WIN/TMX Series Voice Processing System

MITEL COV/SUPERSET 4 EMULATION INTEGRATION

**The following are the recommendations for integrating
with SX100, SX200, SX2000 PBX systems**

SX 100/200 below 1003 w/3 Digit Ext.	**Telefile 84**
SX 100/200 below 1003 w/4 Digit Ext.	**Telefile 85**
SX 100/200 ver. 1003 w/3 Digit Ext.	**Telefile 28**
SX 100/200 ver. 1003 w/4 Digit Ext.	**Telefile 29**
SX 100/200/2000 ver. 1005	**Telefile 5**

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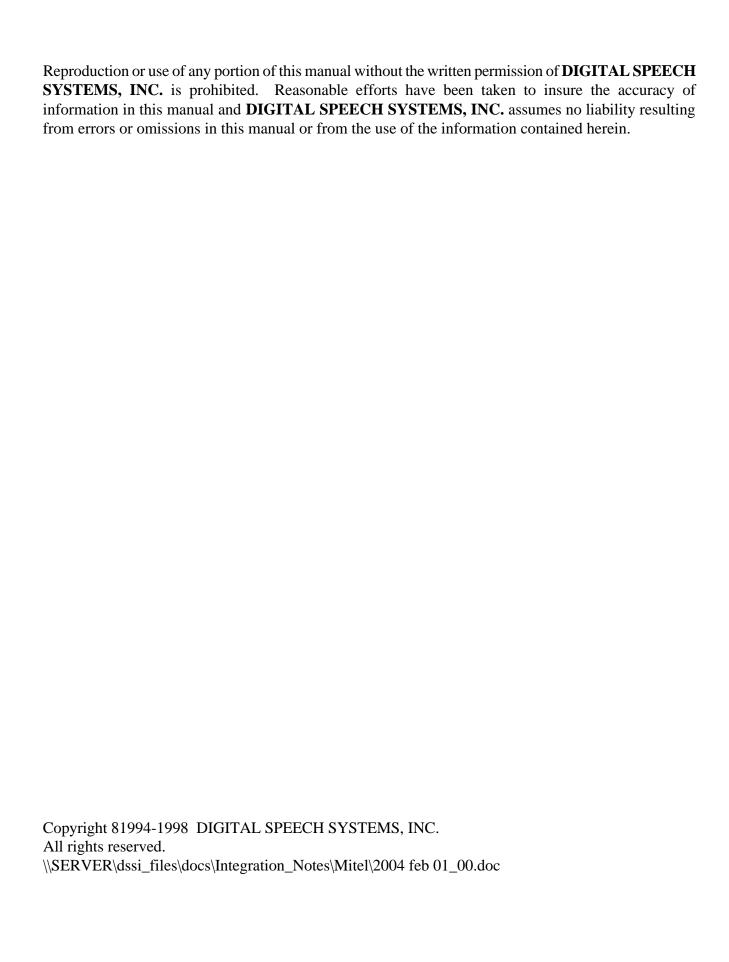PH: 410-795-8681
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1.0 INTRODUCTION

The term "integration" is often used in the voice mail industry. To better understand the capabilities and advantages that integration provides to voice mail, it is necessary to define it.

In a non-integrated voice mail environment, users must manually enter mailbox numbers. This includes outside callers who are directed to a telephone extension by a receptionist. Without integration, the telephone system is only a tool to access the voice mail system. You must manually complete the requirements to access a mailbox. Both the Private Branch Exchange (PBX) and the voice mail systems appear independent.

However, the Digital Speech Systems Mitel integration links the voice mail system with the PBX. This allows two separate systems to appear as one and communication is achieved between both systems. By providing this capability, users no longer need to enter mailbox numbers. The Digital Speech Systems Mitel integration also shelters outside callers from extensions and mailbox numbers. Information is supplied by the PBX about who is calling, the extension they are trying to reach, and the reason the call was not completed. The voice mail system informs the PBX of the mailbox status, so message lights on extensions can be set and cleared. This management of communication and information is achieved through the Digital Speech Systems Mitel integration process.

