

OVERVIEW

The Automatic Line Selection feature selects an appropriate line button when an IPT user goes off-hook or presses a speaker button in idle state.

Each IPT can be programmed with one of the following three selection types. In any type, if the system fails to select the line, nothing takes place and the station stays at idle state.

Type 1: Idle Preference

The system selects an idle line appearance to originate a call. There are two types of idle preference:

- CO button Only
- DN button Only

To avoid confusion about the numbering plan, one of two types must be selected exclusively. In either type, the ownership of the line has nothing to do with the selection.

The system searches for an idle GCO (Group CO) button or Pooled Line button starting from the lower button number to a higher key number. GCO and Pooled Line buttons are associated with the public network. If the private network appears on those buttons, they are precluded during the idle line selection.

The PDN of the station is tested first. If the PDN is idle, the system selects it. Otherwise, the system searches for an idle DN button starting from the lower button number to a higher button number. The PhDN buttons are subject to search.

Type 2: Ringing Preference

The system selects a ringing line appearance to answer a call.

The system provides two options on queuing the incoming calls.

1. Longest ringing

Regardless of call type or the reason for the termination, calls are answered in the order of call arrival no matter what the type of call.

2. Call type and longest ringing

Calls are answered according to their call type and time of call arrival.

The priority for each call type is as follows:

- Emergency Call
- Hands Free Call (Note that Hands Free Call is queued after being changed to Tone Call. In this case, the queued call is no longer recognized as Hands Free Call but the regular call.)
- ACD call
- Recall or callback (Recalls of Consultation Hold, Line Hold and Exclusive Hold, and call back of Automatic Call Back, Automatic Busy Redial and so on)
- External Call, e.g. DID call

- Internal Call (e.g., station call), attendant call, call from TIE line

The calls classified as "I-Called" or "I-Recalled" are subject for selection even though they are not physically indicated as such. (The physical indication may differ from the logical recognition because the system can indicate only one, "I-Called" or "I-Recalled," per phone.) If the call is classified as neither "I-Called" nor "I-Recalled," the system does not recognize it as "ringing" at the particular station.

When multiple calls of the same priority are ringing at a station, the system selects the longest ringing call. In this case, "longest ringing call" means the call arriving at the station first.

Note: The system does not take into account the history of the call before it arrives at the station.

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| Type 3: Prime Preference | The system selects a prime line appearance of the station when it is idle or "ringing." |
| Type 4: Mixed Preference Methods | <p>The system selects a line appearance with the mixed methods of the above. The possible combinations are:</p> <ul style="list-style-type: none"> • Prime preference + Idle preference <p>The system tries the Prime preference first. If it results in no line seized, the system tries the "Idle preference."</p> <ul style="list-style-type: none"> • Prime preference + Ringing preference <p>The system tries the Prime preference first. If it results in no line seized, the system tries the "Ringing preference."</p> <ul style="list-style-type: none"> • Ringing preference + Idle preference <p>The system tries the Ringing preference first. If it results in no ringing line selected, the system tries the "Idle preference."</p> <p>Other combinations are possible and will be implemented at later releases.</p> |
| Type 5: No Preference | The system does not select a line automatically. The user has to do it manually. |
| Ring Call Priority vs. Automatic Line Selection | <p>It is important to address the relationship between the priority of "ringing call" and the automatic line selection. The priority of a "ringing" call is determined not only by the call type but also by the preference set at the destination station.</p> <p>The system checks for the preference first and attempts to select a line based on the criteria. If no line is selected, then the system tries the next available preference. For example, if the destination has only ringing preference, the priority of a "ringing" call follows the criteria detailed in Type 1: Ringing Preference, noted above.</p> |

However, if the station has Prime Preference, any type of call terminated to the prime line will override other calls, because the "ringing" call at the

prime line must be selected. In this sense, regardless of the call type, a “ringing” call at the prime line has the highest priority when the Prime Preference is applied.

Off-Hook Idle Preference for
SLT

This preference is not supported in *IPedge*.

Automatic Line Selection (ALS)

This feature automatically connects a telephone to a specific line or extension button when the user lifts the handset off-hook, presses the **Spkr** (speaker) button, or presses a digit on the dial pad (Hot Dialing). This feature is necessary to make telephone operation consistent for the user because a telephone can have up to 20 line and extension buttons. Each telephone can be assigned in system programming with various options that determine what type of line or extension button is selected when the user takes the handset off-hook to make or answer calls.

