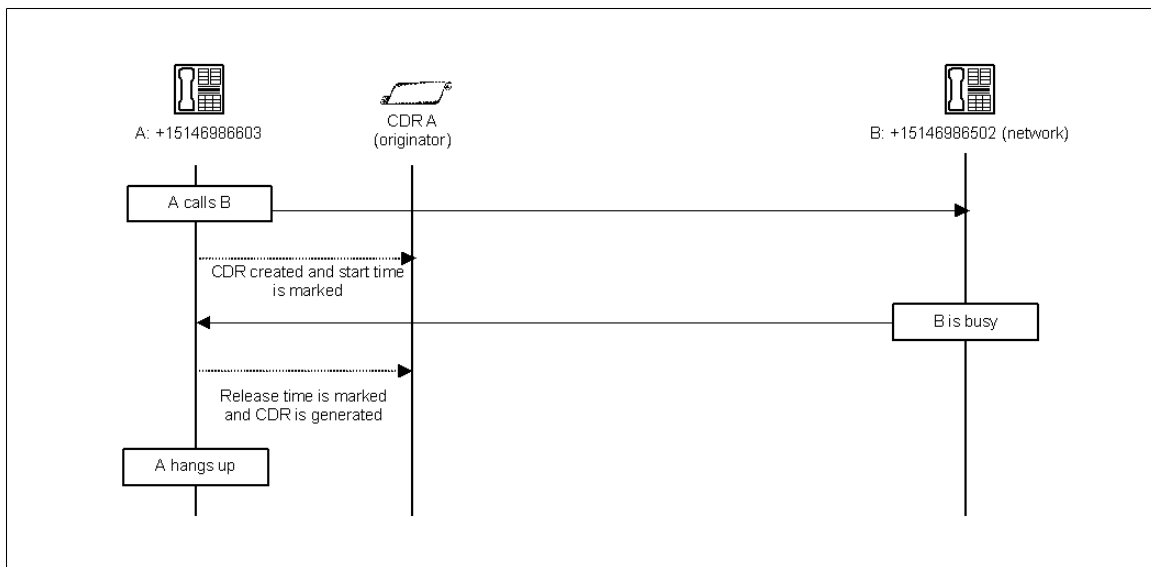


Figure 3: Accounting Scenario for BroadWorks-initiated Network Call

Example of XML output:

```

<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000022</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529185034.534</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986603</userNumber>
    <direction>Originating</direction>
    <asCallType>Network</asCallType>
    <callingNumber>+15146986603</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <dialedDigits>5146986502</dialdDigits>
    <calledNumber>5146986502</calledNumber>
    <networkTranslatedNumber>+15146986502</networkTranslatedNumber>
    <startTime>20090529185034.534</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>67:0</localCallId>
    <answerIndicator>No</answerIndicator>
    <releaseTime>20090529185034.581</releaseTime>
    <terminationCause>017</terminationCause>
    <callCategory>private</callCategory>
    <networkCallType>lo</networkCallType>
    <chargeIndicator>n</chargeIndicator>
    <typeOfNetwork>public</typeOfNetwork>
    <releasingParty>remote</releasingParty>
    <userId>south03@mtlasdev86.net</userId>
  </basicModule>
  <centrexModule>
    <group>South_as86</group>
  </centrexModule>
  <ipModule>

```

```
<route>192.168.8.249:5060</route>
<networkCallID>BW145034565290509-1316220930@192.168.8.249
</networkCallID>
<accessDeviceAddress>192.168.8.28</accessDeviceAddress>
<accessCallID>74ff809f-1f198a0b@192.168.8.28</accessCallID>
</ipModule>
</cdrData>
```

6.3 Network-initiated BroadWorks Terminating Call, No Answer

The following figure shows the event flow for a call from a network-originating user to a BroadWorks terminating user. The XML output below shows the CDR generated for this call scenario. Note that for this call, the Group Calling Line ID has been set to “+15146986600” for the group where user +15146986604 belongs.

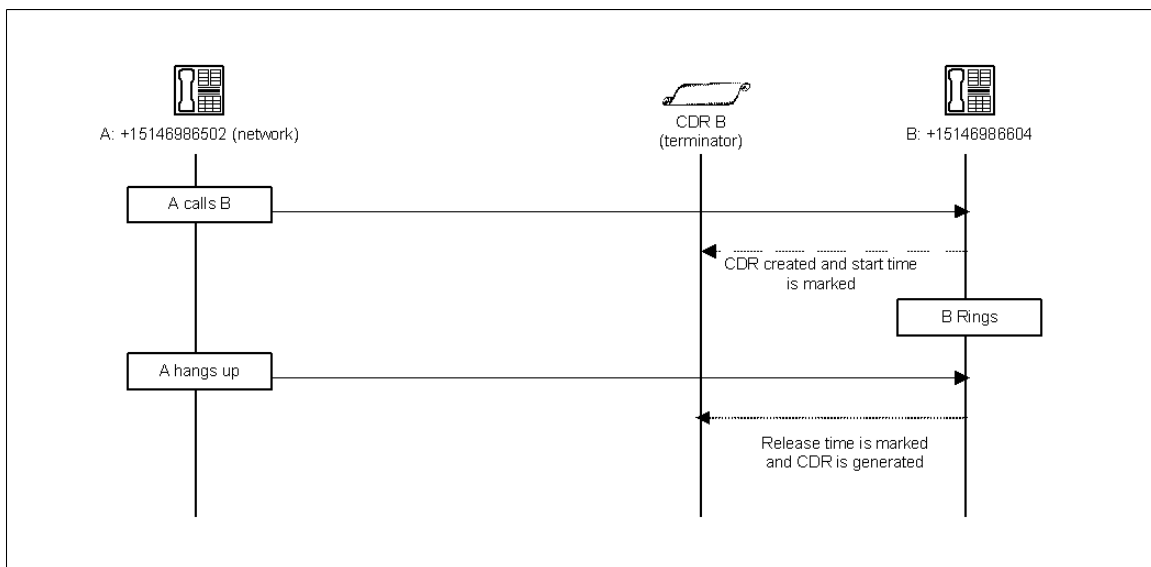


Figure 4: Accounting Scenario for Network-initiated BroadWorks Terminating Call

Example of XML output:

```
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000026</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529190328.627</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986604</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Terminating</direction>
    <asCallType>Network</asCallType>
    <callingNumber>+15146986502</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <calledNumber>+15146986604</calledNumber>
    <startTime>20090529190328.627</startTime>
    <userTimeZone>1-040000</userTimeZone>
```



```
<localCallId>84:0</localCallId>
<answerIndicator>No</answerIndicator>
<releaseTime>20090529190337.221</releaseTime>
<terminationCause>016</terminationCause>
<chargeIndicator>n</chargeIndicator>
<releasingParty>remote</releasingParty>
<userId>south04@mtlasdev86.net</userId>
<otherPartyName>john2 north</otherPartyName>
<otherPartyNamePresentationIndicator>Public
</otherPartyNamePresentationIndicator>
<clidPermitted>Yes</clidPermitted>
<namePermitted>Yes</namePermitted>      </basicModule>
<centrexModule>
  <group>South_as86</group>
</centrexModule>
<ipModule>
  <route>192.168.8.249</route>
  <networkCallID>BW150328627290509443627876@192.168.8.249
  </networkCallID>
  <accessCallID>BW150328627290509-370677985@192.168.8.249
  </accessCallID>
</ipModule>
</cdrData>
```

6.4 Call Forwarding Always

The following figure shows the event flow for a call from an originating network user to a terminating BroadWorks user. Network user A dials the user B, user B forwards the call to user C (intra group user). User C answers the call.

Since user A is on the network, only a terminating CDR is generated for the A to B call leg. Then, when B forwards user A to user C, user B is originating a call to user C. An originating CDR is therefore generated for user B, as well as a terminating CDR for intra-group user C. The XML output below shows the CDRs generated for this call scenario.

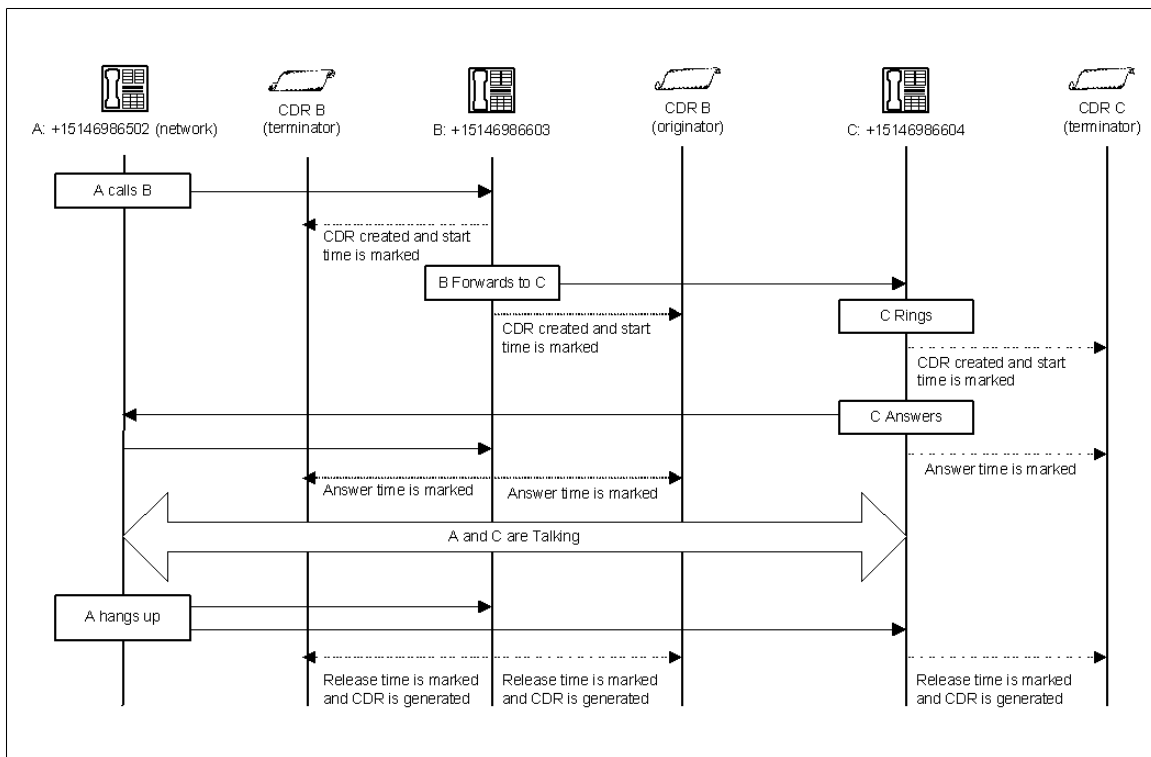


Figure 5: Accounting Scenario for Call Forwarding

Example of XML output:

```
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000029</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529190854.034</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986604</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Terminating</direction>
    <asCallType>Group</asCallType>
    <callingNumber>+15146986502</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <calledNumber>+15146986604</calledNumber>
    <startTime>20090529190854.034</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>96:0</localCallId>
    <remoteCallId>93:0A</remoteCallId>
    <answerIndicator>Yes</answerIndicator>
    <answerTime>20090529190900.643</answerTime>
    <releaseTime>20090529190908.174</releaseTime>
    <terminationCause>016</terminationCause>
    <callCategory>private</callCategory>
    <chargeIndicator>n</chargeIndicator>
    <releasingParty>remote</releasingParty>
    <userId>south04@mtlasdev86.net</userId>
  </basicModule>
</cdrData>
```

```
<otherPartyName>john2 north</otherPartyName>
<otherPartyNamePresentationIndicator>Public
</otherPartyNamePresentationIndicator>
<clidPermitted>Yes</clidPermitted>
<namePermitted>Yes</namePermitted>
</basicModule>
<centrexModule>
  <group>South_as86</group>
  <originalCalledNumber>+15146986603</originalCalledNumber>
  <originalCalledPresentationIndicator>Public
  </originalCalledPresentationIndicator>
  <originalCalledReason>unconditional</originalCalledReason>
  <redirectingNumber>+15146986603</redirectingNumber>
  <redirectingPresentationIndicator>Public
  </redirectingPresentationIndicator>
  <redirectingReason>unconditional</redirectingReason>
</centrexModule>
<ipModule>
  <route>Group</route>
  <codec>PCMU/8000</codec>
  <accessDeviceAddress>192.168.8.28</accessDeviceAddress>
  <accessCallID>BW150854252290509735458825@192.168.8.249
  </accessCallID>
  <codecUsage>7.531</codecUsage>
</ipModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000030</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529190853.799</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986603</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Terminating</direction>
    <asCallType>Network</asCallType>
    <callingNumber>+15146986502</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <calledNumber>+15146986603</calledNumber>
    <startTime>20090529190853.799</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>93:0</localCallId>
    <answerIndicator>Yes-PostRedirection</answerIndicator>
    <answerTime>20090529190900.643</answerTime>
    <releaseTime>20090529190908.174</releaseTime>
    <terminationCause>016</terminationCause>
    <chargeIndicator>y</chargeIndicator>
    <releasingParty>remote</releasingParty>
    <userId>south03@mtlasdev86.net</userId>
    <otherPartyName>john2 north</otherPartyName>
    <otherPartyNamePresentationIndicator>Public
    </otherPartyNamePresentationIndicator>
    <clidPermitted>Yes</clidPermitted>
    <namePermitted>Yes</namePermitted>
  </basicModule>
</centrexModule>
```

```
<group>South_as86</group>
</centrexModule>
<ipModule>
  <route>192.168.8.249</route>
  <networkCallID>BW150853799290509-1037416096@192.168.8.249
</networkCallID>
  <codec>PCMU/8000</codec>
  <codecUsage>7.531</codecUsage>
</ipModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000031</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090529190854.034</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986603</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Originating</direction>
    <asCallType>Group</asCallType>
    <callingNumber>+15146986502</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <dialedDigits>604</dialdDigits>
    <calledNumber>+15146986604</calledNumber>
    <startTime>20090529190854.034</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>93:0A</localCallId>
    <remoteCallId>96:0</remoteCallId>
    <answerIndicator>Yes</answerIndicator>
    <answerTime>20090529190900.643</answerTime>
    <releaseTime>20090529190908.174</releaseTime>
    <terminationCause>016</terminationCause>
    <callCategory>private</callCategory>
    <chargeIndicator>n</chargeIndicator>
    <releasingParty>remote</releasingParty>
    <userId>south03@mtlasdev86.net</userId>
    <otherPartyName>john4 south</otherPartyName>
    <otherPartyNamePresentationIndicator>Public
  </otherPartyNamePresentationIndicator>
</basicModule>
<centrexModule>
  <group>South_as86</group>
  <originalCalledNumber>+15146986603</originalCalledNumber>
  <originalCalledPresentationIndicator>Public
</originalCalledPresentationIndicator>
  <originalCalledReason>unconditional</originalCalledReason>
  <redirectingNumber>+15146986603</redirectingNumber>
  <redirectingPresentationIndicator>Public
</redirectingPresentationIndicator>
  <redirectingReason>unconditional</redirectingReason>
  <relatedCallId>93:0</relatedCallId>
  <relatedCallIdReason>Call Forward Always</relatedCallIdReason>
</centrexModule>
<ipModule>
  <route>Group</route>
  <codec>PCMU/8000</codec>
```

```
<codecUsage>7.531</codecUsage>
</ipModule>
</cdrData>
```

6.5 Intra-group Call to Voice Portal

The following figure shows the event flow for a call from a BroadWorks originating user to this user's BroadWorks voice portal. The originating user dials an extension to reach the voice portal. The XML output that follows shows the CDRs generated for this call scenario when the 3gpp module is enabled.

The device of the calling user reports DTMF tones over SIP INFO rather than using [RFC 2833](#), and are as a result, reported in the 3gpp module. Note that there are two CDRs generated, one for each (non-network) call half. This user is configured with voice portal auto-login; therefore, only three digits are collected: 1 to select the Voice Mail Retrieval (VMR) function, 1 to start playing the messages, and 7 to delete the first message. This explains the presence of three messageBody blocks in the CDR. The caller then hangs up.

