

## Configuring the Application Server

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This procedure describes how to configure the Application Server using Application Resource Manager (ARM) for the ServiceController 3100.

**Note:** You must configure the Media Server before configuring the Application Server, otherwise, you will not be able to perform Step 4 from the procedure list, below.

Configure the Application Server using the following six-step procedure:

- Step 1) Resource Configuration: assign the number of applications for each module.  
  
After completing the resource configuration, activate this configuration, which generates the `linecards.cfg` file that you will use in the next step for the offline configuration.
- Step 2) Offline Configuration: configure App Groups and assign applications to the App Group.  
  
Configure the App Groups and assign applications to the App Groups in the offline configuration. If the system is newly loaded and configurations are not initialized, when you invoke the offline configuration from entering `cmconsole`, the active configuration is initialized first. Simply save the configuration and quit out of Offline Configuration Menu. Then, reach the Offline Configuration Menu again. This time, it initializes the inactive configuration. Finally, configure the App Groups in this configuration.
- Step 3) SIP MWI Configuration.  
  
Configure a subscriber's mailbox with the capability to notify the subscriber of unread VoiceMail messages received in their mailbox.
- Step 4) Module Configuration: Application Server-Media Server (AS-MS) mapping and AppGroup-CircuitGroup (LG-CG) mapping.  
  
This configuration reads App Group information from an inactive offline configuration. This configuration also reads the circuit group information from the Media server configuration. You can map Media Servers to Application Servers and also indicate mappings for the App Group and Circuit Group.
- Step 5) Activating the Configuration.  
  
This generates all Application Server configuration files.
- Step 6) Activating the Application Server.

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This activates any configuration modifications on the Application Server.

**Note:** For most input and system response messages, parameters are provided for sample purposes only. When responding to system prompts, use the parameters for your specific configuration.

**Note:** If you are unsure of which parameters are available, use the “?” option to display the available choices.

To configure the Application Server, you will need to do the following:

- Record the IP addresses and configuration parameters for the Application Server, Media Server, Database Server, and OMAP Server
- Fill in separate configuration worksheets for the Number of App Groups (VoiceMemo) and the number Circuit Groups

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1. Log in as admin to configure the Application Server.

Type **admin** at the console prompt, press **Enter**, type your **password**, press **Enter** again.

The Main Menu appears.

```
MAIN MENU
```

```
(C) Configuration  
(M) Maintenance  
(P) Provisioning  
(R) Report  
(U) User Administration  
(X) Exit
```

```
For help, please type "?"
```

```
COMMAND (C/M/P/R/U/X)
```

2. Select **(C) Configuration**.

The Configuration Menu appears.

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CONFIGURATION MENU

- (A) System Configuration
- (B) Application Server
- (C) Directory Server
- (D) VPIM/UMP Gateway
- (E) SNMP Configuration
- (F) Media Server
- (G) SIP Call Control Gateway
- (H) SS7 Call Control Gateway
- (I) SMDI Call Control Gateway
- (J) Platform Activation menu
- (K) View History
- (L) Copy Configuration
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/E/F/G/H/I/J/K/L/X):

3. **Select (B) Application Server.**

The Application Server Configuration Menu appears.

AS CONFIGURATION

- (A) Activate Configuration
- (B) Resource Configuration
- (C) Offline Voice Mail App Configuration
- (D) Module Configuration
- (E) Online Voice Mail App Configuration
- (F) Directory Service Configuration
- (G) Tenant Groups Configuration
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/E/F/X):

## Configuring the Resource

### 1. Select **(B) Resource Configuration**.

The system responds with the resource configuration information below and then invokes the Application Server Resource Configuration Menu.

The configuration number refers to the XML configuration number, which must be the same number that was used to configure the Media Server.

