Brooktrout Fax Products

Documentation Update

SDK Versions 6.15.0 and 6.14

January 2022

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Purpose

The purpose of this document is to capture the documentation changes for SDKs 6.15.0 and 6.14 . Specifically, it provides the information on the changes to the SDK 6.13 version of the Brooktrout Bfv APIs Reference Manual. The changes in this document will be incorporated into the Brooktrout Bfv APIs Reference Manual to be published at a future date.

Technical Support

For Technical Support, see https://mysupport.enghouse.com/ or email Brooktrout.support@enghouse.com.

Product Documentation

For the latest product documentation, see https://www.dialogic.com/manuals/brooktrout/brooktrout.

Advanced SIP IP Call Control Stack Parameters

The following items to be added to Table 27 on page 1276.

Key Name	Description
ignore_non_initial_record_route	This parameter is used to ignore or recognize non-initial record routes from incoming SIP messages. The following are the allowable parameter values: TRUE Ignore non-initial record routes FALSE Recognize non-initial record routes **Note:** This parameter should only be used when directed to do so by Technical Services and Support. ***Default***: FALSE
sip_use_any_reg_contact_expire	This parameter is used determine the behavior of the session timeout relating to the REGISTER message. The following are the allowable parameter values: TRUE The URI(s) that appear in the Contact: must match on the Contacts in the REGISTER message for the "expires=" value to be accepted FALSE The URI(s) do not need to match **Note:** This parameter should only be used when directed to do so by Technical Services and Support. ***Default***: TRUE
nat_sip_address	This parameter specifies the Network Address Translation (NAT) SIP IPv4 address. If this parameter is defined, the private IP addresses in the SIP messages for the From (REQUEST only), Via (REQUEST only), Contact and RFC3325 P-Asserted-Identity and P-Preferred-Identity fields will be set to the nat_sip_address. Also, the origin (o=) IP address in the SDP will be set to the nat_sip_address. ***Range:*** 0 – 255 for each dotted decimal position of the IP address. ***Value Type:*** Dotted decimal **Note:** This keyword only supports an Ipv4 address. Typically, this parameter is used in conjunction with nat_media_address and both are set to the same Ipv4 address. ***Default:*** <blank> (empty string indicating no NAT SIP address defined)
nat_media_address	This parameter specifies the Network Address Translation (NAT) media Ipv4 address. If this parameter is defined, the connection (c=) IP address in the SDP will be set to the nat_media_address. ***Range:*** 0 – 255 for each dotted decimal position of the IP address.

	Value Type: Dotted decimal **Note:** This keyword only supports an Ipv4 address. Typically, this parameter is used in conjunction with nat_sip_address and both are set to the same Ipv4 address. ***Default:*** <blank> (empty string indicating no NAT SIP address defined)
sips_sip_uri_scheme	This parameter sets the "sips" or "sip" URI scheme for TLS. The parameter ***sip_transport_protocol*** must be set to TLS and both ***sip_tls_enabled*** and ***sip_tcp_enable*** must be set to TRUE for the ***sips_sip_uri_scheme*** parameter to have an effect. When this parameter is set to SIPS the SIP messages will have "sips:" in the SIP message fields, and when this parameter is set to SIP the SIP messages will have "sip:" in the SIP message fields. The following are the allowable parameter values: SIPS The SIP messages will have a "sips:" in the SIP message fields SIP The SIP messages will have a "sip:" in the SIP message fields ***Value Type:*** Character string ***Default:*** SIPS

Configuring T.38 Fax Transport Parameters

The text of the *media_renegotiate_delay_inbound*, *media_passthrough_timeout_inbound*, *media_renegotiate_delay_outbound* and the *media_passthrough_timeout_outbound* 6arameters starting on page 1239 to be replaced with the text below:

