

**TIGER**  
communications plc



# Tiger Communications

## Call Flag Definitions



Version 1.0

# Table of Contents

Call Flag Definitions .....	3
Call Outcome .....	3
Definitions .....	3
Call Initiating and Terminating Reasons .....	4
Conference Calls .....	4
Conference .....	4
Divert .....	5
Divert Call .....	5
Enquiry .....	6
Group Pickup .....	7
Hunt Group .....	8
Included .....	9
Normal Call .....	9
Pickup .....	10
Glossary .....	13

# Call Flag Definitions

## Call Outcome

Please note: All call outcomes are dictated by a PBX, and not the Tiger system. Dependant on type of PBX, not all outcomes may be available.

### Definitions

<b>Connected</b>	Any answered call. Some PABX may flag a call as answered if the call has been diverted to Voicemail, or answered by an Auto Attendant.
<b>Busy</b>	A situation when the caller gets an engaged tone when dialing a specific number or extension. Normally this tone will be heard if the required destination is in use at the time. If the destination is serviced by an auto attendant, or has voice mail, it would be unlikely to hear an engaged tone.
<b>Do Not Disturb</b>	It is possible, dependant on switch type, for a specific extension to setup an instruction to the switch not to put calls through to it using their phone handset. In such instances, the Do Not Disturb Flag would be output from the PABX to the Tiger system.
<b>No Answer</b>	Where someone has called an extension or external number and replaced their handset before the call can be answered. If a call was connected to an auto attendant or voice mail system before the caller disconnected, this may show as a 'connected' call (see above)
<b>No privilege</b>	An extension that is not permitted to make specific calls, e.g. international or outgoing calls. The condition is set on the switch (the Class of Service), and not controllable from the Tiger system.
<b>No Resources</b>	If there are no available lines for a call to be made on (i.e. all the lines are in use), then the PABX will output this flag. Reporting on this outcome would help highlight any system resource limitations.
<b>No Ring</b>	A situation where the phone may have 'immediate call forward' set up on the handset, the call would not ring, but would instead divert to the required number. This is dependent once again on the type of switch.
<b>Not connected</b>	A call that was not connected for an unknown reason (for example, perhaps the number was incomplete). This flag may be output by some PABX to show a call that was not answered.
<b>Refused</b>	A condition where a call was made, but the recipient made a conscious decision to reject or clear down the call without answering it.
<b>Unknown</b>	No specific definition has been decided by the switch, i.e. a default option.
<b>Unobtainable</b>	This refers to the situation where either a non-existent number has been dialled, or the line being called is faulty.

# Call Initiating and Terminating Reasons

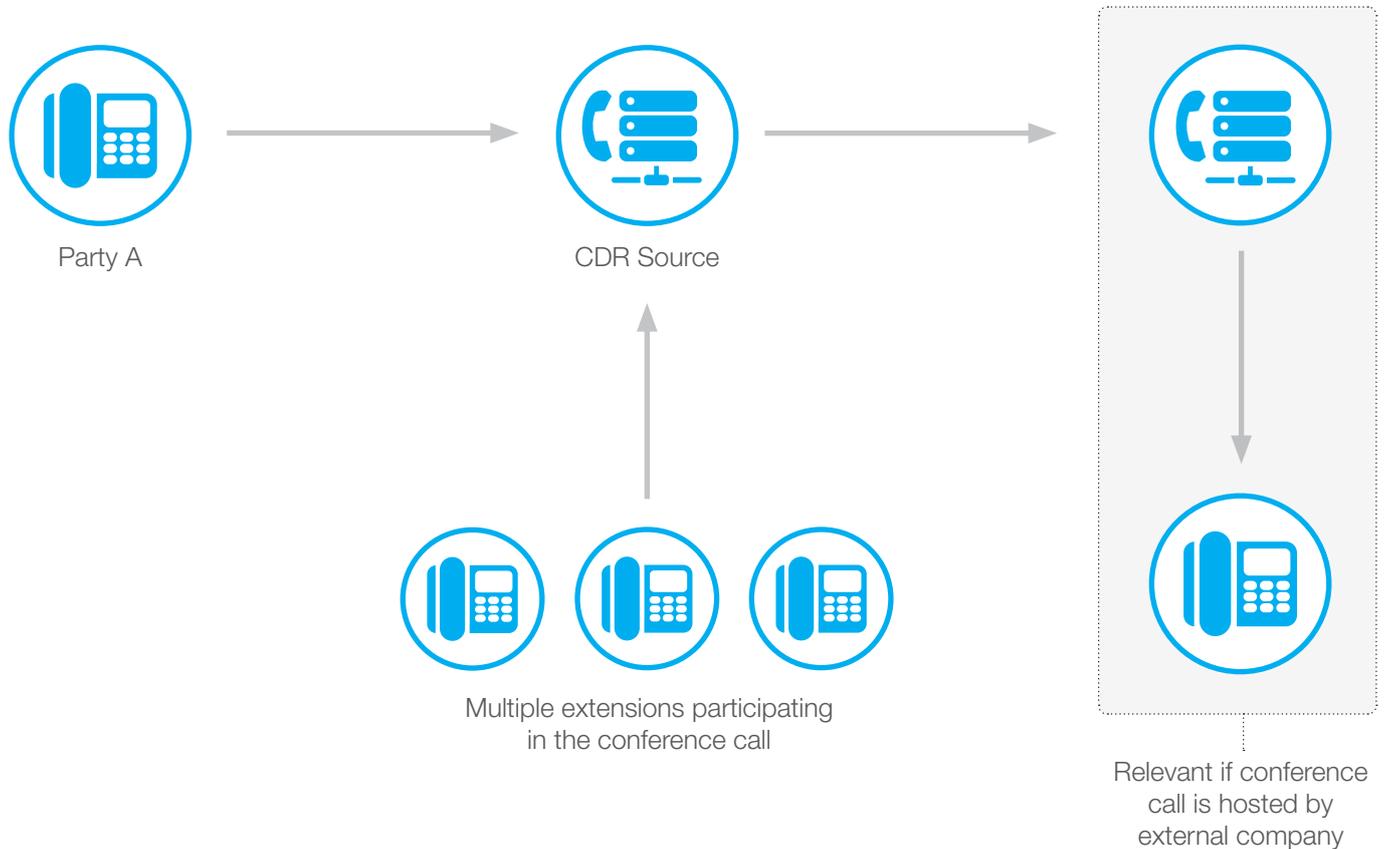
## Conference Calls

Party A initiates a conference call between a number of parties. All involved parties call the designated number and would enter an access code to gain access to the call, which enables them to hold a normal telephone conversation with multiple people at once. All involved parties can enter and leave the call at any time.

