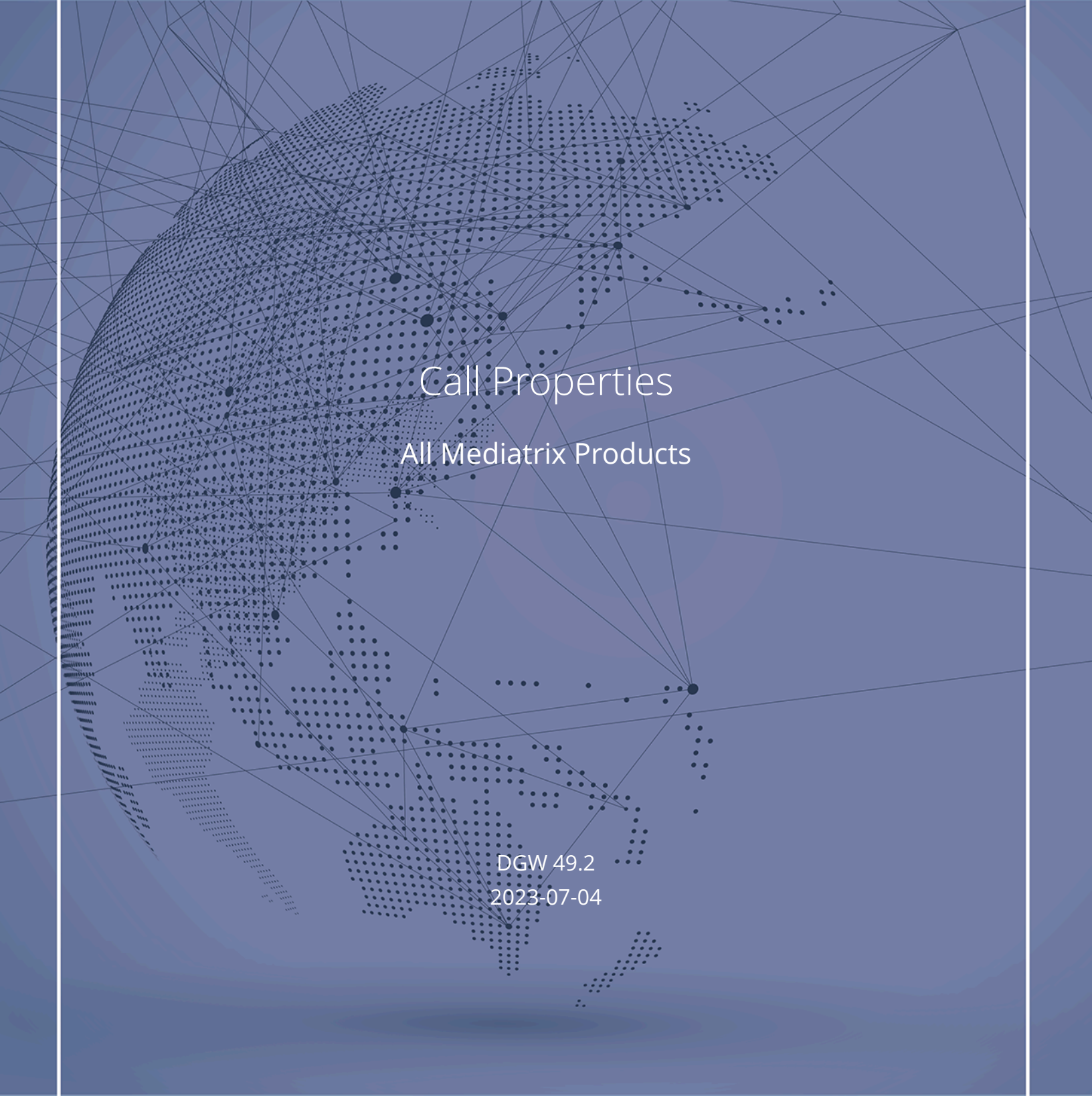


The background of the slide is a dark blue gradient with a complex, abstract graphic. It consists of a dense network of thin, light blue lines connecting numerous small, dark blue dots. These dots are arranged in a way that suggests a global map, with higher concentrations of dots in the Americas and Europe. The overall effect is a sense of global connectivity and data flow.

