

Smooth Operator Configuration Note

For Smooth Operator Family of Products

Octel

Voice

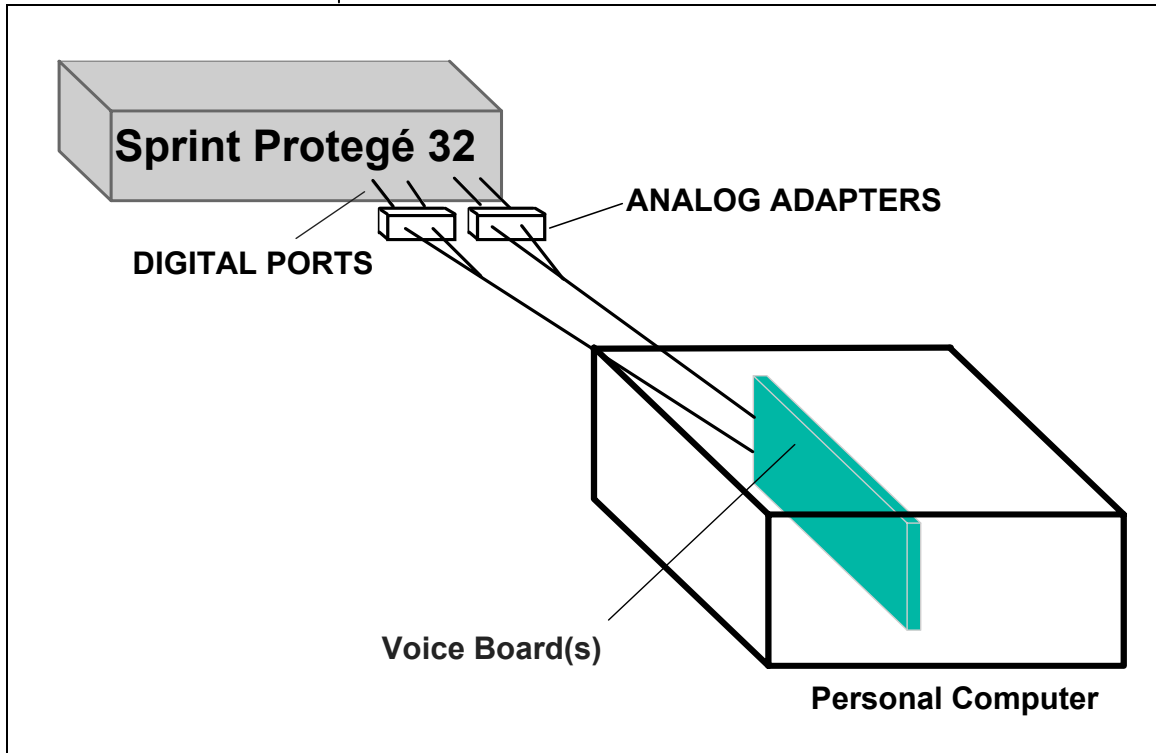
Processing

Module

Configuration Note 77263

Sprint Protegé 32*

Revised 9/18/97



Inband signaling is used for integration

All references to Smooth Operator pertain to the entire family of products

1.0 METHOD OF INTEGRATION

Inband. Call forward to personal greeting is achieved via DTMF signals passed from the Sprint Protegé 32 to the Smooth Operator family of products. Message waiting indicators are set and canceled by dialing a feature access code followed by the extension number. A hook flash followed by the extension transfers the caller to the operator.

2.0 SMOOTH OPERATOR ORDERING INFORMATION

There are many options available for both kit and turnkey versions of this product, depending on the application. Please consult with your sales representative.

Disclaimer: Configuration Notes are designed to be a general guide reflecting Octel's experience configuring its systems. These notes cannot anticipate every configuration possibility given the inherent variations in all hardware and software products. Please understand that you may experience a problem not detailed in a Configuration Note. If so, please notify Sales Engineering at (408)324-3066, and if appropriate we will include it in our next revision. Octel accepts no responsibility for errors or omissions contained herein.