Please note: Larger companies would quite often host their own conference calls, as their PABX are more capable of handling them. Alternatively, some companies would need to outsource to (for example) BT, who can provide the conference call facilities. In such instances, this would output a Tandem call where an outside party calls the company to join the conference call and is then diverted / transferred to the conference that is being hosted by BT.

Response times for a conference call would be unique to each caller, as would the costing for the call if it is being hosted externally. This is due to each caller joining and leaving the conference call at different times, and being connected to the call for varying lengths off time.

### Conference

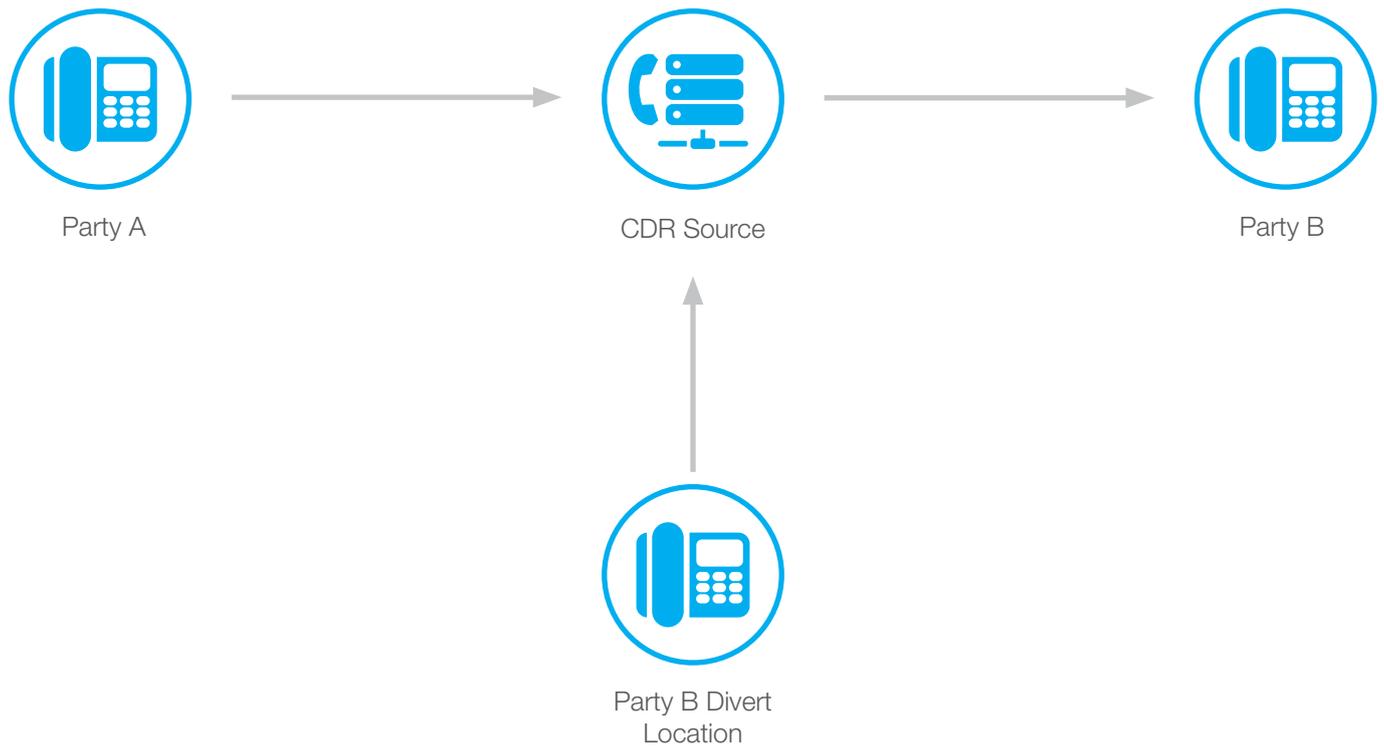


## Divert

Party B has a divert set on the switch, so when Party A calls, the switch will automatically redirect the call to the desired number (which may be an internal extension, or an external number such as a mobile). This will continue until B removes the divert (normally set up by entering a code from a hand set which informs the switch of the change). Response times would be the same as per a normal call which has been connected.

Note: If the divert is set for an outbound location, the call would have a cost associated to it. Party A may not know the call has been diverted unless the PABX informs them (Feature dependant on PABX type and software version).

### Divert Call



## Enquiry

Party A has called B. At some point during the call, A wants to be transferred to Party C. B places A on hold and dials C. If the transfer is successful, the PABX will flag the call as transferred, and will show termination of the call between A and C. If unsuccessful (perhaps C is engaged or busy), the call will be terminated between A and B. The Enquiry call is that between B and C.