Call Properties

All Mediatrix Products

DGW 49.2
2023-07-04

Table of Contents

1 Call Properties and SIP	3
1.1 Call Properties to SIP	3
1.2 SIP to Call Properties	8
2 Call Properties and ISDN	11
2.1 Call Properties to ISDN	11
2.2 ISDN to Call Properties	12
3 Call Properties and R2	13
3.1 Call Properties to R2	13
3.2 R2 to Call Properties	13
4 Call Properties and E&M	14
4.1 Call Properties to E&M	14
4.2 E&M to Call Properties	14
5 Call Properties and FXS	15
5.1 Call Properties to FXS	15
5.2 FXS to Call Properties	15
6 Call Properties and FXO	17
6.1 Call Properties to FXO	17
6.2 FXO to Call Properties	17
7 Copyright Notice	19

1 Call Properties and SIP

1.1 Call Properties to SIP

Used for calls routed to a SIP destination.

SIP	Made from
To	Use the Called URI call property if it is defined and not empty. Otherwise, the various parts of the URI (display name, username, host, "phone-context" parameter, "user" parameter) are built as follows: • The display name (i.e. the friendly name) is set to the value of the Called Name call property (if defined). • The username is set to the first available item among the following: • The SIP Username Call Property (if defined and non-empty). • The Called E164 Call Property (if defined and non-empty). • If the SipEp.InteropDefaultUsernameValue parameter is set to "Host", set the username with the value of the host. • If none of the above applies, the username is set to "anonymous". • If the Called Phone Context call property is defined and not empty, a "phone-context" parameter is added with this call property value. A "user" parameter with a "phone" value is also automatically added in that case. • The host is set to the Called Host call property, if defined. Otherwise it is set to the configured home domain proxy host. • If the Called TON call property says it is an international call, the username is prefixed with a + and the user URI parameter is added with the "phone" value • If, after all of the above, there is still no user parameter and the SipEp.InteropSipUriUserparameterValue parameter is not empty, then a user parameter is added with its value.

SIP	Made from
From	Use the Calling URI call property if it is defined and not empty. Otherwise, the various parts of the URI (display name, username, host, phone-context parameter, user parameter) are built as follows: • The display name (i.e. the friendly name) is set to the value of the Calling Name call property (if defined). • The username is set to the first available item among the following: • The SIP Username Call Property (if defined and non-empty). • The Calling E164 Call Property (if defined and non-empty). • If the SipEp.InteropDefaultUsernameValue parameter is set to "Host", set the username with the value of the host. • If none of the above applies, the username is set to "anonymous". • If the Calling Phone Context call property is defined and not empty, a phone-context parameter is added with this value. A user parameter with a "phone" value is also automatically added in that case. • The host is set to the Calling Host call property, if defined. Otherwise it is set to the configured home domain proxy host. • If the Calling TON call property says it is an international call, the username is prefixed with a + and the user URI parameter is added with the "phone" value. • If, after all of the above, there is still no user parameter and the SipEp.InteropSipUriUserparameterValue parameter is not empty, then a user parameter is added with its value.

SIP	Made from
Request URI	Use same information than for the "To" SIP Header.
Contact	Use the same information than for the "From" SIP Header, but with the current IP address/port for the host.

SIP	Made from
Diversion	A "Diversion" header is added if the LastDivertingE164 call property is defined and not empty. This "Diversion" header is constructed with: • The "username" of the URI is set to the value of the LastDivertingE164 call property. • The "host" of the URI is set to the configured home domain proxy host. • The "reason" field is set according to the value of the LastDivertingReason call property: • cfu: "unconditional" • cfb: "user-busy" • cfnr: "no-answer" • All other values or when undefined: "unknown" • The field counter is set to the value of the DivertingCounter call property if OriginalDivertingE164 call property is set to "empty" or "undefined", otherwise it is set to "DivertingCounter"-1. A second "Diversion" header is added if the LastDivertingE164 and OriginalDivertingE164 call properties are present and not empty. This "Diversion" header is constructed with: • The "username" of the URI is set to the value of the OriginalDivertingE164 call property. • The "host" of the URI is set to the configured home domain proxy host. • The fields "reason" is set according to the value of the OriginalDivertingReason call property : • cfu: "unconditional" • cfb: "user-busy" • cfnr: "no-answer" • All other value or when undefined: "unknown" • The field counter is set to 1.

