



IP Office Technical Bulletin

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Region: EMEA & APAC

IP Office and DECT integration

Avaya is pleased to announce the General Availability of IP Office DECT Integration version 2.0.12 Software. Integration enhances the portable handset with intuitive internal and call presentation activity.

The following information should be adhered to when connecting IP Office and DCU 500/1500 to utilise IP Office DECT integration.

The DECT Integration is license controlled from the IP Office. Browsing the Installation CD and running the install program from within the DECT folder will install the DECT integration software.

IP Office DECT Integration requires the following IPO and KIRK minimum software levels

- DCU/KIRK 1500 CCFP PCS 6a+ hardware
- DCU/KIRK 500 CCFP PCS 2+ hardware
- DCU/KIRK 1500 CCFP version 6 software
- DCU/KIRK 500 CCFP 1N+ software
- Avaya Branded KIRK 3040 PP Handsets 4i+ software
- Base Station/RFP PCS 3+ software
- KIRK CCFP P.I.N.
- IP Office 2.1 (24)+ software
- IP Office DECT License
- IP Office DECTExe V2.012
- IP Office DECTCfg V2.03+

IP Office DECT Integration offers the following enhancements to the Mobile 'Slave' portable DECT handset

- CLI Presentation
- Internal Naming Presentation
- Internal and External Directory
- Twinning via a Master DT/DS handset
- Call Waiting Indication *
- Phone Manager Interaction *

* Slave DECT Call Waiting or Phone Manager BLF operation is an either/or option. On install of the DECT integration software, **the default activity depends on the call waiting settings of the Master or Slave handset.**

If call waiting is set to off, for both the master and slave, then Call Waiting (camp-on) is disabled to the slave DECT handset when busy and receiving a new call to the Master twin, therefore supporting BLF updates.

A change in the registry setting will allow permanent Call Waiting operation, but in turn will disable the BLF updating real time to its Master twin.

Please see page 3 in this document configuring the registry set-up.

IP Office

Analogue ports are utilised to support ringing and speech presentation from the IP Office to the DECT DCU/CCFP. Programming the User and Extension fields should incorporate the following.

The IP Office Extn Tab

The Extn field of any Analogue port supporting the DECT handset must have the Caller Display Type field set to Off. When set to On (Default) the call set up time via the DCU base station signalling is delayed due to the IP Office trying to present the calling display identity on analogue. *Note:* - CLI/naming presentation is a function of the DECT Integration software.

The screenshot shows the configuration interface for Extension 8038. The 'Extn' tab is active. The 'Extension ID' field contains '771' and the 'Extension' field contains '8038'. The 'Caller Display Type' dropdown menu is open, showing the following options: Off (selected), On, UK, UK20, DTMFA, DTMFB, DTMFC, and FSKA. Below the dropdown, there are two 'Unit - 10ms' labels. The 'Equipment Classification' section has three radio buttons: 'Quiet Headset', 'Paging Speaker', and 'Standard Telephone' (which is selected).

IP Office User – Telephony

The Busy Wrap Up timer should be changed from default 2 seconds to 4 seconds on both the Master and Slave, or on any individual User supporting a DECT handset.

The Call Waiting feature must be disabled to the Master and Slave when utilising DECT integration supporting BLF updates to Master handset operation. (Default DECT installation)

Telephony settings must have the Master and Slave Call Waiting checked ON for the call-waiting feature to operate to the Slave DECT handset when twinning has been enabled.

If Call Waiting is checked ON in the Telephony tab, IP Office DECT will work in call waiting operational mode. If call waiting is checked off it will work in BLF copy mode, unless the registry is changed and made to work in call waiting mode regardless of Telephony tab.

