Documentation

HiPath 4000 V5
IP Solutions - Different Time Zones

Service Documentation

A31003-H3150-S104-1-7620

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Reference No.: A31003-H3150-S104-1-7620

Service Manual HiPath 4000 V5 - IP Solutions - Different Time Zones - Contents

1 Feature Description

The “IPDA Different Time Zones (DTZ)” feature is used in situations when an IPDA shelf or access point (AP-IP) or HFA IP telephones are located in different time zones than the host system. In these cases, the local time of day should be shown instead of the system time on the display of the digital telephones that are connected to the remote AP or on the display of the HFA IP telephones.

Example for the local time display:

A HiPath 4000 system in Houston (Texas) has one remote AP in Los Angeles (California) and one HFA IP telephone in New York (New York). All phones should display the local time.

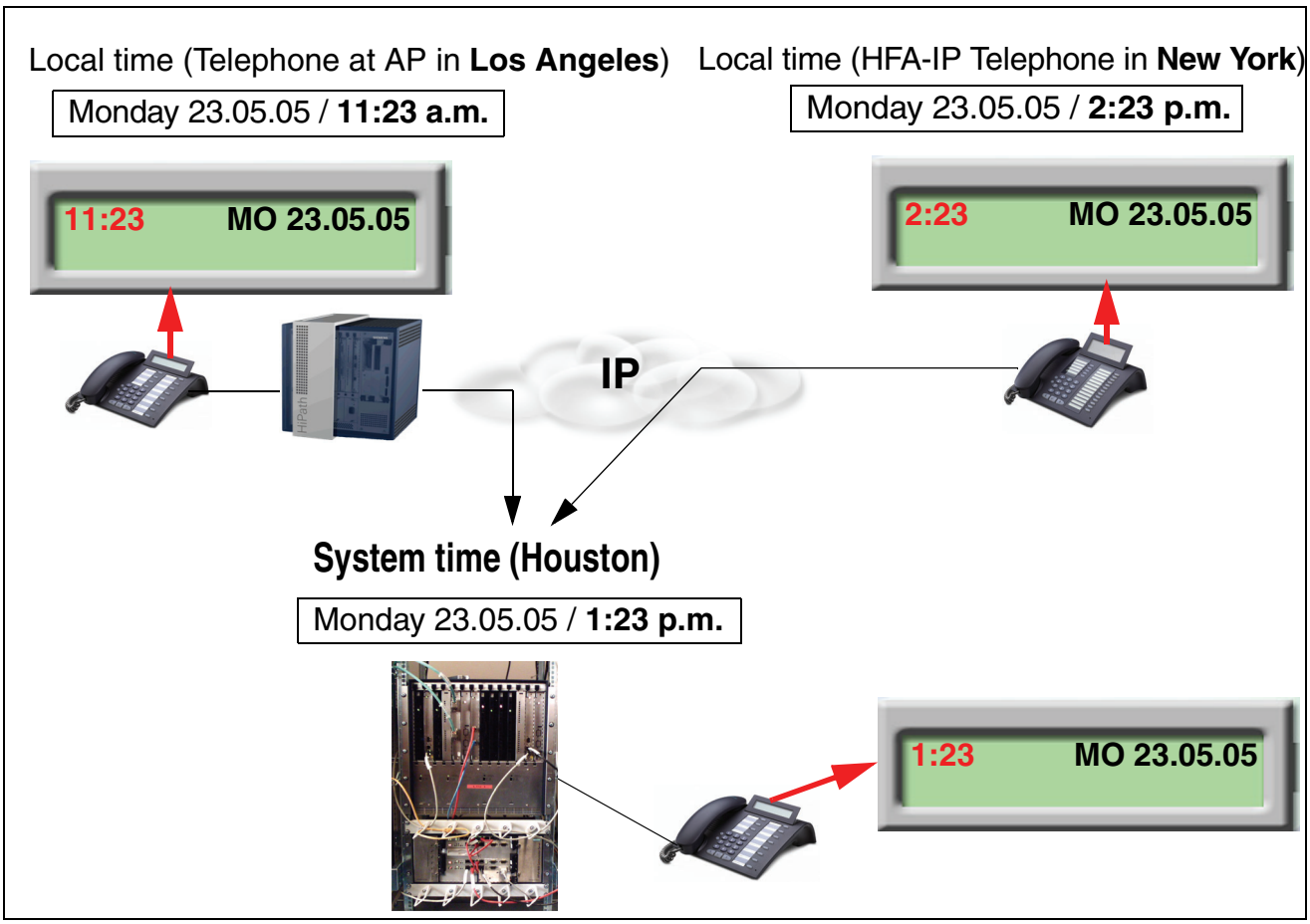


Figure 1-1 Example: HiPath system in Houston with external telephones in Los Angeles and New York

The local time is supported for the following functions:

- Date and time of day in the idle display

- Daylight savings time and standard time
- Call list
- Callbacks
- Date/time button
- Date change at midnight

2 Service Information

In the HiPath 4000, you can set up as many as 50 time classes using the AMO SIPCO. Local times have a fixed offset (in minutes: west or east) to the system time.

