#### **OVERVIEW**

This feature changes the destination of an incoming call or the system operating conditions, such as call originating restrictions, based on the day of the week and the time of day (time zone). It also enables manual switching of Day/Night Mode by operating a specific key, the Night Transfer key, on an IP Telephone (IPT).

The system has three modes: DAY1, DAY2, and NIGHT. Each mode is defined for each tenant. Usually, DAY1 is assigned to office hours, DAY2 is lunch time or operator absent time. Night is after five p.m. or close of business, midnight, or holidays.

To change Day/Night modes depending on the day of the week or the date, IPedge recognizes two types of calendar; Public and Private. Public Calendar indicates the day of the week information, the public telephone network switches services based on it, and it is referred to by Least Cost Routing. Private Calendar indicates the day of the week information; the system user and company switch the services based on it. The switching of Day/Night Mode follows the Private Calendar.

#### Day/Night Mode Scheduling

The day of the week is classified into three types:

- Working day
- Non-working day
- Private holiday

It is also possible to set a private calendar table and set a specific day as a specific type of day.

Private day	of week mapping	Private Calendar		
Monday	working day	2011/01/10	private holiday	
Tuesday	working day	2011/03/06	working day	
Wednesday	working day	2011/05/08	working day	
Thursday	working day			
Friday	working day			
Saturday	non-working day			
Sunday	non-working day			

The system gets the day of week by looking at the system clock, which is mapped to any of the three types of day. If the date is listed in the private calendar, the type of day stored in the calendar overrides the one mapped from the day of the week. Suppose that today is 2011/03/05 (Sat), it is mapped to a "non-working day" by simply referring to the mapping table. If today is 2011/03/06 (Sun), it is mapped to a "working day" because the private calendar says so.

If the Day/Night Mode switching time (00:00 - 23:59) is set on the table to meet the type of day obtained in this way, the system automatically switches the Day/Night mode when that time comes.

Private Holiday		Day/Night Modes		les	Start Time		)	
Non-Working Day Da		Day1 ay/Night Modes			7:00 Start Time			
J	Juy	De		av1		7:00	,	-
Working Day	Day/Night Modes		Start Time					
	Day1			7:00				
			Day2		17:	:00		
			Night		20:	:00		

It is not necessary to set time in the order of DAY1, DAY2, and NIGHT. It is possible, for example, to switch to DAY1 after DAY2 and then switch to NIGHT. To skip a part of modes due to a holiday, enter 99-99 as a start time.

When the system operation starts, the system searches the nearest switching time and sets it to the appropriate Day/Night mode. When the start time is 99:99, the system assumes DAY1.

#### Manual Switching of Day/ Night Modes

It is possible to switch the Day/Night Mode manually using a function key (Night Transfer) on an IPT. On the Night Transfer key, the current Day/ Night mode is indicated by the function key LED:

DAY1: OffDAY2: FlashingNIGHT: On

If an IPT is allowed by Class of Service, a user can change the mode by pressing the Night Transfer key followed by the mode number. Dial 1 shows DAY1, dial 2 shows DAY2, and dial 3 shows NIGHT mode, respectively.

If other digits or keys are pressed instead of these mode numbers or the first inter-digit timer expires without entering any dials or keys, the operation is cancelled. If it is not allowed by Class of Service, the LED indication will function but the mode cannot be switched by pressing the function key.

## Scheduled and Manual Switching Interaction

The manually switched mode is valid until it is manually switched again or the scheduled switch occurs. For example, if the system is set to switch DAY1 to DAY2 at 17:00 and DAY2 to NIGHT at 20:00, even if DAY2 is manually switched to DAY1 at 18:00, the mode will be switched to NIGHT at 20:00.

## Referencing Features of Day/Night Mode

The following features reference Day/Night Mode:

- Direct Inward Dialing the destination is changed according to the Day/Night Mode.
- Class of Service A station's Class of Service and Line Group is changed according to the Day/Night Mode.