Server DECT Integration Registry Changing

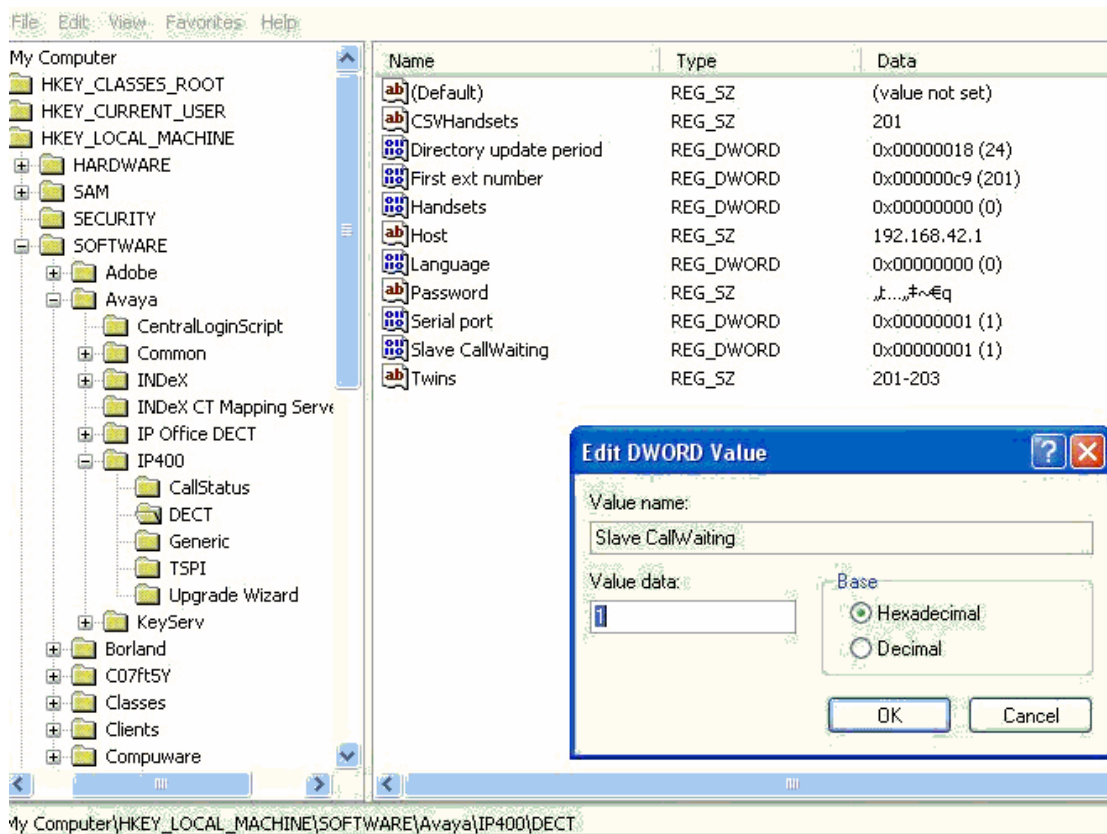
Changing the Registry settings to allow Call Waiting to a Slave twinned DECT handset will disable the real time Master handset BLF update. The CTI coding can only support either/or functionality and is a limitation on the DECT integration service.

To change the Registry to support Call Waiting to a Slave please do the following

- Stop DECT Service
- From the command line type **regedit**
- Within the registry tree navigate to **HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\IP400\DECT**
- Define a new DWORD Value **Slave CallWaiting** and set it to **1** Hexadecimal if requiring Call Waiting on busy Slave when Master called.
- Once defined, set the value to **0** to support BLF updates to the Master twin.

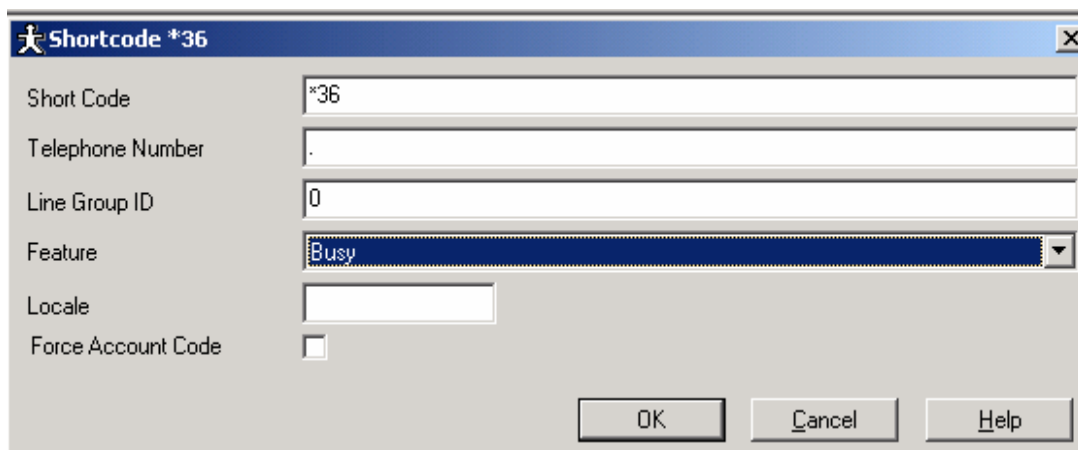
Restart the DECT Service to initialise settings.