One example we can review is the use of call answering for a particular extension. In this case, an outside caller calls XYZ company and asks to speak with John Smith. The receptionist transfers the call to John's extension. John, however, is not at his desk and he is unable to answer the call. The telephone rings three times and since his integrated telephone forwards his calls to voice mail after the third ring, the caller immediately hears a personalized greeting (i.e., "Hi, this is John, I am not available to answer my phone, please leave a Message . . . ")

If John's telephone is busy, the caller immediately hears another greeting indicating that John is on the phone. The personalized greeting would request that a message be left so that John can return the call when he finishes.

Digital Speech Systems Mitel integration also offers many features to the subscriber. The message waiting indication feature (MWI) will illuminate an indicator light, or provide a special dial-tone on John's telephone set when a new message is available. This offers a visual indicator that new messages are waiting, without having to constantly call-in to voice mail to check your mailbox.

When John is ready to retrieve his messages, he can call a single extension number, which links him with voice mail. At this point, the integration informs the voice mail system that John is calling. John now enters his password, provided that he is calling from his own desk. After he has retrieved his messages, the message light is turned off.

The integration is achieved without restricting the functionality of the PBX. The Digital Speech Systems Mitel integration operates as if the messages were being directed to a receptionist. Some integration features may depend on the capabilities of the voice mail system, but the Digital Speech Systems Mitel integration provides all the information necessary to incorporate these features in your system.

The Digital Speech Systems Mitel integration uses the voice cards emulating Mitel digital telephone sets to communicate with the PBX. This allows the Mitel pilot group extensions to act as your primary voice mail number.

2.0 INTEGRATION CAPABILITIES

The Digital Speech Systems Mitel integration provides information for two party internal, trunk to internal, and direct calls. It provides reason codes for unanswered, busy, and forwarded calls. The Digital Speech Systems Mitel integration also handles message waiting indication packets.

2.1 Operator Revert

The Operator revert functionality is fully supported in a Digital Speech Systems Mitel integration environment. After the integration process is complete, the Mitel voice port becomes the supervisor of the call. The voice mail system can revert or transfer to any extension with a flash-hook sequence.

2.2 Message Waiting Indication

Message Waiting Indication is implemented through the Mitel phone set. This will illuminate the message light on digital phone sets and analog sets equipped with a message light.

2.3 Automated Attendant

Automated Attendant is supported and often enhanced in a Digital Speech Systems Mitel integration environment. Transfers are supported through a flash-hook sequence. If a call is transferred to a busy or unanswered extension, the call will be returned to an integrated voice port by the Digital Speech Systems Mitel integration. This makes the Automated Attendant process easier and more efficient.

3.0 CONNECTING THE WIN/TMX SERIES VOICE MAIL SYSTEM TO MITEL PBX SUPERSET 4 PORTS

To implement Mitel Superset/4 Emulation integration the WIN/TMX uses D42-SX line cards.
The D42-SX has two RJ-14 jacks that carry two lines each. Each line emulates a Superset 4 telephone. The inner pair of wires of the first (Top card/right side, from the back) modular plug is port 1 and the outer pair of wires is port 2. The inner pair of wires of the second (Top card/left side, from the back) modular plug is port 3, and the outer pair of wires is port 4. Additional cards are configured consecutively for ports 5 and up.

Warning: **The D42-SX can only be connected to MITEL SUPERSET Line Circuit cards or COV cards. The D42-SX cannot be connected to a standard single line analog station. Doing this will damage the D42-SX board.**

Warning: **D41's in the same system as a D42-SX will be damaged if connected to a line intended to be used by a D42-SX or SUPERSET 4. If you are installing both types of boards in a single WIN/TMX, make sure boards are connected properly to avoid damage.**

3.1 D42-SX MITEL Switch Compatibility

The D42-SX can connect to MITEL Analog PBX's that accept SUPERSET line Circuit cards (Part No. 9110410-000), such as the SX-100 or SX-200. For Mitel Digital PBX's, such as the SX2000D, use COV cards to interface with the D42-SX voice mail cards. The D42-SX **must** be connected to the SUPERSET Line Circuit card or COV card. The SUPERSET Line Circuit card is usually connected to a punch-down block. Build a connector combining two extensions from the punch-

down block into one RJ-14 connector and plug the connector into one of the jacks on the back of the D42-SX.