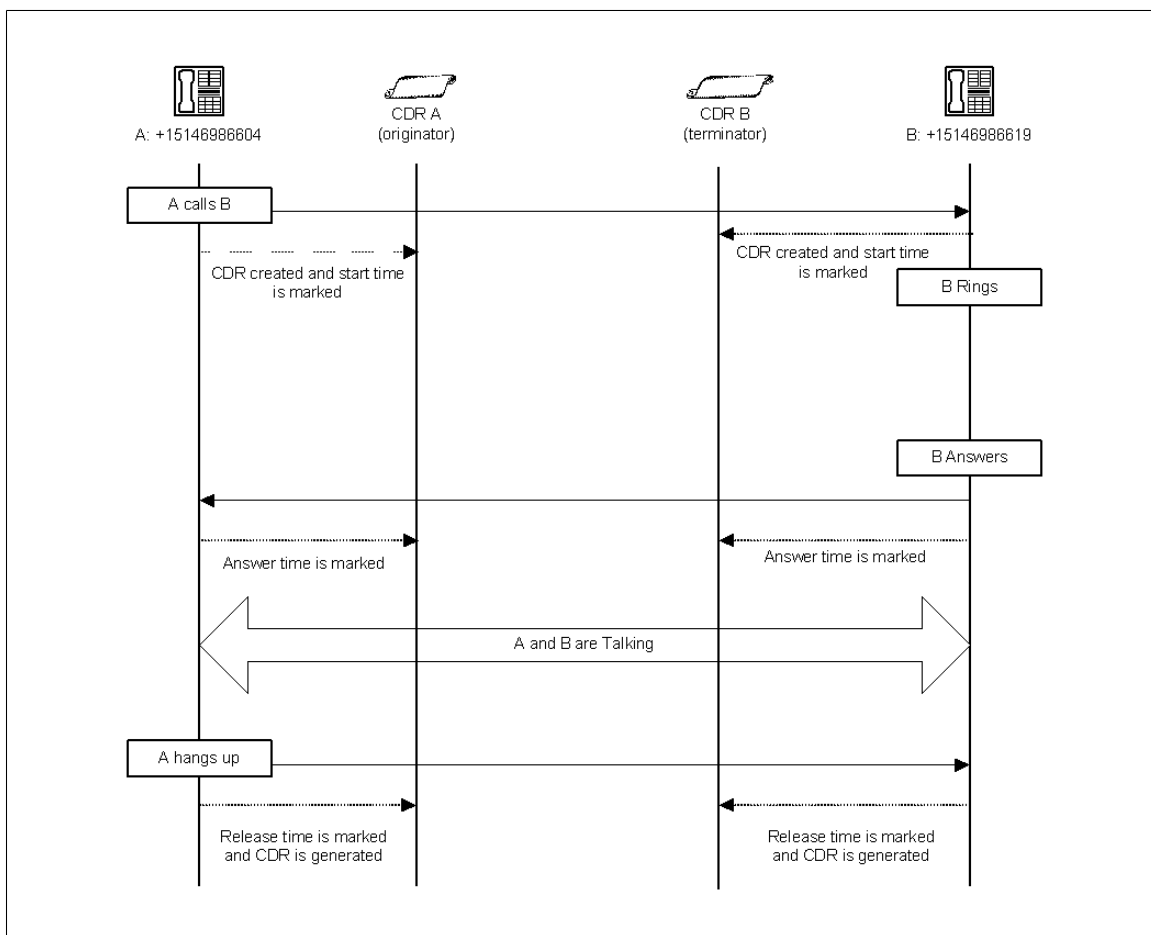


Figure 6: Accounting Scenario for Intra-group Call

Example of XML output:

```
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000017</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090601174211.562</date>
      <systemTimeZone>1-040000</systemTimeZone>
```

```

</recordId>
<serviceProvider>MtlASDev</serviceProvider>
<type>Normal</type>
</headerModule>
<basicModule>
  <userNumber>+15146986604</userNumber>
  <groupName>+15146986600</groupName>
  <direction>Originating</direction>
  <asCallType>Group</asCallType>
  <callingNumber>+15146986604</callingNumber>
  <callingPresentationIndicator>Public</callingPresentationIndicator>
  <dialledDigits>619</dialledDigits>
  <calledNumber>+15146986619</calledNumber>
  <startTime>20090601174211.562</startTime>
  <userTimeZone>1-040000</userTimeZone>
  <localCallId>42:0</localCallId>
  <remoteCallId>44:0</remoteCallId>
  <answerIndicator>Yes</answerIndicator>
  <answerTime>20090601174211.593</answerTime>
  <releaseTime>20090601174228.250</releaseTime>
  <terminationCause>016</terminationCause>
  <callCategory>private</callCategory>
  <chargeIndicator>n</chargeIndicator>
  <releasingParty>local</releasingParty>
  <userId>south04@mtlasdev86.net</userId>
  <otherPartyName>Voice Portal Voice Portal</otherPartyName>
  <otherPartyNamePresentationIndicator>Public
</otherPartyNamePresentationIndicator>
</basicModule>
<centrexModule>
  <group>South_as86</group>
</centrexModule>
<ipModule>
  <route>Group</route>
  <codec>PCMU/8000</codec>
  <accessDeviceAddress>192.168.8.32</accessDeviceAddress>
  <accessCallID>26beb46c-1f1af978@192.168.8.32</accessCallID>
  <codecUsage>16.641</codecUsage>
</ipModule>
<tgppModule>
  <primaryDeviceLinePort>5146986604@mtlasdev86.net
</primaryDeviceLinePort>
  <calledAssertedIdentity>sip:+15146986619@192.168.8.249
</calledAssertedIdentity>
  <calledAssertedPresentationIndicator>Public
</calledAssertedPresentationIndicator>
  <sdp>Content-Type:application/sdp
    Content-Length:195

    v=0
    o=BroadWorks 23 1 IN IP4 192.168.13.6
    s=-
    c=IN IP4 192.168.13.6
    t=0 0
    m=audio 10228 RTP/AVP 0 101
    a=rtpmap:0 PCMU/8000
    a=rtpmap:101 telephone-event/8000
    a=fmtp:101 0-15
  </sdp>
  <mediaInitiatorFlag>1</mediaInitiatorFlag>
  <messageBodyList>
    <messageBody>

```

```

        <bodyContentType>application/dtmf-relay</bodyContentType>
        <bodyContentLength>24</bodyContentLength>
        <bodyContentDisposition>none</bodyContentDisposition>
        <bodyOriginator>0</bodyOriginator>
    </messageBody>
    <messageBody>
        <bodyContentType>application/dtmf-relay</bodyContentType>
        <bodyContentLength>24</bodyContentLength>
        <bodyContentDisposition>none</bodyContentDisposition>
        <bodyOriginator>0</bodyOriginator>
    </messageBody>
    <messageBody>
        <bodyContentType>application/dtmf-relay</bodyContentType>
        <bodyContentLength>24</bodyContentLength>
        <bodyContentDisposition>none</bodyContentDisposition>
        <bodyOriginator>0</bodyOriginator>
    </messageBody>
</messageBodyList>
</tgppModule>
</cdrData>
<cdrData>
    <headerModule>
        <recordId>
            <eventCounter>0000000018</eventCounter>
            <systemId>DEFAULT</systemId>
            <date>20090601174211.562</date>
            <systemTimeZone>1-040000</systemTimeZone>
        </recordId>
        <serviceProvider>MtlASDev</serviceProvider>
        <type>Normal</type>
    </headerModule>
    <basicModule>
        <userNumber>+15146986619</userNumber>
        <groupNumber>+15146986600</groupNumber>
        <direction>Terminating</direction>
        <asCallType>Group</asCallType>
        <callingNumber>+15146986604</callingNumber>
        <callingPresentationIndicator>Public</callingPresentationIndicator>
        <calledNumber>+15146986619</calledNumber>
        <startTime>20090601174211.562</startTime>
        <userTimeZone>1-040000</userTimeZone>
        <localCallId>44:0</localCallId>
        <remoteCallId>42:0</remoteCallId>
        <answerIndicator>Yes</answerIndicator>
        <answerTime>20090601174211.593</answerTime>
        <releaseTime>20090601174228.250</releaseTime>
        <terminationCause>016</terminationCause>
        <callCategory>private</callCategory>
        <chargeIndicator>n</chargeIndicator>
        <releasingParty>remote</releasingParty>
        <userId>105655371_VMR@mtlasdev86.net</userId>
        <otherPartyName>john4 south</otherPartyName>
        <otherPartyNamePresentationIndicator>Public</otherPartyNamePresentationIndicator>
        <clidPermitted>Yes</clidPermitted>
        <namePermitted>Yes</namePermitted>
    </basicModule>
    <centrexModule>
        <group>South_as86</group>
    </centrexModule>
    <ipModule>
        <route>Group</route>
    </ipModule>

```

```

<codec>PCMU/8000</codec>
<codecUsage>16.657</codecUsage>
</ipModule>
<tgppModule>
  <primaryDeviceLinePort>105655371_VMR@mtlasdev86.net
  </primaryDeviceLinePort>
  <sdp>Content-Type:application/sdp
    Content-Length:195

    v=0
    o=BroadWorks 23 1 IN IP4 192.168.13.6
    s=-
    c=IN IP4 192.168.13.6
    t=0 0
    m=audio 10228 RTP/AVP 0 101
    a=rtpmap:0 PCMU/8000
    a=rtpmap:101 telephone-event/8000
    a=fmtp:101 0-15
  </sdp>
  <mediaInitiatorFlag>1</mediaInitiatorFlag>
  <messageBodyList>
    <messageBody>
      <bodyContentType>application/dtmf-relay</bodyContentType>
      <bodyContentLength>24</bodyContentLength>
      <bodyContentDisposition>none</bodyContentDisposition>
      <bodyOriginator>0</bodyOriginator>
    </messageBody>
    <messageBody>
      <bodyContentType>application/dtmf-relay</bodyContentType>
      <bodyContentLength>24</bodyContentLength>
      <bodyContentDisposition>none</bodyContentDisposition>
      <bodyOriginator>0</bodyOriginator>
    </messageBody>
    <messageBody>
      <bodyContentType>application/dtmf-relay</bodyContentType>
      <bodyContentLength>24</bodyContentLength>
      <bodyContentDisposition>none</bodyContentDisposition>
      <bodyOriginator>0</bodyOriginator>
    </messageBody>
  </messageBodyList>
</tgppModule>
</cdrData>

```

6.6 Failover

The following figure shows the event flow for a call from a BroadWorks originating user to a network terminating user. The primary Application Server is gracefully shut down after the call has been set up. A partial CDR is generated at the time of shut down. When the parties hang up, the secondary Application Server generates Failover CDRs. The following XML output shows the CDRs generated for this call scenario.

First, the primary Application Server contains the partial CDR:

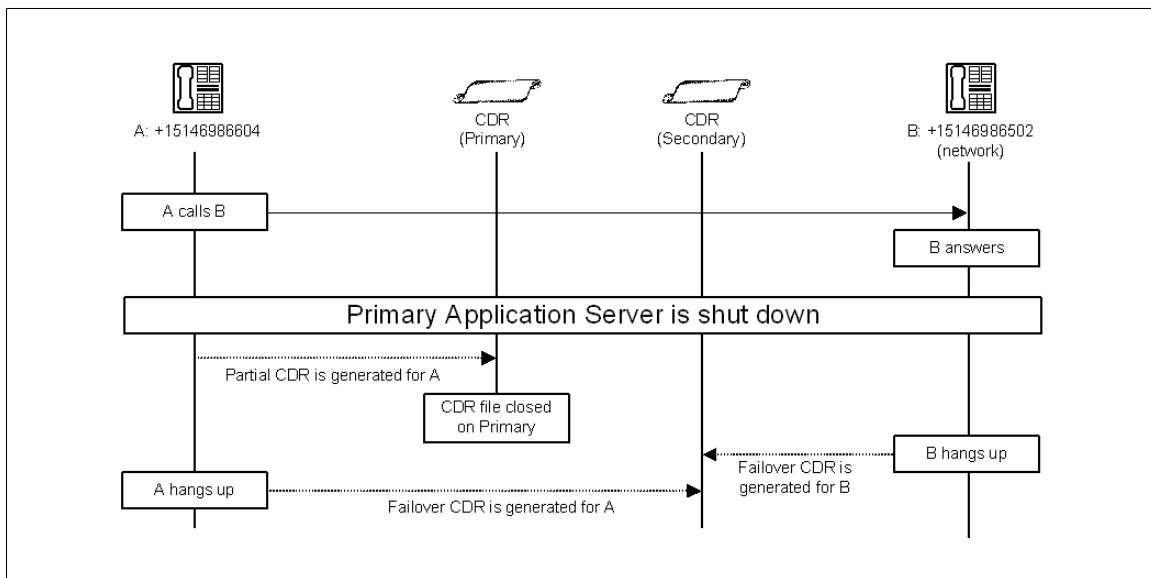


Figure 7: Accounting Scenario for Failover Call

Example of XML output:

```

<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000008</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090601190548.625</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986604</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Originating</direction>
    <asCallType>Network</asCallType>
    <callingNumber>+15146986604</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <dialedDigits>5146993604</dialedDigits>
    <calledNumber>5146993604</calledNumber>
    <networkTranslatedNumber>+15146993604</networkTranslatedNumber>
    <startTime>20090601190548.625</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>87:0</localCallId>
    <answerIndicator>Yes</answerIndicator>
    <answerTime>20090601190552.828</answerTime>
    <releaseTime>20090601190559.031</releaseTime>
    <terminationCause>041</terminationCause>
    <callCategory>private</callCategory>
    <networkCallType>lo</networkCallType>
    <chargeIndicator>y</chargeIndicator>
    <typeOfNetwork>public</typeOfNetwork>
    <releasingParty>none</releasingParty>
    <userId>south04@mtlasdev86.net</userId>
  </basicModule>
  <centrexModule>
    <group>South_as86</group>
  </centrexModule>
</cdrData>
  
```

```
</centrexModule>
<ipModule>
  <route>192.168.8.24:5060</route>
  <networkCallID>BW150548640010609-1534667730@192.168.8.249
</networkCallID>
  <codec>PCMU/8000</codec>
  <accessDeviceAddress>192.168.8.32</accessDeviceAddress>
  <accessCallID>2dcd4d1-274df421@192.168.8.32</accessCallID>
  <codecUsage>6.188</codecUsage>
</ipModule>
<partialCallBeginModule>
  <failoverCorrelationId>2dcd4d1-274df421@192.168.8.32
</failoverCorrelationId>
</partialCallBeginModule>
</cdrData>
```

Failover CDRs from the secondary Application Server are as follows:

```
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000001</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090601190701.812</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <type>Start</type>
  </headerModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000002</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090601190809.859</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Failover</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986604</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <userTimeZone>1-040000</userTimeZone>
    <releaseTime>20090601190809.859</releaseTime>
    <terminationCause>041</terminationCause>
    <chargeIndicator>n</chargeIndicator>
    <releasingParty>local</releasingParty>
    <userId>south04@mtlasdev86.net</userId>
  </basicModule>
  <partialCallEndModule>
    <failoverCorrelationId>2dcd4d1-274df421@192.168.8.32
  </failoverCorrelationId>
</partialCallEndModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000003</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090601190814.812</date>
      <systemTimeZone>1-040000</systemTimeZone>
```

```
</recordId>
<serviceProvider></serviceProvider>
<type>Failover</type>
</headerModule>
<basicModule>
  <releaseTime>20090601190814.812</releaseTime>
  <terminationCause>041</terminationCause>
  <chargeIndicator>n</chargeIndicator>
  <releasingParty>remote</releasingParty>
</basicModule>
<partialCallEndModule>
  <failoverCorrelationId>BW150548640010609-1534667730@192.168.8.249
  </failoverCorrelationId>
</partialCallEndModule>
</cdrData>
```

7 Command Line Interface Configuration

This chapter provides a short summary of the available commands and parameters used to configure the BroadWorks CDR framework. This chapter describes the following:

- BroadWorks Application Server
- BroadWorks Execution Server

7.1 BroadWorks Application Server

This section shows the commands and parameters available from the BroadWorks Application Server (AS) command line interface (CLI).

7.1.1 Command Tree

```
AS_CLI/Interface/Accounting> t -r
.Accounting
...BroadWorksCDRInterface
....Diameter
.....ChargingFunctionElement
.....InhibitedAVPCodeList
.....Offline
.....Online
....File
.....FTP
....Radius
.....Device
...Browser
...FieldIdMapping
```

7.1.2 BroadWorks CDR Interface Parameters

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface> get
enabled = false
longCallDurationRecordControl = enabled
longCallDurationTimerMinutes = 1440
enableCDRCodecChanges = false
enableCDRInternalConference = false
enableCDRLocationChange = false
enableCDRStartEnd = true
enableCDRInterimAoC = false
enableFailoverInfo = true
enableIntraGroupCDR = true
enableModuleCentrex = true
enableModuleIP = true
enableModule3GPP = false
enableTerminatingCDR = true
use3xxAsRouteConfirmationForAccounting = true
customSchemaVersion =
enableAVPQuotes = false
setAnswerIndicatorToYesForUnconfirmedAnswer = false
```

7.1.3 File Parameters

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/File> get
billingHoldTime = 14
billingRotationHour = 0
```

```
billingRotationMinutes = 0
billingRotationsPerDay = 1
enabled = true
outputFormat = xml
bufferSize = 10
```

7.1.4 FTP Parameters

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/File/FTP> get
enabled = false
remoteDirectory =
remoteHostName =
remoteUserId =
remotePassword =
usePassiveMode = false
```

7.1.5 Diameter Parameters

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter> get
defaultDestinationRealm =
useRealmFromCapabilitiesExchange = true
callingPartyAddressStrictCompliance = false
calledPartyAddressStrictCompliance = false
```

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/ChargingFunctionElement>
get
Address  Net Address Extended  Type  Description
=====
1.2.3.4                false  CCF
1.2.3.5                false  ECF
```

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/InhibitedAVPCodeList> get
avpCode  vendorId
=====
      886      10415

1 entry found.
```

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/Offline> get
enabled = false
sendBroadWorksInfo = true
send3GPPInfo = true
enableFileQueuing = false
fileRetentionHours = 1
routingMode = Direct
pollingIntervalSeconds = 1800
backlogMaxParallelTransactions = 1
```

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/Online> get
enabled = false
simultaneousOnlineOfflineBilling = false
defaultTimeQuotaThresholdSeconds = 30
defaultCreditControlFailureHandling = Retry And Terminate
unitDetermination = Centralized
timeSliceSeconds = 300
warningToneThresholdSeconds = 30
enableBroadsoftAvps = true
```

```
routingMode = Direct
txTimerSeconds = 5
serviceContextID = 8.32260@3gpp.org
serviceContextIDAoC = 11.32280@3gpp.org
```