1.2 SIP to Call Properties

Used for calls coming from SIP.

Call Properties	Made from
Called URI	The "Request-Uri".
Calling URI	The URL of the "From" SIP Header.
Called Name	The friendly name in the "To" SIP Header. Undefined if there is no friendly name.
Calling Name	The friendly name in the "From" SIP Header. Undefined if there is no friendly name.
Called E164	- The username of the "Request-Uri" if the username is a compatible E164. - If the username contains parameters, the parameters are ignored. The "+" prefix and "-" separator are removed. - Undefined if no username or if not compatible.
Calling E164	- The username of the "From" SIP Header if the username is a compatible E164. - If the username contains parameters, the parameters are ignored. The "+" prefix and "-" separator are removed. - Undefined if no username or not compatible.
Called Host	The host of the "Request-Uri".
Calling Host	The host of the "Contact" SIP Header.
Called TON	Set to "international" if the user name of the "To" SIP Header is an E164 with the "+" prefix, otherwise remains undefined.
Calling TON	Set to "international" if the username of the "From" SIP Header is an E164 with the "+" prefix, otherwise it remains undefined.
Called Phone Context	Set to the phone-context parameter of the username of the "To" SIP Header if the username is an E164, otherwise it remains undefined.
Calling Phone Context	Set to the phone-context parameter of the username of the "From" SIP Header if the username is an E164, otherwise it remains undefined.
Called SipUsername	Set to the username of the "Request-Uri" SIP Header. Note that this does not include the username parameter such as the phone-context .

Call Properties	Made from
Calling SipUsername	Set to the username of the "From" SIP Header. Note that this does not include the username parameter such as the phone-context .
LastDivertingReason	If the INVITE contains at least one "Diversion" header, this value is set according to the "reason" field value of the first "Diversion" header: • "user-busy": cfb • "unconditional":cfu • "no-answer": cfna • All other values: unknown Otherwise, the property is undefined. Comparing the reason field is not case sensitive.
OriginalDivertingReason	If the INVITE contains more that one "Diversion" header, this value is set according to the "reason" field value of the last "Diversion" header: • "user-busy": cfb • "unconditional":cfu • "no-answer": cfna • All other values: unknown Otherwise, the property is undefined. Comparing the reason field is not case sensitive.
LastDivertingE164	If the INVITE contains at least one "Diversion" header, this value is set to the "username" of the URI (can be a SIP URI, SIPS URI, or TEL URI) of the first "Diversion" header converted into an E164. Can be set to empty if no username or if the username is not an E164. Otherwise, the property is undefined.

Call Properties	Made from
OriginalDivertingE164	If the INVITE contains more than one "Diversion" header, this value is set to the "username" of the URI (can be a SIP URI, SIPS URI, or TEL URI) of the last "Diversion" header converted into a E164. Can be set to empty if no username or if the username is not an E164. Otherwise, the property is undefined.
DivertingCounter	If the INVITE contains at least one "Diversion" header, this value is set to the sum of the "counter" field of all "Diversion" headers. If a diversion header does not contain the "counter" field, the value 1 is assumed for the header.
All others	Undefined

2 Call Properties and ISDN

2.1 Call Properties to ISDN

Used for calls routed to an ISDN destination, to fill the information elements of the Q.931 SETUP message for outgoing ISDN calls.