4.0 MITEL PBX PROGRAMMING REQUIREMENTS

DSSI recommends that MITEL software version **1003** or above be used on integrated systems. Other lower software versions have certain limitations and require more specialized programming, which will be discussed later in this document. A MITEL PBX has features that can be active on an extension. This section lists the features that can affect the operation of the D42-SX. For explanations of these functions refer to your MITEL PBX documentation. **Note:** Some of these features may be referred to by other names, depending upon the software version of your PBX.

A MITEL PBX has two levels of features, System Options and Class Of Service (COS). System Options are features that are enabled for the entire PBX. A COS is a defined group feature. After an extension is assigned to a COS, the COS determines which features may be accessed by that extension.

The following charts define features that affect the D42-SX. The feature numbers listed may vary depending on the MITEL PBX model software version.

1003 System Options

Description	Opt#	Value	Notes
24-hour Clock	01	@	
Message Lamp Test Enable	02	Y	Good for MWI diagnostics
Single Paging Amplifier	03	@	
MW & Msg Reg clear print	04	@	Good for MWI diagnostic
Verified Account Codes	05	@	Might affect callouts
Analog Networking SMDR	06	@	
Cancel 24-hour MWI	07	*	DO NOT ENABLE unless max 100 MWI limit is problem
ATT call block	09	@	
ATT conference beeps	10	@	
Automatic Wake-up	11	@	
Automatic Wake-up Alarm	12	@	
Automatic Wake-up Print	13	@	
Automatic Wake-up Music	14	@	
Data Demultiplexer	15	@	
	16	?	
Discriminating Ringing	17	*	This ringing can be annoying if notification is used in VM
Discriminating Ringing Always	18	*	This ringing can be annoying if notification is used in VM
Holiday Messages	20	N	Can Delay or impair operation of reading SS displays
Incoming to Outgoing Call Forward	21	*	Might be required for certain AA transfer actions
Last Party Clear - Dial Tone	22	N	Allows disconnect supervision
Msg reg count add'l supervisions	23	@	
Message Register Audit	24	@	
Msg reg zero after audit	25	@	
No Overlap Outpulsing	26	@	
Room Status Audit	27	@	
SMDR Indicate Long Calls	28	@	
Superset Last Number Redial	29	Y	
Satellite PBX	31	*	Check SS4 displays if using Satellites
Outgoing Call Restriction	32	@	
Room Status	33	@	
Auto Room Status Conv/AW print	34	@	

N - DO NOT ENABLE   Y - ENABLE   * - ENABLE with reason
? - Reserved or unknown   D - Use defaults   @ - At user discretion, no known problems
AA - Automated Attendant   VM - Voice Mail   SS - Superset

1003 System Options

Description	Opt#	Value	Notes
Property Management System	35	@	
End-of-Dial Character(#)	36	*	Test call progress if system has this in use for conflicting ext. #'s
Calibrated Flash	37	@	
Switch-hook Flash	38	Y	If using analog ports
DATA SMDR Indicate Long Calls	39	@	
Message Register follows talker	40	@	
Automatic Call Distribution	41	@	Test SS4 displays of ACD FWDs to WIN/TMX
ACD Silent Monitoring	42	@	
ACD Silent Monitoring Beeps	43	@	
ACD Plus External ACD Reports	44	@	
Digit Translation Plan (0-3)	46	@	
ARS Unknown dig T/O 2-15 sec	47	*	Long timeout might impair call progress
Limited Wait for DI 1-15 sec	48	*	Duration should be > than disconnect parameter
Pseudo-Answer Supr 10-60 sec	49	@	If Enabled, test for CO disconnects on WIN/TMX
Dialing Conflict Timer 2-10 sec	50	*	Long timer might impair call progress
Final Ring T/O 1-30 min	51	*	Keep this in mind if using Blind Transfers
Minimum Flash Timer 20-50 ms	52	*	
Maximum Flash Timer 20-150 ms	53	*	
DISA Answer Timer 1-8 sec	54	@	
Account Code Length 4-12 digits	55	*	Keep value low if must dial account codes
Auto Room Status printer timer	56	@	
Vac/Rosy Room Def Call Restr	57	@	
Occp Room Def Call Restriction	58	@	
Rev Resv'd for Non AA use	59	@	
100 ATT Bell-off		N	@
101 ATT Outg Restr Room Stat Setup		N	@
102 ATT Display of System Alarms		N	@
103 ATT DISA Code Set-up		N	@
104 ATT Flexible Night Service Setup		N	@ Might help divert calls for maint
105 ATT Guest Room Key		N	@
106 ATT New Call Tone		N	@