PBX hardware requirements

All references to Smooth Operator pertain to the entire family of products

PBX software requirements

Supported integration features

3.0 PBX HARDWARE REQUIREMENTS

- Sprint 616 digital KSU
- Analog Adapter supports 2 Smooth Operator ports per Adapter (436367)
- One RJ11 Jack cord for each of the Digital ports. (These go from the Switch to the Analog Adapters.)
- One RJ11 Jack cord for each of the Analog Adapter ports. (These go from the Analog Adapter ports to the RJ11 to RJ14 splitter.)
- One RJ11 to RJ14 splitter for every 2 Smooth ports.
- One RJ-14 Jack cord for every two Smooth Operator ports. (These go from the splitter to the Smooth Operator ports.)
- One analog line for remote service access
- One RJ-11 Jack for above and 2-conductor modular telephone cord.
- If FaxMail is installed.
 - One analog line per FAX port.
 - One RJ-11 Jack for every Brooktrout TR-112 fax port OR one RJ-14 Jack for every two Brooktrout TR-114 fax ports, along with 4-conductor modular telephone cords.

3.1 PBX SOFTWARE REQUIREMENTS

- K08US0.FB1 thru K08US0.FB4

4.0 SUPPORTED FEATURES

[✓] Items are supported

System Forward to Personal Greeting		Message Waiting	
All Calls	[]	LCD Display	[✓]
Ring/no answer	[]	LED/Voice Mail Msg Waiting Key	[✓]
Busy	[]	Lamp	[]
Busy/No Answer	[]	Audible / Stutter Dial Tone	[✓]
Do Not Disturb	[]	Multiple Return to Operator	[✓]
Station Forward to Personal Greeting		Direct Call	[✓]
All Calls (Direct)	[✓]	Auto Attendant	[✓]
Ring/no answer	[✓]	Outcalling	[✓]
Busy	[✓]	Personal Greeting of Original-Called Party	
Busy/No Answer	[]	Multiple Call Forward	[✓]
Idle Call Forward ¹	[✓]	Double Call Forward	[]
Flexible Forwarding		Call Coverage	[]
Forward to No Answer Greeting	[]	Intercom Paging	[]
Forward to Busy Greeting	[]	Supervised Transfers	
Intercom/CO Forwarding	[]	Call Screening	[]
		Call Queuing	[]
		Intercom Paging	[]
		Record Telephone Conversation	[]

Note: ¹ Calls to extension will forward immediately IF the extension is idle. (Digital Set with LCD ONLY)

Programming PBX system parameters

All references to Smooth Operator pertain to the entire family of products

4.1 DISCONNECT TYPE

Disconnect is achieved via programmable Hangup String for Internal Calls (see section 5.1 for programming procedure). For proper external disconnect supervision, Ground start or Supervised Loop start CO lines are recommended.

5.0 CONFIGURING THE SPRINT PROTEGÉ

Before you begin programming, it is recommended that a hard copy of the customer database be obtained to verify existing programming.

5.1 SPRINT PROTEGÉ SYSTEM PROGRAMMING FOR SMOOTH OPERATOR INTEGRATION

Refer to the Programming section in the Sprint Protegé manual for information on entering, saving and exiting database programming. Note: Information shown in BOLD must be programmed.

1. EXTENSION

- a) Enable **RECEIVE** and **RING ASSIGNMENT** for all trunks used as Voice Mail extensions for the Smooth Operator.
* The Protegé 32 will not provide the automated attendant function.
- b) Assign all Smooth Operator ports to a unique **EXT GROUP (2-8)**
- c) Enable the **VM PORT(s)**

System	
System Type : PBX	(or KEY)
1 Extension	
SHOW EXT : xx	(11-33, 59-81)
Day Class : 0	
Nite Class : 0	
Trunk Assignment	
Trunk 1-8 : Y	
RECEIVE ASSIGNM.	
TRUNK 1-8 : Y	
RING ASSIGNMENT	
TRUNK 1-8 : Y	
AC_Code Forced : N	
Nite Service : N	
EXT GROUP : x	(2,3,4,5,6,7, or 8)
Warning Tone : N	
Drop Timeout : N	
Ext Position : xx	
Forced Lcr : N	
VM PORT : Y	