You can assign a time class to an IPDA shelf with the AMO UCSU. In this way, all Digites that have a display and that are configured on this shelf use this time class.

You can assign a time class to an HFA station with the AMO SDAT. If an HFA station that is configured on an IPDA shelf has no time class configured, the time class of the IPDA shelf is used. As soon as this HFA station is given a time class with the AMO SDAT, the time class of the IPDA shelf is ignored for this station.

The net must be also defined in AMO SIPCO, if only HFA subscribers are configured in a differed time zone.

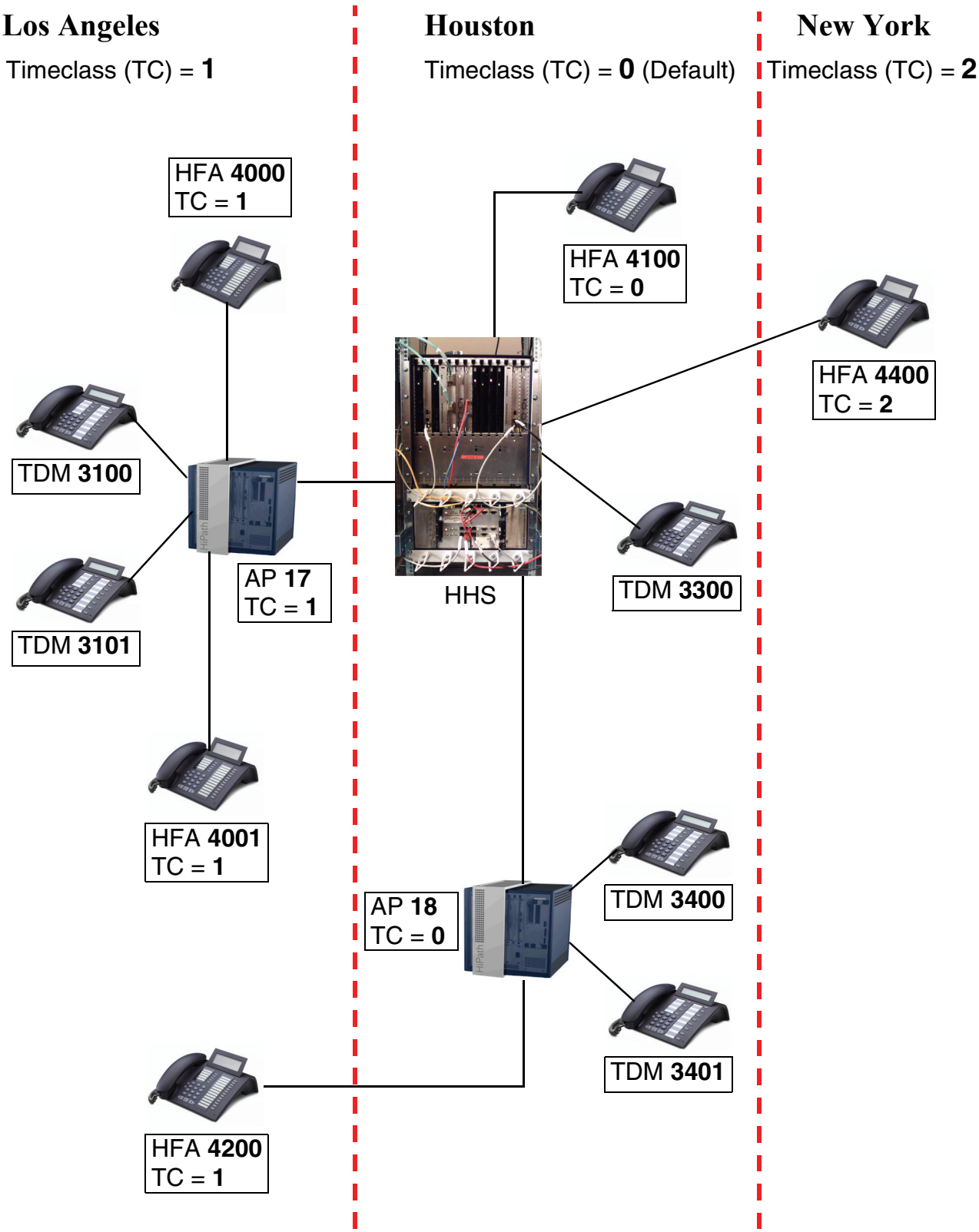
- Using the IPDA wizard in the HiPath 4000 V4 Assistant, the time zones must be configured before in menu: *Configuration Management -> System data -> IPDA -> IPDA data*
- The time class (TCLASS) in AMO SDAT can only be changed for HFA subscribers.