Information Element	Made from
Bearer Capabilities	If valid, the Calling ITC call property is used to fill the "information transfer capability" (octet 3 [5:1]). Otherwise, the ITC is set to "3.1 kHz audio". If more than one bearer capability information element is provided in a prioritised list, all of them receive the same ITC. This information element is included in SETUP message only for outgoing calls.
Calling Party Number	The Calling E164 call property is used to fill the "number digits" (octet 4) field. The Calling TON call property is used to fill the "type of number" (octet 3 [7:5]) field. The Calling PI call property is used to fill the "presentation indicator" (octet 3a [7:6]) field. The Calling SI call property is used to fill the "screening indicator" (octet 3a [2:1]) field. The Calling NPI call property is used to fill the "numbering plan identification" (octet 3 [4:1]) field.
Called Party Number	The Called E164 call property is used to fill the "number digits" (octet 4) field. The Called TON call property is used to fill the "type of number" (octet 3 [7:5]) field. The Called NPI call property is used to fill the "numbering plan identification" (octet 3 [4:1]) field.
Display	The Calling E164 call property is used to fill the "display information" (octet 3) field.
Called Bearer Channel	The called bearer channel is used to select a specific ISDN bearer channel for an outgoing ISDN call.

2.2 ISDN to Call Properties

Used for calls coming from an ISDN interface.

Call Properties	Made from
Calling Name	The "display information" (octet 3) field of the "Display information" element, if included in the SETUP Q.931 message.
Called E164	The "number digits" (octet 4) field of the "called party information" element included in the SETUP Q.931 message.
Calling E164	The "number digits" (octet 4) field of the "calling party information" element included in the SETUP Q.931 message.
Called TON	The "type of number" (octet 3 [7:5]) field of the "called party information" element included in the SETUP Q.931 message.
Calling TON	The "type of number" (octet 3 [7:5]) field of the "calling party information" element included in the SETUP Q.931 message.
Calling PI	The "presentation indicator" (octet 3a [7:6]) field of the "calling party information" element included in the SETUP Q.931 message.
Calling SI	The "screening indicator" (octet 3a [2:1]) field of the "calling party information" element included in the SETUP Q.931 message.
Calling ITC	The "information transfer capability" (octet 3 [5:1]) field of the (chosen, if more than one is provided) "bearer capability information" element included in the SETUP Q.931 message.
Called NPI	The "numbering plan identification" (octet 3 [4:1]) field of the "called party information" element included in the SETUP Q.931 message.
Calling NPI	The "numbering plan identification" (octet 3 [4:1]) field of the "calling party information" element included in the SETUP Q.931 message.
CallingBearerChannel	Represents the ISDN bearer channel on which the ISDN call is received.
All others	Undefined.

3 Call Properties and R2

3.1 Call Properties to R2

Used for calls routed to an R2 destination, to fill the information elements of the Q.931 SETUP message for outgoing R2 calls.

R2 Parameters	Made from
Calling Party Number	The Calling E164 call property is used to fill the ANI number (Automatic Number Identification).
Called Party Number	The Called E164 call property is used to fill the DNIS number (Dialed Number Identification Service).
Called Bearer Channel	The called bearer channel is used to select a specific R2 bearer channel for an outgoing R2 call.

3.2 R2 to Call Properties

Used for calls coming from R2.

Call Properties	Made from
Called E164	DNIS (Dialed Number Identification Service) is the called party destination number.
Calling E164	ANI (Automatic Number Identification) is the caller number.
Calling PI	The presentation indicator indicates if the Send next digit (ANI) request is rejected or accepted.
Calling Bearer Channel	Represents the R2 bearer channel on which the R2 call is received.
All others	Undefined.

4 Call Properties and E&M

4.1 Call Properties to E&M

Used for calls routed to an E&M destination, to fill the information elements of the Q.931 SETUP message for outgoing E&M calls.

E&M Parameters	Made from
Calling Party Number	The Calling E164 call property is used to fill the ANI number (Automatic Number Identification).
Called Party Number	The Called E164 call property is used to fill the DNIS number (Dialed Number Identification Service).
Called Bearer Channel	The called bearer channel is used to select a specific E&M bearer channel for an outgoing E&M call.

4.2 E&M to Call Properties

Used for calls coming from E&M.