2. TRUNKLINE

- a) Enable CALL ABANDON for Smooth Operator trunk ports

2 Trunkline

SHOW TRUNK : X **1-8**
DIALING : TONE
CALL ABANDON : Y
Trunk Type : CO
Loud Bell : N
Trunk Group : 1
Private to : Null
Toll Override : N

3. CALL HANDLING

- a) Call Handling parameters including Flash Time; VM Dialing Ratio; Tone Time and Inter-Digit Tone are programmable. We recommend these parameters be left at default.

4. RESOURCE

- a) Program User Names for Smooth Operator ports; if desired. All other parameters can be left at default.
b) KSU software revision must be K08US0.FB1 thru .FB4

4 Resource

Ring Scheme : 2
Letter Type : 0
Attendant : 10
Alternate : Null
System Alarm
Nite Start : 17:00
Nite End : 08:00
DB PSWD : 000000
User Password

User Names

SHOW EXT : xx **(11-33, 59-81)**
EXT xx : EMPTY **(7 characters)**

(The next several parameters can be skipped as they are not used for Smooth Operator integration)

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KSU REVISION

KSU : K08US0.FBx

5. RESTRICTION

- a) Smooth Operator requires no programming in this area.

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6. SYS APPLICAT.

- a) Select 1 (one) **EXT HUNT GROUP** number for Smooth Operator integration.
- b) Set **VOICE MAIL TYPE** to **Y**.
- c) Assign the Smooth Operator ports **EXT#s** as **MEMBERS** of the Smooth Operator hunt group.
- d) Set **RING ASSIGNMENT** for **TRUNK** to **Y** for trunks connected to Smooth Operator. *(Note: The trunks won't ring to the Smooth Operator system if this is not set.)*

*Note: Both E (ICM PREFIX) and F (DISC. DIGIT) are programmable we recommend 9 for the ICM PREFIX and 9*9 for the DISC. DIGIT. The integrator reflects these recommendations. Neither the XFR PREFIX nor the SUFFIX DGT are used.*

- e) Program **ICM PREFIX** : 9 (the icm prefix is programmable, for this example and in the integrator we will use is 9)
- f) Program the **DISC. DIGIT** : 9*9

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6 SYS APPLICAT.**EXT HUNT GROUP**

HUNT GROUP : x (1-8)

VOICE MAIL TYPE : Y

GROUP MEMBER

MEMBER 01 - 24 : NULL (EXT #; V-ML PORT)

RING ASSIGNMENT

TRUNK 1 - 8 : Y (as needed)

VOICE MAIL**ICM PREFIX** : 9 (0-9, *, #)

XFR PREFIX : EMPTY (0-9, *, #)

SUFFIX DGT : EMPTY (0-9, *, #)

DISC. DIGIT : 9*9 (0-9, *, #)**5.2 PROGRAM THE STATION SETS**

To receive a visual (lamp) indication of message waiting you must program a FTR key as a Voice Mail Message Waiting key (FUNCTION 64)

Repeat these steps for Digital sets w/LCD with MWLs.

- Voice Mail Message key (FUNCTION 64).
 - Press the Function Key, then press #3.
 - Select the Feature Key you wish to program.
 - Press the Function Key, then press 64.
 - Press F2 to save.

To program station forwarding from a Digital phone with LCD Display:

- Busy
 - Press either FWD or, if you do not have a FTR key programmed, press the Function Key, then press the digit 2.
 - Select busy from the LCD display then enter the Hunt Group Pilot number (82-89).
 - Select Save from the LCD display.
 - Choose either CO or ICM/CO depending on your application.
- RNA
 - Press either FWD or, if you do not have a FTR key programmed, press the Function Key, then press the digit 2.
 - Select next from the LCD display.
 - Select n_ans then enter the Pilot Hunt Group number (82-89)
 - Select Save from the LCD display.
 - Choose either CO or ICM/CO depending on your application.
 - Set the No answer timer to the desired timing.
 - To end the session go off hook then on hook from the handset.

