OVERVIEW

Call Pickup enables station users to pick up all types of ringing or held calls including internal, PDN or PhDN calls ringing or on hold at other stations. Station users can also pick up incoming trunk calls ringing or on hold at other stations, incoming trunk ringing during Night Mode to External Page, or tandem SIP trunk connections.

Call pickup can be performed through programmable buttons (Directed Pickup, Group Pickup), or with an access code.

The Call Pickup feature can answer a call which is not terminated or not held at a local station.

Call Pickup types.

Incoming call pickup (Internal or external calls ringing a station or stations)

Incoming call pickup is available as shown in the table below, depending on the specification method.

Type of Pickup	Action
Group Pickup	A call that rings at any station within the same group as the pickup call is picked up. (A group is stations, not DNs.)
Directed Station Pickup (specifying station PDN)	Any call that rings at a designated station is picked up.
Directed Group Pickup (specifying Group Number)	Any call that rings within the group is picked up. A station can belong to more than one group.
Directed DN Pickup (specifying PDN/ PhDN/Station Loop DN)	Any call that rings at a designated DN, not station, is picked up.
Any external call	An incoming call from the public network is picked up, regardless where it is ringing. The order of pickup is FIFO.
Any internal call (no support)	Any internal call, including from a private network, is picked up regardless where it terminates. However, internal calls are not supported.

Recalls of Any type cannot be picked up. This includes Automatic Callback, Automatic Busy Redial, and Consultation Hold. However, an incomplete transfer or a call holding on for long time holding can be picked up. In Group Pick up, Directed Station Pick up and Directed Group Pick up, an incoming call must be logically indicated as I-Called on the designated station or group, and indicated as terminating on the station.

The answer order of Group Pick up and Directed Group Pick up is determined by a pre-defined system, as follows.

- Emergency Call
- Hands Free Call (Note that a Hands Free Call is placed in the queue after being changed to a Tone Call. In this case, the call is no longer recognized as a Hands Free Call but as a regular call.)
- Other type of recall or callback

- External Call, e.g. DID/ DIT call
- Internal Call, e.g. station call, attendant call, or call from IPedge Net

When there are two or more calls of the same priority, they are answered in the order of arrival into the terminated group.

The answer order of a Directed Station Group follows the answer order in a designated station. Calls such as ACD which cannot be answered by Call Pick up feature are ignored. The answer order of a Directed DN Pick up follows the answer order in a designated DN. The answer order of Any External Call follows the order of arrival in calls that become objects of the Call Pick up feature.

Set Class Of Service to determine whether Call Pick up can be executed at each station. Group Pick up can be invoked any time as long as it belongs to a group. For other types of Call Pick up, set for each type to determine if it can be executed.

It is possible to inhibit the pickup of object stations for Group Pick up, Directed Station Pickup, and Directed Group Pickup. They are completely inhibited from out of groups or all permitted. This prevents inadvertent answering of a call.

Call Pickup permits using a One touch button or Speed Dial to initiate the feature instead of manually entering the PDN and PhDN.

Retrieval of a call on hold

Type of Pickup	Action
Local retrieve	Any call placed on Hold on the intiator's station is retrieved.
Remote retrieve (Specifying station PDN)	Any call placed on Hold on the designated station is retrieved.
Directed DN retrieve (Specifying PDN/PhDN)	Any call placed on Hold on the designated DN, not station, is picked up.

Local and Remote Retrieve select calls in numerical order per the GCO button and Pooled Line button which are on hold as I-HOLD in the object station, and answer the call if any corresponding call is found. Then, they retrieve the PDN button and PhDN button which are on hold as I-HOLD in the object station, and answer the call if any corresponding calls are found. If no corresponding call is found, the invoker hears Reorder Tone. The Call Pick up feature cannot answer Consultation Hold and Exclusive Hold.

Class Of Service is necessary to determine whether to invoke Remote Retrieve for each station. At the Remote Retrieve object stations, set Class Of Service to determine whether to invoke Call Pick up. This Class Of Service is shared with answering for terminating call picking up.