Restrictions in the “IPDA Different Time Zones” feature:

- “HFA Mobile User” is not supported. A user’s display shows the time that has been configured for his or her phone, even if he or she has logged in in a different time zone.
- Timed reminders are not supported. The timed reminder function is blocked if a telephone has a local time class configured.
- Call detail recording is done in the system time.
- Error messages are output with the system time.

3 Generation Example

- The following example covers different DTZ configuration possibilities:
  - The HHS is in Houston, Texas and has two AP shelves configured. HFA stations 4000 and 4001 are in AP shelf 17, which is located in Los Angeles and assigned time class 1. Because of the different time zones, AP shelf 17 is given the time class 1, which provides for a time difference of two hours to the west.
  - HFA station 4100 is located in Houston,station 4100 is configured directly on the HHS. The AP shelf 18 is also located in Houston (Direct link). Neither AP shelf 18 nor the station configured directly on the HHS requires a special time class - the default settings are entirely sufficient.
  - Although the HFA station 4400 is configured in the HHS in Houston, it is physically located in New York. This station is given the time class 2, which means a time difference of one hour in the easterly direction.
  - Another configuration option involves the HFA station 4200 that is configured in AP 18 but that is physically located in Los Angeles. Therefore the HFA station 4200 has to be assigned to time class 1.
    If the station would be located in New York, the time class 2 has to be assigned to this station.
  - All TDM stations get the time class depending on their locations. Stations 3100, 3101, 3400 and 3401 get the time class of the AP shelf configuration (AMO UCSU). Station 3300 gets the system time.
  - Furthermore, an HFA station could also be configured in AP 17 (in Los Angeles), but be physically located in New York. Then time class 2 would have to be configured for this station in the AMO SDAT. This configuration is not pursued any further in this example.
- Overview diagram for the following configuration possibilities:


Los Angeles
Timeclass (TC) = 1
Houston
Timeclass (TC) = 0 (Default)
New York
Timeclass (TC) = 2
HFA 4000
TC = 1
HFA 4100
TC = 0
HFA 4400
TC = 2
TDM 3100
TDM 3101
AP 17
TC = 1
HHS
TDM 3300
HFA 4001
TC = 1
AP 18
TC = 0
TDM 3400
TDM 3401
HFA 4200
TC = 1

3.1 Configuring the Time Classes

- The time classes needed for the example are configured in the AMO SIPCO.

  Time class 1, Los Angeleswith automatic switch to standard time, minus 2 hours relative to Houston (system time).

  This class supports changes from standard time to daylight savings time and back; these take place automatically on the last Sunday in March at 2:30 a.m. and on the last Sunday in October at 3:30 a.m.

  The time class and the automatic switches for daylight savings time are configured as follows:

  Configuration Management -> System Data -> IPDA -> IPDA System Data

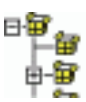
  

```
CHANGE-SIPCO:TYPE=TCLASS,TCLASS=1,OFFSET=120,DIRECT=WEST,
   TEXT="TIME ZONE: -2H L.A.",DSTSW=AUTO,MONTHDST=3,
   WKDAYDST=SU,DAYNODST=LAST,HOURDST=2,MINDST=30,
   MONTHDST=10,WKDAYST=SUN,DAYNODST=LAST,
   HOURNT=3,MINNT=30;
```

  Time class 2, New York, with manual switch to standard time, plus 1 hour relative to Houston (system time).

  This class supports changes from standard time to daylight savings time and back; these take place on March 27th at 2:00 a.m. and on October 30th at 3:00 a.m.