Please see Registry Entry screenshot on page 4.



User - Short Codes

The DECT slave handset associated with twinning does not support Log-On, Log-Off activity. A short code to disable the DECT handset to Log Out should be added to all DECT Slave users. This is a precautionary short code. If a DECT user operational with twinning to a master should enter this function then the DECT service will require restarting.



IP Office Master/Slave Voice Mail Access

IP Office Master Slave integrated Voice Mail access programming can be found on the toolkit 2.1 CD. This can be located from *Contents/System Installation/Compact DECT Installation/IP Office Integration/DECT Configuration/ Voicemail Pickup*.

DECT CCFP Programming

Ensure that the DECT DCU/CCFP has been correctly installed prior to starting the IP Office DECT integration Service.

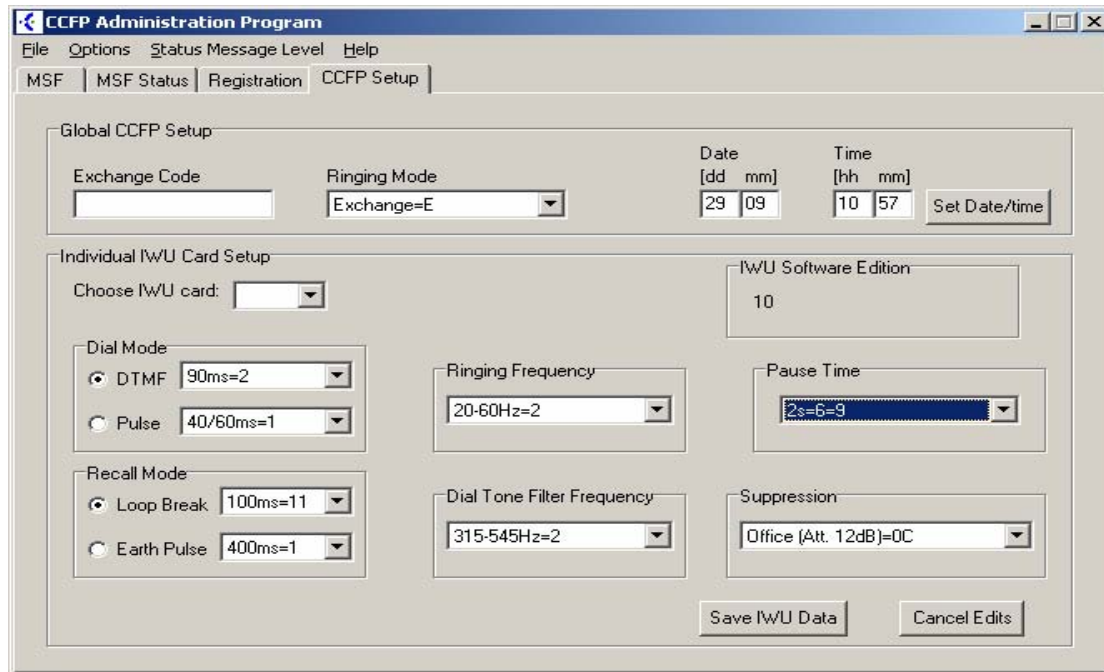
The DCU/CCFP must be set to Exchange Generated Ringing. This is a system wide function. For typical settings see below.

Radio coverage and overlap of Base Stations **MUST** be measured to ensure correct operation and handover functionality. Base Stations must be software PCS 3+.

Prior to starting the IP Office DECT Service, check the diagnostics of the CCFP base-station activity for any busy bits. Any Base-Station showing an excessive busy-bit may require additional coverage from an alternative base station.