7.1.6 Radius Parameters

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius> get
enabled = false
sendCallStartCDR = true
sendCallAnswerCDR = true
sharedSecret =
retransmissionDelayMilliseconds = 1000
maxTransmissions = 3
```

```
AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius/Device> g
Net Address  Port  Description
=====
1.1.1.1      1813
1.1.1.2      1813
```

7.1.7 FieldIdMapping Parameters

```
AS_CLI/Interface/Accounting/FieldIdMapping> get
Internal Id      External Id      Description
=====
4                4                userNumber
5                5                groupNumber
6                6                direction
. . .
(shows all BW CDR fields)
(Note: a restart is required for changes to take effect)
```

7.2 BroadWorks Execution Server

This section shows the command and parameters for the BroadWorks Execution Server (XS) CLI.

7.2.1 Command Tree

```
XS_CLI/Interface/Accounting> tree -r
.Accounting
...BroadWorksCDRInterface
....Diameter
.....ChargingFunctionElement
.....GETSNTInhibitedAVPCoDeList
.....InhibitedAVPCoDeList
.....Offline
.....Online
....File
.....FTP
....Radius
.....Device
...FieldIdMapping
```

7.2.2 BroadWorks CDR Interface Parameters

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface> get
numThreads = 1
useUUIDforLinuxSystemId = false
enabled = false
enableCodecChanges = false
enableFailover = true
enableInternalConference = false
enableIntraGroup = true
enableStartEnd = true
enableTerminating = true
enableLocationChanges = false
enableAccessNetworkChanges = false
enableCentralizationContinuityChanges = false
enableCentrex = true
enableIP = true
enable3GPP = false
longCallDurationRecordControl = enabled
longCallDurationTimerInMinutes = 1440
use3xxAsRouteConfirmation = true
customSchemaVersion =
freezePANIONFirstReceived = true
freezeSCCOnFirstReceived = true
```

7.2.3 File Parameters

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/File> get
enabled = true
format = XML
bufferSize = 10
holdTime = 14
rotationTimeHour = 0
rotationTimeMinutes = 0
rotationsPerDay = 1
```

7.2.4 FTP Parameters

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/File/FTP> get
enabled = false
directory =
netAddress =
userId =
password =
usePassiveMode = false
```

7.2.5 Diameter Parameters

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter> get
defaultDestinationRealm =
useRealmFromCapabilitiesExchange = true
callingPartyAddressStrictCompliance = false
includeRoutingNumberInCallingPartyAddress = false
userNameIdentity = public
userSessionIdSource = access
defaultFixedDevicePrivateUserIdentity =
defaultMobileDevicePrivateUserIdentity =
subscriptionIdType = sipUri
```

```
supportNetworkProvidedPANI = true
use3rdPartyRegistrationForLocation = true
useOrigAccessTypeForAccessNetworkInformationAVP = false
calledAssertedIdentityStrictCompliance = false
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/ChargingFunctionElement>
get
Network Address  Type  Extended Network Address  Description
=====
          1.2.3.4    CCF                      false
          1.2.3.5    ECF                      false

2 entries found.
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/
GETSNTInhibitedAVPCodeList> get
AVP Code  Vendor Id
=====
          886      10415

1 entry found.
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/InhibitedAVPCodeList> get
AVP Code  Vendor Id  Diameter Interface
=====
          886      10415              Both

1 entry found.
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/Offline> get
enabled = false
sendBroadWorksInfo = true
send3GPPInfo = true
enableFileQueuing = false
fileRetentionInHours = 1
routingMode = direct
enableACREvent = true
limitRepeatedAVP = unlimited
maxAVPLimit = 20
serviceContextID = 32260@3gpp.org
useACAOriginHostForACRDestinationHost = false
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Diameter/Online> get
enabled = false
simultaneousOnlineOfflineBilling = false
defaultTimeQuotaThresholdInSeconds = 30
defaultCreditControlFailureHandling = retryAndTerminate
unitDetermination = centralized
timeSliceInSeconds = 300
warningToneThresholdInSeconds = 30
enableBroadSoftAVPs = true
routingMode = direct
txTimerInSeconds = 5
serviceContextID = 8.32260@3gpp.org
bypassPrepaidForFinalUnitRedirection = true
ratingGroup =
enableWarningTone = true
useCCAOriginHostForCCRDestinationHost = false
```



```
multipleServicesIndicatorValue = supported
```

7.2.6 Radius Parameters

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius> get
enabled = false
sendCallStartCDR = true
sendCallAnswerCDR = true
sharedSecret =
retransmissionDelayInMilliseconds = 1000
maxTransmissions = 3
```

```
XS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius/Device> get
Network Address  Port  Description
=====
          1.1.1.1  1813
          1.1.1.2  1813

2 entries found.
```

7.2.7 FieldIdMapping Parameters

```
XS_CLI/Interface/Accounting/FieldIdMapping> get
Internal ID  External ID  Description
=====
          4          4          userNumber
          5          5          groupNumber
          6          6          direction
          . . .
(shows all BW CDR fields)
(Note: a restart is required for changes to take effect)
```

8 CDR Stream Example

This chapter describes the following:

- XML example
- CSV file example
- Radius stream example

The following subsections illustrate the same call in the following format: XML, CSV, and RADIUS. The example¹⁶ call scenario is as follows:

- User +15146986603 makes an intra-group call to user +15146986604 by extension (604)
- User +15146986604 answers
- User +15146986604 hangs up

The example also shows the stream start and end CDR.

For more examples, download the *Rel_20.0_SampleCDRs* available from BroadSoft at xchange.broadsoft.com.

8.1 XML File Example

The following shows an example in the XML file format:

```
<?xml version="1.0" encoding="windows-1252"?>
<!DOCTYPE broadWorksCDR>
<broadWorksCDR version="17.0">
  <cdrData>
    <headerModule>
      <recordId>
        <eventCounter>0000000104</eventCounter>
        <systemId>DEFAULT</systemId>
        <date>20090602170031.843</date>
        <systemTimeZone>1-040000</systemTimeZone>
      </recordId>
      <type>Start</type>
    </headerModule>
  </cdrData>
  <cdrData>
    <headerModule>
      <recordId>
        <eventCounter>0000000105</eventCounter>
        <systemId>DEFAULT</systemId>
        <date>20090602170044.562</date>
        <systemTimeZone>1-040000</systemTimeZone>
      </recordId>
      <serviceProvider>MtlASDev</serviceProvider>
      <type>Normal</type>
    </headerModule>
    <basicModule>
      <userNumber>+15146986604</userNumber>
      <groupNumber>+15146986600</groupNumber>
      <direction>Terminating</direction>
      <asCallType>Group</asCallType>
      <callingNumber>+15146986603</callingNumber>
      <callingPresentationIndicator>Public</callingPresentationIndicator>
      <calledNumber>+15146986604</calledNumber>
      <startTime>20090602170044.562</startTime>
    </basicModule>
  </cdrData>
</broadWorksCDR>
```

¹⁶ This is an example showing details for Release 17.0. Additional fields could be defined in a subsequent release; however, the structure would remain the same.

```
<userTimeZone>1-040000</userTimeZone>
<localCallId>489:0</localCallId>
<remoteCallId>487:0</remoteCallId>
<answerIndicator>Yes</answerIndicator>
<answerTime>20090602170047.031</answerTime>
<releaseTime>20090602170051.984</releaseTime>
<terminationCause>016</terminationCause>
<callCategory>private</callCategory>
<chargeIndicator>n</chargeIndicator>
<releasingParty>local</releasingParty>
<userId>south04@mtlasdev86.net</userId>
<otherPartyName>john3 south</otherPartyName>
<otherPartyNamePresentationIndicator>Public
</otherPartyNamePresentationIndicator>
<clidPermitted>Yes</clidPermitted>
<namePermitted>Yes</namePermitted>
</basicModule>
<centrexModule>
  <group>South_as86</group>
</centrexModule>
<ipModule>
  <route>Group</route>
  <codec>PCMU/8000</codec>
  <accessDeviceAddress>192.168.8.32</accessDeviceAddress>
  <accessCallId>BW130044562020609799344136@192.168.8.249
  </accessCallId>
  <codecUsage>4.953</codecUsage>
</ipModule>
</cdrData>
<cdrData>
  <headerModule>
    <recordId>
      <eventCounter>0000000106</eventCounter>
      <systemId>DEFAULT</systemId>
      <date>20090602170044.562</date>
      <systemTimeZone>1-040000</systemTimeZone>
    </recordId>
    <serviceProvider>MtlASDev</serviceProvider>
    <type>Normal</type>
  </headerModule>
  <basicModule>
    <userNumber>+15146986603</userNumber>
    <groupNumber>+15146986600</groupNumber>
    <direction>Originating</direction>
    <asCallType>Group</asCallType>
    <callingNumber>+15146986603</callingNumber>
    <callingPresentationIndicator>Public</callingPresentationIndicator>
    <dialedDigits>604</dialedDigits>
    <calledNumber>+15146986604</calledNumber>
    <startTime>20090602170044.562</startTime>
    <userTimeZone>1-040000</userTimeZone>
    <localCallId>487:0</localCallId>
    <remoteCallId>489:0</remoteCallId>
    <answerIndicator>Yes</answerIndicator>
    <answerTime>20090602170047.031</answerTime>
    <releaseTime>20090602170051.984</releaseTime>
    <terminationCause>016</terminationCause>
    <callCategory>private</callCategory>
    <chargeIndicator>n</chargeIndicator>
    <releasingParty>remote</releasingParty>
    <userId>south03@mtlasdev86.net</userId>
    <otherPartyName>john4 south</otherPartyName>
```

```

        <otherPartyNamePresentationIndicator>Public
      </otherPartyNamePresentationIndicator>
    </basicModule>
    <centrexModule>
      <group>South_as86</group>
    </centrexModule>
    <ipModule>
      <route>Group</route>
      <codec>PCMU/8000</codec>
      <accessDeviceAddress>192.168.8.32</accessDeviceAddress>
      <accessCallID>f3988867-18114838@192.168.8.32</accessCallID>
      <codecUsage>4.953</codecUsage>
    </ipModule>
  </cdrData>
  <cdrData>
    <headerModule>
      <recordId>
        <eventCounter>0000000107</eventCounter>
        <systemId>DEFAULT</systemId>
        <date>20090602170105.812</date>
        <systemTimeZone>1-040000</systemTimeZone>
      </recordId>
      <type>End</type>
    </headerModule>
  </cdrData>
</broadWorksCDR>

```

8.2 CSV File Example

The following shows an example in the CSV file format:

```

version=17.0 encoding=windows-1252

0000000108DEFAULT20090602175042.2031-040000,,Start

0000000109DEFAULT20090602175049.2501-040000,MtIASDev,Normal,+15146986604,
+15146986600,Terminating,+15146986603,Public,+15146986604,20090602175049.250,
1-040000,Yes,20090602175051.281,20090602175055.250,016,VoIP,,,private,,,,local,Group,
,PCMU/8000,192.168.8.32,BW135049250020609271533085@192.168.8.249,,,,South_as86,,,,,
,,,n,,,500:0,498:0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
,,,,,,south04@mtlasdev86.net,john3 south,Public,,,,,,,,,,,,,,,,,,,,Yes,,,,,,,,,,,,,
,3.969,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,Group
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,Yes,,,,,,,,,,,,,,,,,,,,,

0000000110DEFAULT20090602175049.2501-040000,MtIASDev,Normal,+15146986603,+15146986600
,Originating,+15146986603,PuCdrStreamExamples_Radius.ditablic,
+15146986604,20090602175049.250,1-040000,Yes,
20090602175051.281,20090602175055.250,016,VoIP,,604,private,,,,remote,Group,,
PCMU/8000,192.168.8.32,f8462816-28f9aa0a@192.168.8.32,,,,South_as86,,,,,,n,,,
498:0,500:0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
,south03@mtlasdev86.net,john4 south,Public,,,,,,,,,,,,,,,,,,,,,,,,,,,,3.969,,,,,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,Group,,,,,,,,,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

0000000111DEFAULT20090602175102.4061-040000,,End

```

8.3 Radius Stream Example

The following example shows a complete Radius packet stream, for the same scenario. The packets are reported as decoded by the network capture tool.

The example was captured with the following options enabled:

- **enableCDRStartEnd** under *AS_CLI/Interface/Accounting/BroadWorksCDRInterface* is set to “true”.
- **sendCallStartCDR** under *AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius* is set to “true”.
- **sendCallAnswerCDR** under *AS_CLI/Interface/Accounting/BroadWorksCDRInterface/Radius* is set to “true”.

No.	Time	Source	Destination	Protocol	Info
36	8.929837	192.168.8.249	192.168.8.54	RADIUS	Accounting-Request(4)
Radius Protocol					
Code: Accounting-Request (4)					
Packet identifier: 0x0 (0)					
Length: 141					
Authenticator: 27AB43E51ECD5164785FF88DE228564C					
Attribute Value Pairs					
AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249					
AVP: l=6 t=Acct-Status-Type(40): Stop(2)					
AVP: l=45 t=Acct-Session-Id(44): 0000000233DEFAULT20090602170031.8431-040000					
AVP: l=64 t=Vendor-Specific(26) v=BroadSoft(6431)					
VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0					
VSA: l=45 t=BWAS-Record-id(1):					
0000000233DEFAULT20090602170031.8431-040000					
VSA: l=7 t=BWAS-Type(3): Start					
No.	Time	Source	Destination	Protocol	Info
99	21.633993	192.168.8.249	192.168.8.54	RADIUS	Accounting-Request(4)
Radius Protocol					
Code: Accounting-Request (4)					
Packet identifier: 0x1 (1)					
Length: 387					
Authenticator: A6C5C26B163E208E2D7CCBCF8EA756A3					
Attribute Value Pairs					
AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249					
AVP: l=6 t=Acct-Status-Type(40): Start(1)					
AVP: l=32 t=Acct-Session-Id(44): 487:0DEFAULT20090602170044.562					
AVP: l=251 t=Vendor-Specific(26) v=BroadSoft(6431)					
VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0					
VSA: l=45 t=BWAS-Record-id(1):					
0000000234DEFAULT20090602170044.5621-040000					
VSA: l=10 t=BWAS-Service-provider(2): MtlASDev					
VSA: l=8 t=BWAS-Type(3): Normal					
VSA: l=14 t=BWAS-User-Number(4): +15146986603					
VSA: l=14 t=BWAS-Group-Number(5): +15146986600					
VSA: l=13 t=BWAS-Direction(6): Originating					
VSA: l=7 t= BWAS-AS-Call-Type(231): Group					
VSA: l=14 t=BWAS-Calling-Number(7): +15146986603					
VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public					
VSA: l=5 t=BWAS-Dialed-Digits(18): 604					
VSA: l=14 t=BWAS-Called-Number(9): +15146986604					
VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562					
VSA: l=10 t=BWAS-User-Timezone(11): 1-040000					
VSA: l=7 t=BWAS-Local-Callid(45): 487:0					
VSA: l=4 t=BWAS-Answer-Indic(12): No					

```

VSA: l=6 t=BWAS-Network-Type(16): VoIP
VSA: l=3 t=BWAS-Charge-Indic(42): n
VSA: l=24 t=BWAS-UserId(121): south03@mtlasdev86.net
VSA: l=13 t=BWAS-Other-Party-Name(122): john4 south
AVP: l=72 t=Vendor-Specific(26) v=BroadSoft(6431)
VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
VSA: l=32 t=BWAS-Access-Callid(28): f3988867-18114838@192.168.8.32
VSA: l=12 t=BWAS-Group(32): South_as86

No.      Time      Source      Destination      Protocol Info
  101  21.635072  192.168.8.249  192.168.8.54    RADIUS   Accounting-
Request(4)
Radius Protocol
Code: Accounting-Request (4)
Packet identifier: 0x2 (2)
Length: 364
Authenticator: 38C2C74A9E1C83A13CD7C630DB44DE71
[The response to this request is in frame 102]
Attribute Value Pairs
  AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
  AVP: l=6 t=Acct-Status-Type(40): Start(1)
  AVP: l=32 t=Acct-Session-Id(44): 489:0DEFAULT20090602170044.562
  AVP: l=253 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
    VSA: l=45 t=BWAS-Record-id(1):
0000000235DEFAULT20090602170044.5621-040000
    VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
    VSA: l=8 t=BWAS-Type(3): Normal
    VSA: l=14 t=BWAS-User-Number(4): +15146986604
    VSA: l=14 t=BWAS-Group-Number(5): +15146986600
    VSA: l=13 t=BWAS-Direction(6): Terminating
    VSA: l=7 t=BWAS-AS-Call-Type(231): Group
    VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
    VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
    VSA: l=14 t=BWAS-Called-Number(9): +15146986604
    VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
    VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
    VSA: l=7 t=BWAS-Local-Callid(45): 489:0
    VSA: l=7 t=BWAS-Remote-Callid(46): 487:0
    VSA: l=4 t=BWAS-Answer-Indic(12): No
    VSA: l=6 t=BWAS-Network-Type(16): VoIP
    VSA: l=3 t=BWAS-Charge-Indic(42): n
    VSA: l=24 t=BWAS-UserId(121): south04@mtlasdev86.net
    VSA: l=13 t=BWAS-Other-Party-Name(122): john3 south
  AVP: l=37 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
    VSA: l=5 t=BWAS-CLID-Permitted(141): Yes
    VSA: l=9 t=BWAS-Generic-Attribute(255): 272=Yes
    VSA: l=7 t=BWAS-Route(24): Group
    VSA: l=12 t=BWAS-Group(32): South_as86

No.      Time      Source      Destination      Protocol Info
  120  24.108273  192.168.8.249  192.168.8.54    RADIUS   Accounting-
Request(4)
Radius Protocol
Code: Accounting-Request (4)
Packet identifier: 0x3 (3)
Length: 452
Authenticator: 6DE43F2016B8FB4EC63196AEBD50B742
Attribute Value Pairs
  AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249