To program station forwarding from a Digital phone without an LCD Display:

- Busy
 - Press either FWD or, if you do not have a FTR key programmed, press the Function Key, then press the digit 2.
 - Dial 1 for Busy Call Forward, enter the Hunt Group Pilot number (82-89).
 - Receive Confirmation Tone.
- RNA
 - Press either FWD or, if you do not have a FTR key programmed, press the Function Key, then press the digit 2.
 - Dial 4 for No Answer Call Forward, enter the Pilot Hunt Group number (82-89)
 - Select the No Answer Delay Time:
 - 0=10 seconds
 - 1=20 seconds
 - 2=30 seconds
 - 3=40 seconds
 - 4=50 seconds
 - Receive Confirmation Tone.

6.0 CONFIGURING THE SMOOTH OPERATOR

During the install process, run the Integrator program and choose the Sprint Protegé 32 switch. The Integrator will place appropriate feature codes into the Smooth Operator Setup. The integrator inserts the following codes with two digit extensions assumed. Adjust to match site requirements.

Outside Line Access Code	9,
Off Hook Delay (OFFHDLY)	25
Hook Flash Interval (FLINTVL)	70
DTMF Tone Length (TONELEN)	8

Transfer, Paging and Screening Parameters

Custom Transfer Code	&,XDR
Transfer Release Code when Busy	&
Transfer Release Code when No Answer	&

Message Waiting Parameters

Permit Message Waiting Lights	Enabled
Message Waiting Light Prefix ON	#96
Message Waiting Light Prefix OFF	##96

Hangup Detection Parameters

Hangup String (HANGUPSTR)	9*9
Hangup String Timeout (HANGUPDLY)	50

Inband Parameters

Total Number of DID Digits	4
Seconds to Wait for DID	1
Location of Inband Signaling Code	1
Number of Milliseconds to Wait for Digits	750
Code for Immediate Subscriber Login to Mailbox	9
Start at End of String for Immediate Login	Enabled
Location of Mailbox Number for Immediate Login	2
Start at End of String for Default Code	Enabled
Location of Mailbox Number for Default Code	2

In addition to running the Integrator, ensure the following parameter is set to its corresponding value in System Setup:

Message Delivery Parameters

Dial Tone Timeout During Message Delivery	100
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Note: Verify these dialing sequences for your PBX!

7.0 CONSIDERATIONS/ALTERNATIVES

The following items should be considered, below:

- Programmable Hang up String
- Running Call Analysis
- Programming a DSS Key for Transferring

Important notes concerning this integration

7.1 PROGRAMMABLE HANG UP STRING

It has been noticed that if you start the Hang up String with a # or *, it can cause intermittent hang-up failures, for this reason a 9*9 is recommended as the Hang up String.

7.2 RUNNING CALL ANALYSIS

When Running Call Analysis, it is recommended that you turn Validate Test Number off in the Set Defaults Screen of Call Analysis then run Call Analysis manually.

7.3 PROGRAMMING A DSS KEY FOR TRANSFERRING

You can program a DSS key to make transferring calls from a station into a mailbox easier. From a Digital set with LCD display:

- Press **FUNCTION** key
- Dial #3
- Press the desired **FTR** key.
- Press **F3** key below the CHG selection to make a change.
- Press **F1 DIR** to select extension number.
- Enter the Smooth Operator pilot hunt group number.
- Press **F2** to save.

To program a DSS key from a Digital phone with no LCD:

- Press **FUNCTION** key.
- Dial #3.
- Press the desired **FTR** key.
- Dial 1 and enter the Smooth Operator pilot hunt group number. (82-89)
- Press **HOLD** to store.
- Receive Confirmation Tone.

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