Correct Twinning operation must have the same CCFP Local number to its corresponding IP Office analogue user number.

DCU/CCFP does **NOT** support Collective group calling (Ring Mode = Group). Any Twinning or analogue activity supporting DECT handsets must use an alternative group calling operation from the IP Office.



DCU/CCFP 1500 and 500 P.I.N. (5a+ software)

The DCU requires a P.I.N. from KIRK to support full MSF (Message Service Function) messaging. By default the license supports 2 full MSF channels on DAB/IWU card 0 slots 0-1.

The default KIRK P.I.N. drives the first two programmed handsets display showing the call waiting details, however IPO DECT Integration will offer the Call Waiting tone to other busy DECT handset. KIRK full P.I.N. number status allows the display of all portable handsets to be updated with the Call Waiting details.

P.I.N. is mandatory for base station and handset functionality from version 5a onwards.

DECT Non Supported Functionality

- Collective Group Calling on ANY DECT handsets.
- Profile 2 selected on a DECT handset with IP Office DECT Integration operational
- VoiceMail Ring back alerting Slave DECT handset when Master has gone off hook /on hook after initial Voice Mail alert.
- DECT Slave Log On / Log Off operational Activity
- Master/Slave ACD Agent twinning operation and CCC reporting.
- Twinning has not been tested on KIRK 500 Infineon Platform PCS 7 Hardware

Comments and Observations

KIRK has introduced 5b Flash software for CCFP 1500 units. All CCFP 1500 units have been shipped from KIRK with this build of software from Week 27, 2004.

CCFP 1500 units should be upgraded to version 6 software supporting IPO DECT integration.

Group calling activity does not support Collective groups through DECT DCU/CCFP.

Twinned Master and Slave and individual DECT supported handsets should have a minimum ring timeout set to 15 seconds from the settings available in the IP Office.

Changing a name associated to the DECT POT handset on the IP Office 'User' details will require the DECT service to be restarted.

DECT Integration Known Issues on Release

- The maximum password length on the host IP Office must be no greater than 12 characters when configuring IPO DECT Integration.
- The Ringing time before diverting to Voicemail does not follow the timer set on either the DECT Master or Slave, diverting being slightly delayed than the timer set.

Version 6 Software KIRK1500 DCU/CCFP

Incorrect CLI presentation could occur to a DECT handset when a new call is presented to a handset still in the clearing process within DCU/CCFP unit.

This is resolved with an upgrade to version 6 KIRK 1500 operation DCU/CCFP software and a modification of the default KIRK 1500 settings.

A release of software for the KIRK 500 COMPACT DECT resolving this issue will be available on the 22nd October 2004.

Upgrade Process to version 6 software

Upgrading the KIRK 1500 DCU/CCFP to version 6 software can be administered through the DCU/CCFP windows interface.

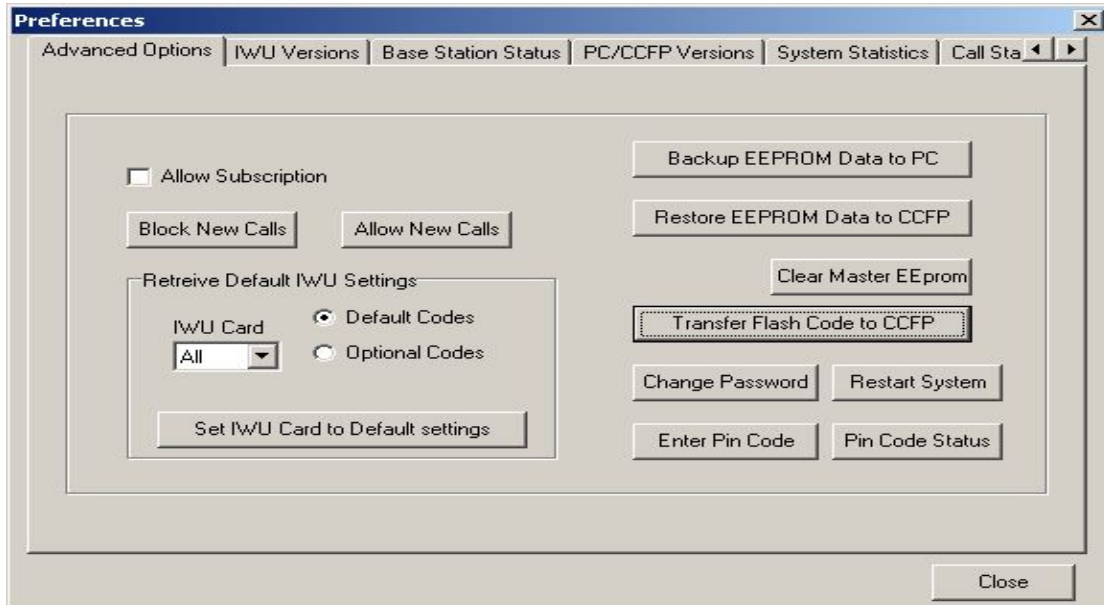
The DECT control unit MUST be hardware 6a+ capable of supporting the 'Big Flash' software.