**Note:** The following messages are examples only and do not indicate exactly what may be shown on the console for your system.

```
Modifying config number: [1] Continue (Y/N) [Y]
```

```
AS Cluster is not configured
```

```
Creating AS Cluster configuration
```

```
AS Cluster created
```

```
Following modules are added in management matrix 1 2  
Adding associated AS resource configuration
```

```
resources for Module ID 1 successfully added to the  
resource table
```

```
resources for Module ID 2 successfully added to the  
resource table
```

```
Application Server Resource Configuration Menu
```

```
-----
```

```
(M) Modify Resource  
(S) Show Resources  
(Q) Quit -- Forget Changes  
(X) Exit -- Save Changes
```

### 2. Select **(M) Modify Resource**.

The Modify Application Server Resource Configuration Menu appears.

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<i>Step</i>	<i>Reference</i>
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```
Modify Application Server Resource Configuration Menu
```

```
-----
```

```
(M) Application Server Module ID = [0]  
(N) Number Of Applications = [0]  
(X) Exit
```

3. **Select (M) Application Server Module ID = [0].**

In response to the system prompt, choose the Application Server Module ID (for this example, **1** is selected).

```
Please choose a AS Module Id from the list: 1 2
```

In response to the system prompt, enter the Application Server Module ID (for this example, **1** is entered).

```
Enter AS Module ID [] = 1
```

4. **From the Modify Application Server Resource Configuration Menu, select (N) Number Of Applications = [0].**

The Number of Applications defines the maximum number of App Group applications the Application Server can run. Since this configuration contains one circuit group with 24 lines that will be serving only as VoiceMemo lines, set the number to 24. One VoiceMemo application is used for each circuit in the circuit group.

In response to the system prompt, enter the Number of Applications (for this example, **24** is entered).

```
Number Of Applications = [10] 24
```

The system returns to the Modify Application Server Resource Configuration Menu with the new parameters shown.

```
Modify Application Server Resource Configuration Menu
```

```
-----
```

```
(M) Application Server Module ID = [1]  
(N) Number Of Applications = [24]  
(X) Exit
```

5. **Select (X) Exit.**

The system responds with the message below and returns to the Application Server Resource Configuration Menu.

Successfully saved the resource configuration in xml file

Application Server Resource Configuration Menu

-----

- (M) Modify Resource
- (S) Show Resources
- (Q) Quit -- Forget Changes
- (X) Exit -- Save Changes

6. Select **(X) Exit -- Save Changes**.

The system responds with the following message and prompt:

Saving the new configuration to /usr/bsp/systemconfig/  
platformcfg\_1.xml

Do you want to activate this configuration(Y/N)[N] =

COMMAND (A/B/C/D/E/F/X):

7. Enter **Y**.

**Note:** Verify that call processing is not halted during activation.

The system activates the configuration and returns to the Application Server Configuration Menu.

AS CONFIGURATION

- (A) Activate Configuration
- (B) Resource Configuration
- (C) Offline Voice Mail App Configuration
- (D) Module Configuration
- (E) Online Voice Mail App Configuration
- (F) Directory Service Configuration
- (G) Tenant Groups Configuration
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/E/F/X):

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## 8. Select **(C) Offline Voice Mail App Configuration**.

The system responds with the following configuration information and then returns to the VoiceMemo Configuration Offline Menu.

```
OFFLINE MENU: configuration 1.  
Currently active configuration is: 0.
```

```
MKCONF: No GROUP record for configuration 1, initializing  
configuration 1.  
Storing the initialized TCP/IP oaa record...Done.  
Press <Enter> to continue....
```

```
VoiceMemo Configuration - Offline Menu  
-----
```

```
(A) App group Associated Applications  
(B) Duplicate Active Configuration  
(C) Report Current Configuration  
(D) Pre-Extension Dial String  
(E) Smartcard Integrations  
(G) Define App Groups  
(H) Toll Saver Configuration for Integrated Call  
(K) VPIM Configuration Menu  
(N) MESA-Net Menu  
(Q) Quit -- Forget Changes  
(S) Auto Task Menu  
(T) DTMF to PBX Message Lights  
(W) SS7/SIP/SMDI Applications  
(Z) Auto ECDR Conversion Parameters  
(X) EXIT -- Save Changes
```

```
OFFLINE MENU:
```

## Configuring App Groups and Assigning Applications to Them

Now that the Application Server knows how many applications it can run, define an App Group that consists of 24 VoiceMemo applications to handle incoming VoiceMail requests.

1. From the VoiceMemo Configuration - Offline Menu, select **(G) Define App Groups**.

The App Groups Menu appears.