When answering calls, this option can be set to answer the call or not when a call rings the telephone and the user takes the handset off-hook. If the option is set to not answer automatically, the user can press the ringing button on the telephone to answer manually. With Automatic line selection, if more than one type of call is ringing simultaneously on the telephone, this option selects which type of call should be answered as a priority, then the longest ringing call in that call type is answered first.

Automatic line selection options are set independently for each telephone, for originating new calls and answering ringing calls. This feature can also be disabled on all or selected telephones to allow users to manually press a button to originate or answer calls.

Automatic Line Selection (ALS)

Automatic Line Selection (ALS) is engaged on outgoing calls. Lift the handset or press **Spkr** to hear a dial tone. The steady green Line LED indicates ALS is enabled. The second line of the LCD displays the method of dialing available, followed by the digits dialed.

PROGRAMMING

- Station Assignment
1. Click on **Station > Station Assignment**.
 2. Check the Station to be programmed.
 3. Click on **Edit** icon.
 4. Select the **Preference tab**.
 5. Click Show Advance Configuration.
 6. Select the PDN/Line Preference.
 7. Click on **Save** icon.

CAPACITY N/A

AVAILABILITY

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| IPT | Applied |
| Soft IPT | Applied |
| IP Attendant | Applied |

RESTRICTION

I-Called indication

Previously, only one "I-Called" indication was possible per station. For IPT, even though there is no limitation since the station generates the pattern, Called Indication remains for the customer's convenience. The "I-Called" indication shows the highest priority call to be selected by Prime preference or Ringing preference. When a higher priority call is presented to a station, the station indicates it as "I-Called" by changing the existing "I-Called" indication to another pattern.

If the station has neither Ringing preference nor Prime preference, the system indicates "I-Called" as if there were Prime preference + Ringing preference (Longest Ringing) in terms of the priority of the ringing call.

HARDWARE

No additional hardware is necessary for this feature.

FEATURE INTERACTION

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| Automatic Busy Redial (ABR) | <p>Going Off-hook and pressing the speaker key during the recall by Automatic Busy Redial is regarded as an answer to Automatic Busy Redial (even on the station that is set to Idle Preference by the Automatic Line Selection feature).</p> <p>Before the recall by Automatic Busy Redial starts, pressing the speaker key while hearing the audible tone from the trunk line is regarded as an answer to Automatic Busy Redial.</p> |
| Automatic Callback (ACB) | <p>The Automatic Line Selection feature is not applied to recall termination for Automatic Callback invoker. The call terminates on the line button that is used when invoking the Automatic Callback feature.</p> |
| Basic Survivability | <p>The same programming setting must be set for both the primary and secondary server.</p> |
| Call Forward/Ringing Transfer/System Call Forward/Delayed Ringing | <p>The "longest ringing" call means the call which is ringing for the longest time of period at a particular station. The system does not take into account how long it was ringing prior to that.</p> |
| Call History | <p>When two or more calls come in to a station, the lowest priority call actually cannot ring the station. Call history is recorded even in this case because it is recorded for the owner station regardless of whether the call actually rings the station.</p> <p>When the Spkr button is pressed or the line is off-hook in Call History Reviewer Mode, the line button is selected by Automatic Line Selection. If there is a ringing button and the system is set to preferably select the ringing button, then it will be answered. Call History Reviewer Mode ends, and the CLID button turns off.</p> |
| Call Park Orbits | <p>The Automatic Line Selection feature invokes when the park retrieving feature access code is entered by pressing the Spkr button or going off-hook. However, this operation is valid only if the Prime Preference or "DN button only" of Idle Preference for Automatic Line Selection feature is set.</p> |
| Direct Station Selection Button | <p>To use the Direct Station Selection feature, Idle preference or Prime preference must be set and an idle line usable for making a call must be selected. When the DSS feature is used, it is obvious that the telephone is used for originating a call. Thus, an idle DN line button is selected and the system originates the call regardless of the setting of Automatic Line Selection.</p> |