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1003 System Options

Description		Opt#	Value		Notes
107	ATT Auto CFDA		N	@	
108	ATT Audible Lock-out alarm		N	@	
109	ATT Serial Call		N	*	Helps transfer no-dial callers
110	ATT Abrv Dial Conf Num Display		N	@	
111	ATT Abrv Dial Programming		N	@	
112	ATT Station Busy-Out		N	*	DO NOT busy out MW ports
113	ATT Call Block Key		N	@	Watch for "0" transfers
114	ATT Trunk Busy-Out		N	@	
115	ATT Timed Recall NA 5-240 sec		D	*	Keep station CFDA times in mind
116	ATT Timed Recall Hold 5-240 sec		D	@	
117	ATT Timed Recall Camp 5-240 sec		D	@	
118	ATT Timed Recall CFDA 5-240 sec		D	@	
119	ATT Tone Signaling		N	Y	For transfer to mailbox #
120	ATT Conference Disable		N	@	
121	RESERVED		?	?	Use system defaults
122	RESERVED		?	?	Use system defaults
123	RESERVED		?	?	Use system defaults
200	Acct Code Forced Entry - External		N	@	
201	Acct Code Forced Entry - Long Dist		N	@	
202	Alarm Call		N	@	
203	Broker's Call		N	*	Impairs transfer of caller to WIN/TMX
204	Call Block Applies (room - room)		N	@	
205	RESERVED		?	?	
206	Call Forwarding-Busy		N	@	
207	Call Forwarding-Don't Answer		N	@	
208	Call Forwarding-External		N	@	
209	Call Forwarding-Follow Me		N	*	
210	Call Fwd Inhibit on Dial in Trunks		N	@	Check COS on Ext fwd to WIN/TMX
211	Call Hold & Retrieve Access		N	@	
212	Can Flash on Incoming Trunk		Y	@	
213	Can Flash on Outgoung Trunk		Y	@	

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1003 COS Options

Opt#	Description	VM	Sub	Notes
214	Can't Dial a Trunk After Flash	N	@	
215	Can't Dial TK if Hold or Cnf with TK	N	@	
216	Data Security	Y	@	
217	Direct to ARS	N	@	
218	Directed Call Pickup	N	@	
219	Discriminating Dial Tone	N	@	Might impair call progress
220	Do Not Disturb (DND)	Y	@	
221	Clear All Features	Y	@	Helps port diagnostics
222	Call Fwd Inhibit on Hold Timeout	N	@	
223	Flash Disable	N	@	
224	Flash for ATT	N	@	
225	Hold Pickup (ATT page access)	N	@	
226	Inward Restriction	*	@	Might want to restrict access to WIN/TMX
227	Lockout Alarm Applies	N	@	
228	Manual Line	N	@	
229	COV VM Port	Y	0	
230	Message Reg Overflow Alarm	N	@	
231	Message Waiting Setup-Bell	N	@	
232	Message Waiting Setup-Lamp	Y	@	
233	Never a Consultee	N	*	Prevents confirmed transfer actions
234	Never a Forwardee	N	*	
235	Originate Only	N	*	Prevents cleaning MWI
236	Outgoing Trunk Callback	N	@	
237	Outgoing trunk Camp-on	N	@	
238	Override Security	Y	@	
239	Priority Dial 0	*	@	Might be Desired for transfer to ATT
240	Line Privacy	Y	@	MUST ENABLE
241	Receive Only	N	@	
242	Repeated Camp-on Beeps	N	@	
243	Non-Busy Extension	N	@	
244	Room Status Applies	N	@	