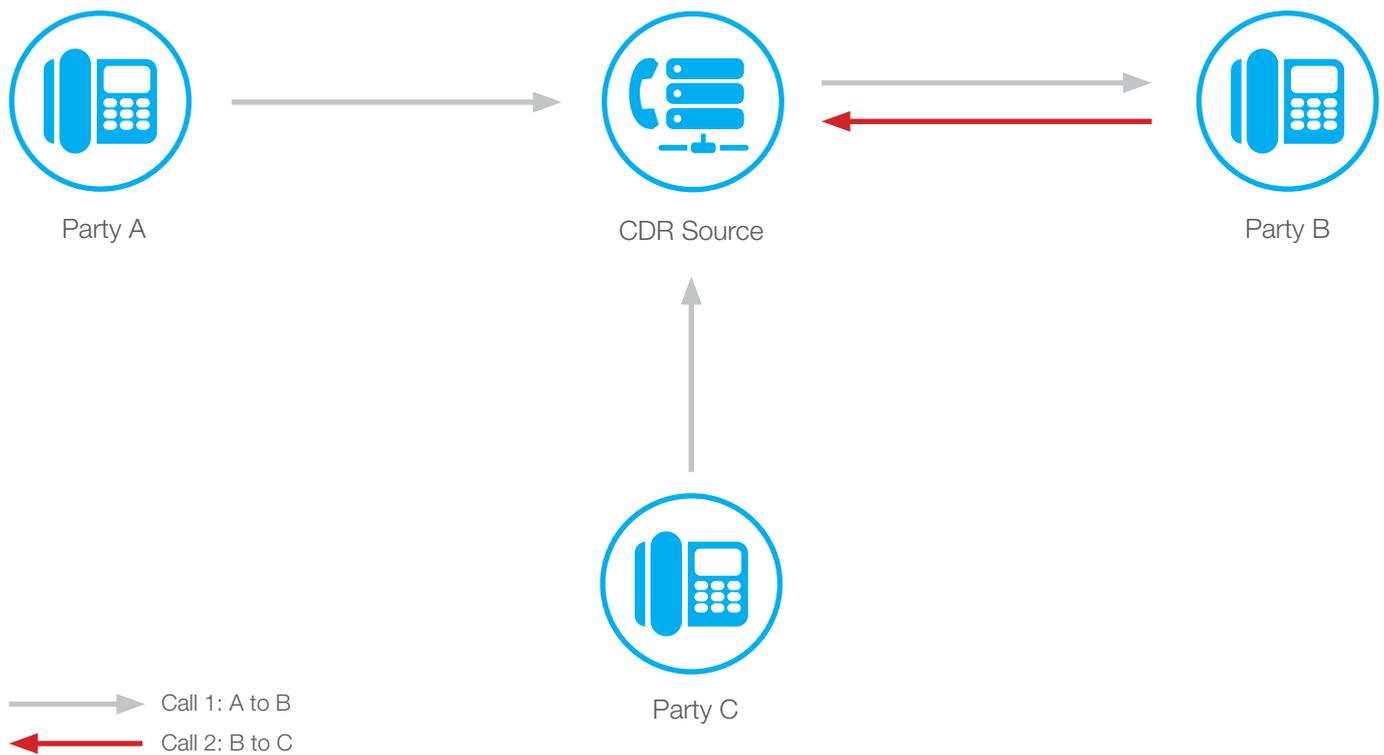
Two response times will be shown, one for each part of the call:

- ▶ Party A to Party B – Call does not connect until Party B answers.
- ▶ Party B to Party C – Party A will incur a charge for this call, unless C is contacted via an internal connection.

When using the Tiger system to trace and report on this type of call, it should be noted that:

- ▶ Both call elements will have the same CLI (Call Line Id) and originating trunk number.
- ▶ If the call was transferred to an external number or to another port on the network, then the second part of the call will be shown as a Tandem call, i.e. a call involving two trunks rather than an extension to trunk call.
- ▶ Party B may keep A on 'hold' and speak to C for a duration before dropping out of the call or terminating the connection with C. Should this happen, an additional call may be output by the PABX.

## Enquiry



## Group Pickup

Party A calls a section within a company configured as a hunt group (like a small call centre). The number dialled goes to a Virtual Extension (this is a number that does not have a physical telephone attached to it, but is defined to the PABX). When the call comes into the PABX, it is presented to individual extensions within a hunt group until it is answered. If the call is presented to an un-manned extension and another extension in the group dials the appropriate code (pickup code) to answer the call, it is termed as a group pickup.

Response times will vary greatly depending on how quick the call is answered by an individual hunt group operator. Tiger report information will represent when Party A's call was answered by one of the hunt group, not the virtual extension.

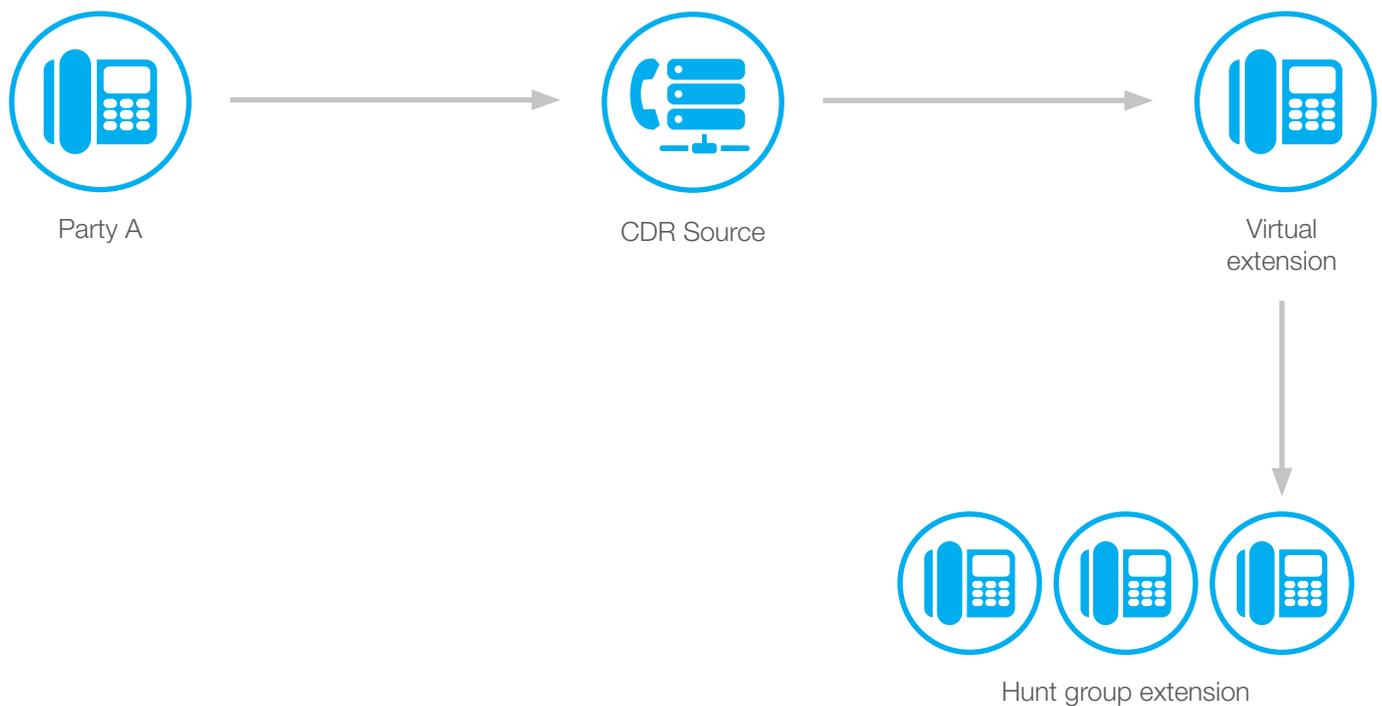
The type of expected PABX output is dependent on the PABX brand. Some PABX may see this type of call as two calls:

**Record 1:** Party A calling the virtual extension

**Record 2:** Virtual Extension to the hunt group extension, which successfully answers the call.

Please note: Test calls will help determine how a particular PABX presents the information to the Tiger system. Please call the Tiger Helpdesk for assistance with this process (01425 891000 option 2).