Parameter	Value
media_renegotiate_delay_inbound	Controls media renegotiation to image (T.38) on inbound calls. If the gateway is responsible for media renegotiation, set this parameter to -1 and [fax_transport_protocol] to t38_only to disable initiating the media renegotiation to image. Setting this parameter to -1 and [fax_transport_protocol] to t38_first will cause the inbound side renegotiation to T.38 being controlled by [media_passthrough_timeout_inbound]. If the inbound side is responsible for media renegotiation to image, set this parameter to a value between 0 and 60000. Numbers from 0 to 3000 will cause the inbound side to renegotiate to T.38 after 3 seconds. Numbers from 3000 to 60000 indicate the number of milliseconds to delay before the inbound side attempts media renegotiation to T.38. Set this parameter to: -1 Disables media renegotiation on inbound calls if [fax_transport_protocol] is t38_only. See [media_passthrough_timeout_inbound] if [fax_transport_protocol] is t38_first. 0 to 3000 Waits 3 seconds before attempting to renegotiate the media to T.38. 3000 to 60000 Waits this number of milliseconds before attempting to renegotiate the media to T.38. ***Unit:*** ms ***Range:*** -1 and 0 to 60000 ***Value Type:*** decimal ***Default:*** 3000 (3 seconds)
media_passthrough_timeout_inbound	Sets the time before media renegotiation to image (T.38) will be attempted before doing fax passthrough on inbound calls. This timer is active only when [media_renegotiate_delay_inbound] is set to -1, [fax_transport_protocol] is set to t38_first and the module supports fax passthrough. Setting this parameter to -1 will suppress the sending of a REINVITE to T.38 and fax passthrough.

	Numbers from 0 to 3000 will cause the inbound side to wait 3 seconds before attempting media renegotiation to image (T.38). Numbers from 3000 to 60000 indicate the number of milliseconds to delay before attempting media renegotiation to image (T.38). Set this parameter to: -1 Suppress renegotiation to T.38 or fax passthrough. 0 to 3000 Waits 3 seconds before attempting renegotiation to T.38 and fax passthrough. 3000 to 60000 Number of milliseconds to wait before attempting renegotiation to T.38 and fax passthrough. ***Unit:*** ms ***Range:*** -1 and 0 to 60000 ***Value Type:*** decimal ***Default:*** 3000 (3 seconds)
media_renegotiate_delay_outbound	Controls media renegotiation to image (T.38) on outbound calls. If the gateway is responsible for media renegotiation, set this parameter to -1 to disable initiating the media renegotiation to image. If the outbound side is responsible for media renegotiation to image, set this parameter to a value between 0 and 60000. Numbers greater than 0 indicate the number of milliseconds to delay before attempting media renegotiation. A value of 0 will cause an immediate renegotiation, while -1 will wait for a renegotiation to image. Set this parameter to: -1 Disables media renegotiation on outbound calls. 0 Does not delay before attempting to renegotiate the media to image (T.38). >0 Waits this number of milliseconds before attempting to renegotiate the media to image (T.38). ***Unit:*** ms ***Range:*** -1 and 0 to 60000 ***Value Type:*** decimal ***Default:*** -1
media_passthrough_timeout_outbound	Sets the timer to fail over to fax passthrough when no T.38 is negotiated on outbound calls. This timer is active only when [media_renegotiate_delay_outbound] is set to -1, [fax_transport_protocol] is set to t38_first and the module supports fax passthrough. Numbers greater than 0, indicate the number of milliseconds to wait for T.38 negotiation before performing fax passthrough. A value of 0

	will cause an immediate renegotiation to passthrough, while -1 will suppress renegotiation to fax passthrough. Set this parameter to: -1 Suppress renegotiation to fax passthrough. 0 Cause an immediate renegotiation to passthrough. >0 Number of milliseconds to wait for T.38 negotiation before performing fax passthrough. ***Unit:*** ms ***Range:*** -1 and 0 to 60000 ***Value Type:*** decimal ***Default:*** 4000

BfvFaxT30Holdup

In the last paragraph on page 758, the following text:

The receiver responds with a signal which is typically MCF, though it could also be RTN, RTP, PIN, or PIP.