Directed Station/Remote Retrieval

Specify the DN to pickup a combination of Directed Station and Remote Retrieval of a call on hold.

When a user attempts to use this type of pickup, the system first searches the specified station for the ringing call and, if it is found, lets a user answer it. If no ringing call is found, then the system searches the specified station for a call on hold and, if it is found, lets a user retrieve it.

Pickup Call on Hold

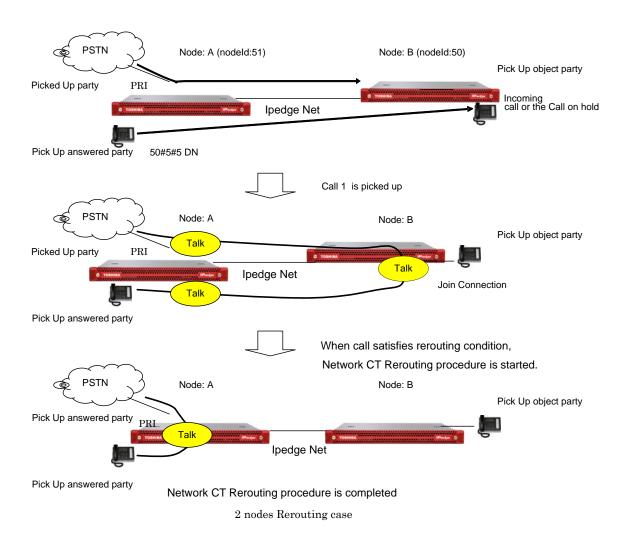
This is a combination of a call on hold with the pickup of DN specification.

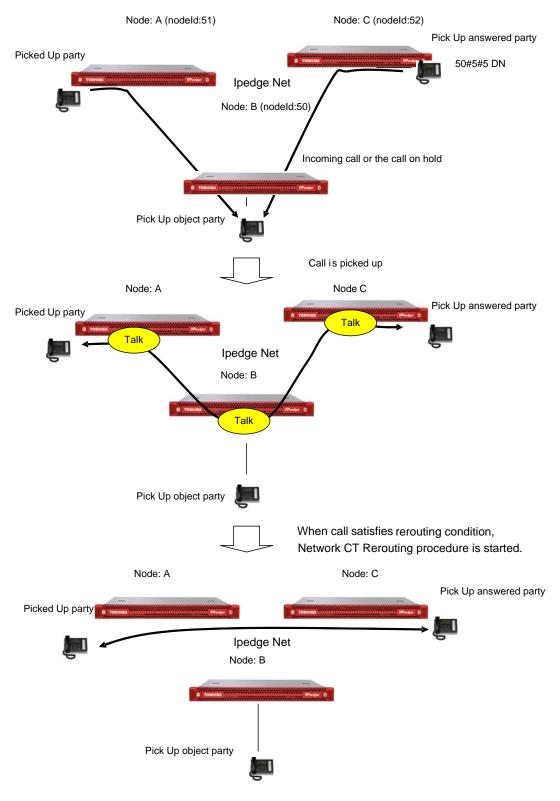
If a user starts this type of picking up, the system first determines if the specified DN is ringing. If it is ringing, a user can answer it. If it is not ringing, the system determines if there is a call on Hold. If there is a call on Hold, a user can retrieve the call on Hold.

IPedge Path Replacement

When an extension station picks up a ringing or held call in remote nodes, the speech path is established with a join connection in the remote node. After the call is established in the 2-way talking state, an IPedge path replacement is performed between the Pickedup party and the Pickingup answered party by Network CT Rerouting procedure, which is an ECMA standard.

The following Figures are examples for 2 nodes and 3 nodes cases.