### Group Pickup



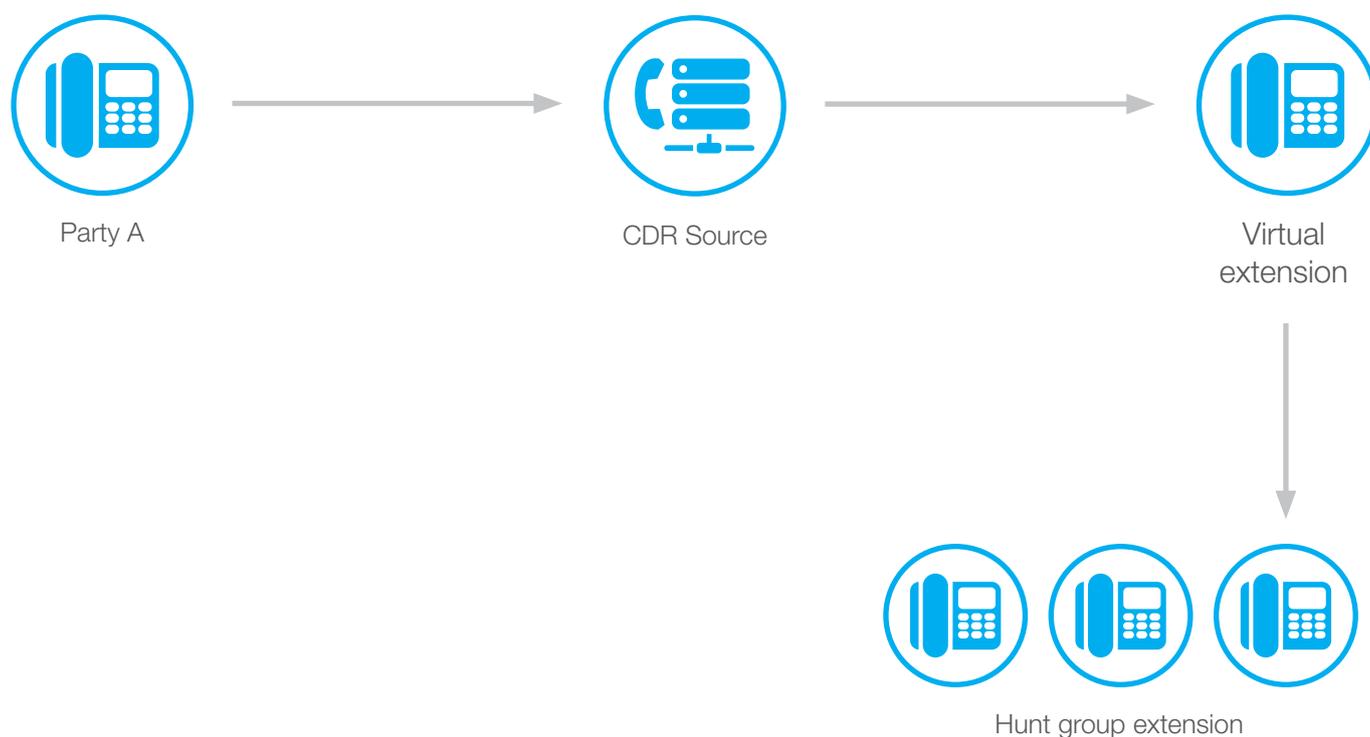
## Hunt Group

It is possible for a PABX to be setup with a virtual extension that is programmed to call a group of extensions in a specific department, such as a call centre. Extensions can be called in a certain order, but this is dependent on how it has been configured on the PABX.

If the virtual extension has been added to the Tiger directory, this can then be used for reporting purposes.

The response times for the calls in a hunt group may vary, depending on the type of PABX in use. For example, some PABX would output a call record to show the call arriving at the virtual extension, and then a second call from the virtual extension to the call centre, thus giving two response times. Other PABX may just show one call record for the in-bound call to the final receiving extension within the hunt group, resulting in only one response time.