#### **Day/Night Mode**

**Auto Schedule** – The system has three operating modes that are based on the time-of-day, day-of-the-week, and up to 128 holiday schedules. The operating modes are Day1, Day2, and Night. Each mode controls the routing of incoming line calls and settings for station and line Class Of Service restrictions. The system can be programmed to use all three modes, Day/Night mode only, or just the Day mode. The system switches automatically from one mode to the next based on the system's time-of-day clock.

# Example Day/Night Mode Applications:

**Incoming Calls** – Incoming line call including ground/loop start lines converted to SIP trunks via a gateway, SIP trunk URIs, and individual DID and DNIS numbers can change their ringing destinations automatically according to the date and time of day.

For example: On workdays, calls are routed to the attendant, individual telephones, ACD groups, etc., until 5:00 p.m. After 5:00 p.m., calls are routed off-premise to another office, to the Night Bell, or to night announcements and voice mail message boxes. On holidays and weekends, calls are routed independently to the appropriate holiday announcements or voice mail message boxes.

Class Of Service – Station, lines, and DID numbers are assigned options in Class of Service. These include Toll Restriction, Override privileges, allowed tandem connection, security code administration, etc. Any of these options can be changed independently for each telephone, line and DID number when the system switches from one operating mode to another.

For example: When the system changes from the Day to Night mode, selected stations can be automatically restricted from dialing outside or long distance calls. Note that outgoing route selections set in LCR are switched using a route selection schedule that is independent of the Day/ Night mode schedule.

**System Call Forward** – The System Call Forward settings for stations can be changed automatically when the system changes from the Day to Night mode. For example: During the day, a telephone can forward to a person's car or cell phone, and at night automatically forward to the person's voice mailbox.

**Tenant Services** – Up to eight different tenants can each have different attendant or night bell assignments for day-of-the week schedules using Day 1, Day 2, or Day 3 modes. This feature is enabled in system programming.

**Manual Mode Change** – The system also enables users to manually change the Day/Night operating mode, even if the system is using the Auto Schedule feature. A Night Transfer key can be set on telephones for manually switching at any time from one mode to another. The key's LED flash rate indicates the system's operating mode.

If used with the System Auto Schedule operation, the Night Transfer key overrides the current Auto Schedule mode. However, when it is time for

the system to switch to another mode per the Auto Schedule timer, the system will switch to the mode set by the Auto Schedule.

Example: If the system is switched from Day to Night at 2 p.m. manually with the Night Transfer key (Auto Schedule is set to switch from Day to Night at 6 p.m.), the system will still automatically switch back to the Day mode at 8 a.m. the next morning per the Auto Schedule.

## **Day/Night Mode**

#### Day/Night Mode

The system has three operating modes that are based on the time-of-day, day-of-the-week, and up to 128 holiday schedules. The operating modes are Day, Day2, and Night. Each mode controls the routing of incoming line calls and settings for station and line Class Of Service restrictions.

The system can be programmed to use all three modes, Day/Night mode only, or just the Day mode.

The system switches automatically from one mode to the next based on the system's time-of-day clock. The mode can be manually change using a function key on an IPT.

#### **PROGRAMMING**

#### Day/Night Service

- 1. Click on System > Day Night Service.
- 2. Select the Server from the dropdown.
- 3. Select the Tenant from the dropdown (default Tenant is 1).
- Select the Calendar tab to assign a Working Day Type (Work Day, Non-Work Day, or Holiday) for a specific date such as a Holiday that occurs on the same day each year.
- Select the Day of Week tab to assign A Working Day Type to the days of the week. By Default, Monday through Friday are Work Days. Saturday and Sunday are Non-work days.
- Select the Daily Schedule tab To assign the start times for DAY1, DAY2, and NIGHT mode on days assigned as Work days, Non-Work days, and Holidays.
- 7. Reset to Default sets all values to factory defaults.
- 8. Click on **Save** icon or click **Apply To** if you want to copy the changes to multiple servers or tenants.