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1003 COS Options

Opt#	Description	VM	Sub	Notes
245	Abbreviated Dialing Access	*	@	As required for transfer and callouts
246	SMDR-Extended Record	N	@	
247	SMDR - Record Meter Pulse	N	@	
248	TAFAS Any Access	N	@	
249	TAFAS Access Tenant	N	@	
250	TAFAS Access During Day Service	N	@	
251	Transfer Dial Tone	N	@	
252	Broker's Call with Transfer	N	*	Impairs transfer of caller to WIN/TMX
253	Call Fwd DA 2-6 rings	D	*	
254	Call Hold Recall Timer 1-10 min	D	@	
255	Rept'd Camp-on Beeps 5-15 sec	D	@	
256	UCD Music on Hold 0-50 min	D	@	
257	RESERVED	?	?	Use system defaults
258	RESERVED	?	?	Use system defaults
259	Message Sending	Y	*	Watch MWI limit if ext have enabled
300	Automatic Callback	N	@	Ext should not callback
301	Camp-on	N	@	Ext should not camp-on
302	Flash-in Conference	N	@	
303	Paging Zone 1 Access	*	@	Caution: will be able to page
304	Paging Zone 2 Access	*	@	Caution: will be able to page
305	Paging Zone 3 Access	*	@	Caution: will be able to page
306	Paging Zone 4 Access	*	@	Caution: will be able to page
307	Paging Zone 5 Access	*	@	Caution: will be able to page
308	Paging Zone 6 Access	*	@	Caution: will be able to page
309	Paging Zone 7 Access	*	@	Caution: will be able to page
310	Paging Zone 8 Access	*	@	Caution: will be able to page
311	Paging Zone 9 Access	*	@	Caution: will be able to page
312	Default paging Zone (0-9)	*	@	Caution: will be able to page
313	CO to CO Trunk Connect	*	@	Consider transfer actions before enable
314	CO to TIE Trunk Connect	*	@	Consider transfer actions before enable
315	CO to DID Trunk Connect	*	@	Consider transfer actions before enable

N - DO NOT ENABLE   Y - ENABLE   * - ENABLE with reason
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1003 COS Options

Opt#	Description	VM	Sub	Notes
316	TIE to TIE Trunk Connect	*	@	Consider transfer actions before enable
317	TIE to DID Trunk Connect	*	@	Consider transfer actions before enable
318	DID to DID Trunk Connect	*	@	Consider transfer actions before enable
319	Ext non CO to Trunk Connect	*	@	Consider transfer actions before enable
320	Transparent Multi-Console operation	N	N	Improves MWI diags, add to ATT COS
321	RESERVED	?	?	Use system defaults
322	RESERVED	?	?	Use system defaults
323	RESERVED	?	?	Use system defaults
324	RESERVED	?	?	Use system defaults
325	RESERVED	?	?	Use system Defaults
326	Acct Code forced-Data internal	N	@	
327	Acct Code forced-Data external	N	@	
328	Acct Code forced-Data LD calls	N	@	
400	Contact Monitor	N	@	
401	Call Park	N	@	
402	Long Loop (OPX only)	N	@	
403	Trunk Recall Partial Inhibit	N	?	No documentation found
404	Rec Fail Hangup Timer 1-255	D	@	
405	RESERVED	?	?	Use system Defaults
406	RESERVED	?	?	
407	RESERVED	?	?	
500	Override	N	@	
501	Override Announce	N	@	
502	RESERVED	?	?	Use system defaults
503	RESERVED	?	?	
600	Superset-Auto Answer	N	*	Will prevent MWI cancel on exit
601	Superset-Auto Hold Disable	Y	@	
602	Superset-Background Music	N	@	
603	Superset-Disconnect Alarm	N	@	
604	Superset-Immediate Line Select	Y	@	Enables dial tone detection for outdialing
605	Superset-Message Program	N	N	Allows confusing display