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| Directory Assistance | When this feature is activated and a call is originated, the call originating operation is not started according to Automatic Line Selection. The idle line per the destination type (station or trunk) is selected. |
| Emergency Call | The emergency call is treated as the highest priority when it terminates on the station. |
| Enhanced 911 (E911 Interface) | An E911 call can be originated even though the station is not permitted to originate outgoing calls. |
| Group CO Button | It is possible to answer a terminating call on the Group CO button or seize the idle Group CO button to originate an outgoing call when the user goes off-hook or presses the speaker button at the idle state and the system applies the Automatic Line Selection feature. |
| Group Paging/Emergency Page | The paged station, during paging, can originate or answer a call by seizing the appropriate line (by going off-hook or pressing the Spkr button), provided by Automatic Line Selection feature. This is the same behavior as an idle station. It is not supported to answer a paging call by going off-hook or pressing the Spkr button. A paging call on the paged station is disconnected when the paged station seizes the line. |
| Hands Free Answer Back | <p>A Hands Free Call is disconnected right away and the originator hears Busy Tone if the user tries to originate or answer the terminating call by seizing the other line button by Automatic Line Selection or pressing the other line button manually.</p> <p>A hands free call disconnects immediately and the user hears Reorder Tone if an emergency call terminates on the station and a hands free call comes in.</p> |
| Hot-dialing | <p>To make a call from a telephone, press a line appearance button then, lift the handset or press the speaker button. It is not necessary to press the line button first.</p> <p>Hot Dialing means that when a number (0~9) button on a phone is pressed it will automatically select a line (Auto Line Select) and turn on the speaker.</p> <p>The Hot Dialing feature requires that Idle Line preference or Prime preference is set and that there is an idle line on the station in order to make a call.</p> <p>If an Idle Line or Prime is not selected it can't select a line to make the call.</p> |

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| LCD Shift Key | If the priority of the line button or the terminating call is higher, even though the line button is located on the hidden side, the call can be answered by going off-hook or pressing the Spkr button. |
| Lock Password | If the Lock mode station defines Automatic Line Selection to select a GCO button when Off-Hook or pressing the Spkr button, the external trunk access is restricted except for an emergency call. |
| One Touch Button | Contents of One Touch Button are analyzed to see whether to activate the Automatic Line Selection feature. For example, pressing the One Touch Button is ignored if nothing has been set for it. (No line is captured and no dial tone is heard.) |
| On-hook Dialing | <p>Press the Spkr button to engage Automatic Line Selection. Either Idle Preference or Prime Preference is set and the idle line to originate the call can be selected when the dial pad is pressed.</p> <p>If Idle preference or Prime preference is not set or an idle line cannot be selected, the pressing the dial pad is ignored.</p> |
| PC Attendant | <p>The call to be answered is requested by PC because PC ATTENDANT does not have an ATT-ANSWER button.</p> <p>The selected line when PC-ATT originates the call follows the programming setting when Position Busy mode is either Attended or Position Busy Pending.</p> |
| Pooled Line Button | Going off-hook or pressing the Spkr button seizes the POOL button at originating if the Idle Preference for Automatic Line Selection feature is set. |
| Prime DN Button | The Prime DN button is seized in high priority if the user goes off-hook or presses the Spkr button, when the programming is set as "Prime Preference" or "Idle Preference" with "DN Button Only." |
| Private Networking Over IP | In Ringing Preference, when a call is recognized as an incoming call from IPedge tie line and the originator is recognized as a trunk, the incoming call from the trunk has the system priority. The other call types or the incoming call from a non-IPedge tie line are handled as an internal call. |
| Release/ Answer Button | A new incoming call is answered using the Release/Answer Button even if the Idle Preference setting for Automatic Line Selection is not set for answering. |

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| Repeat Last Number Dialed | <p>If either "Prime Preference" or "Idle Preference" is set, the idle line is seized following the Automatic Line Selection feature when the Redial button is pressed at an idle station. The idle line is seized regardless of the setting if "Ringing Preference" is selected.</p> <p>Pressing the Redial button is ignored if the idle line cannot be chosen by setting the Automatic Line Selection feature and the idle line cannot be seized temporarily.</p> |
| Ring Over Busy | <p>The highest priority call of the terminating calls can ring by Ring Over Busy. The priority is determined per Longest Ringing if preference for the termination is not set.</p> |
| Ringing Assignment | <p>The call is not subject to Ringing Preference if the line button is set as either No Ring or Delayed Ring with the call before starting ringing.</p> <p>The call is not subjected to Prime Preference if the line button is set as either No Ring or Delayed Ring for the call before ringing starts, because the line button is in intermediate state.</p> <p>The system checks whether calls can be indicated as I-called/I-Recalled per the terminating type for each call and the setting of Ringing Assignment for the line, (if there are 2 or more terminating calls on one station). This is determined per the setting of the preference for Automatic Line Selection.</p> |
| SIP Extension | <p>Not applied</p> |
| Speaker Phone ON/OFF | <p>When the speaker button is pressed during the idle state of the station, the operation follows Automatic Line Selection. If there is no line to select, pressing the speaker button is ignored.</p> |
| Speed Dial (System/Station) | <p>If Automatic Line Selection is set to select an idle line, it hunts an idle line when the speed dial feature button is pressed in an idle state. Otherwise, it ignores pressing of the speed dial feature button.</p> |