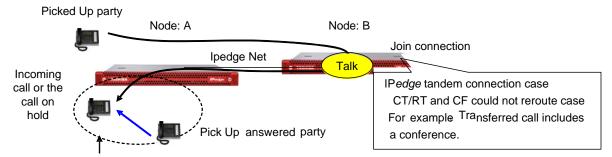


Network CT Rerouting procedure is completed

3 nodes Rerouting case

Rerouting Condition

- IPedge Net Path Replacement of Network CT Rerouting procedure is performed as follows.
 - The node in which an incoming call or a held call behaves the same as a Transferring party.
 - Picked up party: Transferred party
 - Picking up answered party: Transferred-to destination party
- The node in which an incoming call or a held call exists should not be the same node as either the node where the Picked up party belongs or the node where the Picking up answered party belongs.
 - Each node is connected by IPedge.
 - For example, acceptable rerouting cases are shown in the Figures 1 and 2 above and in Figure 4 below. However, Figure 3 is not considered rerouting, because the object picked up call and picking up answered party are in the same node.



Because Pick up object call and Park answered party are in the same node, Rerouting is not started.

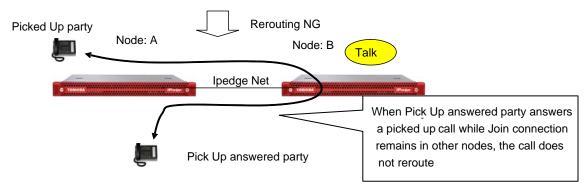
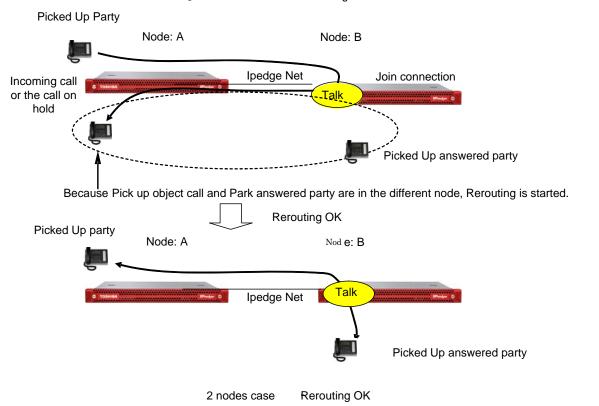
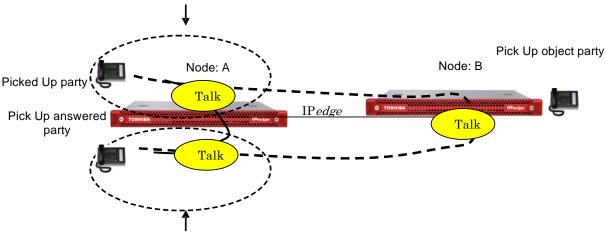


Figure 3 2 nodes case Rerouting NG



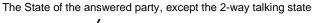
When Network CT Rerouting starts and the state of the picked up party is other than the 2 way talking state, Rerouting cannot be made. In this case, the taking path remains as a join connection. (The state referred to means any state such as pressed CONF button, HOLD button, calling a third Party, or in a conference.) When the picked up party is in a state of service feature providing, Rerouting cannot be made to avoid competition of other features.

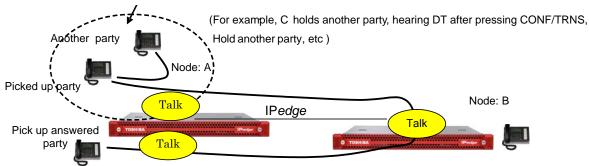
The State of the answered party is ONLY the 2-way talking state to IPedge



The State of the answering party is any state in which answering party can retrieve the pick up object call of the other node.

If Rerouting cannot be made, even if the answered party becomes the 2-way talking state to IPedge, the join connection remains.





Call Pickup

Call Pickup enables station users to pick up all types of ringing or held calls including internal, PDN or PhDN calls ringing or on hold at other stations. When you pick up an internal call, the calling station and the called station displays on your LCD.

Group Pickup

Two or more stations can be assigned to a pickup group, there are a total of 48 pickup groups available. You can easily pick up ringing calls on other extensions. Ringing calls include: new, transferred, internal, or external calls. You will have the ability to pick up calls for other extensions in your group and other groups as well. See your system administrator for group assignments.