```
App Groups
-----
(G) Current Group = [1]
(N) Name of current group = []
(S) Show ALL groups
(T) Show THIS group
(U) Show Unassigned Apps
(A) Add Apps to current group
(D) Drop Apps from current group
(X) Exit
```

COMMAND (G/N/S/T/U/A/D/X):

2. Select **(N) Name of current group = []**.

At the system prompt, enter the Group Name (for this example, enter **Voicemail**).

```
Enter group name = [] Voicemail
```

3. Select **(A) Add Apps to current group**.

Enter the App number as: <module>:<appIndex>; enter the App number range as: <module>:<appIndex>-<module>:<appIndex>.

You can enter a wild card value as: \* (all Apps all modules) or as <module>:\* (all Apps on <module>).

You can enter multiple values, as defined above, separated by commas, for example, 3:2 1:0-1:3 \* 1:\* 1:0,1:1,2:\* ,3:\*.

At the system prompt, enter the range of applications (for this example, enter **1:0-1:23**)

```
Enter AppIndex to add = 1:0-1:23
```

The system returns to the App Groups Menu.

```
App Groups
-----
(G) Current Group = [1]
(N) Name of current group = [Voicemail]
(S) Show ALL groups
(T) Show THIS group
(U) Show Unassigned Apps
(A) Add Apps to current group
```

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(D) Drop Apps from current group  
(X) Exit

4. **Select (T) Show THIS group.**

The number of applications are shown for the specified group.

```
Group #1: "Voicemail" (24 Apps)
Module 1: AppIndex 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23
```

5. **Select (X) Exit** to return to the VoiceMemo Configuration Offline Menu.

```
VoiceMemo Configuration - Offline Menu
-----
(A) App Group Associated Applications
(B) Duplicate Active Configuration
(C) Report Current Configuration
(D) Pre-Extension Dial String
(E) Smartcard Integrations
(G) Define App Groups
(H) Toll Saver Configuration for Integrated Call
(K) VPIM Configuration Menu
(N) MESA-Net Menu
(Q) Quit -- Forget Changes
(S) Auto Task Menu
(T) DTMF to PBX Message Lights
(W) SS7/SIP/SMDI Applications
(Z) Auto ECDR Conversion Parameters
(X) EXIT -- Save Changes
```

OFFLINE MENU:

6. **Select (A) App Group Only Applications.**

The current Group number is shown, along with the App Group Only Applications Menu.

```
Group #1 = [VOICEMEMO]

App Group Only Applications
-----
(G) Group selected = [1]
(U) User Interface = []
```

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<i>Step</i>	<i>Reference</i>
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- (D) DID VoiceMemo
- (P) Pager
- (V) VoiceMemo
- (W) Disable
- (X) Exit

APPL:

7. **Select (V) VoiceMemo.**

The VoiceMemo Group number is shown.

Group #1 = [VOICEMEMO]  
APPL (G/U/D/P/V/W/X):

8. **Select (X) Exit** to return to the VoiceMemo Configuration Offline Menu.

VoiceMemo Configuration - Offline Menu

-----

- (A) App Group Associated Applications
- (B) Duplicate Active Configuration
- (C) Report Current Configuration
- (D) Pre-Extension Dial String
- (E) Smartcard Integrations
- (G) Define App Groups
- (H) Toll Saver Configuration for Integrated Call
- (K) VPIM Configuration Menu
- (N) MESA-Net Menu
- (Q) Quit -- Forget Changes
- (S) Auto Task Menu
- (T) DTMF to PBX Message Lights
- (W) SS7/SIP/SMDI Applications
- (Z) Auto ECDR Conversion Parameters
- (X) EXIT -- Save Changes

OFFLINE MENU:

9. **Select (X) Exit -- Save Changes.**

The system responds with the following configuration processing information, along with the Application Server Configuration Menu:

```
Writing new configuration report to /usr/bsp/  
clusterconfig/app.report.1...
```

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```
Writing new configuration commands to /usr/bsp/  
clusterconfig/app.cmd.1...  
WARNING: ACTIVATE CONFIGURATION to enable changes!
```

```
COMMAND (A/B/C/D/E/F/X):
```

```
AS CONFIGURATION
```

```
(A) Activate Configuration  
(B) Resource Configuration  
(C) Offline Voice Mail App Configuration  
(D) Module Configuration  
(E) Online Voice Mail App Configuration  
(F) Directory Service Configuration  
(G) Tenant Groups Configuration  
(X) Exit
```

```
For help, please type "?"
```

```
COMMAND (A/B/C/D/E/F/X):
```

## Configuring Application Server and Media Server Modules

1. From the Application Server Configuration Menu, select **(D) Module Configuration**.

The system responses shown below indicate the initialization of the configuration files.

**Note:** The following messages are examples only and do not indicate exactly what may be shown on the console for your system.

```
Modifying config number: [1] Continue (Y/N) [Y] =
```

**Note:** Use the same config number used in previous server configurations)

```
Following modules are added in management matrix 1
```

```
Adding associated AS configuration
```

```
Module ID 1 successfully added to the AS cluster
```

```
The following app groups are added in OAA configuration 0
```

---

Adding App Group configurations to module id 1

Then, the system returns to the Application Server Configuration Menu.

Application Server Configuration Menu

```
-----  
(M) Modify Application Server Cluster  
(S) Show Application Server Cluster  
(Q) Quit -- Forget Changes  
(X) Exit -- Save Changes
```

2. Select **(S) Show Application Server Cluster** to show cluster information.

```
-----  
AS Module ID = 1  
-----
```

```
-----  
AS App Group Configuration  
-----
```

Number of App Groups Configured = 1

App Group Number = 0

App Group Type = IN

Number Of Applications Configured = 24

APPLICATION SERVER CONFIGURATION MENU (M/S/Q/X):

3. Select **(M) Modify Application Server Cluster**.

The Modify Application Server Configuration Menu appears.

Modify Application Server Configuration

```
-----  
(M) Modify Module  
(S) Show Module  
(X) Exit
```

4. Select **(M) Modify Module**.

The Modify Application Server Module Menu appears.

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<i>Step</i>	<i>Reference</i>
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Modify Application Server Module Menu

-----

(M) Application Server Module ID  
(C) Media Server Connections  
(L) App Group - CircuitGroup Mapping  
(X) Exit

5. **Select (M) Application Server Module ID.**

In response to the system prompt, select the Module ID (for this example, Module ID 1 is chosen).

Please choose a AS Module Id from the list: 1 2  
Enter AS Module ID [] = 1

The system responds with the ID confirmation and returns to the Modify Application Server Module Menu.

6. **Select (C) Media Server Connections.**

The Media Server Connection Menu appears.

Media Server Connection Menu

-----

(A) Add Media Server  
(R) Remove Media Server  
(S) Show Media Server  
(M) Modify Media Server  
(X) Exit

7. **Select (A) Add Media Server.**

In response to the system prompt, select the Module ID (for this example, the Module ID 1 is chosen).

Modifying AS Module ID 1

Please choose a MS Module Id from the list: 1

The MS Module ID is shown, along with configuration confirmation. The system returns to the Media Server Connection Menu.

Enter MS Module ID [] = 1  
MS connection configuration added successfully for MS id 1

---

Step

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MEDIA SERVER CONNECTION MENU (A/R/S/M/X):

Media Server Connection Menu

-----

(A) Add Media Server  
(R) Remove Media Server  
(S) Show Media Server  
(M) Modify Media Server  
(X) Exit

MEDIA SERVER CONNECTION MENU:

8. Select **(S) Show Media Server** to view the connection information.

Media Server ID = 1  
Maximum Number of connections = 1  
Connection Retry Interval = 120  
Idle Interval = 300  
Ping Retries = 1  
Session Ping Interval = 120  
Session Timeout = 60

MEDIA SERVER CONNECTION MENU (A/R/S/M/X):

9. Select **(X) Exit** to return to the Modify Application Server Module Menu.

Modify Application Server Module Menu

-----

(M) Application Server Module ID  
(C) Media Server Connections  
(L) AppGroup - CircuitGroup Mapping  
(X) Exit

## Mapping the App Group and Circuit Group

1. From the Modify Application Server Module Menu, select **(L) AppGroup - CircuitGroup Mapping**.

The App Group CircuitGroup Mapping Configuration Menu appears.