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1003 COS Options

Opt#	Description	VM	Sub	Notes
606	Superset-Sub-Attendant	Y	@	MUST ENABLE for MWI operation
607	Superset-Assc'd Modem Line	N	@	
608	Superset-Room Status Display	N	@	
609	Superset-Night Service Switching	N	@	
610	Superset-3&4 DN Guest Temp	N	@	
611	Superset-Limited New Call Ring	N	@	
612	Superset-Headset Operation	N	*	Fast answer might impair MWI cancel
613	RESERVED	?	?	Use system Defaults
614	RESERVED	?	?	Use system defaults
615	RESERVED	?	?	Use system defaults
650	ACD Agent Template 0-3	N	@	
651	ACD Super template 0-3	N	@	
652	ACD Senior Super template 0-3	N	@	
653	ACD Agent Always Auto-Answer	N	@	
654	RESERVED	?	?	Use system defaults
655	RESERVED	?	?	Use system defaults
656	RESERVED	?	?	Use system defaults
657	RESERVED	?	?	Use system defaults
658	RESERVED	?	?	Use system defaults
700	SMDR-Does Not Apply	N	@	See 702
701	No Dial Tone	N	@	
702	SMDR-Overwrite Buffer	N	@	Prevents SMDR delaying callouts
703	Message Register Applies	N	@	
704	Inc/Internal Modem Pool Access	N	@	
705	Automatic Overflow from ATT	N	@	
706	RESERVED	?	?	Use system defaults
707	RESERVED	?	?	Use system defaults
800	ANI Applies	N	@	
801	Incoming Trunk Call Rotary	N	@	
802	Limited Wait For Dial Tone	N	@	
803	SMDR Drop Calls <N Digits	N	@	

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1003 COS Options

Opt#	Description	VM	Sub	Notes
804	SMDR Drop Incomplete Out Calls	N	@	
805	Trunk No Dial Tone Alarm	N	@	
806	Record Incoming Calls	N	@	
807	RESERVED	N	@	
808	Special DISA	N	@	
809	Standard Ring Applies	Y	@	
810	DISA During Night Service Only	N	@	
811		?	?	Use system defaults
812	Loop Start TK to ACD Path Conn	N	@	
813	RESERVED	N	@	
814	RESERVED	N	@	
900	Data Station Queuing	N	@	
901	DTRX Herald	N	@	
902	DTRX Message Code	N	@	
903	DTRX Message Code Text	N	@	
904	DTRX Complete Message Text	N	@	
905	DTRX Herald Text Select (1-4)	N	@	Use system defaults
906	DATA SMDR-Does Not Apply	N	@	
907	DATA SMDR-Extended Record	N	@	
908	DATA SMDR-Overwrite Buffer	N	@	
909	RESERVED	?	?	Use system defaults
910	RESERVED	?	?	Use system defaults

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5.0 PBX COS Programming for systems with Generic 217, 218, and 319 software versions:

The following Options must be enabled on the voice-mail COV port COS and system options

41	Data Security
65-76	Trunk Group Access (for outdialing)
106	Sub Attendant
180	Can Flash if talking to station
181	Can Flash if talking to trunk (required for auto-attendant transfers)
182	Can flash if talking to outgoing trunk
276	Message waiting setup

5.2 Generic 218 and 319 only

52	Call Sender of Oldest Message
53	Cancel Message
104	COV Voicemail Port

Note: DSSI recommends that the port used for outdial/MW notification should not be part of the voice mail hunt group set up in Mitel programming. See the critical applications section of these notes for further details.

All phones should be programmed to be call forwarded busy/no answer to the voice mail hunt group on version 1003 or above. Versions below 1003 should be setup with call forward no answer only as the Mitel will not allow the WIN/TMX to activate a MW light on a busy station that is call forwarded busy to voice mail because it must ring the station first.