Ringing, Page, or Held Call Pickup

This feature picks up ringing or held calls, including Group Page and All Call Page calls. If these types of calls occur at the same time, the pickup priority is station-to-station and then Page calls in the order of occurrence. In some systems, this feature can be applied to pick up All Call Page exclusively.

Call Pickup

You can pick up a call that is ringing another station's extension, a call placed on hold at another station and other types of calls. When you pick up an internal call, the calling station and the called station display on your LCD.

Group Pickup

One or more stations can be assigned to a pickup group, there are a total of 48 pickup groups available. You can easily pick up ringing calls on other extensions. Ringing calls include: new, transferred, internal, or external calls. You will have the ability to pick up calls for other extensions in your group and other groups as well. See your System Administrator for group assignments.

Ringing, Page or Held Call Pickup

This feature picks up ringing or held calls, including Group Page and All Call Page calls. If these types of calls occur at the same time, the pickup priority is station-to-station and then Page calls in the order of occurrence. In some systems, this feature can be applied to pick up All Call Page exclusively.

Perform Call Pickup

Press the buttons shown in the table below for the desired Pickup feature.

Ringing or Page Calls	To Pick Up:	Press Ext. Button, then dial access sequence below:	
Directed DN	A call ringing or held at the Extension Number.	#5#6 + Ext. No.	
	A call Ringing, held or parked at the Ext. No.	#5#29 + Ext. No.	
Group	A call ringing a member of your pickup group.	#5#34	
Directed Ext.	A call ringing on any line of this Primary Ext. No.	#5#5 + Primary Ext. No.	
Directed	A call ringing an extension in this Pickup Group.	#5#32 + Group No.	
Group			
Ext. No.	A call ringing this Ext. No. only. Other lines	#5#22 + Ext. No.	
	ringing on the same phone are unaffected.		
Outside Calls	Any incoming outside line call.	#5#9	
Held Calls	To Pick Up:	Press Ext. Button, then dial access sequence below:	
Local Retrieve	A call held on this telephone.	#5#71	
Remote	A call held on another Primary Ext. No.	#5#72 + Primary Ext. No.	
Retrieve			
Directed Ext.	A call held on for this Ext. No., regardless of	#5#74 + Ext. No.	
Retrieve	where this Ext. No. appears.		

Notes:

- The Primary extension number is the directory number by which the telephone set is defined. Other, non-primary extension numbers may also appear on the telephone. By convention, the Primary extension number is assigned to the first button (on the bottom left-hand side) of a multi-button telephone.
- If more than one call is on hold, the call on the telephone's lowest button number is picked up.
- Ringing calls are picked up over held calls as a priority.

PROGRAMMING

Class of Service

- 1. Click on System > Class of Service.
- 2. Select the server from the dropdown.
- 3. COS Number Select the COS number (1~32)
- 4. Place a check mark in each of the services you want to allow.
- 5. Click on Save icon.

Station Assignment

- 1. Click on **Station > Station Assignment**.
- 2. Check the Station to be programmed.
- 3. Click on Edit icon.
- 4. Select Show Advance Configuration.
- 5. Enable/Disable the Pickup type.
- 6. Click on Save icon.

For Group Pickup

- 1. Click on Station > Station Groups.
- 2. Select the IPedge Server from the dropdown.
- 3. Select Pickup Group from the dropdown.
- 4. Check the Group to modify.
- 5. Click on Edit icon.
- 6. Add or delete members from the group as needed.
- 7. Click on Save icon.

Station Assignments for Group Pickup

- 1. Click on Station > Station Assignment.
- 2. Select the IPedge Server from the dropdown.
- 3. Select the Group tab.
- 4. Check the Group(s) that this station should be a member of.
- 5. Click on Save icon.

Call Pickup Key Assignment

To program a Pickup key on a station:

- 1. Click on **Station > Station Assignment**.
- 2. Check the Station to be programmed.
- 3. Click on Edit icon.
- 4. Select the **Key tab**.
- 5. Right-click the key to be programmed. This will highlight the key and pop-up a screen with button types.
- 6. Select Call Pickup > (the desired pickup type).
- 7. Click on Save icon.