### Hunt Group



## Included

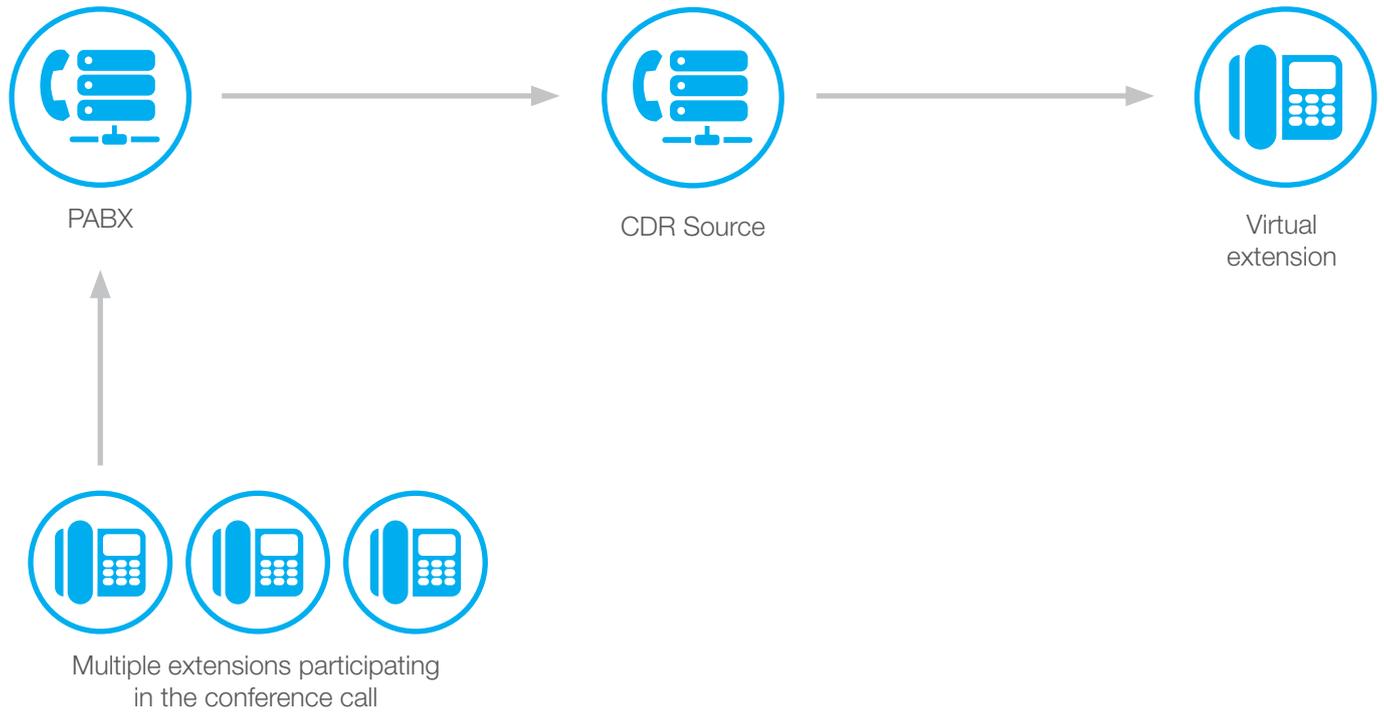
During the course of a conference call, Party A calls another extension or an outside number, who may then be involved in the conference; this would then be termed as an 'Included' call by the PABX.

If the included call is an extension within the company hosting the conference call, it would be termed as an internal call. If, however, it is an external number (i.e. one outside of the company), then it would occupy a trunk line whilst the call was in progress.

The response times would be between the conference call connecting to the included call.

If the included call is an external number, the conference call would be charged for it. The cost would continue until both parts of the included call terminate, i.e. if the conference call hangs up, but the included call continues the cost would carry on until the included call terminates. This cost would be allocated against the extension that called the external number.

**Included**



**Normal Connection**

Party A initiates a call to B (at an external location, or another extension within the same company). B answers the call and, upon completion, replaces their handset. This signals the termination of the call to the PABX, which in turn outputs the relevant call information to the Tiger system.

One response time is involved - the length of time B took to pick up the phone. The call does not connect, until B has picked up the handset.

Duration of the call is taken from the time B picks up the call, to the time when the first person (A or B) puts down their handset.

Please note: At anytime after the call has been answered, B could transfer the call to another extension – please see 'Transfer' section.

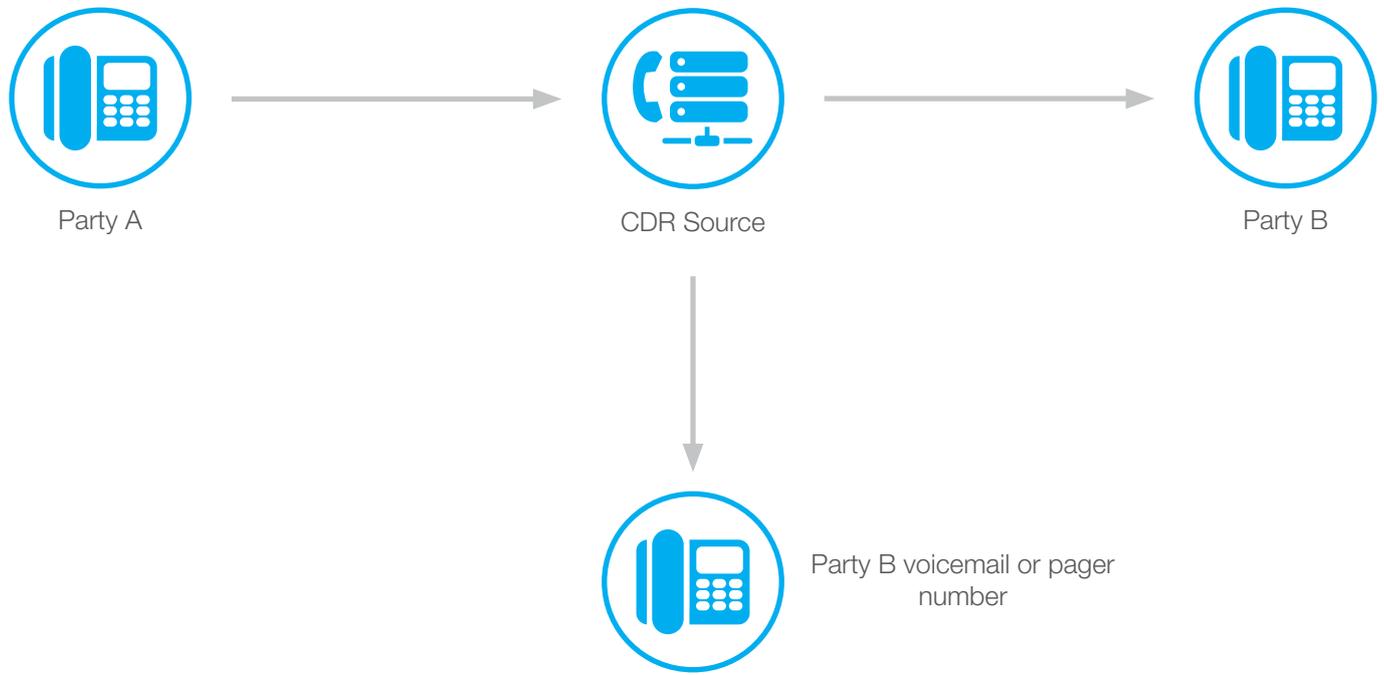
**Normal Call**



## Paging

Party B has a divert set on the switch, so when Party A calls, the switch will automatically redirect the call to Voicemail or to a Pager. This will continue until B removes the divert (normally set up by entering a code from a hand set which informs the switch of the change). Response times would be the same as per a normal call which has been connected.