App Group - CircuitGroup Mapping Configuration Menu

-----

(A) Add App Group - CircuitGroup Map

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<i>Step</i>	<i>Reference</i>
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---

(R) Remove App Group - CircuitGroup Map  
(S) Show App Group - CircuitGroup Map  
(X) Exit

2. Select **(A) Add App Group - CircuitGroup Map**.

The Add App Group CircuitGroup Map Menu appears.

```
Add App Group - CircuitGroup Map Menu
-----
(I) Add Incoming Circuit Map
(O) Add Outgoing Circuit Map
(X) Exit
```

3. Depending on the application group requirements for your configuration, select either **(I) Adding Incoming Circuit Map** or **(O) Add Outgoing Circuit Map**.

Enter the values for the following parameters (for this example, **1** is entered).

```
Please choose an app group number from the list: 1 2 4
Enter App Group Number = 1
Please choose a circuit group number from the list: 1
Enter CircuitGroup Number = 1
```

The system responds with the Map entry status, mapping App Group 0 to Circuit Group 0.

```
Successfully added LGCG Map entry
```

4. Select **(X) Exit** to return to the Add App Group CircuitGroup Map Menu.

5. Select **(S) Show App Group - CircuitGroup Map** to view Mapping information.

```
App Group Number = 0, CircuitGroup Number = 0
```

6. Select **(X) Exit** to save the configuration information and return to the Modify Application Server Configuration Menu.

```
Modify Application Server Configuration
-----
(M) Modify Module
(S) Show Module
(X) Exit
```

7. **Select (S) Show Module.**

In response to the system prompt, select a Module ID from the list (for this example, Module ID 1 is chosen).

```
Please choose a AS Module Id from the list: 1
Enter AS Module ID [1] = 1
```

The Module ID is shown, as well as the associated Application Server - Media Server connection configuration, App Group, and applications configuration information.

```
-----
AS Module ID = 1
-----

-----
AS - MS Connection Configuration
-----

Number of Media Servers Configured = 1

Media Server ID = 1
Maximum Number of connections = 1
Connection Retry Interval = 120
Idle Interval = 300
Ping Retries = 1
Session Ping Interval = 120
Session Timeout = 60

-----
AS App Group Configuration
-----

Number of App Groups Configured = 1

App Group Number = 0
App Group Type = IN
Number Of Applications Configured = 24

-----
App Group - CircuitGroup Map Configuration
-----
```

---

<i>Step</i>	<i>Reference</i>
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---

App Group Number = 0, CircuitGroup Number = 0

8. Select **(X) Exit** (twice) to exit and save changes.

The following message indicates the configuration is being saved.

```
Saving the new configuration to /usr/bsp/systemconfig/  
platformcfg_1.xml
```

9. Select **(X) Exit** from the Application Server Configuration Menu.

The following prompt appears:

```
Exit from AS CONFIGURATION? [Y/n] =
```

10. Enter **Y**, and then select **(X) Exit** (twice) to return to the VoiceMemo Main Menu.

## Activating the Configuration

1. Log in as admin to activate the configuration.

Type **admin** at the console prompt, press **Enter**, type your **password**, press **Enter** again.

The Main Menu appears.

```
MAIN MENU
```

```
(C) Configuration  
(M) Maintenance  
(P) Provisioning  
(R) Report  
(U) User Administration  
(X) Exit
```

For help, please type "?"

```
COMMAND (C/M/P/R/U/X)
```

2. Select **(C) Configuration**.

The Configuration Menu appears.