```

```

AVP: l=6 t=Acct-Status-Type(40): Interim-Update(3)
AVP: l=32 t=Acct-Session-Id(44): 489:0DEFAULT20090602170044.562
AVP: l=237 t=Vendor-Specific(26) v=BroadSoft(6431)
      VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
      VSA: l=45 t=BWAS-Record-id(1):
0000000236DEFAULT20090602170044.5621-040000
      VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
      VSA: l=8 t=BWAS-Type(3): Normal
      VSA: l=14 t=BWAS-User-Number(4): +15146986604
      VSA: l=14 t=BWAS-Group-Number(5): +15146986600
      VSA: l=13 t=BWAS-Direction(6): Terminating
      VSA: l=7 t= BWAS-AS-Call-Type(231): Group
      VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
      VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
      VSA: l=14 t=BWAS-Called-Number(9): +15146986604
      VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
      VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
      VSA: l=7 t=BWAS-Local-Callid(45): 489:0
      VSA: l=7 t=BWAS-Remote-Callid(46): 487:0
      VSA: l=5 t=BWAS-Answer-Indic(12): Yes
      VSA: l=20 t=BWAS-Answer-Time(13): 20090602170047.031
      VSA: l=6 t=BWAS-Network-Type(16): VoIP
      VSA: l=3 t=BWAS-Charge-Indic(42): n
AVP: l=151 t=Vendor-Specific(26) v=BroadSoft(6431)
      VSA: l=24 t=BWAS-UserId(121): south04@mtlasdev86.net
      VSA: l=13 t=BWAS-Other-Party-Name(122): john3 south
      VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
      VSA: l=5 t=BWAS-CLID-Permitted(141): Yes
      VSA: l=9 t=BWAS-Generic-Attribute(255): 272=Yes
      VSA: l=7 t=BWAS-Route(24): Group
      VSA: l=11 t=BWAS-Codec(26): PCMU/8000
      VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
      VSA: l=42 t=BWAS-Access-Callid(28):
BW130044562020609799344136@192.168.8.249
      VSA: l=12 t=BWAS-Group(32): South_as86

```

No.	Time	Source	Destination	Protocol	Info
121	24.108799	192.168.8.249	192.168.8.54	RADIUS	Accounting-

Request(4)

Radius Protocol

Code: Accounting-Request (4)

Packet identifier: 0x4 (4)

Length: 442

Authenticator: 29A5410260DD114C7BE022BAD7FDEB2B

Attribute Value Pairs

```

      AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
      AVP: l=6 t=Acct-Status-Type(40): Interim-Update(3)
      AVP: l=32 t=Acct-Session-Id(44): 487:0DEFAULT20090602170044.562
      AVP: l=251 t=Vendor-Specific(26) v=BroadSoft(6431)
            VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
            VSA: l=45 t=BWAS-Record-id(1):
0000000237DEFAULT20090602170044.5621-040000
            VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
            VSA: l=8 t=BWAS-Type(3): Normal
            VSA: l=14 t=BWAS-User-Number(4): +15146986603
            VSA: l=14 t=BWAS-Group-Number(5): +15146986600
            VSA: l=13 t=BWAS-Direction(6): Originating
            VSA: l=7 t= BWAS-AS-Call-Type(231): Group
            VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
            VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
            VSA: l=5 t=BWAS-Dialed-Digits(18): 604
            VSA: l=14 t=BWAS-Called-Number(9): +15146986604

```

```

VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
VSA: l=7 t=BWAS-Local-Callid(45): 487:0
VSA: l=7 t=BWAS-Remote-Callid(46): 489:0
VSA: l=5 t=BWAS-Answer-Indic(12): Yes
VSA: l=20 t=BWAS-Answer-Time(13): 20090602170047.031
VSA: l=6 t=BWAS-Network-Type(16): VoIP
VSA: l=9 t=BWAS-Call-Category(19): private
VSA: l=3 t=BWAS-Charge-Indic(42): n
AVP: l=127 t=Vendor-Specific(26) v=BroadSoft(6431)
VSA: l=24 t=BWAS-UserId(121): south03@mtlasdev86.net
VSA: l=13 t=BWAS-Other-Party-Name(122): john4 south
VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
VSA: l=7 t=BWAS-Route(24): Group
VSA: l=11 t=BWAS-Codec(26): PCMU/8000
VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
VSA: l=32 t=BWAS-Access-Callid(28): f3988867-18114838@192.168.8.32
VSA: l=12 t=BWAS-Group(32): South_as86

No.      Time      Source      Destination      Protocol Info
  154 29.055234 192.168.8.249 192.168.8.54    RADIUS   Accounting-
Request(4)
Radius Protocol
Code: Accounting-Request (4)
Packet identifier: 0x5 (5)
Length: 500
Authenticator: F1521907C97F163C7E8B4682FA26E2D0
Attribute Value Pairs
  AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
  AVP: l=6 t=Acct-Status-Type(40): Stop(2)
  AVP: l=32 t=Acct-Session-Id(44): 489:0DEFAULT20090602170044.562
  AVP: l=253 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 1.0
    VSA: l=45 t=BWAS-Record-id(1):
0000000238DEFAULT20090602170044.5621-040000
    VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
    VSA: l=8 t=BWAS-Type(3): Normal
    VSA: l=14 t=BWAS-User-Number(4): +15146986604
    VSA: l=14 t=BWAS-Group-Number(5): +15146986600
    VSA: l=13 t=BWAS-Direction(6): Terminating
    VSA: l=7 t=BWAS-AS-Call-Type(231): Group
    VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
    VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
    VSA: l=14 t=BWAS-Called-Number(9): +15146986604
    VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
    VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
    VSA: l=7 t=BWAS-Local-Callid(45): 489:0
    VSA: l=7 t=BWAS-Remote-Callid(46): 487:0
    VSA: l=5 t=BWAS-Answer-Indic(12): Yes
    VSA: l=20 t=BWAS-Answer-Time(13): 20090602170047.031
    VSA: l=20 t=BWAS-Release-Time(14): 20090602170051.984
    VSA: l=5 t=BWAS-Termination-Cause(15): 016
  AVP: l=183 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=6 t=BWAS-Network-Type(16): VoIP
    VSA: l=9 t=BWAS-Call-Category(19): private
    VSA: l=3 t=BWAS-Charge-Indic(42): n
    VSA: l=7 t=BWAS-Releasing-Party(23): local
    VSA: l=24 t=BWAS-UserId(121): south04@mtlasdev86.net
    VSA: l=13 t=BWAS-Other-Party-Name(122): john3 south
    VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
    VSA: l=5 t=BWAS-CLID-Permitted(141): Yes
    VSA: l=9 t=BWAS-Generic-Attribute(255): 272=Yes

```



```

VSA: l=7 t=BWAS-Route(24): Group
VSA: l=11 t=BWAS-Codec(26): PCMU/8000
VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
VSA: l=42 t=BWAS-Access-Callid(28):
BW130044562020609799344136@192.168.8.249
VSA: l=7 t=BWAS-Codec-Usage(157): 4.953
VSA: l=12 t=BWAS-Group(32): South_as86

No.      Time      Source      Destination      Protocol Info
    157  29.056467  192.168.8.249  192.168.8.54    RADIUS   Accounting-
Request(4)
Radius Protocol
Code: Accounting-Request (4)
Packet identifier: 0x6 (6)
Length: 482
Authenticator: 323BC836B51C6AF29D76A9170EECDE6B
Attribute Value Pairs
  AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
  AVP: l=6 t=Acct-Status-Type(40): Stop(2)
  AVP: l=32 t=Acct-Session-Id(44): 487:0DEFAULT20090602170044.562
  AVP: l=253 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
    VSA: l=45 t=BWAS-Record-id(1):
0000000239DEFAULT20090602170044.5621-040000
    VSA: l=10 t=BWAS-Service-provider(2): MtlASDev
    VSA: l=8 t=BWAS-Type(3): Normal
    VSA: l=14 t=BWAS-User-Number(4): +15146986603
    VSA: l=14 t=BWAS-Group-Number(5): +15146986600
    VSA: l=13 t=BWAS-Direction(6): Originating
    VSA: l=7 t=BWAS-AS-Call-Type(231): Group
    VSA: l=14 t=BWAS-Calling-Number(7): +15146986603
    VSA: l=8 t=BWAS-Calling-Presentation-Indic(8): Public
    VSA: l=5 t=BWAS-Dialed-Digits(18): 604
    VSA: l=14 t=BWAS-Called-Number(9): +15146986604
    VSA: l=20 t=BWAS-Start-Time(10): 20090602170044.562
    VSA: l=10 t=BWAS-User-Timezone(11): 1-040000
    VSA: l=7 t=BWAS-Local-Callid(45): 487:0
    VSA: l=7 t=BWAS-Remote-Callid(46): 489:0
    VSA: l=5 t=BWAS-Answer-Indic(12): Yes
    VSA: l=20 t=BWAS-Answer-Time(13): 20090602170047.031
    VSA: l=20 t=BWAS-Release-Time(14): 20090602170051.984
  AVP: l=165 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=5 t=BWAS-Termination-Cause(15): 016
    VSA: l=6 t=BWAS-Network-Type(16): VoIP
    VSA: l=9 t=BWAS-Call-Category(19): private
    VSA: l=3 t=BWAS-Charge-Indic(42): n
    VSA: l=8 t=BWAS-Releasing-Party(23): remote
    VSA: l=24 t=BWAS-UserId(121): south03@mtlasdev86.net
    VSA: l=13 t=BWAS-Other-Party-Name(122): john4 south
    VSA: l=8 t=BWAS-Other-Party-Name-Pres-Indic(123): Public
    VSA: l=7 t=BWAS-Route(24): Group
    VSA: l=11 t=BWAS-Codec(26): PCMU/8000
    VSA: l=14 t=BWAS-Access-Device-Address(27): 192.168.8.32
    VSA: l=32 t=BWAS-Access-Callid(28): f3988867-18114838@192.168.8.32
    VSA: l=7 t=BWAS-Codec-Usage(157): 4.953
    VSA: l=12 t=BWAS-Group(32): South_as86

No.      Time      Source      Destination      Protocol Info
    217  42.900401  192.168.8.249  192.168.8.54    RADIUS   Accounting-
Request(4)
Radius Protocol
Code: Accounting-Request (4)

```

```
Packet identifier: 0x7 (7)
Length: 139
Authenticator: 96DD9CCB4A9072FC99275966907A21AF
Attribute Value Pairs
  AVP: l=6 t=NAS-IP-Address(4): 192.168.8.249
  AVP: l=6 t=Acct-Status-Type(40): Stop(2)
  AVP: l=45 t=Acct-Session-Id(44): 0000000240DEFAULT20090602170105.8281-040000
  AVP: l=62 t=Vendor-Specific(26) v=BroadSoft(6431)
    VSA: l=6 t=BWAS-Radius-Encoding-Version(0): 17.0
    VSA: l=45 t=BWAS-Record-id(1):
0000000240DEFAULT20090602170105.8281-040000
    VSA: l=5 t=BWAS-Type(3): End
```

Appendix A: Information Reported by Network Server

For inter-group calls, the *callCategory*, *networkCallType*, and *typeOfNetwork* fields report information obtained from the Network Server for each contact provided in the *302 Moved Temporarily* response, as shown in the following example:

```
SIP/2.0 302 Moved temporarily
Via:SIP/2.0/UDP 192.168.8.18:5060;branch=z9hG4bK-
BroadWorks.192.168.8.18-192.168.13.3V5060-0-482574692-243235606-1027462333327
From:"Pingtel
  User"<sip:5146976000@192.168.8.18;user=phone>;tag=243235606-1027462333327
To:<sip:72222@192.168.13.3;user=phone>
Call-ID:BW181213327230702030201786836622@192.168.8.18
CSeq:482574692 INVITE
Content-Length:0
Contact:
<sip:600;phone-context=/bw/pdp/CompanyA@192.168.8.5:5060;user=phone>;q=0.5;
ct=nil;ton=PRIVATE;cat=PRIVATE,
<sip:15146976600@192.168.8.55:5060;user=phone>;q=0.25;
ct=to;ton=PUBLIC;cat=INTERLAT
```

The Application Server goes over this list of contacts, until a proper response¹⁷ is received for the contact being tried. The *callCategory*, *networkCallType*, and *typeOfNetwork* fields in the CDR reflect the information for this specific contact for which a proper response was obtained. The *networkTranslatedNumber*, *networkTranslatedNumberContext*, and *networkTranslatedGroup* fields in the CDR also reflect the information from that same contact (for more information, see the field definitions).

This section provides only an overview of call types, call categories, and type of network. The Network Server can be configured to:

- Map any calls to any call types.
- Define new call types (service provider-defined); in addition to basic (system-defined) call types.
- Associate a (system-defined) category with each call type.

The Network Server always sets the *typeOfNetwork* to "PUBLIC", except when the VoiceVPN policy is involved in the processing. The VoiceVPN policy always sets the *typeOfNetwork*, by determining a selector, and then mapping this selector to a *typeOfNetwork*. A route configured in the VoiceVPN policy is always assigned a selector.

A selector can be "PRIVATE", "ROUTE", "PUBLIC", or "TRMT". They are handled as follows:

- "PRIVATE" or "ROUTE" selector values are mapped to a "PRIVATE" *typeOfNetwork*.
- A "PUBLIC" selector value is mapped to a "PUBLIC" *typeOfNetwork*.
- A "TRMT" selector value results in the Network Server returning a SIP error message, not a 302, so no *typeOfNetwork* applies.

If the VoiceVPN policy finds a route, the *typeOfNetwork* is set along the selector associated with the route found. When the VoiceVPN policy does not find a route, it sets the selector according to the default

¹⁷ These route confirmation messages include 180 alerting, 200 OK (answer), many release (4xx/5xx/...), and also further 3xx messages. In the latter case, the processing is:

a- The first 3xx (from the Network Server) contains a list of route.

b- While iterating over this list of route, encountering a 3xx results in capturing the route itself together with its network information (if any) in the originating CDR.

c- The networkCallId reports the call ID of the SIP dialog where the Application Server (AS) received an alerting (18x), answer (200 OK), or release (4xx/5xx/...).

Some softswitches are implemented by a set of devices, one being the controller, and others being network gateways under the umbrella of the controller. In such a case, the Network Server provides the controller as a route in its 302, and then the controller provides what gateway to use in a 300. The confirmed route (and call type) is one of those provided by the Network Server in the first 302 seen by the Application Server. The route/call type/etc is saved at this point. The network call ID reported in the CDR is the one related to the network gateway that provided an 18x/200/4xx/5xx/... For correlation purposes, it is up to the service provider to maintain a map of which gateways are under the scope of which controller in such a configuration.

selector configuration, which can be “PUBLIC” or “PRIVATE”, and the *typeOfNetwork* is set along the above mapping.

Detailed information about the Network Server call type, call category, and VoiceVPN policy is available in:

- [Network Server Product Description](#), Release 20, specifically the following sections:
 - Network Server Enterprise Policies
 - Network Server System Provider Policies
 - Call Screening Policies
- [Network Server Command Line Interface Administration Guide](#), Release 20, where the CLI level *System/CallP/CallType* is described.

Call types can be configured on the Network Server. Call types are either system-defined or user-defined. The system-defined call types cannot be removed. User-defined call types can be added by the administrator. Call types are then used by routing policies and dial plans. Rules for call typing are entirely configurable on the Network Server. Whenever a contact is added as a translation result of an Enterprise policy, the call category is set to “PRIVATE”.

The following table shows the basic system-defined call types on the Network Server and their associated category. The *networkCallType* field in a CDR always contains the exact same string returned by the Network Server in the “ct=” option, even when additional call types are created on the Network Server by a service provider. Note that the Network Server limits the length of call types (system-defined and new ones) to a maximum of four characters.

Table 467: System-defined Call Types on the Network Server

Call Type	Description	Associated Category
CSV	Carrier Services	INTERLAT
SV	Service Call	OTHER
TRMT	Treatment	OTHER
CT	CAC Cut Through	INTERLAT
LPS	Local Premium Service	OTHER
MS	Media Server Selection	OTHER
PCS	Personal Communications Services	NATIONAL
TPS	Toll Premium Services	NATIONAL
DP	Alternate Dial Plan	OTHER
OAP	Operator Assisted Plus	NATIONAL
TO	Toll Call	NATIONAL
LO	Local Call	LOCAL
IN	International Call	INTERNAT
EM	Emergency	EMERG
NIL	Nil Call Type	OTHER
ALL	All (Any) Call Types	OTHER
TF	Toll Free	OTHER
DA	Directory Assistance	OTHER
EA	Equal Access	OTHER
OA	Operator Assisted	INTRALAT
POA	PIC1 Operator Assisted	INTERLAT
FGB	Feature Group B	OTHER
SVCD	Service Call Termination	OTHER
SVCO	Service Call Origination	OTHER
ZD	Zone Dialing	OTHER

The following table shows the system-defined call categories on the Network Server. The callCategory field in a CDR always contains the exact string returned by the Network Server in the "cat=" option.