### Paging



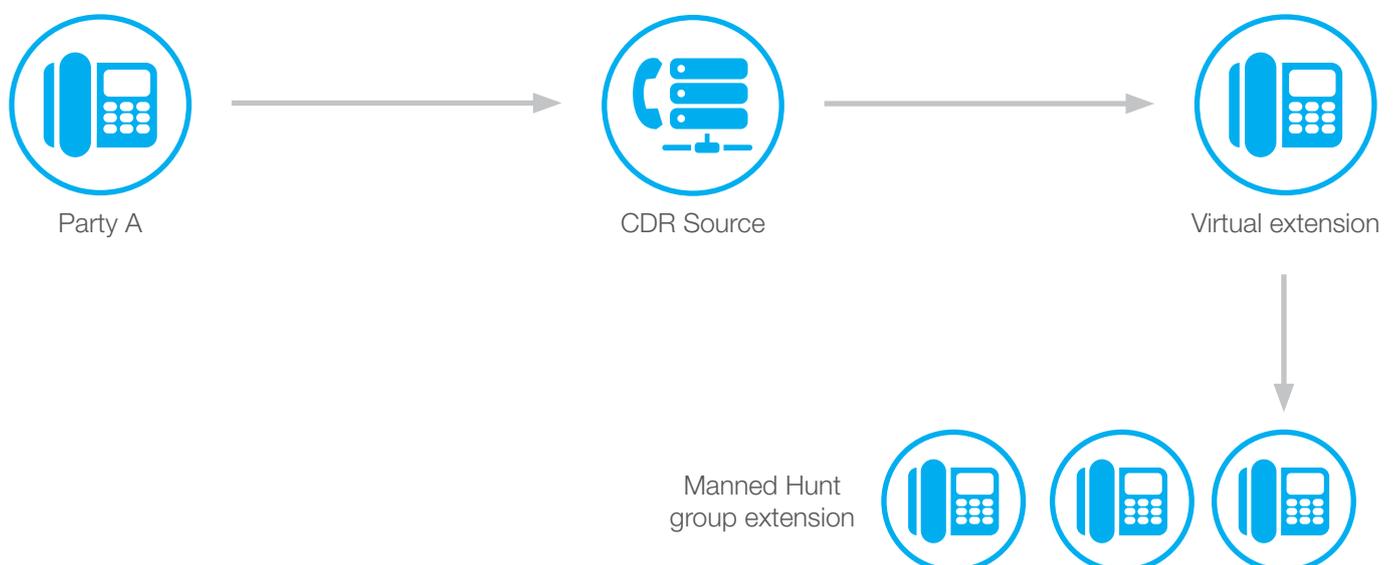
## Pickup

**Scenario A:** Party A calls Party B. If B is an unattended extension, another member of staff may choose to answer the call from their handset (by inputting a pre-defined key sequence)

**Scenario B:** Party A calls Party B. Party B is in fact a virtual extension number used by a call center/helpdesk where all incoming calls are directed to. The call center staff can then pick up the calls from here when they have become available for the next enquiry. By adding the virtual extension into the Tiger directory it may be used for reporting purposes.

The response time would be from Party A to whichever phone picked up the call. Due to the condition of the call (i.e. being flagged as a 'pickup' by the PABX) the response times may not be available on certain types of PABX.

### Pickup

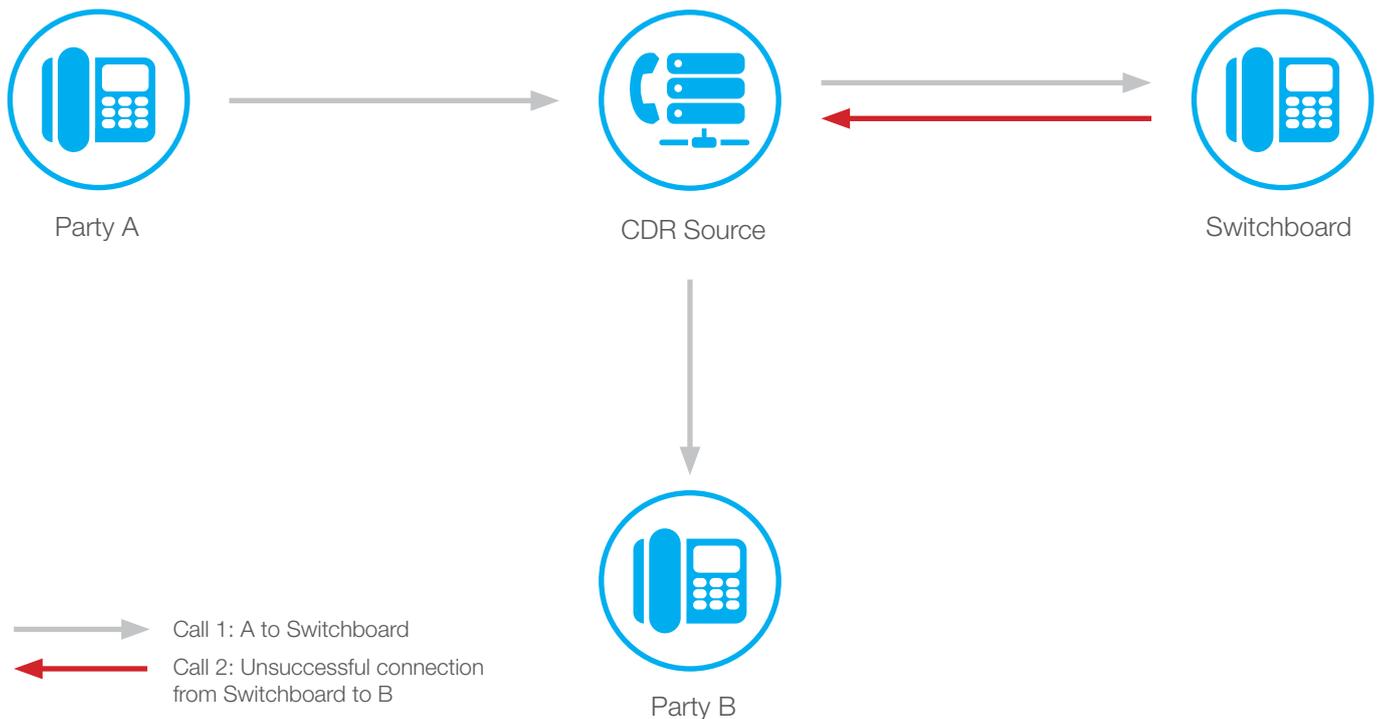


## Recall

Party A calls into the switchboard of a company and requires transferring to Party B. Switchboard transfers Party A to Party B, but Party B does not answer after a preset time limit (often 20 to 30 seconds), so the PABX returns the call to the switchboard to be answered by an operator again.