Call Properties	Made from
Called E164	DNIS (Dialed Number Identification Service) is the called party destination number.
Calling E164	ANI (Automatic Number Identification) is the caller number.
Calling PI	The presentation indicator is not set.
Calling Bearer Channel	Represents the E&M bearer channel on which the E&M call is received.
All others	Undefined.

5 Call Properties and FXS

5.1 Call Properties to FXS

Used for calls routed to an FXS destination.

Field	Made from
Number	If the PI call property is present and not set to "allowed", the number is "P". Otherwise the number is set to the value of the E164 call property (trimmed to the first 20 characters).
Name	If the PI call property is present and not set to "allowed", the name is "Anonymous". Otherwise the name is set to the value of the Name call property (trimmed to the first 50 characters).

5.2 FXS to Call Properties

Used for calls coming from an FXS interface.

Call Property	Made from
Calling E164	If the auto routing is enabled and the CRout.Autorouting.E164 parameter is not empty, the value of CRout.AutoRouting.E164 . Otherwise the call property is not present.
Calling Name	If the auto routing is enabled and the CRout.Autorouting.Name parameter is not empty, the value of CRout.AutoRouting.Name . Otherwise the call property is not present.
Calling SipUsername	If the auto routing is enabled and the CRout.Autorouting.SipUsername parameter is not empty, the value of CRout.AutoRouting.SipUsername . Otherwise the call property is not present.
Called E164	For automatic calls, the E164 specified as the destination in the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress parameters. For other calls, the dialled digit after the transformation defined in the EpServ.CallDtmfMapAllowed.DtmfTransformation parameter.
Called Name	For automatic calls, the name specified as the destination in the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress parameters. The call property is not present if the target address does not contain a name. For other calls, the call property is not present.
Called Host	For automatic calls, the host specified in the destination of the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress parameters. The call property is not present if the target address does not contain a host. For other calls, the host defined in the CallDtmfMapAllowed.TargetHost parameter. The call property is not present if the target host is not configured for the matching DTMF map.

6 Call Properties and FXO

6.1 Call Properties to FXO

Used for calls routed to an FXO destination.

Field	Made from
Dialled number	The Called E164 call property.

6.2 FXO to Call Properties

Used for calls coming from an FXO interface.

Call Property	Made from
Calling E164	If the caller ID is detected, the numbers provided by the caller ID. Otherwise, if the auto routing is enabled and the CRout.Autorouting.E164 parameter is not empty, the value of CRout.AutoRouting.E164 . Otherwise the call property is not present.
Calling Name	If the caller ID is detected, the name provided by the caller ID. If the auto routing is enabled and the CRout.Autorouting.Name parameter is not empty, the value of CRout.AutoRouting.Name . Otherwise the call property is not present.
Calling SipUsername	If the caller ID is detected, the call property is not present. If the auto routing is enabled and the CRout.Autorouting.SipUsername parameter is not empty, the value of CRout.AutoRouting.SipUsername . Otherwise the call property is not present.
Called E164	For automatic calls, the E164 specified as destinations in the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress parameters. For other calls, the dialled digit after the transformation defined in the EpServ.CallDtmfMapAllowed.DtmfTransformation parameter.
Called Name	For automatic calls, the name specified in the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress destinations. The call property is not present if the target address does not contain the name. For other calls, the call property is not present.
Called Host	For automatic calls, the host specified as destinations in the EpServ.DefaultAutoCallTargetAddress and EpServ.pSpecificAutoCall.TargetAddress parameters. The call property is not present if the target address does not contain the host. For other calls, the host defined in the CallDtmfMapAllowed.TargetHost parameter. The call property is not present if the target host is not configured for the matching DTMF map.

7 Copyright Notice

Copyright © 2023 Media5 Corporation.

This document contains information that is confidential and proprietary to Media5 Corporation.

Media5 Corporation reserves all rights to this document as well as to the Intellectual Property of the document and the technology and know-how that it includes and represents.

This publication cannot be reproduced, neither in whole nor in part, in any form whatsoever, without written prior approval by Media5 Corporation.

Media5 Corporation reserves the right to revise this publication and make changes at any time and without the obligation to notify any person and/or entity of such revisions and/or changes.



media5corp.com