---

CONFIGURATION MENU

- (A) System Configuration
- (B) Application Server
- (C) Directory Server
- (D) VPIM/UMP Gateway
- (E) SNMP Configuration
- (F) Media Server
- (G) SIP Call Control Gateway
- (H) SS7 Call Control Gateway
- (I) SMDI Call Control Gateway
- (J) Platform Activation menu
- (K) View History
- (L) Copy Configuration
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/E/F/G/H/I/J/K/X):

**3. Select (J) Platform Activation Menu.**

The Platform Activation Menu appears.

PLATFORM ACTIVATION MENU

- (A) Reactivate active configuration
- (B) Activate last active configuration
- (C) Activate last modified configuration
- (D) Activate by configuration number
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/X):

**4. Select (D) Activate by configuration number.**

In response to the system prompt, enter the configuration number (for this example, 1 is entered).

Enter configuration number [1 - 5] 1

The system responds with the following configuration status:

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```
Activating configuration [1], please wait...
SS7 Cluster Configuration is not defined
## SS7 CCG Cluster is not configured
Please select Configuration Option and then select SS7
Call Control Gateway Configuration option to add SS7
Configuration
# Contact TAC if you are not sure how to modify SS7 Gateway
Configuration
```

```
SIP Cluster is not Configured
```

5. Select **(X) Exit** (three times) to return to the VoiceMemo Main Menu.

## Activating the Application Server

1. From the VoiceMemo Main Menu, select **(C) Configuration**.

The Configuration Menu appears.

```
CONFIGURATION MENU
```

```
(A) System Configuration
(B) Application Server
(C) Directory Server
(D) VPIM/UMP Gateway
(E) SNMP Configuration
(F) Media Server
(G) SIP Call Control Gateway
(H) SS7 Call Control Gateway
(I) SMDI Call Control Gateway
(J) Platform Activation menu
(K) View History
(L) Copy Configuration
(X) Exit
```

For help, please type "?"

```
COMMAND (A/B/C/D/E/F/G/H/I/J/K/L/X):
```

2. Select **(B) Application Server**.

The Application Server Configuration Menu appears.

---

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AS CONFIGURATION

- (A) Activate Configuration
- (B) Resource Configuration
- (C) Offline Voice Mail App Configuration
- (D) Module Configuration
- (E) Online Voice Mail App Configuration
- (F) Directory Service Configuration
- (G) Tenant Groups Configuration
- (X) Exit

For help, please type "?"

COMMAND (A/B/C/D/E/F/X):

3. **Select (A) Activate Configuration.**

The VoiceMemo Activate Configuration Menu appears.

VOICEMEMO ACTIVE CONFIGURATION MENU

- (A) Activate Configuration
- (X) Exit

If you need help later, type?.

4. **Select (A) Activate Configuration.**

The system responds with the following configuration activity information, along with configuration activation prompts:

Configuration last edited by OFFLINE CONFIGURATION is 1.

CONFIG NAME NUMBER	ACTIVE	DATE	ACTIVATION DATE
00 CONFIGURATION #0	NO	06/17/04 10:07	06/22/04 16:20
01 CONFIGURATION #1	YES	06/22/04 16:20	

Activate inactive configuration, 'CONFIGURATION # 1'? [Y/N]:

5. **Enter Y in response to the prompt above.**

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The system responds with the following prompt.

```
Wait for message waiting queues to be empty? [Y]:
```

6. Enter **Y** in response to the prompt above.

The system responds with the following prompt.

```
Wait for paging queues to be empty? [Y]:
```

7. Enter **Y** in response to the prompt above.

The system responds with the following activation information and then returns to the VoiceMemo Active Configuration Menu:

```
Sending shutdown to ARM on AppServer 3...  
AppServerShutdown_rsp:returnCode=SUCCESS
```

```
Message Indicator Request Queue Lengths  
active:0 untried:0 retrying:0 calls expected:0
```

```
Paging Request Queue Lengths  
active:0 untried:0 retrying:0 calls expected:0
```

```
ARM on AppServer 3: activeApps=0 hangupApps=0
```

```
No more calls in progress...
```

```
Unified Message Portal Request Queue Lengths  
Pending: 0
```

```
Master configuration record updated, restarting tasks  
Configuration activated on AppServer 3 (foot)
```

End of Configuration Procedure

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*Step*

*Reference*

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