Modify Call Pickup Access Code

Optional.

- 1. Click on System > Flexible Access Codes.
- 2. Click the access code to be changed.
- 3. Click on **Delete**.
- 4. Confirm deletion of the code.

Add a new Flexible Access Code

- 1. Click New.
- 2. Enter the code.
- 3. Select the feature from the dropdown.
- 4. Click on Save icon.

CAPACITY

Number of pick up groups = 48

Number of members in one group = Unrestricted

The number of terminating calls simultaneously (can be picked up) is 512.

AVAILABILITY

Station/Line	Descriptions
IPT	Can pick up and answer by either feature access code or feature button.
Soft IPT	Can pick up and answer by either feature access code or feature button.
IP Attendant	Can pick up and answer by feature access code.
SIP compliant station	Can pick up and answer by feature access code.
SLT (via FXS gateway)	Can pick up and answer by feature access code.
IPedge	Can pick up and answer by feature access code from a remote node.

RESTRICTION

Call Pickup cannot pick up an incoming call that is calling as a third party (a call originated by Conference Master by Consultation Hold or the destination). The station to invoke Call Pickup can pick up the call after it is transferred to another destination. Unless one of them is restricted, two Conference Masters are connected using a conflict of service.

Call pick up can be made for an incoming call that is calling the third party (a call originated by Conference Master by Consultation Hold). However, the station to invoke Call Pick up cannot answer the call after the party puts the far end party on Consultation hold and enters a feature access code. Unless one of them is restricted, two Conference Masters connect causing a conflict of service. This case happens only in a single node. Even if the Pick up answered party in the remote node puts the far end party on consultation Hold, it can pick up an incoming call, which is calling the third party.

HA			

No additional hardware is necessary for this feature.

FEATURE INTERACTION

Automatic Busy Redial Recall by Automatic Busy Redial cannot be picked up. (ABR)

Automatic Callback
It is not supported to pick up a call in the queue and answer it.

Recall to an Automatic Callback invoker cannot be picked up.

Automatic Camp On A camped on call in a queue by Off-hook Camp On or Automatic Camp

On feature cannot be picked up.

ACD Use the pickup feature defined by ACD to pick up an ACD call.

Basic Survivability After switchover to a secondary server, a customer needs to enter the

node ID of the primary server to pick up a terminating or held call in the

primary server.

Caller Identification The Call Picking up party's LCD displays caller information, if notified,

when the party picks up a terminating call on another station from the

PSTN and begins talking.

Call History When an incoming call is answered by the Call Pick up feature, it is

recorded as an incoming call history.

Call Monitor A Monitoring station cannot pick up a monitored call up using the Call

Pickup feature.

Call Park Orbits Call Park Orbit cannot be answered by Call Pickup. Use the Call Park

access code.

A Parked call cannot be retrieved by Call Pickup. Use the Call Park

retrieving access code.

Recall of a parked call can be picked up by Call Pickup feature.

Call Transfer With Camp On The Call Pickup feature cannot be applied for calls in a camped on queue

by Call Transfer With Camp On feature (camping on the transferred-to

destination).

Class Of Service The Class Of Service "Whether to be picked up" for the picked up party

must be enabled to invoke the Pick up access code.

Adding Class Of Service above, the picking up party's (DN) Class Of Service must be enabled to invoke the following types of picking up. Only the using type's Class Of Service should be enabled.

- 1. Group Pick up
- 2. Directed station Pick up
- 3. Directed Group Pick up
- 4. Directed DN Pick up
- 5. Any External Pick up
- 6. Remote retrieve
- 7. Directed DN retrieve

Conference on Hold

A Conference on Hold call cannot be retrieved by the C all Pickup feature. This is to ease the complexity in the specification as well as in the software and prevents the user-executed Call Pick up from being suddenly put into a conference.

Conferencing

Other users can answer a call from a conference master to a participant by using Call Pickup.