Systems with versions 217 or below can only set one type of call forwarding on their stations at once. In these cases we recommend that you use no answer call forwarding and set the WIN/TMX to perform a semi-supervised transfer from auto-attendant, as discussed later in this section. If an operator will be transferring the calls manually, they will have to check the status of the station for a busy condition prior to transferring the caller. If the station is busy, they can direct the caller to the user's mailbox by dialing the Voice Mail hunt group number, pressing * and the mailbox number from the main greeting, and then releasing the call. **Note: The console must be provided with an external tone generator as described later in this manual.**

6.0 CONFIGURING THE WIN/TMX FOR MITEL SUPERSET INTEGRATION

Note: This integration is available only with the WIN/TMX software release 5.19j or higher.

Exit WIN/TMX Voice messaging operations by entering the Administrative password **"VMAIL"** followed by 'Q' and 'Y'.

Make sure that optional Mitel Digital set Integration software has been ordered and installed.

Type EDITVM followed by **<ENTER>** to select the WIN/TMX configuration utility. Select screen 8, Telephone System Integration.
Select Item 1, Telephone system type:
Select type 28 if your PBX is configured with 1003 series software and has three digit extensions;

   Select type 29 if your PBX is configured with 1003 series software and four digit extensions (use type **29** if the system requires both 3 and 4 digit extensions).
Select type 84 if your PBX is configured with software below the 1003 series (Generic 217) and has 3 digit ext.
Select type 85 if the PBX has software below 1003 and has 4 digit ext.
Select type 5 if the PBX has software version 1005 or above.

Check item 5 (call completion sequence) equal blank. **Note:** In some Mitel software versions it is necessary to pause slightly before releasing a blind transferred call to a forwarded station, in order for the called party information to be sent to the WIN/TMX, if the WIN/TMX appears to have a problem processing forwarded calls set item 4 to **'„'** (2 second delay). If the customer uses All Call Forward it may be necessary to set the WIN/TMX to answer an incoming call after 2 rings, using the EDITGR utility. Otherwise, the calls routed to a mailbox greeting may result in **part of the greeting being cut**.

 Check Item 1, MW On sequence should be as follows:
 Ver 1003 or above: <-K7,4,E,<-K3,<-K0,
 Below 1003: E,<-O,

1.   Check Item 2, MW Off sequence should be as follows:
         Ver 1003 or above: <-K7,4,E,<-K4,<-K0,
         Below 1003:   E,<-F,

2.   Check item 13 (minimum ring on delay) equal 2 (.2 second).

3.   Check item 14 (minimum ring off delay) equal 3 (.3 second).

4.   From the Editvm main menu select screen 17. Set line configuration flag 4 equal 1 for **all the WIN/TMX lines** connected to Mitel superset ports.

5.   From the Editvm main menu select screen 6. Select item 4 (exclusion sequence). Enter Mitel hunt group number of the lines connected to the WIN/TMX.

6.   From the Editvm main menu select screen 4. Select item 3 (Dial Tone Detection). This should be set to "0", check for dial tone before outdialing, on all versions.

7.   EXIT and save the configuration. Type "VM" and press <**ENTER**> to resume operations.

8.   It may be necessary to renumber the WIN/TMX mailboxes to match your PBX extension numbers. These numbers must be the same, in order for integration to work. Refer to the WIN/TMX manual for instructions on renumbering the mailboxes.

9.   Set the "Call Transfer Supervision" parameter to **OFF** on all mailboxes that will be integrated to PBX extensions. **Note: The "Busy/No answer" options and "Number of rings before no answer" parameters will not be used with integrated stations. Also, "Call Screening" and "Call Queuing" is not**

available on integrated extensions.

Note: Software version 217 or below does not allow blind transfers to a busy station that is call forwarded busy to the voice mail. Transfers through the auto attendant must be semi-supervised. Set the "No answer" option to blind transfer and the "Number of rings before no answer" to 1 or 2. The "Busy" option should be set to "Leave message". This allows the WIN/TMX to monitor the call for a busy and then release the call if the station rings.

