

Overview

Analytics is a user-friendly data querying engine which allows for quick CDR analysis on discrete or aggregated (grouped summary) data. Tiger Prism classes attributes of CDR into two distinct types; depending on the qualities of data these are classified as a Dimension or a Measure.

Dimensions*

Attributes containing fact data such as product information, names of people, device types, phone numbers, etc. are classed as Dimensions. These attribute types cannot be aggregated as they do not contain data types which can have a mathematical function such as averages or summaries for the total results e.g. [(Joe Blogs + Joe Blogs + Joe Blogs) / 3].

Measures

Attributes containing integer values such as seconds, cost, count numbers, etc. are classed as Measures. These attribute types can aggregate facts by associating the values into a common mathematical function such as averaging or summarising for the total results e.g. [(£5.20 + £12.75 + 15.50) / 3] = £11.15. The example below uses characters to explain how Dimensions and Measures are used. Below is the result-set for all the characters and how much each person has spent.

Row	Dimensions			Measure
	Name	Gender	Wearing glasses	Money
1	Bill	Male	✗	£1.13
2	Caroline	Female	✓	£2.23
3	Geoff	Male	✓	£1.56
4	Matt	Male	✓	£3.67
5	Paul	Male	✓	£0.12
6	Jean	Female	✗	£3.26
7	Salli	Female	✓	£4.05
8	Richard	Male	✗	£1.42
9	Sharon	Female	✗	£2.38
10	Sheena	Female	✗	£1.61

Using the result-set below we can now see how the data can be analysed to give valuable information.

Female, Glasses	Female, No Glasses	Male, Glasses	Male, No Glasses
Caroline £2.23	Salli £4.05	Geoff £1.56	Matt £3.67
Jean £3.26	Sharon £2.38	Paul £1.42	Bill £1.13
Sheena £1.61		Richard £0.12	

Gender	Wearing Glasses	Max (Money)	Min (Money)	Sum (Money)	Avg (Money)	Count (Money)
Female	Yes	£4.05	£2.23	£6.28	£3.14	2
Female	No	£3.26	£1.61	£7.25	£2.42	3
Male	Yes	£3.67	£1.42	£6.65	£2.22	3
Male	No	£1.13	£0.12	£1.25	£0.62	2

Group: Gender, Wearing Glasses; Aggregates: Max (Money), Min (Money), Sum (Money), Avg (Money), Count (Money)

* (some Dimensions are CDR Source dependant so they may return no results)

Dimensions

Attribute Name	Function
Call Direction	Describes the direction of a call either as incoming, internal, outgoing or tandem
Call Outcome	Depending on the CDR source, calls are flagged with an outcome of answered, unanswered, busy or a range of different outcomes
Call Start	Describes the time at which the first call leg initiates in your local time displayed in date / time
Leg Start	Describes the time at which the call leg initiates in your local time displayed in date / time
Call Termination Cause	The ISDN cause code flagged by the CDR source, a full list of termination codes can be found online
Channel Group Device Name / Description (Called / Calling)	If a call has utilised a gateway to facilitate an incoming, outgoing or tandem direction then the channel group device name and description will be populated from the network tables
Charged Digits / Charged Party / Charged Levels	Looking at the user / level that will be charged for the calls when applying "Use Charge Party" in the reporting tool
Collecting CDR Source	Describes which CDR source the call leg was processed from
Cost / Bill Local Currency	Local currency describes the currency associated with the carrier on call legs
Device Category (Called / Calling)	Defines a device to be hardware or software
Device Name (Called / Calling)	CDR Source dependant, device names such as hostnames or IP addresses present which hardware or software has facilitated the call
Device Type (Called / Calling)	If the device table within the network module has specified a device naming format it can then be allocated a device type e.g. csf[.] = Cisco Jabber
Digits (Called / Calling)	Reflects which endpoint or PSTN digits were engaged in the call leg
DNIS	Dialled Number Identification Service: identifies the number that was originally dialled by the incoming call party. DNIS and Called Digits may be equivalent depending on CDR source
Group Label	A descriptive field of a grouping regardless of group type i.e. Hunt Groups, Ring Groups, Response Groups, etc.
Group Name	Describes the grouping pilot number regardless of group type i.e. Hunt Groups, Ring Groups, Response Groups, etc.
Initiation Reason	CDR source dependant, a flag which represents how the call leg began
IP Address Location (Called / Calling)	Mapped in the IP address table within the Network module, IP Address location expresses where a device exists
Is Conference Call	A Yes / No flag indicating whether the call leg was involved in a conference
Is Message Left	Configurable in the voicemail table within the network module, if a call exceeds the threshold configured then the CDR is marked with a Yes and vice versa
Is Voicemail (Called / Calling)	Configurable in the voicemail table within the network module, if the called digits are the same as what is configured as voicemail then the CDR is marked with a Yes and vice versa

Dimensions - continued

Label (Called / Calling)	A description of what best represents the digits of the call to be. Where available, directory information such as party name or organisation will be presented. If the digits belong to an external party, then the label will contain the description of the location based on the carrier
Leg Order	Defines the position of the leg within a chain of call legs
LegGuid	The unique key associated to the call leg once it enters the warehouse database
Media Type	The type of call made by the user, for example Data or Video or Voice
Response Time Band	Allows for organisation of response times into SLA bands
SequenceCode	CDR dependant, this describes the key which binds CDR legs into the same chain. If not present within the raw data from the CDR source Tiger Prism will build one based on the associations it can build
Termination Reason	CDR source dependant, a flag to represent how the call leg completed
Transfer Digits (From / To)	Describes the digits of the party from a previous call leg or next call leg within the call chain

Measures

Attribute Name	Function
Leg Count	Each leg has a leg count of 1 effectively acting as a row count function of the dimension
Talk Time	The duration of a call after connection is established published in HH:MM:SS format
Talk Time in Seconds	The duration of a call after connection is established published in seconds
Ring Time	The duration of a call prior to an established connection, published in HH:MM:SS format
Response Time	This is a value we calculate for all call directions. It measures the time between a call being initiated and it being answered or abandoned. The calculation is based on total ring time plus any queue time and is CDR Source dependent
Queue Time	CDR Source dependant, the duration of time it takes for an incoming party to be received by an agent within a group
Base Cost	The cost calculated through Tiger Prism's ETL processes with no relation to the currency the carrier associates the call to
Local Cost	The cost calculated through Tiger Prism's ETL processes relating to the currency the carrier associates the call to
Base Bill	The bill calculated through Tiger Prism's ETL processes with no relation to the currency associated to the call by the carrier
Local Bill	The bill calculated through Tiger Prism's ETL processes linked to the currency associated to the call by the carrier