Call Category	Description
PRIVATE	This call is categorized as private.
LOCAL	This call is categorized as local.
NATIONAL	This call is categorized as national.
INTERLAT	This call is categorized as interLATA toll.
INTRALAT	This call is categorized as intraLATA toll.
INTERNAT	This call is categorized as international.
EMERG	This call is categorized as emergency.
OTHER	This call has a category other than the ones listed above.

Examples of call types and call categories returned by the Network Server are as follows:

Network Server Call Type	Network Server Call Category	Dialing Example for North America
lo	local	5146976600 dials 6976500
to	national ¹⁸	5146976600 dials 12403649999
in	internat	5146976600 dials 01161396343372
to	intralat	5146976600 dials 4504612222
to	interlat	2403645555 dials 16178638900
nil	private	5146976600 dials 6500, where 6 is a location code and 500 is an extension
em	other	5146976600 dials 911
tf	other	5146976600 dials 18007689000

Call types are managed using the CLI of the Network Server, at the level *System/CallP/CallType*. A new call type can be added with the Add command as follows: *NS_CLI/System/CallP/CallTypes> add <CallType> <Category> [<Desc>]*.

For example:

```
NS_CLI/System/CallP/CallTypes> add svc1 local "Service Number One"
```

For the new svc1 call type to be used, the dial plan must be customized to use it. For example, the svc1 call type could be used for typing calls made to a special 800 number, such as 18005559999.

This is done by adding the following entry into the North American dial plan:

```
NS_CLI/System/CallP/CountryCodes/DialPlan/Entry> add 1 NADP 18005559999 18005559999
exact 11 11 svc1 0 "" "Movie Schedules"
```

Then, a call from some user, for example 15146971111 to 18005559999, would result in the Network Server returning the following 302 message:

```
NS_CLI> vtr 15146971111 18005559999
[output of intermediate processing removed]
SIP/2.0 302 Moved temporarily
```

¹⁸ National is not used in North America, but rather intralat and interlat. In countries where the concept of LATA is not implemented, the call category is set to national in those cases.

```
Via:SIP/2.0/UDP 127.0.0.1
Content-Length:0
Contact:
<sip:18005559999@192.168.2.152:5060;user=phone>;q=0.5;ct=svcl;ton=PUBLIC;cat=LOCAL,
<sip:18005559999@192.168.8.77:5080;user=phone>;q=0.33;ct=svcl;ton=PUBLIC;cat=LOCAL,
<sip:18005559999@192.168.8.198:5080;user=phone>;q=0.17;ct=svcl;ton=PUBLIC;cat=LOCAL
```

Appendix B: Sample Radius Dictionary

This section describes a sample Radius dictionary for vendor-specific attributes used in BroadWorks CDRs. The following BroadWorks CDR dictionary definitions are adequate for a FreeRADIUS server (<http://www.freeradius.org/>). Other Radius servers may have a different format for their dictionary definitions.

```
#
# dictionary.broadsoft
#
#           Accounting VSAs for BroadSoft
#
#
VENDOR           BroadSoft 6431

#
ATTRIBUTE  BWAS-Radius-Encoding-Version           0  string
BroadSoft
ATTRIBUTE  BWAS-Record-id                         1  string
BroadSoft
ATTRIBUTE  BWAS-Service-provider                 2  string
BroadSoft
ATTRIBUTE  BWAS-Type                             3  string
BroadSoft
ATTRIBUTE  BWAS-User-Number                       4  string
BroadSoft
ATTRIBUTE  BWAS-Group-Number                     5  string
BroadSoft
ATTRIBUTE  BWAS-Direction                        6  string
BroadSoft
ATTRIBUTE  BWAS-Calling-Number                   7  string
BroadSoft
ATTRIBUTE  BWAS-Calling-Presentation-Indic       8  string
BroadSoft
ATTRIBUTE  BWAS-Called-Number                    9  string
BroadSoft
ATTRIBUTE  BWAS-Start-Time                       10  string
BroadSoft
ATTRIBUTE  BWAS-User-Timezone                    11  string
BroadSoft
ATTRIBUTE  BWAS-Answer-Indic                     12  string
BroadSoft
ATTRIBUTE  BWAS-Answer-Time                      13  string
BroadSoft
ATTRIBUTE  BWAS-Release-Time                     14  string
BroadSoft
ATTRIBUTE  BWAS-Termination-Cause                15  string
BroadSoft
ATTRIBUTE  BWAS-Network-Type                     16  string
BroadSoft
ATTRIBUTE  BWAS-Carrier-Identification-Code      17  string
BroadSoft
ATTRIBUTE  BWAS-Dialed-Digits                    18  string
BroadSoft
ATTRIBUTE  BWAS-Call-Category                    19  string
BroadSoft
ATTRIBUTE  BWAS-Network-Call-Type                20  string
BroadSoft
ATTRIBUTE  BWAS-Network-Translated-Number        21  string
BroadSoft
```


ATTRIBUTE	BWAS-Network-Translated-Group	22	string
BroadSoft			
ATTRIBUTE	BWAS-Releasing-Party	23	string
BroadSoft			
ATTRIBUTE	BWAS-Route	24	string
BroadSoft			
ATTRIBUTE	BWAS-Network-Callid	25	string
BroadSoft			
ATTRIBUTE	BWAS-Codec	26	string
BroadSoft			
ATTRIBUTE	BWAS-Access-Device-Address	27	string
BroadSoft			
ATTRIBUTE	BWAS-Access-Callid	28	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-29	29	string
BroadSoft			
ATTRIBUTE	BWAS-Failover-Correlation-Id	30	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-31	31	string
BroadSoft			
ATTRIBUTE	BWAS-Group	32	string
BroadSoft			
ATTRIBUTE	BWAS-Department	33	string
BroadSoft			
ATTRIBUTE	BWAS-Account-Code	34	string
BroadSoft			
ATTRIBUTE	BWAS-Authorization-Code	35	string
BroadSoft			
ATTRIBUTE	BWAS-Original-Called-Number	36	string
BroadSoft			
ATTRIBUTE	BWAS-Original-Called-Presentation-Indic	37	string
BroadSoft			
ATTRIBUTE	BWAS-Original-Called-Reason	38	string
BroadSoft			
ATTRIBUTE	BWAS-Redirecting-Number	39	string
BroadSoft			
ATTRIBUTE	BWAS-Redirecting-Presentation-Indic	40	string
BroadSoft			
ATTRIBUTE	BWAS-Redirecting-Reason	41	string
BroadSoft			
ATTRIBUTE	BWAS-Charge-Indic	42	string
BroadSoft			
ATTRIBUTE	BWAS-Type-Of-Network	43	string
BroadSoft			
ATTRIBUTE	BWAS-VP-Calling-Invoke-Time	44	string
BroadSoft			
ATTRIBUTE	BWAS-Local-Callid	45	string
BroadSoft			
ATTRIBUTE	BWAS-Remote-Callid	46	string
BroadSoft			
ATTRIBUTE	BWAS-Calling-Party-Category	47	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-48	48	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-49	49	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-50	50	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-51	51	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-52	52	string
BroadSoft			

ATTRIBUTE	BWAS-Spare-53	53	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-54	54	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-55	55	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-56	56	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-57	57	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-58	58	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Vector-Key	59	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Vector-Creator	60	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Vector-Orig	61	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Vector-Term	62	string
BroadSoft			
ATTRIBUTE	BWAS-Acc-Per-Call-Invoke-Time	63	string
BroadSoft			
ATTRIBUTE	BWAS-Acc-Per-Call-Fac-Result	64	string
BroadSoft			
ATTRIBUTE	BWAS-Acb-Act-Invoke-Time	65	string
BroadSoft			
ATTRIBUTE	BWAS-Acb-Act-Fac-Result	66	string
BroadSoft			
ATTRIBUTE	BWAS-Acb-Deact-Invoke-Time	67	string
BroadSoft			
ATTRIBUTE	BWAS-Acb-Deact-Fac-Result	68	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Park-Invoke-Time	69	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Park-Fac-Result	70	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Park-Retr-Invoke-Time	71	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Park-Retr-Fac-Result	72	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Pickup-Invoke-Time	73	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Pickup-Fac-Result	74	string
BroadSoft			
ATTRIBUTE	BWAS-Directed-Call-Pickup-Invoke-Time	75	string
BroadSoft			
ATTRIBUTE	BWAS-Directed-Call-Pickup-Fac-Result	76	string
BroadSoft			
ATTRIBUTE	BWAS-Dpubi-Invoke-Time	77	string
BroadSoft			
ATTRIBUTE	BWAS-Dpubi-Fac-Result	78	string
BroadSoft			
ATTRIBUTE	BWAS-Cancel-Cwt-Per-Call-Invoke-Time	79	string
BroadSoft			
ATTRIBUTE	BWAS-Cancel-Cwt-Per-Call-Fac-Result	80	string
BroadSoft			
ATTRIBUTE	BWAS-Cfa-Act-Invoke-Time	81	string
BroadSoft			
ATTRIBUTE	BWAS-Cfa-Act-Fac-Result	82	string
BroadSoft			
ATTRIBUTE	BWAS-Cfa-Deact-Invoke-Time	83	string
BroadSoft			

ATTRIBUTE	BWAS-Cfa-Deact-Fac-Result	84	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Act-Invoke-Time	85	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Act-Fac-Result	86	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Deact-Invoke-Time	87	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Deact-Fac-Result	88	string
BroadSoft			
ATTRIBUTE	BWAS-Cfna-Act-Invoke-Time	89	string
BroadSoft			
ATTRIBUTE	BWAS-Cfna-Act-Fac-Result	90	string
BroadSoft			
ATTRIBUTE	BWAS-Cfna-Deact-Invoke-Time	91	string
BroadSoft			
ATTRIBUTE	BWAS-Cfna-Deact-Fac-Result	92	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Delivery-Per-Call-Invoke-Time	93	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Delivery-Per-Call-Fac-Result	94	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Per-Call-Invoke-Time	95	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Per-Call-Fac-Result	96	string
BroadSoft			
ATTRIBUTE	BWAS-Cot-Invoke-Time	97	string
BroadSoft			
ATTRIBUTE	BWAS-Cot-Fac-Result	98	string
BroadSoft			
ATTRIBUTE	BWAS-Direct-Vm-Xfer-Invoke-Time	99	string
BroadSoft			
ATTRIBUTE	BWAS-Direct-Vm-Xfer-Fac-Result	100	string
BroadSoft			
ATTRIBUTE	BWAS-Dnd-Act-Invoke-Time	101	string
BroadSoft			
ATTRIBUTE	BWAS-Dnd-Act-Fac-Result	102	string
BroadSoft			
ATTRIBUTE	BWAS-Dnd-Deact-Invoke-Time	103	string
BroadSoft			
ATTRIBUTE	BWAS-Dnd-Deact-Fac-Result	104	string
BroadSoft			
ATTRIBUTE	BWAS-Sac-Lock-Invoke-Time	105	string
BroadSoft			
ATTRIBUTE	BWAS-Sac-Lock-Fac-Result	106	string
BroadSoft			
ATTRIBUTE	BWAS-Sac-Unlock-Invoke-Time	107	string
BroadSoft			
ATTRIBUTE	BWAS-Sac-Unlock-Fac-Result	108	string
BroadSoft			
ATTRIBUTE	BWAS-Flash-Call-Hold-Invoke-Time	109	string
BroadSoft			
ATTRIBUTE	BWAS-Flash-Call-Hold-Fac-Result	110	string
BroadSoft			
ATTRIBUTE	BWAS-Last-Number-Redial-Invoke-Time	111	string
BroadSoft			
ATTRIBUTE	BWAS-Last-Number-Redial-Fac-Result	112	string
BroadSoft			
ATTRIBUTE	BWAS-Return-Call-Invoke-Time	113	string
BroadSoft			
ATTRIBUTE	BWAS-Return-Call-Fac-Result	114	string
BroadSoft			

ATTRIBUTE	BWAS-Sd100-Programming-Invoke-Time	115	string
BroadSoft			
ATTRIBUTE	BWAS-Sd100-Programming-Fac-Result	116	string
BroadSoft			
ATTRIBUTE	BWAS-Sd8-Programming-Invoke-Time	117	string
BroadSoft			
ATTRIBUTE	BWAS-Sd8-Programming-Fac-Result	118	string
BroadSoft			
ATTRIBUTE	BWAS-Clear-Mwi-Invoke-Time	119	string
BroadSoft			
ATTRIBUTE	BWAS-Clear-Mwi-Fac-Result	120	string
BroadSoft			
ATTRIBUTE	BWAS-UserId	121	string
BroadSoft			
ATTRIBUTE	BWAS-Other-Party-Name	122	string
BroadSoft			
ATTRIBUTE	BWAS-Other-Party-Name-Pres-Indic	123	string
BroadSoft			
ATTRIBUTE	BWAS-Moh-Deact-Invoke-Time	124	string
BroadSoft			
ATTRIBUTE	BWAS-Moh-Deact-Fac-Result	125	string
BroadSoft			
ATTRIBUTE	BWAS-Push-to-Talk-Invoke-Time	126	string
BroadSoft			
ATTRIBUTE	BWAS-Push-to-Talk-Fac-Result	127	string
BroadSoft			
ATTRIBUTE	BWAS-Hoteling-Invoke-Time	128	string
BroadSoft			
ATTRIBUTE	BWAS-Hoteling-Group	129	string
BroadSoft			
ATTRIBUTE	BWAS-Hoteling-UserId	130	string
BroadSoft			
ATTRIBUTE	BWAS-Hoteling-User-Number	131	string
BroadSoft			
ATTRIBUTE	BWAS-Hoteling-Group-Number	132	string
BroadSoft			
ATTRIBUTE	BWAS-Diversion-Inhibitor-Invoke-time	133	string
BroadSoft			
ATTRIBUTE	BWAS-Diversion-Inhibitor-Fac-Result	134	string
BroadSoft			
ATTRIBUTE	BWAS-Trunk-Group-Name	135	string
BroadSoft			
ATTRIBUTE	BWAS-Spare-136	136	string
BroadSoft			
ATTRIBUTE	BWAS-InstantGroupCall-Invoke-Time	137	string
BroadSoft			
ATTRIBUTE	BWAS-InstantGroupCall-PushToTalk	138	string
BroadSoft			
ATTRIBUTE	BWAS-InstantGroupCall-Related-Callid	139	string
BroadSoft			
ATTRIBUTE	BWAS-CustomRingback-Invoke-Time	140	string
BroadSoft			
ATTRIBUTE	BWAS-CLID-Permitted	141	string
BroadSoft			
ATTRIBUTE	BWAS-AHR-Invoke-Time	142	string
BroadSoft			
ATTRIBUTE	BWAS-AHR-Action	143	string
BroadSoft			
ATTRIBUTE	BWAS-Access-Network-Info	144	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Function-Addresses	145	string
BroadSoft			

ATTRIBUTE	BWAS-Charge-Number	146	string
BroadSoft			
ATTRIBUTE	BWAS-Related-CallId	147	string
BroadSoft			
ATTRIBUTE	BWAS-Related-CallId-Reason	148	string
BroadSoft			
ATTRIBUTE	BWAS-Transfer-Invoke-Time	149	string
BroadSoft			
ATTRIBUTE	BWAS-Transfer-Result	150	string
BroadSoft			
ATTRIBUTE	BWAS-Transfer-Related-CallId	151	string
BroadSoft			
ATTRIBUTE	BWAS-Transfer-Type	152	string
BroadSoft			
ATTRIBUTE	BWAS-Conf-Start-Time	153	string
BroadSoft			
ATTRIBUTE	BWAS-Conf-Stop-Time	154	string
BroadSoft			
ATTRIBUTE	BWAS-Conf-Id	155	string
BroadSoft			
ATTRIBUTE	BWAS-Conf-Type	156	string
BroadSoft			
ATTRIBUTE	BWAS-Codec-Usage	157	string
BroadSoft			
ATTRIBUTE	BWAS-Vmb-Act-Invoke-Time	158	string
BroadSoft			
ATTRIBUTE	BWAS-Vmb-Act-Fac-Result	159	string
BroadSoft			
ATTRIBUTE	BWAS-Vmb-Deact-Invoke-Time	160	string
BroadSoft			
ATTRIBUTE	BWAS-Vmb-Deact-Fac-Result	161	string
BroadSoft			
ATTRIBUTE	BWAS-Vmna-Act-Invoke-Time	162	string
BroadSoft			
ATTRIBUTE	BWAS-Vmna-Act-Fac-Result	163	string
BroadSoft			
ATTRIBUTE	BWAS-Vmna-Deact-Invoke-Time	164	string
BroadSoft			
ATTRIBUTE	BWAS-Vmna-Deact-Fac-Result	165	string
BroadSoft			
ATTRIBUTE	BWAS-Vma-Act-Invoke-Time	166	string
BroadSoft			
ATTRIBUTE	BWAS-Vma-Act-Fac-Result	167	string
BroadSoft			
ATTRIBUTE	BWAS-Vma-Deact-Invoke-Time	168	string
BroadSoft			
ATTRIBUTE	BWAS-Vma-Deact-Fac-Result	169	string
BroadSoft			
ATTRIBUTE	BWAS-No-Answer-Set-Invoke-Time	170	string
BroadSoft			
ATTRIBUTE	BWAS-No-Answer-Set-Fac-Result	171	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Act-Invoke-Time	172	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Act-Fac-Result	173	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Deact-Invoke-Time	174	string
BroadSoft			
ATTRIBUTE	BWAS-Clid-Blocking-Deact-Fac-Result	175	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Waiting-Act-Invoke-Time	176	string
BroadSoft			