Please note: If Party A is calling from an external number, it would be charged for the whole duration of the call, including the time the call is being transferred and returned to the switchboard.

### Recall

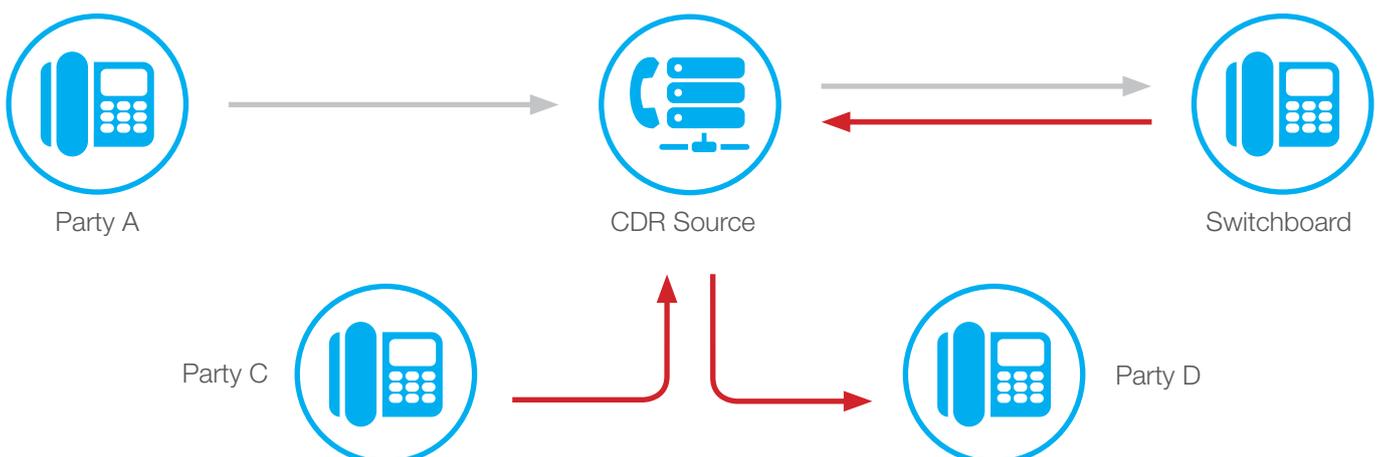


## Redirect

Party A makes a normal connected call to B and sometime during the call C also tries to call B. The switch tries to connect the call but discovers that the extension is engaged or busy. The call is returned to the switch, which has been instructed to call D in the event of B being busy or engaged. The redirect is generally set up by B's handset using a code.

Usually the extension that the call has been diverted to is within the same department, but it is also possible to redirect to an external line, hence a cost would be applied. Response times would relate to Caller C being answered by Caller D.

### Redirect



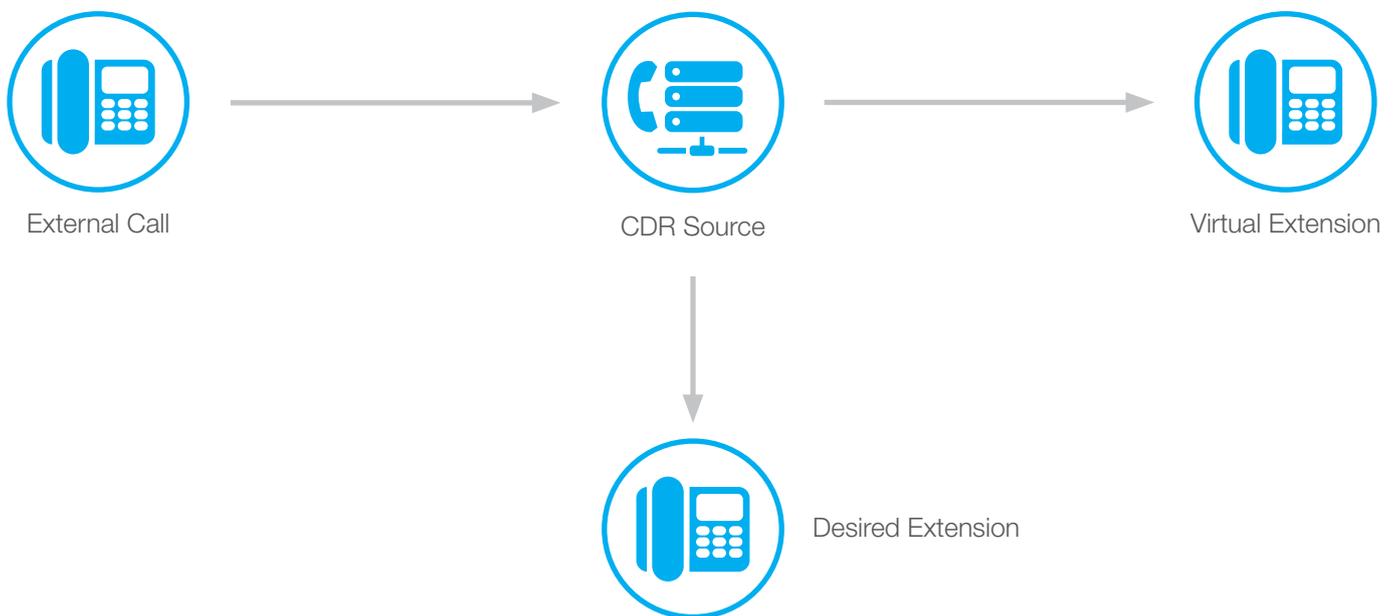
## Virtual Extension

A virtual extension is an extension that does not physically exist, although a company's PABX would recognize it as a valid destination. A virtual extension may be given to a person who would be able to move from phone to phone. By entering a specific access code on a handset (switch specific), the PABX would recognize the virtual extension and would be able to route calls to the relevant required destination.

**Example A:** Within a company, if 0 is dialled for the operator, the call goes to the virtual extension 0 and is then routed to the switchboard extension. This is done at PABX level and is setup on the PABX by the relevant maintainers.

