Configuration Note 7105

Iwatsu ADIX* / ADIX M*

Revised 02/27/01

Iwatsu ADIX / ADIX M

alog Ports

Voice Board(s)

Personal Computer

1.0   METHOD OF INTEGRATION
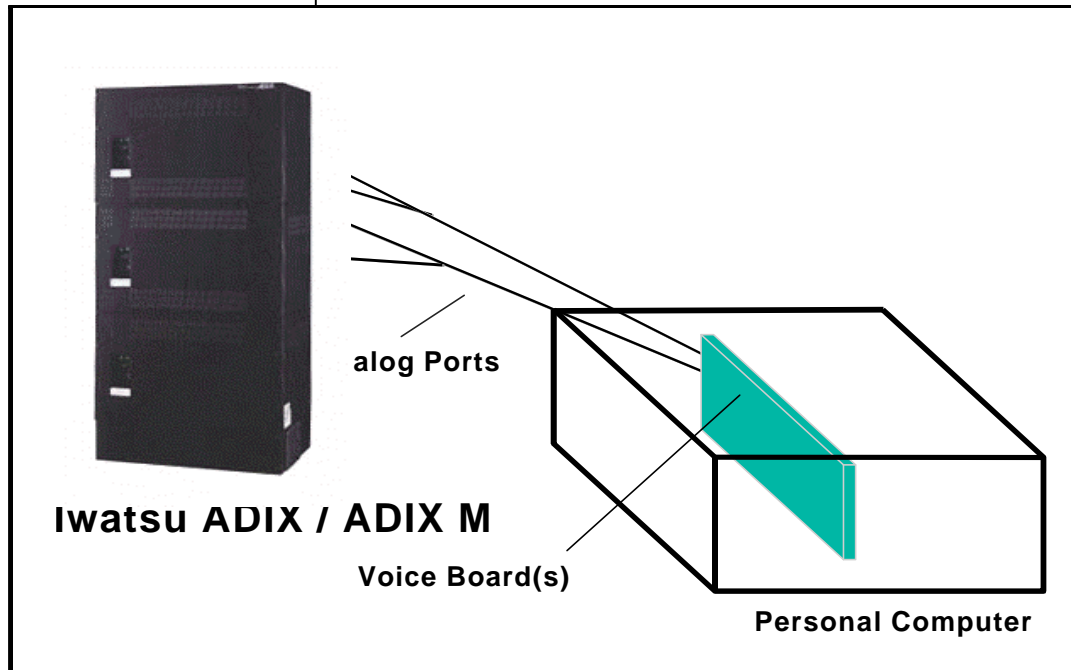
**Inband signaling is
used for integration**

Inband. Call forward to personal greeting is achieved via DTMF signals passed from the Iwatsu ADIX to the Octel 100. Message waiting indicators are set and canceled by dialing a feature access code followed by the extension number. A hookflash followed by the extension transfers the caller to the operator.

1.1 SUPPORTED VOICE PROCESSING MODULE

**Supported Voice Processing
Module**

The Octel 100 is a Year 2000 (Y2K) compliant, PC based, enhanced voice messaging product release intended to replace the OPC, Signature Performer, CEO, CP, and CP+ product lines. For installed systems that have port capacities above 16 ports contact your OMD representative for the proper solution.

Ordering Information

This integration will support 16 ports.

ADIX Hardware Requirements

ADIX M Hardware Requirements

ADIX / ADIX M Software Requirements

Additional Material Requirements

2.0   ODERING INFORMATION

Voice Boards supported:
   Dialogic DIALOG/4 ™

Fax Boards supported:
   Brooktrout TruFax® 200

3.0   HARDWARE REQUIREMENTS FOR ADIX

- Single Line Subscriber Card (IX-8SUBS, IX-SUBS-1 or IX-SUBS-2) (IX-SUBS-1or IX-SUBS-2 can provide drop in loop current for disconnect.)

- For IX-SUBS or IX-SUBS-1 you will need a minimum of 2 IX4RCVS DTMF Receiver cards. (this will provide 8 DTMF receivers.)