  The time class and the manual switches for daylight savings time are configured as follows:

  Configuration Management -> System Data -> IPDA -> IPDA System Data

```
CHANGE-SIPCO:TYPE=TCLASS,TCLASS=2,OFFSET=60,DIRECT=EAST,
   TEXT="TIME ZONE: +1H N.Y.",DSTSW=MAN,MONTHNT=3,
   DAYDST=27,HOURDST=2,MINDST=0,MONTHNT=10,DAYNT=30,
      HOURNT=3,MINNT=0;
```

- The time class configuration now looks as follows:

```
DISPLAY-SIPCO:TYPE=TCLASS;

TIME CLASS DATE:
```

INDEX	OFFSET	DIRECT	TEXT	DSTSW
1	120	WEST	TIME ZONE: -2H L.A.	AUTO
2	60	EAST	TIME ZONE: +1H N.Y.	MAN

INDEX		MONTH	WEEKDAY	DAYNUMBER	HOUR	MINUTE
1	DST:	3	SU	LAST	2	30
1	NT:	10	SU	LAST	3	30

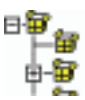
INDEX		MONTH	DAYOFMONTH	HOUR	MINUTE
2	DST:	3	27	2	0
2	NT:	10	30	3	0

3.2 Assigning the Time Classes to an AP Shelf

- The AP shelf 17 configured in the example needs a time class because there is a station configured on it that draws its time class from the AP shelf.

  Assign time class 1 to AP shelf 17.

  The time class is configured with the new parameter TCLASS in AMO UCSU:



Configuration Management -> System Data -> IPDA -> IPDA Access Point

```
ADD-UCSU:UNIT=AP,LTG=1,LTU=17,
   LTPARTNO="Q2305-X40 ",SRCGRP=17,FRMTYPE=INCH19,
   CONNTYPE=APDL,LSRTADDR=198.16.16.63,
   APRTADDR=198.16.16.150,LOCID=017,
   LOCATION="LOS ANGELES",PHONE=3140,FAX=3141,PLCHECK=Y,
   BCHLCNT=120,CONVLAW=N,TCLASS=1;
```

- The AP 18 is not assigned a time class of its own so that the TCLASS parameter is not specified. Consequently, AP 18 works with the default time class 0 (no additional calculation of the display with regard to time zones and daylight savings time).

If the shelf's time class has to be changed, the shelf must first be deactivated with the AMO USSU and then reactivated after the change has been made.

3.3 Assigning the Time Classes to an HFA Station

- A time class must be assigned to HFA stations 4200 and 4400 configured in the example.

  Assigning a time class for HFA stations with AMO SDAT.

  After the HFA stations have been configured by means of the AMO SBCSU (OPTIIP), the time class is configured with the new TCLASS parameter in AMO SDAT:

Configuration Management -> Station -> Station

```
CHANGE-SDAT:STNO=4400,TYPE=DATA1,NNO=1-1-100,TCLASS=2;
CHANGE-SDAT:STNO=4200,TYPE=DATA1,NNO=1-1-100,TCLASS=1;
```

- HFA stations 4000, 4001 and 4100 are not assigned a time class with AMO SDAT.
  - For HFA station 4000, the calculation is controlled by the time class of the AP shelf in where the station is currently loggen on (here AP 17, and therefore time class 1).
  - HFA station 4100 is directly logged on to the HHS and therefore does not need a time class. The display is always adapted to the HHS time.
- HFA subscriber 4200 is configured in AP shelf 18 (system time). Station 4200 is in time class 1, which was assigned to the station with AMO SDAT.
- The HFA subscriber 4400 is configured in Host and is assigned to the Time Class 2 (TC=2) with AMO SDAT.
- The configured time classes are always shown at station level by the AMOs SDAT and SBCSU.
- Only an HFA subscriber can be assigned a time class with AMO SDAT. If an HFA subscriber is assigned time class 0 with AMO SDAT, then the AP shelf's time class applies for this subscriber.

3.4 Deleting a Time Class

- You can delete a time class by setting the time offset and direction to the initialization values.

  Delete time class 1.

  Reset the offset and direction to delete the time class:

Configuration Management -> System Data -> IPDA -> IPDA - System Data

CHANGE-SIPCO:TYPE=TCLASS,TCLASS=1,**OFFSET=0**,**DIRECT=NONE**;

Note: All stations with time class 1 are now using system time!

- The time class configuration now looks as follows:

```
DISPLAY-SIPCO:TYPE=TCLASS;

TIME CLASS DATE:

-------------------------------------------------------------------
+------+-----------+-----------+--------------------+--------+
|INDEX |   OFFSET  |    DIRECT |        TEXT        | DSTSW  |
+------+-----------+-----------+--------------------+--------+
|   2  |      60   |     EAST  |TIME ZONE: +1H N.Y. |  MAN   |
+------+-----------+-----------+--------------------+--------+

+------+-----+----------+-----------+-----------+-----------+
|INDEX |     |   MONTH  | DAYOFMONTH|   HOUR    |  MINUTE   |
+------+-----+----------+-----------+-----------+-----------+
|   2  |DST: |     3    |     27    |      2    |     0     |
|   2  |NT:  |    10    |     30    |      3    |     0     |
+------+-----+----------+-----------+-----------+-----------+
```

3.5 Deleting the Daylight Savings Time Changeover

- You can deactivate the consideration of daylight savings time in the time class with an AMO parameter.