ATTRIBUTE	BWAS-Call-Waiting-Act-Fac-Result	177	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Waiting-Deact-Invoke-Time	178	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Waiting-Deact-Fac-Result	179	string
BroadSoft			
ATTRIBUTE	BWAS-Fax-Messaging	180	string
BroadSoft			
ATTRIBUTE	BWAS-TSD-Digits	181	string
BroadSoft			
ATTRIBUTE	BWAS-Trunk-Group-Info	182	string
BroadSoft			
ATTRIBUTE	BWAS-Recall-Type	183	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Act-Invoke-Time	184	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Act-Fac-Result	185	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Deact-Invoke-Time	186	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Deact-Fac-Result	187	string
BroadSoft			
ATTRIBUTE	BWAS-Q850-Cause	188	string
BroadSoft			
ATTRIBUTE	BWAS-Dialed-Digits-Context	189	string
BroadSoft			
ATTRIBUTE	BWAS-Called-Number-Context	190	string
BroadSoft			
ATTRIBUTE	BWAS-Network-Translated-Number-Context	191	string
BroadSoft			
ATTRIBUTE	BWAS-Calling-Number-Context	192	string
BroadSoft			
ATTRIBUTE	BWAS-Original-Called-Number-Context	193	string
BroadSoft			
ATTRIBUTE	BWAS-Redirecting-Number-Context	194	string
BroadSoft			
ATTRIBUTE	BWAS-Location-Control-Act-Result	195	string
BroadSoft			
ATTRIBUTE	BWAS-Location-Control-Deact-Result	196	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Retrieve-Result	197	string
BroadSoft			
ATTRIBUTE	BWAS-Routing-Number	198	string
BroadSoft			
ATTRIBUTE	BWAS-Origination-Method	199	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Parked-Invoke-Time	200	string
BroadSoft			
ATTRIBUTE	BWAS-BA-Related-Call-Id	201	string
BroadSoft			
ATTRIBUTE	BWAS-Acr-Act-Invoke-Time	202	string
BroadSoft			
ATTRIBUTE	BWAS-Acr-Act-Fac-Result	203	string
BroadSoft			
ATTRIBUTE	BWAS-Acr-Deact-Invoke-Time	204	string
BroadSoft			
ATTRIBUTE	BWAS-Acr-Deact-Fac-Result	205	string
BroadSoft			
ATTRIBUTE	BWAS-Outside-Access-Code	206	string
BroadSoft			
ATTRIBUTE	BWAS-Primary-Device-Line-Port	207	string
BroadSoft			

ATTRIBUTE	BWAS-Called-Asserted-Identity	208	string
BroadSoft			
ATTRIBUTE	BWAS-Called-Asserted-Pres-Indicator	209	string
BroadSoft			
ATTRIBUTE	BWAS-SDP	210	string
BroadSoft			
ATTRIBUTE	BWAS-Media-Initiator-Flag	211	string
BroadSoft			
ATTRIBUTE	BWAS-SDP-Offer-Timestamp	212	string
BroadSoft			
ATTRIBUTE	BWAS-SDP-Answer-Timestamp	213	string
BroadSoft			
ATTRIBUTE	BWAS-Early-Media-SDP	214	string
BroadSoft			
ATTRIBUTE	BWAS-Early-Media-Initiator-Flag	215	string
BroadSoft			
ATTRIBUTE	BWAS-Body-Content-Type	216	string
BroadSoft			
ATTRIBUTE	BWAS-Body-Content-Length	217	string
BroadSoft			
ATTRIBUTE	BWAS-Body-Content-Disposition	218	string
BroadSoft			
ATTRIBUTE	BWAS-Body-Originator	219	string
BroadSoft			
ATTRIBUTE	BWAS-SIP-Error-Code	220	string
BroadSoft			
ATTRIBUTE	BWAS-otherInfoInPCV	221	string
BroadSoft			
ATTRIBUTE	BWAS-Received-Calling-Number	222	string
BroadSoft			
ATTRIBUTE	BWAS-CustomRingback-Media-Selection	223	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Type	224	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Charge	225	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Currency	226	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Time	227	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Sum	228	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Activation-Time	229	string
BroadSoft			
ATTRIBUTE	BWAS-AOC-Result	230	string
BroadSoft			
ATTRIBUTE	BWAS-AS-Call-Type	231	string
BroadSoft			
ATTRIBUTE	BWAS-Scf-Act-Invoke-Time	232	string
BroadSoft			
ATTRIBUTE	BWAS-Scf-Act-Fac-Result	233	string
BroadSoft			
ATTRIBUTE	BWAS-Scf-Deact-Invoke-Time	234	string
BroadSoft			
ATTRIBUTE	BWAS-Scf-Deact-Fac-Result	235	string
BroadSoft			
ATTRIBUTE	BWAS-Cfa-Inter-Invoke-Time	236	string
BroadSoft			
ATTRIBUTE	BWAS-Cfa-Inter-Fac-Result	237	string
BroadSoft			
ATTRIBUTE	BWAS-Cfna-Inter-Invoke-Time	238	string
BroadSoft			

ATTRIBUTE	BWAS-Cfna-Inter-Fac-Result	239	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Inter-Invoke-Time	240	string
BroadSoft			
ATTRIBUTE	BWAS-Cfb-Inter-Fac-Result	241	string
BroadSoft			
ATTRIBUTE	BWAS-CBF-Auth-Code	242	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Bridge-Result	243	string
BroadSoft			
ATTRIBUTE	BWAS-Return-Call-Number-Deletion-Invoke-Time	244	string
BroadSoft			
ATTRIBUTE	BWAS-Return-Call-Number-Deletion-Fac-Result	245	string
BroadSoft			
ATTRIBUTE	BWAS-Prepaid-Status	246	string
BroadSoft			
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ATTRIBUTE	BWAS-Call-Center-Night-Service-Act-Result	248	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Night-Service-Deact-Result	249	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Forced-Forwarding-Act-Result	250	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Forced-Forwarding-Deact-Result	251	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Outgoing-Call-FAC-Result	252	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Outgoing-Personal-Call-FAC-Result	253	string
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ATTRIBUTE	BWAS-Call-Center-Outgoing-Phone-Number	254	string
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ATTRIBUTE	BWAS-Intercept-User-Routing-Number	255	string
BroadSoft			
ATTRIBUTE	BWAS-Intercept-Group-Routing-Number	256	string
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ATTRIBUTE	BWAS-CB-Activation-Invoke-Time	257	string
BroadSoft			
ATTRIBUTE	BWAS-CB-Activation-Fac-Result	258	string
BroadSoft			
ATTRIBUTE	BWAS-CB-Deactivation-Invoke-Time	259	string
BroadSoft			
ATTRIBUTE	BWAS-CB-Deactivation-Fac-Result	260	string
BroadSoft			
ATTRIBUTE	BWAS-CB-Query-Invoke-Time	261	string
BroadSoft			
ATTRIBUTE	BWAS-CB-Query-Fac-Result	262	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Inter-Invoke-Time	263	string
BroadSoft			
ATTRIBUTE	BWAS-Cfnrc-Inter-Fac-Result	264	string
BroadSoft			
ATTRIBUTE	BWAS-VMR-Dialing-Invoke-Time	265	string
BroadSoft			
ATTRIBUTE	BWAS-VMR-Dialing-Fac-result	266	string
BroadSoft			
ATTRIBUTE	BWAS-VP-Dialing-Invoke-Time	267	string
BroadSoft			
ATTRIBUTE	BWAS-VP-Dialing-Fac-result	268	string
BroadSoft			
ATTRIBUTE	BWAS-Camel-Loc-Info	269	string
BroadSoft			

ATTRIBUTE	BWAS-Camel-Msc-Address	270	string
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ATTRIBUTE	BWAS-Camel-CellId-Or-LAI	271	string
BroadSoft			
ATTRIBUTE	BWAS-NAME-Permitted	272	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-User-Id	273	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Center-Outgoing-Group-Phone-Number	274	string
BroadSoft			
ATTRIBUTE	BWAS-VON-Type	275	string
BroadSoft			
ATTRIBUTE	BWAS-PreAlertingAnnmtDuration	276	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Disp-Code-Tagging-Invoke-Time	277	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Disp-Code-Tagging-Result	278	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Escalated-Call-Invoke-Time	279	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Escalated-Call-FAC-Result	280	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Monitoring-BI-Invoke-Time	281	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Monitoring-BI-FAC-Result	282	string
BroadSoft			
ATTRIBUTE	BWAS-Mid-Call-Cot-Invoke-Time	283	string
BroadSoft			
ATTRIBUTE	BWAS-Office-Zone	284	string
BroadSoft			
ATTRIBUTE	BWAS-Primary-Zone	285	string
BroadSoft			
ATTRIBUTE	BWAS-Roaming-MS-C-Address	286	string
BroadSoft			
ATTRIBUTE	BWAS-CC-Emergency-Call-Invoke-Time	287	string
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ATTRIBUTE	BWAS-Monitoring-Next-Call-Invoke-Time	288	string
BroadSoft			
ATTRIBUTE	BWAS-Monitoring-Next-Call-FAC-Result	289	string
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BroadSoft			
ATTRIBUTE	BWAS-Legacy-Acb-Act-Fac-Result	291	string
BroadSoft			
ATTRIBUTE	BWAS-Legacy-Acb-Deact-Invoke-Time	292	string
BroadSoft			
ATTRIBUTE	BWAS-Legacy-Acb-Deact-Fac-Result	293	string
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ATTRIBUTE	BWAS-Custom-Schema-Version	294	string
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ATTRIBUTE	BWAS-Group-Paging-Related-CallId	296	string
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ATTRIBUTE	BWAS-DCLID	297	string
BroadSoft			
ATTRIBUTE	BWAS-MeetMeConferencing-InvokeTime	298	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Me-Now-Type	299	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Me-Now-Transaction-Id	300	string
BroadSoft			

ATTRIBUTE	BWAS-Call-Me-Now-Related-Call-Id	301	string
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ATTRIBUTE	BWAS-MeetMeConferencing-Bridge	304	string
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ATTRIBUTE	BWAS-MeetMeConferencing-OwnerDn	306	string
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ATTRIBUTE	BWAS-MeetMeConferencing-Title	307	string
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ATTRIBUTE	BWAS-MeetMeConferencing-ProjectCode	308	string
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ATTRIBUTE	BWAS-MobilityRoutingNumber	311	string
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ATTRIBUTE	BWAS-Location-Type	313	string
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ATTRIBUTE	BWAS-Location-Usage	314	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Invocation-Time	315	string
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ATTRIBUTE	BWAS-Call-Recording-FAC-Result	316	string
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ATTRIBUTE	BWAS-Call-Recording-Result	319	string
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ATTRIBUTE	BWAS-Calling-Asserted-Number-Context	323	string
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ATTRIBUTE	BWAS-Acr-Inter-Fac-Result	328	string
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BroadSoft			
ATTRIBUTE	BWAS-CW-Inter-Fac-Result	330	string
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ATTRIBUTE	BWAS-Clid-Blocking-Inter-Fac-Result	332	string
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BroadSoft			
ATTRIBUTE	BWAS-Colr-Inter-Fac-Result	334	string
BroadSoft			
ATTRIBUTE	BWAS-Scr-Inter-Invoke-Time	335	string
BroadSoft			
ATTRIBUTE	BWAS-Scr-Inter-Fac-Result	336	string
BroadSoft			
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BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Activation-FAC-Result	338	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Activation-Target-HuntGroupId	339	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Deactivation-Invocation-Time	340	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Deactivation-FAC-Result	341	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Deactivation-Target-HuntGroupId	342	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Interrogation-Invocation-Time	343	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Interrogation-FAC-Result	344	string
BroadSoft			
ATTRIBUTE	BWAS-HuntGroupBusy-Interrogation-Target-HuntGroupId	345	string
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ATTRIBUTE	BWAS-User-Agent	346	string
BroadSoft			
ATTRIBUTE	BWAS-FMFM-Call-Push-Invocation-Time	347	string
BroadSoft			
ATTRIBUTE	BWAS-FMFM-Call-Push-FAC-Result	348	string
BroadSoft			
ATTRIBUTE	BWAS-SCC-Cause	349	string
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ATTRIBUTE	BWAS-Executive-Assistant-Initiate-Call-Invocation-Time	350	string
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ATTRIBUTE	BWAS-Executive-Assistant-Initiate-Call-FAC-Result	351	string
BroadSoft			
ATTRIBUTE	BWAS-Executive-Assistant-Call-Push-Invocation-Time	352	string
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ATTRIBUTE	BWAS-Executive-Assistant-Call-Push-FAC-Result	353	string
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BroadSoft			
ATTRIBUTE	BWAS-Executive-Call-Filtering-Activation-FAC-Result	355	string
BroadSoft			
ATTRIBUTE	BWAS-Executive-Call-Filtering-Deactivation-Invocation-Time	356	string
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ATTRIBUTE	BWAS-Executive-Assistant-Opt-in-FAC-Result	359	string
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ATTRIBUTE	BWAS-Executive-Assistant-Opt-out-Invocation-Time	360	string
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ATTRIBUTE	BWAS-Executive-Assistant-Opt-out-FAC-Result	361	string
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ATTRIBUTE	BWAS-Cic-Inserted-As-Cac	362	string
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ATTRIBUTE	BWAS-Calling-Party-Address	363	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Start-Invocation-Time	364	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Start-FAC-Result	365	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Stop-Invocation-Time	366	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Stop-FAC-Result	367	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Pause-Invocation-Time	368	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Pause-FAC-Result	369	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Resume-Invocation-Time	370	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Recording-Resume-FAC-Result	371	string
BroadSoft			
ATTRIBUTE	BWAS-External-Tracking-Id	372	string
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ATTRIBUTE	BWAS-Flexible-Seating-Guest-Invoke-Time	373	string
BroadSoft			
ATTRIBUTE	BWAS-Flexible-Seating-Guest-HostGroup	374	string
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ATTRIBUTE	BWAS-Flexible-Seating-Guest-HostUserId	375	string
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ATTRIBUTE	BWAS-Flexible-Seating-Guest-HostUserNumber	376	string
BroadSoft			
ATTRIBUTE	BWAS-Flexible-Seating-Guest-HostGroupNumber	377	string
BroadSoft			
ATTRIBUTE	BWAS-Gets	378	string
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ATTRIBUTE	BWAS-Num-Port-Npdi	379	string
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ATTRIBUTE	BWAS-Num-Port-Rn	380	string
BroadSoft			
ATTRIBUTE	BWAS-Num-Port-Status	381	string
BroadSoft			
ATTRIBUTE	BWAS-Num-Port-Annc-Activation-Invocation-Time	382	string
BroadSoft			
ATTRIBUTE	BWAS-Num-Port-Annc-Activation-FAC-Result	383	string
BroadSoft			
ATTRIBUTE	BWAS-Num-Port-Annc-Deactivation-Invocation-Time	384	string
BroadSoft			
ATTRIBUTE	BWAS-Num-Port-Annc-Deactivation-FAC-Result	385	string
BroadSoft			
ATTRIBUTE	BWAS-Called-Party-Address	386	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Activation-Invocation-Time	387	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Activation-FAC-Result	388	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Deactivation-Invocation-Time	389	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Deactivation-FAC-Result	390	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Activation-Per-Call-Invocation-Time	391	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Call-Anchoring-Activation-Per-Call-FAC-Result	392	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Activation-Invocation-Time	393	string
BroadSoft			

ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Activation-FAC-Result	394	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Deactivation-Invocation-Time	395	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Deactivation-FAC-Result	396	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Activation-Per-Call-Invocation-Time	397	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Activation-Per-Call-FAC-Result	398	string
BroadSoft			
ATTRIBUTE	BWAS-Mobility-Calling-Line-ID-Deactivation-Per-Call-Invocation-Time	399	string
BroadSoft			
ATTRIBUTE	BWAS-Personal-Assistant-Presence	401	string
BroadSoft			
ATTRIBUTE	BWAS-Answer-Confirmation-Invocation-Time	402	string
BroadSoft			
ATTRIBUTE	BWAS-Answer-Confirmation-Time	403	string
BroadSoft			
ATTRIBUTE	BWAS-Route-List-Number	404	string
BroadSoft			
ATTRIBUTE	BWAS-Collaborate-InvokeTime	405	string
BroadSoft			
ATTRIBUTE	BWAS-Collaborate-RoomID	406	string
BroadSoft			
ATTRIBUTE	BWAS-Collaborate-Role	407	string
BroadSoft			
ATTRIBUTE	BWAS-Collaborate-Bridge	408	string
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ATTRIBUTE	BWAS-Collaborate-Owner	409	string
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ATTRIBUTE	BWAS-Collaborate-OwnerDn	410	string
BroadSoft			
ATTRIBUTE	BWAS-Collaborate-RoomName	411	string
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ATTRIBUTE	BWAS-Collaborate-RoomType	412	string
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ATTRIBUTE	BWAS-BTLU-Exceeded	413	string
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ATTRIBUTE	BWAS-Ent-Trunk-Cap-Exceeded	414	string
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ATTRIBUTE	BWAS-customInfoInPCV	415	string
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ATTRIBUTE	BWAS-receivedRoute	416	string
BroadSoft			
ATTRIBUTE	BWAS-alternateCarrierSelection	417	string
BroadSoft			
ATTRIBUTE	BWAS-receivedChargingVector	418	string
BroadSoft			
ATTRIBUTE	BWAS-Phone-List-Calling-Name	419	string
BroadSoft			
ATTRIBUTE	BWAS-Received-TimeZone	420	string
BroadSoft			
ATTRIBUTE	BWAS-User-Equipment-Info	421	string
BroadSoft			
ATTRIBUTE	BWAS-Charging-Group-Id	422	string
BroadSoft			
ATTRIBUTE	BWAS-Incoming-Reason	423	string
BroadSoft			
ATTRIBUTE	BWAS-Outgoing-Reason	424	string
BroadSoft			

