Northern Telecom Option PBX and Phone Set Administration

Meridian-1

These tasks must be completed when administering the PBX:
- **!** Verification of Meridian option packages
- **!** Programming of the Meridian 2616 digital station set. When this is completed, VoiceGate ICS has access to all of the power and functionality of the PBX.
- **!** Subscriber station set administration.

For illustrative purposes, the following pages are standardized using specific extension numbers for VoiceGate ICS, analog voice mail ports and subscribers. You will need to consult with your PBX administrator to determine your own numbering plan and naming conventions. Our examples assume:

- **!** VoiceGate ICS is assigned a pilot extension number of **500**.
- **!** Seven extensions (**501** through **507**) will be created and administered on each of the Meridian sets to create an 8-port system.
- **!** Extensions 201 and 202 are voice mail subscribers.

Although detailed administrative procedures are provided, a general overview of the VoiceGate ICS administration requirements is provided below. You can refer to this list if you are installing a VoiceGate ICS on new or non-standard software releases. It is also useful as a brief requirement list.

Option Verification

- **!** Package 19 (DDSP) Digit Display Software.
- **!** Package 46 (MWC) Message Waiting Center Software.

Meridian 2616 Digital Station Set

!   One DN is programmed for each of the eight VoiceGate ICS ports.

!   Program an MIK key on button 05, an MCK key on button 04 and a transfer key on buttons 03.

!   A display set should be administered in class of service for the following:

> Automatic Digit Display (ADD) should be **Allowed**,
> Hunting (HTA) should be **Allowed**,
> Call Forward no Answer (FNA) should be **Allowed**,
> Call Forward Busy (FBD) should be **Denied**,
> Message Waiting (MWA) should be **Allowed**,
> Call party Name Display (CNDA) should be **Allowed**,
> Hands-Free Operation Denied (HFD) should be **Denied**,

!   This will be accomplished for all VoiceGate ICS ports.

Subscriber Setup

! Program each subscriber's set to forward to the VoiceGate ICS pilot extension for busy and ring-no-answer conditions.

NOTE

The screens shown in this section are taken from a Meridian administration terminal:

! **Boldface** fields indicate where required information must be entered.
! <u>Underlined</u> fields should be completed as needed, but have no required defaults.
! *Italics* indicate fields that may not appear on all software versions.

Option Verification

Before you can proceed with the configuration of the voice mail analog ports and the administration of the Meridian 2616 digital station set, you must verify that your PBX is equipped with the two Option Packages that VoiceGate ICS requires:

! Package 19 (DDSP) Digit Display Software.
! Package 46 (MWC) Message Waiting Center.

Verify the existence of these packages in the following manner:

>**LD 22**
REQ   **PRT**
TYPE   **PKG**
OPTF
CDR
CTY
DISA
NCOS
DDSP
MWC

Meridian 2616 Station Set Administration

The Meridian 2616 digital station set is the key element in the VoiceGate ICS integration. This set provides VoiceGate ICS with the vital link to the PBX. Configuring the 2616 is fairly basic and does not require a great deal of effort. Once the 2616 is configured in the switch, the VoiceGate ICS unit will handle the button set-up and management automatically. Before starting to configure the 2616 set, an available interface channel must be located (QPC578 or NT8D02).

Key configuration on the 2616 set is of vital importance for proper integration, so care should be taken when administering the set. The configuration of the keys are as follows:

> **!** Key 0 is the primary DN. The first VoiceGate ICS port is the forwarding target for all voice mail subscribers. Any call directed to Key 0 hunts through all VoiceGate ICS ports.

> **!** Key 03 is a transfer key.

> **!** Key 04 is a message cancellation key (MCK).

> **!** Key 05 is a message indication key (MIK).

Step 1: Create the 2616 digital set emulation. Every call forwarded to VoiceGate ICS will be transferred to voice mail and labelled as Ring-No-Answer. If this station is busy it will "hunt" to our second VoiceGate ICS port, extension 501.

```
>LD 11
REQ          NEW
TYPE         2616
TN           0 0 6 2
DES
CUST         0
AOM
FDN
TGAR
NCOS
RNPG
SSU
CLS          HFD  CNDA  HTA  ADD  FNA  MWA  FBD
HUNT         501
LHK
KEY          00  SCR  500
KEY
KEY
KEY          03  TRN
KEY          04  MCK
KEY          05  MIK
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
```

Step 2: This is an example of port two. Notice that this port is "hunting" to
extension 502; this creates a daisy-chain effect.


```
>LD  11
REQ          NEW
TYPE         2616
TN           0 0 6 3
DES
CUST         0
AOM
FDN
TGAR
NCOS
RNPG
SSU
CLS          HFD  CNDA  HTA  ADD   FNA  MWA  FBD
HUNT         502
LHK
KEY          00  SCR  501
KEY
KEY
KEY          03   TRN
KEY          04   MCK
KEY          05   MIK
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
```


Repeat this step for the remaining six extensions. Make sure each
extension hunts for the next.

Step 3: Verify the administration of the 2616.

```
>LD  20
REQ          PRT
TYPE         TNB
TN           0 0 6 2
DATE
PAGE
DES

DES
TN           0 0 6 2
TYPE         2616
CUST         0
AOM
FDN
TGAR
NCOS
RNPG
SSU
CLS          HFD CNDA  HTA ADD  FNA  MWA  FBD
HUNT         501
LHK
KEY          00  SCR  500
KEY
KEY
KEY          03  TRN
KEY          04  MCK
KEY          05  MIK
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
KEY
```

Subscriber Administration

The remaining PBX administration involves the individual subscriber extensions. By forwarding a subscriber to the 2616 set you provide integrated voice messaging for all calls. Software Generic 11 Release 10 and greater allow different call forwarding paths for external and internal calls.