When a conference master puts a call on Consultation Hold and calls other stations, the terminating call cannot be picked up by another conference master who puts the conference call on Consultation Hold.

A user cannot pick up a recall on the conference master who puts the call on Consultation Call.

The far end party who answers a call by Call Pick up can join a conference. However, merging two conferences by using the Conf button or Join softkey is impossible. A Consultation Hold master who presses the Conf button or Join softkey hangs up the later joined conference and hears Reorder Tone. See the Consultation Hold specifications to return to the original call.

Consultation Hold

Call Pickup cannot answer a call on Consultation Hold or a call turned from Consultation Hold to a recall.

Delayed Ringing

Delayed Ringing is not applied when the call is answered by the Call Pickup feature.

A call can be picked up before the termination timer expires on the line button where Delayed Ringing is set.

Do Not Disturb (DND)

Activating Do Not Disturb does not affect originating from a station.

Do Not Disturb (DND)
Override

A terminating call with Do Not Disturb Override activated can be picked up the same as an ordinal call.

Emergency Call

An Emergency call can be picked up the same as an ordinal termination.

Enhanced 911 (E911 Interface)

A user cannot pick up an emergency call termination (Internal Notification) to an Emergency destination.

Exclusive Hold

A call in Exclusive Hold state or Hold recall termination cannot be picked up.

External ACD

ACD Calls terminating on an agent or held by an agent can be picked up by other stations.

Group CO Button

The following picking up features can be used to pick up terminating calls on the GCO button.

- Group Pick up
- 2. Directed Group Pick up
- 3. Directed station Pick up
- Any External Call
- 5. Directed station Pick up & Remote Retrieve

The following picking up features can be used to pick up held calls on the GCO button.

- 1. Local Retrieve (Only for self station)
- 2. Remote Retrieve
- 3. Directed station Pick up & Remote Retrieve

Group Paging/Emergency
Page

A page call cannot be answered by any Call Pick up features except Directed station Pick up and Directed Group Pick up.

A Paging Call through an IPT speaker can be answered from other telephones by Directed station Pickup or Directed Group Pickup.

Hands Free Answer Back

Since a hands free call is regarded as an incoming call on the service, it can be picked up the same as a tone call.

Intercept

An Intercept termination call can be picked up and answered by the Call Pickup feature the same as a usual termination.

ISDN Basic Call Control

An external incoming call from the ISDN cannot be picked up by specifying a CO number. CO numbers do not exist for ISDN trunks.

LCD Shift Key

Each feature button can be set on both the fore side and the hidden side.

The service using LED continues even though it is not indicated while on the hidden side.

Line Hold

A held call can be retrieved by the Call Pick up feature. (On-hold call pickup.)

Lost Call Treatment

Lost Call termination can be picked up by the Call Pick up feature. The types of picking up are the same as a usual termination.

Manual Voice Recording

When a call held by Line Hold is picked up by another station, Voice Recording is automatically finished.

When a call held by the remote station that initiated voce recording is picked up by another station, voice recording continues.

Multiple Appearance

It is possible to pick up the following calls at secondary appearances that are ringing and indicating as I-Called:

- 1. Group Pickup
- 2. Directed Station Pickup
- 3. Directed Group Pick up
- 4. Directed station Pick up & Remote Retrieve

Multiple Calling

All kinds of Pick up (defined as Call Pickup) apply to a call for the MCP No.

However, an MC call cannot be picked up by specifying the MCP number.

Network DN Table

A Network DN cannot be specified as a specified DN and specified picking up station.

Off-Hook Call Announce, Handset Off-Hook Call Announce Off-Hook Call Announce or Handset Off-Hook Call Announce are to be picked up with priority when Directed station Pickup is used, as long as a line key is associated with those. If no line key is allocated to those calls, pickup is not allowed.

Off-Hook Call Announce

Call Pick up is applicable to an OCA call initiated by seizing a line button. For an OCA call initiated without seizing a line button, Call Pick up must specify the destination station.

Off-Hook Camp On, Automatic Callback

Call Pickup cannot answer calls queued using these features.