#### Class of Service

- Click on System > Class of Service.
- 2. Select the Server from the dropdown.
- 3. COS Number Select the COS Number.
- 4. Place a check mark to the right of Invoke Day/Night Mode to enable users with this COS the privilege of placing the system in day or night mode. Default is disabled.
- 5. Reset to Default sets all values to factory defaults.
- 6. Click on **Save** icon or click **Apply To** if you want to copy the changes to multiple servers.

## Assign a Night Transfer key to 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 key types.
- 6. Select Call Control > Night Transfer.
- 7. Click on Save icon.

**Note:** The station must be assigned to the same tenant as the trunks and/or stations whose day/night mode is being controlled. A station assigned to tenant 1 in the station assignments cannot control the ringing assignments of trunks with an ILG assigned to tenant 2.

## **CAPACITY**

Maximum nNumber of holidays stored in Private Calendar is 128.

## **AVAILABILITY**

Station/Line	Descriptions				
IPT	Can indicate Day Night mode by Night Transfer key. Can switch Day Night mode by Night Transfer key. COS can be changed by Day Night mode.				
Soft IPT	Can indicate Day Night mode by Night Transfer key. Can switch Day Night mode by Night Transfer key. COS can be changed by Day Night mode.				
IP Attendant	Indication and switching Day Night mode can be done by CSTA. COS can be changed by Day Night mode.				
SIP compliant station	COS can be changed by Day Night mode.				
SLT (via FXS gateway)	COS can be changed by Day Night mode.				
Paging Device (via FXS gateway)	COS can be changed by Day Night mode.				
SIP trunk	COS can be changed by Day Night mode. Can set destination per Day Night mode.				
IPedge Net	COS can be changed by Day Night mode. Can set destination per Day Night mode.				
ISDN trunk (via FXO gateway)	COS can be changed by Day Night mode.				
T1 trunk (via FXO gateway)	COS can be changed by Day Night mode. Can set destination per Day Night mode.				
Voice Mail - MAS	COS can be changed by Day Night mode.				
Voice Mail - SIP	COS can be changed by Day Night mode.				

**RESTRICTION** 

N/A

<b>HARDWARE</b>
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No additional hardware is necessary for this feature.

#### **FEATURE INTERACTION**

Administration When using an administrative command, you change the current clock or

the data for determining the correct mode. (Private, Day of Week,

Mapping table, Private Calendar, and Day/Night mode).

Back Light Switching Day/Night Mode using scheduled time does not affect or control

the back light. However, if the IPT has an LCD keystrip that displays the Night Transfer Mode status, the back light will turn on because the LCD

changes.

Basic Survivability The same programming setting must be set for both primary and

secondary servers.

Class of Service The class of service stations and line group are changed according to the

Day/Night Mode.

Each station and port sets COS/DRL/FRL/QPL per Day/Night mode. Each may have different COS/DRL/FRL/QPL settings per Day1/Day2/

Night mode.

A user can enter a mode number after pressing the Night Transfer key, then the system changes the Day/Night mode if the IPTs Class of Service

allows.

Direct Inward Dialing (DID) The destination is changed according to the Day/Night Mode.

Direct Inward Termination The destination is changed according to the Day/Night Mode.

(DIT)

LCD Shift Key Each feature key 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.

Local Date and Time The three modes (Day1/ Day2/ Night) follow the system date and time

and change accordingly. These three modes are not relevant to the date

and time displayed on the LCDs of station that are set to local time.

Position Busy Mode Position Busy Mode works independently from Day/Night mode.

PC Attendant Cannot be set by using the feature key, however, CSTA provides a

method.

Private Networking Over IP

Day/Night mode is controlled for individual nodes. An extension cannot manually switch the Day/Night mode of other nodes.

Ringing Assignment

The Ringing Assignment can be set per Day/Night mode.

Schedule

The system immediately resets the mode to whatever the data shows.

Tenant Services

The starting time can be set for modes per the tenant. A different Class of

Service can be set for each tenant mode.