ATTRIBUTE	BWAS-Requested-Party-Address	425	string
BroadSoft			
ATTRIBUTE	BWAS-Private-User-Identity	426	string
BroadSoft			
ATTRIBUTE	BWAS-Music-On-Hold-Invocation-Time	427	string
BroadSoft			
ATTRIBUTE	BWAS-Location-Network	428	string
BroadSoft			
ATTRIBUTE	BWAS-E911-Psap-Callback-Attempt	429	string
BroadSoft			
ATTRIBUTE	BWAS-Access-Network-Info-From-Register	430	string
BroadSoft			
ATTRIBUTE	BWAS-Direct-Route-Number	431	string
BroadSoft			
ATTRIBUTE	BWAS-IMRN-From-Xsi	432	string
BroadSoft			
ATTRIBUTE	BWAS-Outgoing-Privacy	433	string
BroadSoft			
ATTRIBUTE	BWAS-Push-Notification-Retrieval-Invocation-Time	434	string
BroadSoft			
ATTRIBUTE	BWAS-Push-Notification-Retrieval-Fac-Result	435	string
BroadSoft			
ATTRIBUTE	BWAS-MSC-Identity	436	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Parked-Parked-Against	437	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Park-Retr-Retrieved-Against	438	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Pickup-Picked-Up-User	439	string
BroadSoft			
ATTRIBUTE	BWAS-Directed-Call-Pickup-Picked-Up-User	440	string
BroadSoft			
ATTRIBUTE	BWAS-Dpubi-Barged-In-User	441	string
BroadSoft			
ATTRIBUTE	BWAS-Outgoing-Trunk-Group	442	string
BroadSoft			
ATTRIBUTE	BWAS-GETS-OriginationType	443	string
BroadSoft			
ATTRIBUTE	BWAS-GETS-PriorityLevel	444	string
BroadSoft			
ATTRIBUTE	BWAS-Cell-Identity	445	string
BroadSoft			
ATTRIBUTE	BWAS-Sector-Identity	446	string
BroadSoft			
ATTRIBUTE	BWAS-Received-Called-Asserted-Identity	447	string
BroadSoft			
ATTRIBUTE	BWAS-Reseller	448	string
BroadSoft			
ATTRIBUTE	BWAS-IMSI	449	string
BroadSoft			
ATTRIBUTE	BWAS-Call-Reference-Number	450	string
BroadSoft			
ATTRIBUTE	BWAS-VLR-Number	451	string
BroadSoft			
ATTRIBUTE	BWAS-Automatic-Collect-Call-Type	452	string
BroadSoft			
ATTRIBUTE	BWAS-Automatic-Collect-Call-Connect-Time	453	string
BroadSoft			
#			
#			

Appendix C: Document Type Definition (DTD) for BroadWorks XML CDRs

NOTE: The document type definition (DTD) for BroadWorks Call Detail Records (CDR) in XML format is also provided in a file called *broadWorksCDR.dtd*.

```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT broadWorksCDR (cdrData*)>
<!ATTLIST broadWorksCDR version CDATA #REQUIRED>
<!ELEMENT cdrData ((headerModule|basicModule|centrexModule|ipModule|tgppModule|
partialCallBeginModule|partialCallEndModule)*)>
<!ELEMENT headerModule ((recordId|serviceProvider|type)*)>
<!ELEMENT basicModule ((userNumber|groupNumber|direction|asCallType|callingNumber|
callingNumberContext|callingPresentationNumber|callingPresentationNumberContext|
callingAssertedNumber|callingAssertedNumberContext|dialableCallingNumber|
callingPresentationIndicator|dialedDigits|dialedDigitsContext|calledNumber|
calledNumberContext|networkTranslatedNumber|networkTranslatedNumberContext|
networkTranslatedGroup|startTime|userTimeZone|localCallId|remoteCallId|
answerIndicator|answerTime|releaseTime|terminationCause|q850Cause|
carrierIdentificationCode|callCategory|networkCallType|chargeIndicator|typeOfNetwork|
releasingParty|userId|otherPartyName|otherPartyNamePresentationIndicator|
clidPermitted|receivedCallingNumber|namePermitted|reseller)*)>
<!ELEMENT centrexModule ((group|department|accountCode|authorizationCode|
cbfAuthorizationCode|callingPartyCategory|outsideAccessCode|originalCalledNumber|
originalCalledNumberContext|originalCalledPresentationIndicator|originalCalledReason|
redirectingNumber|redirectingNumberContext|redirectingPresentationIndicator|
redirectingReason|btluExceeded|enterpriseTrunkCapacityExceeded|trunkGroupName|
trunkGroupInfo|chargeNumber|relatedCallId|relatedCallIdReason|faxMessaging|
twoStageDialingDigits|recallType|originationMethod|phoneListCallingName|
imrnFromXsi|outgoingTrunkGroup|serviceExtensionList|prepaidStatus|
configurableCLID|virtualOnNetType|officeZone|primaryZone|roamingMscAddress|
customSchemaVersion|locationList|locationUsage|cicInsertedAsCac|extTrackingId|
answerConfirmationInvocationTime|answerConfirmationTime)*)>
<!ELEMENT ipModule ((route|networkCallId|codec|accessDeviceAddress|accessCallId|
accessNetworkInfo|correlationInfo|receivedChargingVector|chargingFunctionAddresses|
codecUsage|routingNumber|pCamelLocInfo|pCamelMscAddress|pCamelCellIDorLAI|userAgent|
gets|getsOriginationType|getsPriorityLevel|accessNetworkInfoFromRegister|imsi|
callReferenceNumber|vlrNumber|e911PsapCallbackAttempt)*)>
<!ELEMENT tgppModule ((primaryDeviceLinePort|calledAssertedIdentity|
calledAssertedPresentationIndicator|sdp|mediaInitiatorFlag|earlyMediaList|
messageBodyList|sipErrorCode|callingPartyAddressList|calledPartyAddress|
receivedRoute|receivedTimeZone|userEquipmentInfo|chargingGroupId|incomingReasonList|
outgoingReason|requestedPartyAddress|privateUserIdentity|outgoingPrivacy|
receivedCalledAssertedIdentityList)*)>
<!ELEMENT partialCallBeginModule (failoverCorrelationId)>
<!ELEMENT partialCallEndModule ((correlationInfo|failoverCorrelationId)*)>
<!ELEMENT serviceExtensionList (serviceExtension+)>
<!ELEMENT serviceExtension ((serviceName|invocationTime|facResult|
parkedAgainst|retrievedAgainst|pickedUpUser|bargedInUser|host|pushToTalk|
relatedCallId|mediaSelection|action|result|type|startTime|stopTime|confId|
locationActivationResult|locationDeactivationResult|callRetrieveResult|
charge|currency|time|sum|callBridgeResult|nightServiceActivationMOResult|
nightServiceDeactivationMOResult|forcedForwardingActivationResult|
forcedForwardingDeactivationResult|outgoingCallCenterCallFACResult|
outgoingPersonalCallFACResult|outgoingCallCenterPhoneNumber|outgoingCallCenterUserId|
outgoingCallCenterGroupNumber|routingNumber|preAlertingDuration|conferenceId|
role|bridge|owner|ownerDN|title|projectCode|recordingDuration|transactionId|
mobilityNumber|mobilityRoutingNumber|recordingTrigger|recordingDestination|
recordingResult|sccCallId|sccNumber|sccCause|mscIdentity|cellIdentity|sectorIdentity|
```



```
targetHuntGroupId|flexibleSeatingHost|npdi|rn|status|presence|routeListNumber|
directRouteNumber|roomId|roomName|roomType|selectScheme|callType|connectTime)*>
<!ELEMENT locationList ((locationInformation)*)>
<!ELEMENT earlyMediaList ((earlyMedia)*)>
<!ELEMENT messageBodyList ((messageBody)*)>
<!ELEMENT callingPartyAddressList ((callingPartyAddress)*)>
<!ELEMENT incomingReasonList ((incomingReason)*)>
<!ELEMENT receivedCalledAssertedIdentityList ((receivedCalledAssertedIdentity)*)>
<!ELEMENT recordId ((eventCounter|systemId|date|systemTimeZone)*)>
<!ELEMENT host ((group|userId|userNumber|groupNumber)*)>
<!ELEMENT flexibleSeatingHost ((hostGroup|hostUserId|hostUserNumber|
hostGroupNumber)*)>
<!ELEMENT locationInformation ((location|locationType|locationNetwork)*)>
<!ELEMENT correlationInfo ((key|creator|originatorNetwork|terminatorNetwork|
otherInfoInPCV|customInfoInPCV)*)>
<!ELEMENT earlyMedia ((sdpOfferTimestamp|sdpAnswerTimestamp|earlyMediaSdp|
earlyMediaInitiatorFlag)*)>
<!ELEMENT messageBody ((bodyContentType|bodyContentLength|bodyContentDisposition|
bodyOriginator)*)>
<!ELEMENT eventCounter (#PCDATA)>
<!ELEMENT systemId (#PCDATA)>
<!ELEMENT date (#PCDATA)>
<!ELEMENT systemTimeZone (#PCDATA)>
<!ELEMENT serviceProvider (#PCDATA)>
<!ELEMENT type (#PCDATA)>
<!ELEMENT serviceName (#PCDATA)>
<!ELEMENT userNumber (#PCDATA)>
<!ELEMENT groupNumber (#PCDATA)>
<!ELEMENT direction (#PCDATA)>
<!ELEMENT asCallType (#PCDATA)>
<!ELEMENT callingNumber (#PCDATA)>
<!ELEMENT callingNumberContext (#PCDATA)>
<!ELEMENT callingPresentationNumber (#PCDATA)>
<!ELEMENT callingPresentationNumberContext (#PCDATA)>
<!ELEMENT callingAssertedNumber (#PCDATA)>
<!ELEMENT callingAssertedNumberContext (#PCDATA)>
<!ELEMENT dialableCallingNumber (#PCDATA)>
<!ELEMENT callingPresentationIndicator (#PCDATA)>
<!ELEMENT dialedDigits (#PCDATA)>
<!ELEMENT dialedDigitsContext (#PCDATA)>
<!ELEMENT calledNumber (#PCDATA)>
<!ELEMENT calledNumberContext (#PCDATA)>
<!ELEMENT networkTranslatedNumber (#PCDATA)>
<!ELEMENT networkTranslatedNumberContext (#PCDATA)>
<!ELEMENT networkTranslatedGroup (#PCDATA)>
<!ELEMENT startTime (#PCDATA)>
<!ELEMENT userTimeZone (#PCDATA)>
<!ELEMENT localCallId (#PCDATA)>
<!ELEMENT remoteCallId (#PCDATA)>
<!ELEMENT answerIndicator (#PCDATA)>
<!ELEMENT answerTime (#PCDATA)>
<!ELEMENT releaseTime (#PCDATA)>
<!ELEMENT terminationCause (#PCDATA)>
<!ELEMENT q850Cause (#PCDATA)>
<!ELEMENT carrierIdentificationCode (#PCDATA)>
<!ELEMENT callCategory (#PCDATA)>
<!ELEMENT networkCallType (#PCDATA)>
<!ELEMENT chargeIndicator (#PCDATA)>
<!ELEMENT typeOfNetwork (#PCDATA)>
<!ELEMENT releasingParty (#PCDATA)>
<!ELEMENT userId (#PCDATA)>
<!ELEMENT otherPartyName (#PCDATA)>
```



```
<!ELEMENT otherPartyNamePresentationIndicator (#PCDATA)>
<!ELEMENT clidPermitted (#PCDATA)>
<!ELEMENT receivedCallingNumber (#PCDATA)>
<!ELEMENT namePermitted (#PCDATA)>
<!ELEMENT group (#PCDATA)>
<!ELEMENT department (#PCDATA)>
<!ELEMENT accountCode (#PCDATA)>
<!ELEMENT authorizationCode (#PCDATA)>
<!ELEMENT cbfAuthorizationCode (#PCDATA)>
<!ELEMENT callingPartyCategory (#PCDATA)>
<!ELEMENT outsideAccessCode (#PCDATA)>
<!ELEMENT originalCalledNumber (#PCDATA)>
<!ELEMENT originalCalledNumberContext (#PCDATA)>
<!ELEMENT originalCalledPresentationIndicator (#PCDATA)>
<!ELEMENT originalCalledReason (#PCDATA)>
<!ELEMENT redirectingNumber (#PCDATA)>
<!ELEMENT redirectingNumberContext (#PCDATA)>
<!ELEMENT redirectingPresentationIndicator (#PCDATA)>
<!ELEMENT redirectingReason (#PCDATA)>
<!ELEMENT btluExceeded (#PCDATA)>
<!ELEMENT enterpriseTrunkCapacityExceeded (#PCDATA)>
<!ELEMENT trunkGroupName (#PCDATA)>
<!ELEMENT trunkGroupInfo (#PCDATA)>
<!ELEMENT chargeNumber (#PCDATA)>
<!ELEMENT relatedCallId (#PCDATA)>
<!ELEMENT relatedCallIdReason (#PCDATA)>
<!ELEMENT faxMessaging (#PCDATA)>
<!ELEMENT twoStageDialingDigits (#PCDATA)>
<!ELEMENT recallType (#PCDATA)>
<!ELEMENT originationMethod (#PCDATA)>
<!ELEMENT phoneListCallingName (#PCDATA)>
<!ELEMENT imrnFromXsi (#PCDATA)>
<!ELEMENT outgoingTrunkGroup (#PCDATA)>
<!ELEMENT invocationTime (#PCDATA)>
<!ELEMENT facResult (#PCDATA)>
<!ELEMENT parkedAgainst (#PCDATA)>
<!ELEMENT retrievedAgainst (#PCDATA)>
<!ELEMENT pickedUpUser (#PCDATA)>
<!ELEMENT bargedInUser (#PCDATA)>
<!ELEMENT pushToTalk (#PCDATA)>
<!ELEMENT mediaSelection (#PCDATA)>
<!ELEMENT action (#PCDATA)>
<!ELEMENT result (#PCDATA)>
<!ELEMENT stopTime (#PCDATA)>
<!ELEMENT confId (#PCDATA)>
<!ELEMENT locationActivationResult (#PCDATA)>
<!ELEMENT locationDeactivationResult (#PCDATA)>
<!ELEMENT callRetrieveResult (#PCDATA)>
<!ELEMENT charge (#PCDATA)>
<!ELEMENT currency (#PCDATA)>
<!ELEMENT time (#PCDATA)>
<!ELEMENT sum (#PCDATA)>
<!ELEMENT callBridgeResult (#PCDATA)>
<!ELEMENT nightServiceActivationMOResult (#PCDATA)>
<!ELEMENT nightServiceDeactivationMOResult (#PCDATA)>
<!ELEMENT forcedForwardingActivationResult (#PCDATA)>
<!ELEMENT forcedForwardingDeactivationResult (#PCDATA)>
<!ELEMENT outgoingCallCenterCallFACResult (#PCDATA)>
<!ELEMENT outgoingPersonalCallFACResult (#PCDATA)>
<!ELEMENT outgoingCallCenterPhoneNumber (#PCDATA)>
<!ELEMENT outgoingCallCenterUserId (#PCDATA)>
<!ELEMENT outgoingCallCenterGroupNumber (#PCDATA)>
```

```
<!ELEMENT routingNumber (#PCDATA)>
<!ELEMENT preAlertingDuration (#PCDATA)>
<!ELEMENT conferenceId (#PCDATA)>
<!ELEMENT role (#PCDATA)>
<!ELEMENT bridge (#PCDATA)>
<!ELEMENT owner (#PCDATA)>
<!ELEMENT ownerDN (#PCDATA)>
<!ELEMENT title (#PCDATA)>
<!ELEMENT projectCode (#PCDATA)>
<!ELEMENT recordingDuration (#PCDATA)>
<!ELEMENT transactionId (#PCDATA)>
<!ELEMENT mobilityNumber (#PCDATA)>
<!ELEMENT mobilityRoutingNumber (#PCDATA)>
<!ELEMENT recordingTrigger (#PCDATA)>
<!ELEMENT recordingDestination (#PCDATA)>
<!ELEMENT recordingResult (#PCDATA)>
<!ELEMENT sccCallId (#PCDATA)>
<!ELEMENT sccNumber (#PCDATA)>
<!ELEMENT sccCause (#PCDATA)>
<!ELEMENT mscIdentity (#PCDATA)>
<!ELEMENT cellIdentity (#PCDATA)>
<!ELEMENT sectorIdentity (#PCDATA)>
<!ELEMENT targetHuntGroupId (#PCDATA)>
<!ELEMENT hostGroup (#PCDATA)>
<!ELEMENT hostUserId (#PCDATA)>
<!ELEMENT hostUserNumber (#PCDATA)>
<!ELEMENT hostGroupNumber (#PCDATA)>
<!ELEMENT npdi (#PCDATA)>
<!ELEMENT rn (#PCDATA)>
<!ELEMENT status (#PCDATA)>
<!ELEMENT presence (#PCDATA)>
<!ELEMENT routeListNumber (#PCDATA)>
<!ELEMENT directRouteNumber (#PCDATA)>
<!ELEMENT roomId (#PCDATA)>
<!ELEMENT roomName (#PCDATA)>
<!ELEMENT roomType (#PCDATA)>
<!ELEMENT selectScheme (#PCDATA)>
<!ELEMENT callType (#PCDATA)>
<!ELEMENT connectTime (#PCDATA)>
<!ELEMENT prepaidStatus (#PCDATA)>
<!ELEMENT configurableCLID (#PCDATA)>
<!ELEMENT virtualOnNetType (#PCDATA)>
<!ELEMENT officeZone (#PCDATA)>
<!ELEMENT primaryZone (#PCDATA)>
<!ELEMENT roamingMscAddress (#PCDATA)>
<!ELEMENT customSchemaVersion (#PCDATA)>
<!ELEMENT location (#PCDATA)>
<!ELEMENT locationType (#PCDATA)>
<!ELEMENT locationNetwork (#PCDATA)>
<!ELEMENT locationUsage (#PCDATA)>
<!ELEMENT cicInsertedAsCac (#PCDATA)>
<!ELEMENT extTrackingId (#PCDATA)>
<!ELEMENT answerConfirmationInvocationTime (#PCDATA)>
<!ELEMENT answerConfirmationTime (#PCDATA)>
<!ELEMENT route (#PCDATA)>
<!ELEMENT networkCallID (#PCDATA)>
<!ELEMENT codec (#PCDATA)>
<!ELEMENT accessDeviceAddress (#PCDATA)>
<!ELEMENT accessCallID (#PCDATA)>
<!ELEMENT accessNetworkInfo (#PCDATA)>
<!ELEMENT key (#PCDATA)>
<!ELEMENT creator (#PCDATA)>
```

```
<!ELEMENT originatorNetwork (#PCDATA)>
<!ELEMENT terminatorNetwork (#PCDATA)>
<!ELEMENT otherInfoInPCV (#PCDATA)>
<!ELEMENT customInfoInPCV (#PCDATA)>
<!ELEMENT receivedChargingVector (#PCDATA)>
<!ELEMENT chargingFunctionAddresses (#PCDATA)>
<!ELEMENT codecUsage (#PCDATA)>
<!ELEMENT pCamelLocInfo (#PCDATA)>
<!ELEMENT pCamelMscAddress (#PCDATA)>
<!ELEMENT pCamelCellIDorLAI (#PCDATA)>
<!ELEMENT userAgent (#PCDATA)>
<!ELEMENT gets (#PCDATA)>
<!ELEMENT getsOriginationType (#PCDATA)>
<!ELEMENT getsPriorityLevel (#PCDATA)>
<!ELEMENT accessNetworkInfoFromRegister (#PCDATA)>
<!ELEMENT imsi (#PCDATA)>
<!ELEMENT callReferenceNumber (#PCDATA)>
<!ELEMENT vlrNumber (#PCDATA)>
<!ELEMENT primaryDeviceLinePort (#PCDATA)>
<!ELEMENT calledAssertedIdentity (#PCDATA)>
<!ELEMENT calledAssertedPresentationIndicator (#PCDATA)>
<!ELEMENT sdp (#PCDATA)>
<!ELEMENT mediaInitiatorFlag (#PCDATA)>
<!ELEMENT sdpOfferTimestamp (#PCDATA)>
<!ELEMENT sdpAnswerTimestamp (#PCDATA)>
<!ELEMENT earlyMediaSdp (#PCDATA)>
<!ELEMENT earlyMediaInitiatorFlag (#PCDATA)>
<!ELEMENT bodyContentType (#PCDATA)>
<!ELEMENT bodyContentLength (#PCDATA)>
<!ELEMENT bodyContentDisposition (#PCDATA)>
<!ELEMENT bodyOriginator (#PCDATA)>
<!ELEMENT sipErrorCode (#PCDATA)>
<!ELEMENT callingPartyAddress (#PCDATA)>
<!ELEMENT calledPartyAddress (#PCDATA)>
<!ELEMENT receivedRoute (#PCDATA)>
<!ELEMENT receivedTimeZone (#PCDATA)>
<!ELEMENT userEquipmentInfo (#PCDATA)>
<!ELEMENT chargingGroupId (#PCDATA)>
<!ELEMENT incomingReason (#PCDATA)>
<!ELEMENT outgoingReason (#PCDATA)>
<!ELEMENT requestedPartyAddress (#PCDATA)>
<!ELEMENT privateUserIdentity (#PCDATA)>
<!ELEMENT e911PsapCallbackAttempt (#PCDATA)>
<!ELEMENT outgoingPrivacy (#PCDATA)>
<!ELEMENT receivedCalledAssertedIdentity (#PCDATA)>
<!ELEMENT reseller (#PCDATA)>
<!ELEMENT failoverCorrelationId (#PCDATA)>
```