> 10.   The "Cancel message source announcement" option in the mailbox options/class of service should be set to ON for ALL mailboxes, as the Mitel PBX does not provide the WIN/TMX with the "calling party" information on forwarded calls. Failure to do this will cause the WIN/TMX to announce every message as a "message from an outside caller" even if it is from an internal user.

> 11.   This will complete the WIN/TMX configuration.

7.0 CRITICAL APPLICATION CONSIDERATIONS

Message Waiting Notification:

Early versions of the analog station card may not allow setting of the Message Waiting Light lamp on standard telephones. Before installing this integration, make sure that your operator console will set Message Waiting Light lamps on all phones. Also, early versions of the Superset telephones may not have end-to-end DTMF signaling. Before installing and using WIN/TMX Series system, test the Supersets for end-to-end DTMF signaling. Some Superset telephones may need to be upgraded by Mitel to the latest revision level.

Stations forwarding calls to WIN/TMX Series system may need to be limited to "Forward No Answer". Versions of Mitel software below 1003 will not allow the WIN/TMX to set/cancel Message Waiting Lights for stations in the "Forward Busy" (if the station is busy), "Forward All Call" or "Do Not Disturb" condition because the WIN/TMX must ring the station prior to dialing the MW feature code. This problem can be resolved by setting up the MW ON code as an outdial sequence in the mailbox programming and configuring the WIN/TMX to repeat sending the ON code periodically thus allowing the WIN/TMX to light the MW light as soon as the station becomes idle. Refer to the WIN/TMX manual on setting up message notification sequences.

In addition, all Mitel systems will automatically turn off a MW lamp when the station (or the hunt group that station resides in) is accessed that turned on the lamp. Therefore, in order to avoid any confusion about MW notification, DSSI recommends that the outdial port not be included in the voice mail hunt group. Assign the outdial port to its own hunt group and then define the busy overflow (if available on your version) of the outdial port hunt group to the voice mail hunt group. In this way the user's can still use their soft keys for message retrieval and the WIN/TMX will control turning off the MW light only after all new messages have all been deleted or saved instead of the Mitel PBX turning off the MW light automatically.

7.1 PBX Integration Applications

If the Mitel system is running below version 1003 software, you must add 'c' followed by the station number to the beginning of the name field for superset telephones if the user wants a name to appear in

the display. **This must be done for either ALL OR NONE superset telephones in the system.** For example, if the system is configured with four digit extension numbers, enter "CXXXX Smith" where X=station number, in the name field (if the system needs both 3 and 4 digit station numbers, enter C_XXX). **NOTE:** All single line telephones act as supersets with no name field, the display would show "CALLING XXX".

The operator or station transferring CO calls to forwarded stations must wait 2 seconds (1 ringback) before releasing the call. If stations do not wait this period of time, it causes called party information to be omitted by the telephone system.

Depending on the Mitel software version, trunk names must be programmed to a "TXXX" format, with "XXX" representing any numbers between 000 and 999. Do not use "XXX" numbers that match valid station numbers. For easy maintenance, you can group trunks by WIN/TMX audiotext entries by using the same XXX audiotext entry number. For example, sales trunks can be assigned "T911" and service trunks can be assigned "T912".

Integrated Superset ports used to access WIN/TMX Series system must be placed in a circular or UCD group. When setting up these ports, make sure that you consider how to handle overflow during "all ports busy" conditions. You cannot use standard front-to-back hunting.

The **"Last party to clear"** (no dial tone on disconnect) option on the Mitel should be disabled. Note: a failure to disable this option will prevent the WIN/TMX's from seeing disconnect supervision when a calling party hangs up.

It is recommended to install the music-on-hold feature to assure callers of proper call handling and system operation. Otherwise, callers being transferred to a station by WIN/TMX Series system will experience a period of silence, and may misunderstand what is happening to their call.

The operator console may need an external DTMF generator in order to transfer callers directly to mailboxes in the WIN/TMX system and to retrieve messages in mailbox 0. DSSI recommends the BUSCOM 1232C Quicktouch Tone Dialer. Mitel SX2000D switches with 1003 software do not need this dialer. The operator can enable DTMF by pressing a button on the console before dialing the Voice Mail.