One Touch Button

The One touch button feature can be used for picking up terminating and held calls. It is possible to specify the number of Line/ station/ Group by One touch buttons.

Overflow

When a call is queued to attendant console it cannot be picked up from an extension station. After the call is transferred to the Overflow destination it can be picked up from the station.

PC Attendant

It is not possible for stations, other than Attendant, to pick up calls terminating or holding on either Attendant group or Attendant individual DN in Attended or Position Busy Pending mode. However, other Attendants in Attended mode can pick up.

Calls terminating or holding on Attendants in Position Busy mode can be picked up. This is the same as IPT.

Attendant can pick up a call terminating or holding on another station. This is the same as IPT.

Pooled Line Button

The following picking up features can be used to pick up terminating calls on the Pool button.

- 1. Group Pickup
- 2. Directed Group Pickup
- 3. Directed station Pickup
- 4. Any External Call
- 5. Directed station Pickup & Remote Retrieve

The following picking up features can be used to pick up held calls on the Pool button.

- 1. Local Retrieve (Only for self station)
- 2. Remote Retrieve
- 3. Directed station Pick up & Remote Retrieve

Private Networking Over IP

It is impossible to pick up an incoming call to a remote node as if picking up an incoming call to a local node by Call Pick up.

On the other hand, it is possible to pick up a terminated call to another node by using the Network Feature Access Code. In this case, when picking up the call via IPedge Net, the originating station's class of service (including attendant console) is notified to the service providing node to determine if Pick up is possible. When IPedge Net is used but the call

originator is not an extension station or when the call is picked up via non-IPedge Net, the Class of Service set for the Line Group is referenced to determine if Pick up is possible.

You cannot build up a Call Pickup group over two or more nodes. Thus, when the pick up destination station does not allow pick up from out of a group, pick up fails.

Recall Treatment

A recall termination can be picked up by following:

- 1. Group Pick up
- 2. Directed station Pickup
- 3. Directed Group Pickup
- 4. Directed DN Pickup
- 5. Directed station Pickup & Remote Retrieve
- 6. Directed DN Pickup & Directed DN Retrieve

(Picking up can be used. However, Any External Call type is not applied.)

Excluded from the above are Consultation Hold or Exclusive Hold recall. The recall of transferring incomplete or holding recall for a long term Consultation Hold can be picked up.

Other types of picking up for a Hold call can be used for recall termination of Hold recall, Exclusive hold invoked by specified by the station or DN, and Consultation Hold. However, these are not picking up for the recall termination.

Repeat Last Number Dialed

Call Picking up invoker Operation is stored in the redial buffer.

Ring Transfer

After the transfer takes place, a transferred call ringing at the destination can be picked up through the Call Pickup feature. However, the combination of the call to be picked up and the party picking up may result in the Call Pick up feature being denied.

Ringing Assignment

A terminating call on the line button which sets No Ring for Ringing Assignment cannot be picked up by Directed station Call pick up.

The Delayed Ring feature can be used to pick up and answer a call even if the call is not ringing.

SIP Extension

A Line-Hold in SIP is treated as a Consultation hold within the system. For this reason, a call held by a SIP station cannot be picked up.

SIP Trunking Provided.

Specified Caller Identification

When a station in IPedge picks up a call from MAS (FF PCH) or Varaha, the caller number (same as the specified caller number) displays on the station's LCD.

Station Message Detail Record (SMDR) Invoking picking up is treated as starting talking the same as ordinal answering so that the SMDR record outputs to the external device.

Tone First/Voice First

It is supported to pick up the terminating call of both a Voice first call and

a Tone first call.

Transfer Direct To VM

This feature cannot pick up a call transferred to Voice Mail.

Transfer Privacy

Directed station, Group, Directed Group, and Any External Call picking up can be used if the Transfer Privacy setting is Disabled and a terminating indication is on the appearance line buttons.

If the Transfer Privacy setting is Enabled and the In-use indication is on the appearance line buttons, then Picking a call up is not possible except for the transferred-to destination.