Appendix D: XML Schema Definition (XSD) for BroadWorks XML CDRs

NOTE: The XML schema definition (XSD) for BroadWorks CDR in XML format is also provided in a file called *broadWorksCDR.xsd*.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">

  <xs:element name="broadWorksCDR" type="broadWorksCDR"/>

  <xs:complexType name="broadWorksCDR">
    <xs:sequence>
      <xs:element name="cdrData" minOccurs="0" maxOccurs="unbounded" type="cdrData"/>
    </xs:sequence>
    <xs:attribute name="version" type="xs:string"/>
  </xs:complexType>

  <xs:complexType name="cdrData">
    <xs:all>
      <xs:element name="headerModule" minOccurs="1" type="headerModule"/>
      <xs:element name="basicModule" minOccurs="0" type="basicModule"/>
      <xs:element name="centrexModule" minOccurs="0" type="centrexModule"/>
      <xs:element name="ipModule" minOccurs="0" type="ipModule"/>
      <xs:element name="tgppModule" minOccurs="0" type="tgppModule"/>
      <xs:element name="partialCallBeginModule" minOccurs="0"
type="partialCallBeginModule"/>
      <xs:element name="partialCallEndModule" minOccurs="0"
type="partialCallEndModule"/>
    </xs:all>
  </xs:complexType>

  <xs:complexType name="headerModule">
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      <xs:element name="type" minOccurs="1" type="xs:string"/>
    </xs:all>
  </xs:complexType>

  <xs:complexType name="basicModule">
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      <xs:element name="userNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="groupNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="direction" minOccurs="0" type="xs:string"/>
      <xs:element name="asCallType" minOccurs="0" type="xs:string"/>
      <xs:element name="callingNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="callingNumberContext" minOccurs="0" type="xs:string"/>
      <xs:element name="callingPresentationNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="callingPresentationNumberContext" minOccurs="0"
type="xs:string"/>
      <xs:element name="callingAssertedNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="callingAssertedNumberContext" minOccurs="0" type="xs:string"/>
    >
      <xs:element name="dialableCallingNumber" minOccurs="0" type="xs:string"/>
      <xs:element name="callingPresentationIndicator" minOccurs="0" type="xs:string"/>
    >
      <xs:element name="dialedDigits" minOccurs="0" type="xs:string"/>
      <xs:element name="dialedDigitsContext" minOccurs="0" type="xs:string"/>
    </xs:all>
  </xs:complexType>
</xs:schema>
```

```

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<xs:element name="calledNumberContext" minOccurs="0" type="xs:string"/>
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<xs:element name="networkTranslatedNumberContext" minOccurs="0"
type="xs:string"/>
<xs:element name="networkTranslatedGroup" minOccurs="0" type="xs:string"/>
<xs:element name="startTime" minOccurs="0" type="xs:string"/>
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<xs:element name="releaseTime" minOccurs="0" type="xs:string"/>
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<xs:element name="namePermitted" minOccurs="0" type="xs:string"/>
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<xs:element name="cbfAuthorizationCode" minOccurs="0" type="xs:string"/>
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<xs:element name="originalCalledNumber" minOccurs="0" type="xs:string"/>
<xs:element name="originalCalledNumberContext" minOccurs="0" type="xs:string"/>
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<xs:element name="redirectingPresentationIndicator" minOccurs="0"
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<xs:element name="enterpriseTrunkCapacityExceeded" minOccurs="0"
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<xs:element name="trunkGroupInfo" minOccurs="0" type="xs:string"/>
<xs:element name="chargeNumber" minOccurs="0" type="xs:string"/>
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<xs:element name="twoStageDialingDigits" minOccurs="0" type="xs:string"/>
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```

```

<xs:element name="originationMethod" minOccurs="0" type="xs:string"/>
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<xs:element name="configurableCLID" minOccurs="0" type="xs:string"/>
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<xs:element name="officeZone" minOccurs="0" type="xs:string"/>
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<xs:element name="roamingMscAddress" minOccurs="0" type="xs:string"/>
<xs:element name="customSchemaVersion" minOccurs="0" type="xs:string"/>
<xs:element name="locationList" minOccurs="0" type="locationList"/>
<xs:element name="locationUsage" minOccurs="0" type="xs:string"/>
<xs:element name="cicInsertedAsCac" minOccurs="0" type="xs:string"/>
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<xs:element name="answerConfirmationInvocationTime" minOccurs="0"
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<xs:element name="codec" minOccurs="0" type="xs:string"/>
<xs:element name="accessDeviceAddress" minOccurs="0" type="xs:string"/>
<xs:element name="accessCallID" minOccurs="0" type="xs:string"/>
<xs:element name="accessNetworkInfo" minOccurs="0" type="xs:string"/>
<xs:element name="correlationInfo" minOccurs="0" type="correlationInfo"/>
<xs:element name="receivedChargingVector" minOccurs="0" type="xs:string"/>
<xs:element name="chargingFunctionAddresses" minOccurs="0" type="xs:string"/>
<xs:element name="codecUsage" minOccurs="0" type="xs:string"/>
<xs:element name="routingNumber" minOccurs="0" type="xs:string"/>
<xs:element name="pCamelLocInfo" minOccurs="0" type="xs:string"/>
<xs:element name="pCamelMscAddress" minOccurs="0" type="xs:string"/>
<xs:element name="pCamelCellIDorLAI" minOccurs="0" type="xs:string"/>
<xs:element name="userAgent" minOccurs="0" type="xs:string"/>
<xs:element name="gets" minOccurs="0" type="xs:string"/>
<xs:element name="getsOriginationType" minOccurs="0" type="xs:string"/>
<xs:element name="getsPriorityLevel" minOccurs="0" type="xs:string"/>
<xs:element name="accessNetworkInfoFromRegister" minOccurs="0"
type="xs:string"/>
<xs:element name="imsi" minOccurs="0" type="xs:string"/>
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<xs:element name="vlrNumber" minOccurs="0" type="xs:string"/>
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</xs:complexType>

<xs:complexType name="tgppModule">
<xs:all>
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<xs:element name="calledAssertedIdentity" minOccurs="0" type="xs:string"/>
<xs:element name="calledAssertedPresentationIndicator" minOccurs="0"
type="xs:string"/>
<xs:element name="sdp" minOccurs="0" type="xs:string"/>
<xs:element name="mediaInitiatorFlag" minOccurs="0" type="xs:string"/>
<xs:element name="earlyMediaList" minOccurs="0" type="earlyMediaList"/>
<xs:element name="messageBodyList" minOccurs="0" type="messageBodyList"/>

```

```

        <xs:element name="sipErrorCode" minOccurs="0" type="xs:string"/>
        <xs:element name="callingPartyAddressList" minOccurs="0"
type="callingPartyAddressList"/>
        <xs:element name="calledPartyAddress" minOccurs="0" type="xs:string"/>
        <xs:element name="receivedRoute" minOccurs="0" type="xs:string"/>
        <xs:element name="receivedTimeZone" minOccurs="0" type="xs:string"/>
        <xs:element name="userEquipmentInfo" minOccurs="0" type="xs:string"/>
        <xs:element name="chargingGroupId" minOccurs="0" type="xs:string"/>
        <xs:element name="incomingReasonList" minOccurs="0" type="incomingReasonList"/>
        <xs:element name="outgoingReason" minOccurs="0" type="xs:string"/>
        <xs:element name="requestedPartyAddress" minOccurs="0" type="xs:string"/>
        <xs:element name="privateUserIdentity" minOccurs="0" type="xs:string"/>
        <xs:element name="outgoingPrivacy" minOccurs="0" type="xs:string"/>
        <xs:element name="receivedCalledAssertedIdentityList" minOccurs="0"
type="receivedCalledAssertedIdentityList"/>
    </xs:all>
</xs:complexType>

<xs:complexType name="partialCallBeginModule">
    <xs:all>
        <xs:element name="failoverCorrelationId" minOccurs="0" type="xs:string"/>
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</xs:complexType>

<xs:complexType name="partialCallEndModule">
    <xs:all>
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    </xs:all>
</xs:complexType>

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type="serviceExtension"/>
    </xs:sequence>
</xs:complexType>

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        <xs:element name="locationInformation" minOccurs="1" maxOccurs="unbounded"
type="locationInformation"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="earlyMediaList">
    <xs:sequence>
        <xs:element name="earlyMedia" minOccurs="1" maxOccurs="unbounded"
type="earlyMedia"/>
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</xs:complexType>

<xs:complexType name="messageBodyList">
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type="messageBody"/>
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</xs:complexType>

<xs:complexType name="callingPartyAddressList">
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type="xs:string"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="incomingReasonList">

```



```

<xs:sequence>
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type="xs:string"/>
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</xs:complexType>
<xs:complexType name="receivedCalledAssertedIdentityList">
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  </xs:sequence>
</xs:complexType>

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    <xs:element name="result" minOccurs="0" type="xs:string"/>
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    <xs:element name="callBridgeResult" minOccurs="0" type="xs:string"/>
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    <xs:element name="nightServiceDeactivationMOResult" minOccurs="0"
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    <xs:element name="outgoingCallCenterCallFACResult" minOccurs="0"
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    <xs:element name="outgoingPersonalCallFACResult" minOccurs="0"
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    <xs:element name="preAlertingDuration" minOccurs="0" type="xs:string"/>
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```



```

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<xs:element name="targetHuntGroupId" minOccurs="0" type="xs:string"/>
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Acronyms and Abbreviations

3GPP	3rd Generation Partnership Project
ACB	Automatic Callback
ACR	Accounting Request
AoC	Advice of Charge
AP	Application Patch
AS	Application Server
ASCII	American Standard Code for Information Interchange
ATA	Analog Telephone Adapters
ATCF	Access Transfer Control Function
ATU-STI	Access Transfer Update - Session Transfer Identifier
AVP	Attribute-Value Pair
BTLU	Business Trunking License Unit
BW	BroadWorks
CAC	Carrier Access Code
CAMEL	Customized Applications for Mobile Network Enhanced Logic
CAP	Client Application Protocol
CC	Country Code
CCR	Credit Control Request
CDR	Call Detail Record
CEA	Capabilities-Exchange-Answer
CER	Capabilities-Exchange-Request
CF	Collection Function
CFA	Charging Function Address
CFB	Call Forwarding Busy
CFNA	Call Forwarding No Answer
CLI	Command Line Interface
CLID	Calling Line ID
CPC	Calling Party Category
CPL	Call Processing Language
CPU	Central Processing Unit
CSCF	Call Session Control Function
CSRN	CS domain Routing Number
CSV	Comma Separated Value
DN	Directory Number
DND	Do Not Disturb
DNIS	Dialed Number Identification Service
DNS	Domain Name System

DTMF	Dual-Tone Multi-Frequency
E164	An ITU-T recommendation for international telecommunication numbering
EP	Emergency Patch
EV	ExtraView
FAC	Feature Access Codes
FMFM	Find-me/Follow-me
FQDN	Fully Qualified Domain Name
FTP	File Transfer Protocol
GMT	Greenwich Mean Time
IANA	Internet Assigned Numbers Authority
IMRN	IP Multimedia Routing Number
IMS	IP Multimedia Subsystem
IN	International
IP	Internet Protocol
IPv4	Internet Protocol Version 4
IPv6	Internet Protocol Version 6
ISO	International Organization for Standardization
LATA	Local Access Transport Area
MAC	Media Access Control
MD5	Message Digest 5 Algorithm
MGCP	Media Gateway Control Protocol
MP	Maintenance Patch
MS	Media Server
MSC	Mobile Switching Centre
MWI	Message Waiting Indicator or Indication
NAPTR	Naming Authority Pointer
NCOS	Network Class of Service
NS	Network Server
OCS	Online Charging System
P-CFA	P-Charging-Function-Addresses
PBX	Private Branch Exchange
PRACK	Provisional Response Acknowledgement
PSTN	Public Switched Telephone Network
PTT	Push To Talk
RADIUS	Remote Authentication Dial-In User Service
RAM	Random Access Memory
RTP	Real-Time Transport Protocol
SCA	Selective Call Acceptance
SCC	Service Centralization and Continuity

SCC AS PSI DN	Service Centralization and Continuity Application Server Public Service Identity Directory Number
SCF	Session Continuity Function
SCR	Selective Call Rejection
SDP	Session Description Protocol
SIP	Session Initiation Protocol
STN-SR	Session Transfer Number - Single Radio
TCP	Transmission Control Protocol
TLV	Type-length-value
UDP	User Datagram Protocol
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
UTC	Coordinated Universal Time
UUID	Universally Unique Identifier
VDN	VCC Domain Transfer URI
VDN	VCC Domain Transfer Number
VM	Voice Messaging
VMR	Voice Mail Retrieval
VoIP	Voice Over Internet Protocol
VP	Voice Portal
VSA	Vendor-Specific Attributes
XML	eXtensible Markup Language
XS	Execution Server
Xsi	Xtended Services Interface

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