- Ring Generator IXRNGU

3.1   HARDWARE REQUIREMENTS FOR ADIX M

- Single Line Subscriber Card IX8SUBS-2

- Ring Generator RNGU-M

3.2   ADIX / ADIX M SOFTWARE REQUIREMENTS

- ADIX 16 bit processor 4.20 to 4.50

- ADIX 32 bit processor 5.20 to 5.50

- ADIX 32 bit processor ACD 1.52 to 2.10

- ADIX M 4.20 to 4.50

3.3   ADDITIONAL MATERIAL REQUIREMENTS

- The DIALOG/4 ™ will need:

   – One RJ-14 jack with 4-conductor line cord for every two OCTEL 100 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.

   – Two RJ-11 jacks for each Brooktrout TruFax® 200 board plus two, 2-conductor modular telephone cords.

Supported Integration Features

4.0   SUPPORTED FEATURES

[✓] Items are supported

System Forward to Personal Greeting		**Multiple Return to Operator**	[✓]
All Calls	[✓]	**Direct Call [2]**	[✓]
Ring/no answer	[✓]	**Auto Attendant**	[✓]
Busy	[✓]	**Outcalling**	[✓]
Busy/No Answer	[✓]	**Personal Greeting of Original-Called Party**	
Do Not Disturb	[ ]	Multiple Call Forward	[✓]
Station Forward to Personal Greeting		Double Call Forward	[ ]
All Calls	[✓]	Call Coverage	[ ]
Ring/no answer	[✓]	**Intercom Paging**	[ ]
Busy	[✓]	**Supervised Transfers [3]**	
Busy/No Answer	[✓]	Call Screening [3, 4]	[✓]
Do Not Disturb	[ ]	Call Queuing [3]	[✓]
Flexible Forwarding		Intercom Paging	[ ]
Forward to No Answer Greeting	[ ]	**Identify Calling Party (Ver. 1.5 and up)**	
Forward to Busy Greeting	[ ]	System Forward to Personal Greeting	[ ]
Intercom/CO Forwarding	[ ]	Station Forward to Personal Greeting	[ ]
Message Waiting		Flexible Forwarding (NA with CO)	[ ]
LCD Display	[ ]	**Record Telephone Conversation**	[ ]
LED	[✓]		
Lamp [1]	[✓]	*Notes: [1] See Section 7.1 [2] See Section 7.2*	
Audible / Stutter Dial Tone	[ ]	*[3] See Section 7.3 [4] See Section 7.4*	

4.1   DISCONNECT TYPE

Disconnect is achieved via programmable hang-up string or Drop in Loop current. For proper external disconnect supervision, Ground start trunks or Supervised loop start CO lines are recommended.   (see section 3.0).

5.0   CONFIGURING THE ADIX / ADIX M

Programming Switch System Parameters

Define the DTMF Packet timers and Disconnect type

> **DTMF Packet Speed**
> **Class 04, Item 71**
> **Element: 10**
> Data: **4**

(Sets the DTMF packet speed to 150 ms on and 50 ms off)

> **In-Packet Pause Time**
> **Class 04, Item 71**
> **Element: 11**
> Data: **0**

(Sets the pause time before the packet is sent to 0 seconds.)

> **Pre-disconnect packet Pause Time**
> **Class 04, Item 71**
> **Element: 12**
> Data: **1**

(Sets the pause time before disconnect to 1 second.)

Disconnect Signal Type
Class 04, Item 71
Element: 13
Data: **0** = disconnect by packet (*see note: section 7.3)*
        or
Data: **1** = disconnect by loop open (IX-8SUBS-1 and 2 only)

(Sets the type of disconnect)

Loop Open Duration (set only if using loop open disconnect)
Class 04, Item 71
Element: 15
Data: **70**

(Sets Loop open time to 700 ms.)