Deactivate the daylight savings time calculation in time class 2.

Reset the offset and direction to delete the time class.

Configuration Management -> System Data -> IPDA -> IPDA - System Data

CHANGE-SIPCO:TYPE=TCLASS,TCLASS=2,**DSTSW=OFF**;

- The time class configuration now looks as follows:

DISPLAY-SIPCO:TYPE=TCLASS;

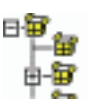
TIME CLASS DATE:

INDEX	OFFSET	DIRECT	TEXT	DSTSW
2	60	EAST	TIME ZONE: +1H N.Y.	OFF

3.6 Changing the System Date/Time with AMO DATE

Important
The MODE parameter (DST/ NT) **must** be specified for DTZ, otherwise the telephones may display the wrong time.

Changing the system date/time



Base Administration -> Unix Base Administration -> Date/Time

Comment: At present, the MODE parameter can only be entered via RMX.

CHA-DATE:YEAR=2005,MONTH=7,DAY=20,HOUR=14,MINUTE=30,**MODE=DST**;

- Displaying the system date/time:

DISPLAY-DATE;

```
+-----------------------------+
| WEDNESDAY                   |
| DATE:           TIME:       |
| 2005-07-20       14:30:34   |
|                             |
| DAY OF YEAR: 201            |
| DAYLIGHT SAVING             |
| GMTDIR:       TIMEOFFS:0    |
+-----------------------------+
```

4 Relevant AMOs

The following list shows the parameters that are relevant for the “Different Time Zones” feature:

AMO	Parameter	Sprache/ Language	Beschreibung/Description
DATE	MODE	d	Zeit-Modus
	MODE	e	Mode of time
	SZ	d	Sommerzeit
	DST	e	Daylight Saving Time
	NZ	d	Normalzeit
	NT	e	Normal Time
UCSU	TCLASS	d	Zeitklasse des AP-Shelfs
	TCLASS	e	Time class of the AP shelf
SDAT	TCLASS	d	Zeitklasse des Teilnehmers
	TCLASS	e	Time class of the subscriber
SIPCO	TCLASS	d	Zeitklasse
	TCLASS	e	Time class
	OFFSET	d	Zeit-Offset (Minuten)
	OFFSET	e	Time offset (minutes)
	RICHT	d	Richtung (WEST/OST/KEINE)
	DIRECT	e	Direction (WEST/EAST/NONE)
	TEXT	d	Beschreibung der Zeitklasse
	TEXT	e	Time class description
	SONUS	d	Sommer-/Normalzeit-Umschaltung (AUTO/MAN/AUS)
	DSTSW	e	Daylight savings time switching (AUTO/MAN/OFF)
	MONATSZ	d	Monat der Sommerzeitumschaltung
	MONTHDST	e	Month of switching to daylight savings time
	WOTAGSZ	d	Wochentag der Sommerzeitumschaltung
	WKDAYDST	e	Weekday of switching to daylight savings time
	TAGNRSZ	d	Tagesnummer der Sommerzeitumschaltung
	DAYNODST	e	Day number of switching to daylight savings time

AMO	Parameter	Sprache/ Language	Beschreibung/Description
	STUNDESZ	d	Stunde der Sommerzeitumschaltung
	HOURDST	e	Hour of switching to daylight savings time
	MINSZ	d	Minute der Sommerzeitumschaltung
	MINDST	e	Minute of switching to daylight savings time
	MONATNZ	d	Monat der Normalzeitumschaltung
	MONTHNT	e	Month of switching to normal time
	WOTAGNZ	d	Wochentag der Normalzeitumschaltung
	WKDAYNT	e	Weekday of switching to normal time
	TAGNRNZ	d	Tagesnummer der Normalzeitumschaltung
	DAYNONT	e	Day number of switching to normal time
	STUNDENZ	d	Stunde der Normalzeitumschaltung
	HOURNT	e	Hour of switching to normal time
	MINNZ	d	Minute der Normalzeitumschaltung
	MINNT	e	Minute of switching to normal time
	TAGSZ	d	Tag der Sommerzeitumschaltung
	DAYDST	e	Day of switching to daylight savings time
	TAGNZ	d	Tag der Normalzeitumschaltung
	DAYNT	e	Day of switching to normal time

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