To be replaced with:

The receiver responds with a signal which is typically MCF, though it could also be ERR, RTN, RTP, PIN, or PIP.

BfvLineOriginateCall and BfvCallSetup

The following Input Field to be added to BfvLineOriginateCall on page 374 and BfvCallSetup on page 303.

Enum TperCallFaxTransportProtocol per_call_fax_transport_protocol;

per_call_fax_transport_protocol – Allows restriction of the fax transport protocol on a per-call basis.

The value can be one of the following:

PER_CALL_FAX_TRANSPORT_PROTOCOL_DEFAULT (0) – The fax transport protocol will be determined based on the call control configuration file settings.

PER_CALL_FAX_TRANSPORT_PROTOCOL_RTP_PREFERRED (1) – The fax transport protocol will be G.711 (RTP), if available, regardless of the call control configuration file settings; if not, it will be T.38.

BfvLineOriginateCall and BfvCallWaitForComplete

The Output fields for BfvLineOriginateCall on page 374 and BfvCallWaitForComplete on page 377 to be changed to:

```
int cause;
int subcause;
int cause_location;
RES res;
CALL_RES cres.name_ident;
CALL_RES cres.name_char_set;
CALL_RES cres.connected_num;
CALL_RES cres.sip_call_id
enum TrxTransportType call_transport;
unsigned sip_header_list_len;
BT_SIP_HEADER_LIST *sip_header_list;
```

In the description section, the following text to be added:

args.cres.char sip_call_id

> Returns text in the sip_call_id field of the CALL_RES structure (see Volume 6, Appendix B, CALL_RES Structure Parameters), indicating the SIP Call-ID when using the SIP protocol. The field allows a maximum of 256 characters(MAX_SIP_CALL_ID).

In **Appendix B – Bfv API Structures** section, in "**Result Structures**" section on page 1335 the CALL_RES structure to be updated to the following:

```
typedef struct {
      int call_type;
      char dest_id[MAX_DID];
      /* The rest are ISDN only */
      #define called_party_number dest_id
      char called_party_subaddress[MAX_DID];
      char calling_party_number[MAX_DID];
      char calling_party_subaddress[MAX_DID];
      char redir_number[MAX_DID];
      int redir_reason;
      char name_ident;
      int name_char_set;
      char connected_num[MAX_CONN_NUM];
      char sip_call_id[MAX_SIP_CALL_ID]
} CALL_RES;
```

In "**CALL_RES Structure Parameters**" on page 1343, the following to be added:

sip_call_id

A null-terminated ASCII string that identifies the SIP Call-ID. This value is only indicated for the SIP protocol.

BfvLineAnswer and BfvCallAccept

The following Input Field to be added to BfvLineAnswer on page 362 and BfvCallAccept on page 280.

Enum TperCallFaxTransportProtocol per_call_fax_transport_protocol;

per_call_fax_transport_protocol – Allows restriction of the fax transport protocol on a per-call basis.

The value can be one of the following:

PER_CALL_FAX_TRANSPORT_PROTOCOL_DEFAULT (0) – The fax transport protocol will be determined based on the call control configuration file settings.

PER_CALL_FAX_TRANSPORT_PROTOCOL_RTP_PREFERRED (1) – The fax transport protocol will be G.711 (RTP), if available, regardless of the call control configuration file settings; if not, it will be T.38.

Advanced TIFF Parameters

In the Brooktrout Bfv API Reference Manual in Appendix A under the User-Defined Configuration File there is a new parameter.

Parameter	Value
allow_zero_lines	Specifies whether BfvFaxRcvPageTiff should allow pages with zero-length scan lines. The TIFF-F specification does not allow this, so if such a page occurs, it is normally treated as an error. Setting the value of this parameter to non-zero will cause this to be treated as if it were a normally received page. Note: Enabling this feature may cause invalid TIFF-F files to be created. ***Value Type:*** decimal ***Default:*** 0 (disabled)