DTMF Packet Programming

AA/VM Packet Code
Class 04, Item 77
Elements: 01 - 20
Valid packets are up to 4 digits (0 - 9, *, #)

Packets 5 through 12 deal with all the different forwarding conditions.
They are very flexible and can be used in many ways. For this example,
we have set them all to '7' so that the ADIX will send the OCTEL 100 a
'7' for all the different forward conditions. In the OCTEL 100 setup we
have Code to Go To Voice Mail set as 7.

Define the following Elements:

Element **05** = **7** (consultation hold recall to VM)
Element **06** = **7** (ICM call to Mailbox forwarded to VM)
Element **07** = **7** (CO call xfered to Mailbox forwarded to VM)
Element **08** = **7** (ICM xfered to Mailbox forwarded to VM)
Element **09** = **7** (CO call forwarded to VM)
Element **10** = **7** (ICM call forwarded to VM)
Element **11** = **7** (CO/ICM camp on recall to VM on No Answer)
Element **12** = **7** (CO/ICM camp on recall to VM on Busy)

Elements 11 and 12 can be used to forward calls to a No Answer or Busy
greeting by setting them to send a unique code. IE: Element 11 = 5 and
Element 12 = 6. This would send the OCTEL 100 a 5 plus the extension
number for a ring no answer, and a 6 plus the extension number for a busy.
This should be set up as customer needs dictate.

Element **13** = **8** (ICM call to VM to retrieve a message)

(Sets packet for Auto login/Direct Call to 8)

Element **19** = **55**** (CO/ICM disconnect packet.)

(Sets disconnect packet. Use Element 19 only if Class 04, Item 71 is set to 0
to disconnect by packet.)

Note:All of the Forwarding, Direct Call and Disconnect packets are programmable, we recommend 7 for Forwarding (Elements 5 through 12), 8 for Direct Dial (Element 13) and 55** for the Disconnect (Element 19). The integrator module reflects these recommendations.

Define the Message Waiting Light Codes

Message Waiting Cancel Code
Class 7, Item 06
Element 1
Data: **501** (ADIX default for MWL cancel)

Message Waiting Set Code
Class 7, Item 06
Element 19
Data: **519** (ADIX default for MWL set)

5.1   CONFIGURING THE OCTEL 100 PORTS

Define all OCTEL 100 Ports

Port Definition
Class 01, Item 03
Data: **0-4-1-nnn** (nnn = Logical Port Number)
Valid Range = 0-4-1-001 through 0-4-1-448

(Defines the Logical Port Numbers as Voice Mail Integration ports.)

Define the type of Voice Mail Integration for ports.

Port Configuration
Class 01, Item 04
Data: **0**

(Sets the Voice Mail Integration ports to VM/AA)

5.2   ASSIGNING OCTEL 100 EXTENSIONS TO HUNT GROUP

Define the Hunt Group Access Number.

Hunt Group Access Number
Class 07, Item 02
Element: 47 - 50   (These hunt group**s** are reserved for AA/VM
Element 47   use only)
Data : **400** Access Number
Range = Up to 4 digits (0 - 9, *, #)

(Programmable code/number that is used to access the hunt group. For this example we will use access code 400 programmed to Element 47.)

Define Ports designated as VM/AA in Class 1, Item 04.

> **Hunt Group - Station**
> **Class 08, Item 02**
> Element: 47 - 50
> Element 47 = VM/AA Hunt Group No. 47
> Element 48 = VM/AA Hunt Group No. 48
> Element 49 = VM/AA Hunt Group No. 49
> Element 50 = VM/AA Hunt Group No. 50
> **Element 47**
> Data : (Enter the logical numbers of the Voice Mail Ports
>   designated VM/AA in Port Configuration Class 1, Item 04.)
> Range = 001 - 448

(This is where you define the logical ports that you wish to assign to the
hunt group that you will access by dialing, in this example, 400. The hunt
group used in this example is 47.)

5.3   CONFIGURING THE SUBSCRIBERS STATIONS

Assign Fixed Call Forward as needed.