Call forwarding conditions are determined by individual user needs. Remember, any phone forwarded to the main DN (Key 0) of VoiceGate ICS is automatically answered by voice mail.

Message waiting indication is a key feature of voice mail, so proper PBX administration is essential. The digital Meridian and SL-1 sets have visual message waiting indication through the administration of an MWK key or an LED on the phone. Analog sets (prior to Generic 11 Release 2) use neon lamps on the set for visual message indication.

For analog sets, cards are required to operate the QPC789 or NT8D09AB neon lamps. PBX's with Generic 11 Release 2 (or greater) can use the Audible Message Waiting (AMW) option, which provides stutter dial tone on analog sets of Digital and SL-1 sets without an MWK key. The SL-1 set, in most circumstances, has an MWK key.

Terms used in the screens on the following pages:

LPA   Lamp Allowed: Used in the COS when the analog set is equipped With a neon lamp.

> **!** If the PBX is equipped with Audible Message Waiting (AMW), LPD (Lamp Denied) is programmed to allow stutter dial tone.

CFTA   Call Forward By Type: A feature available in PBX's with software Generic 11 Release 10 and greater. EFD (External Forward DN) and EHT (External Hunt) are used in conjunction with CFTA.

SFA   Call Forward No Answer, Second Level: Allows a call to be forwarded to a second level on ring-no-answer.

> **!** Available in Generic 11 Release 15 and higher.

Step 1: System administration for telephone sets

ANALOG SETS:

```
>LD 10
REQ         CHG
TYPE        500
TN          0 0 7 1
CDEN
DES
CUST
DIG
DN
HUNT        500
TGAR
NCOS
RNPG
CLS         HTA  FNA  MWA  LPA  CFTA  SFA
FTR
FDN         500
EFD         500
EHT         500
```

SL-1 SETS:

```
>LD 11
REQ        CHG
TYPE       SL1
TN         0 0 8 3
CDEN
DES
CUST
KLS
FDN        500
TGAR
NCOS
RNPG
SSU
CLS        HTA  FNA  MWA  LPA  CFTA
EFD        500
HUNT       500
EHT        500
LHK
KEY        04  MWK  500
```

DIGITAL SETS:

```
>LD   11
REQ        CHG
TYPE       2008
TN         0 1 8 3
ECHG
DES
FDN        500
TGAR
NCOS
RNPG
SSU
CLS        HTA  FNA MWA  CFTA  SRA
EFD        500
HUNT       500
EHT        500
LHK
```

Because M2008 telephones have built-in LED's, an MWK key is not programmed.

Step 2: Verify subscriber administration

```
>LD  20
REQ         PRT
TYPE        TNB
TN          0 1 8 3
DATE
PAGE
DES

DES
TN          0 1 8 3
TYPE        2008
CUST        0
FDN         500
TGAR
NCOS
RNPG
SSU
CLS         HTA  FNA  MWA  CTFA  SRA
EFD         500
HUNT        500
EHT         500
LHK
KEY         00  SCR  201
KEY         01  SCR  211
KEY         03  TRN
KEY         09  RLS
```

The table below gives the interconnect block (Type 66) hook-up for VoiceGate ICS.

LINE NUMBER	PIN NUMBER	PAIR COLOR	LEAD DESIGNATION
	26	White/Blue	NOT USED
	1	Blue/White	NOT USED
Phone Line #1	27	White/Orange	TXR1 (Meridian 1)
	2	Orange/White	RXT1 (Meridian 1)
	28	White/Green	NOT USED
	3	Green/White	NOT USED
Phone Line #2	29	White/Brown	TXR1 (Meridian 1)
	4	Brown/White	RXT1 (Meridian 1)
	30	White/Slate	NOT USED
	5	Slate/White	NOT USED
Phone Line #3	31	Red/Blue	TXR1 (Meridian 1)
	6	Blue/Red	RXT1 (Meridian 1)
	32	Red/Orange	NOT USED
	7	Orange/Red	NOT USED
Phone Line #4	33	Red/Green	TXR1 (Meridian 1)
	8	Green/Red	RXT1 (Meridian 1)
	34	Red/Brown	NOT USED
	9	Brown/Red	NOT USED
Phone Line #5	35	Red/Slate	TXR1 (Meridian 1)
	10	Slate/Red	RXT1 (Meridian 1)
	36	Black/Blue	NOT USED
	11	Blue/Black	NOT USED
Phone Line #6	37	Black/Orange	TXR1 (Meridian 1)
	12	Orange/Black	RXT1 (Meridian 1)
	38	Black/Green	NOT USED
	13	Green/Black	NOT USED
Phone Line #7	39	Black/Brown	TXR1 (Meridian 1)
	14	Brown/Black	RXT1 (Meridian 1)
	40	Black/Slate	NOT USED
	15	Slate/Black	NOT USED
Phone Line #8	41	Yellow/Blue	TXR1 (Meridian 1)
	16	Blue/Yellow	RXT1 (Meridian 1)
	42	Yellow/Orange	NOT USED
	17	Orange/Yellow	NOT USED
	43	Yellow/Green	NOT USED
	18	Green/Yellow	NOT USED
	44	Yellow/Brown	NOT USED
	19	Brown/Yellow	NOT USED
	45	Yellow/Slate	NOT USED
	20	Slate/Yellow	NOT USED
	46	Violet/Blue	NOT USED
	21	Blue/Violet	NOT USED
	47	Violet/Orange	NOT USED
	22	Orange/Violet	NOT USED
	48	Violet/Green	NOT USED
	23	Green/Violet	NOT USED
	49	Violet/Brown	NOT USED
	24	Brown/Violet	NOT USED
	50	Violet/Slate	NOT USED
	25	Slate/Violet	NOT USED