**Example B:** A helpdesk operative uses a different phone each day depending on where they are sitting. At the beginning of each shift, a pre-defined code is entered to notify the PABX of the virtual number. Thus, when a call comes in for that particular operative, the PABX routes the call to the phone he is at via the Virtual Extension.

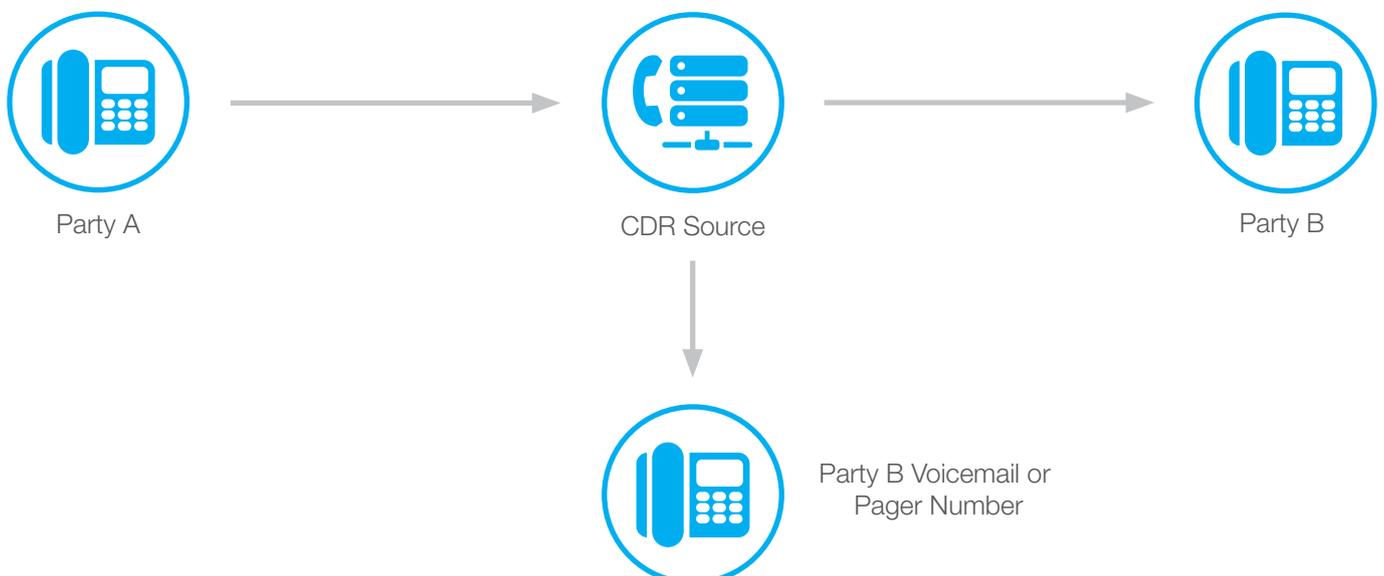
### Virtual Extension



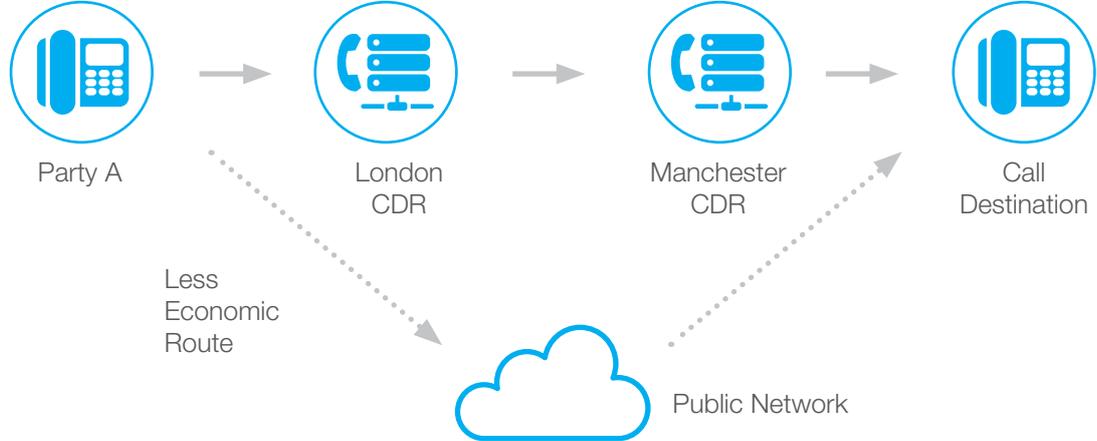
## Voicemail

Party B has a divert set on the switch, so when Party A calls, the switch will automatically redirect the call to Voicemail or to a Pager. This will continue until B removes the divert (normally set up by entering a code from a hand set which informs the switch of the change). Response times would be the same as per a normal call that has been connected.

### Voicemail



## Glossary

<b>Extension</b>	An internal line allowing connection of a handset, modem, or other equipment to the PABX / Switchboard.
<b>Internal call</b>	A call between two extensions on the same PABX, which doesn't break-out onto the public Network.
<b>Inter PBX</b>	A call made on a private wire trunk, this would probably not cost and is generally set up to call other Buildings/offices within the same company
<b>LCR</b>	<p><b>Least Cost Routing</b></p> <p>A call made to an external number from one location, diverted either through a company's network of PABX or an alternative carrier's PABX to reach the destination in the most cost effective way. For example, if A (based in London) was to dial a Manchester number, the call may be routed via the company's private network, enabling it to 'breakout' at their Manchester Office, thus charging the call at a local rate – See Figure 1.</p> <p><b>Figure 1</b></p>  <pre> graph LR     A[Party A] --&gt; L[London CDR]     L --&gt; M[Manchester CDR]     M --&gt; D[Call Destination]     A -.-&gt; Less Economic Route  P[Public Network]     P -.-&gt; D     </pre>
<b>PABX</b>	Private Automatic Branch exchange
<b>PSTN</b>	Public Switched Telephone Network
<b>PBX</b>	Private Branch eXchange
<b>Trunk</b>	Carries calls across the public network, or to another telephone switch that is connected by a private wire.
<b>Tandem Call</b>	<p>A call entering a PABX on one trunk and leaving it on another, either because of a diverted extension, a transferred call, or a route optimisation (See Figure 2).</p> <p><b>Figure 2</b></p>  <pre> graph LR     A[Trunk A] --&gt; C[CDR Source]     C --&gt; B[Trunk B]     </pre>

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