> **Fixed Call Forward Mode**
> **Class 10, Item 73**
> **Element : 1**
> Data : 0 = All Calls: 1 = Busy/No Answer: 2 = No Answer

*Note: If you program forward All Calls to a station it will never receive
calls. Forwarding set from a phone overrides any fixed call forwarding.*

Configure the Fixed Call Forward Destination

> **Fixed Call Forward Destination**
> **Class 10, Item 78**
> Element : **1**
> Data : Extension number or Hunt Group Access Number.

6.0   CONFIGURING THE OCTEL 100

OCTEL 100 Configuration

Sections 6.1 shows the integration codes which should already be configured for
your switch. Appropriate OCTEL 100 Setup sections may be checked to verify
that this is done. If the integration codes are not correct, run the Integrator
program and select the Iwatsu ADIX / ADIX M switch.

6.1   OCTEL 100 VERSION 1.5

**Integration for OCTEL 100
Version 1.5 and above software**

Outside Line Access Code	**9,**
Off Hook Delay (OFFHDLY)	**25**
Hook Flash Interval (FLINTVL)	**50**
DTMF Tone Length (TONELEN)	**8**

Message Waiting Parameters

Permit Message Waiting Lights	✓
Message Waiting Light Prefix ON	**519**
Message Waiting Light Prefix OFF	**501519**
Light Message Waiting Light for Every Message	✓

Hangup Detection Parameters

Hangup String (HANGUPSTR)	**55****
Hangup String Timeout (HANGUPDLY)	**100**

Inband Parameters

Total Number of DID Digits	**4**
DID Terminating Character	*(blank)*
Seconds to Wait for First Digit	**1**
Millisecs to Wait for Next Digit	**750**

Inband Templates

7R	**Go to Voice Mail**
8R	**Auto Login**

These Codes apply to the Inband Template:

R = Receiving Mailbox

S = Sending Mailbox   X = Ignore Character

Valid Characters are: ~ $ * # 0-9 A-D F N T

Note: Verify all these dialing sequences for your switch

6.2   CALL ANALYSIS CONSIDERATIONS

Call Analysis must be run manually to a station. To run Call Analysis manually set Channel IN to 0, leave Channel OUT as it is, enter a physical extension number in the Phone Number field. It is best to use the extension of a phone that is next to you as you will be asked to make the phone busy, let the phone ring and answer the phone etc. Make sure the extension you are using does not have hands free announce or any type of call forwarding active.

7.0   CONSIDERATIONS / ALTERNATIVES

The following items should be considered, below:

☐ MWL/ Lamp to Single Line Phones

☐ Direct Call (Auto Login)

☐ Supervised Transfers

☐ Call Screening

Important notes concerning this integration

7.1   MWL/ LAMP TO SINGLE LINE PHONES

In order to provide Message Waiting lamps to Single Line phones you will need a IXDC-8. The IXDC-8 supplies 90 volts message waiting voltage to the Single Line phones. Message Waiting Lamps to a Single Line phone

require an additional wire pair, one pair to the phone and the other pair is used to light the Message Waiting Lamp.

7.2   DIRECT CALL (AUTO LOGIN)

Direct Call (Auto Login) will only work when the MSG key is lighted.

To retrieve a message from an extension with the MSG key lighted you must: Go off hook; Press the MSG key then press #.

To retrieve a message from an extension with the MSG key not lighted you must: Dial the main pilot hunt group number; Press the # sign then enter the mailbox number.

7.3   SUPERVISED TRANSFERS

If the OCTEL 100 is programmed to execute a supervised transfer, Handsfree Announce must be disabled.

If you are using supervised transfers the caller and the called party will hear 'beep' tones when the call is connected or cut through. Also it has been noticed that on some systems the prompts, such as "I'm sorry there is no answer at that extension...", tend to get the first words clipped off.

7.4   CALL SCREENING

If you wish to use call screening it is recommended that you use packet 19 to disconnect instead of Drop in Loop current. On call screening Reject and Redirect with Drop in Loop current, if the called party hangs up the phone before the system performs a hook flash to get the caller back, the caller will be dropped.