The PIN number must be obtained from KIRK Telecom by supplying to KIRK the individual DCU/CCFP 'ARI' number, unique to each DCU/CCFP unit. If the DCU/CCFP has been shipped with the PIN then this will be seen on System PIN Label attached to the DCU/CCFP unit.

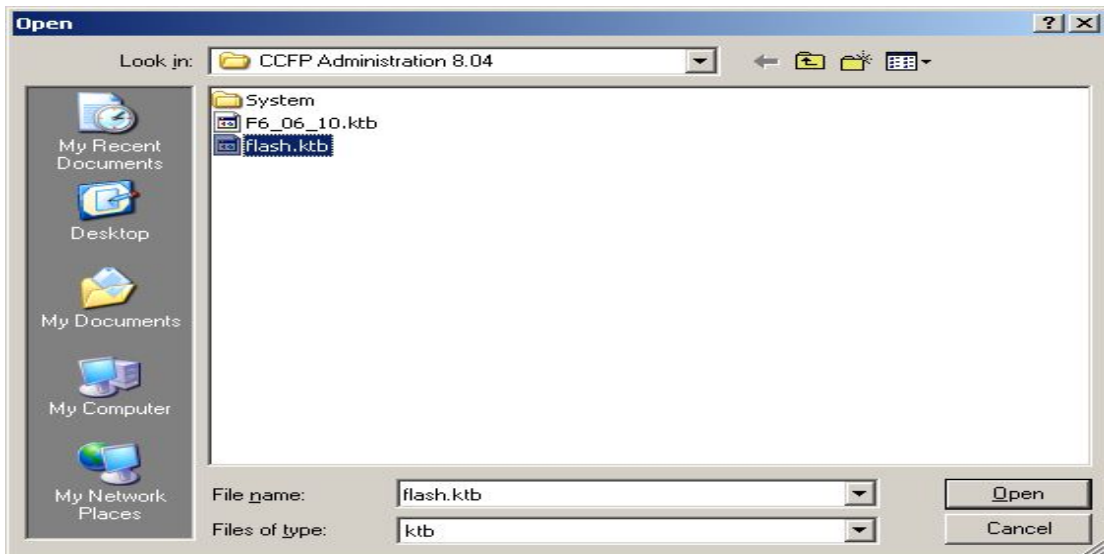
The DECT Integration service must be stopped.

Copy the Flash.ktb file into the working directory C:\Program Files\CCFP Administration.

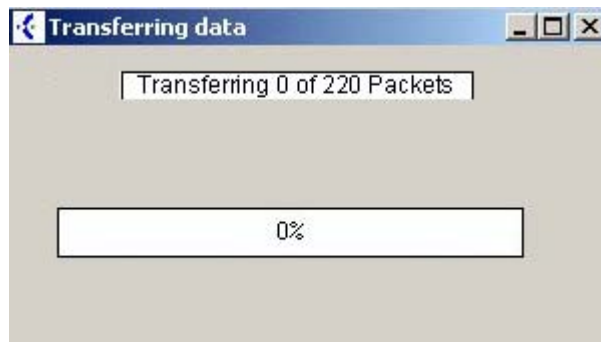
Open the DCU/CCFP Windows administration. Click on Transfer Flash and select the Flash.ktb file



Select Flash.ktb and click open.

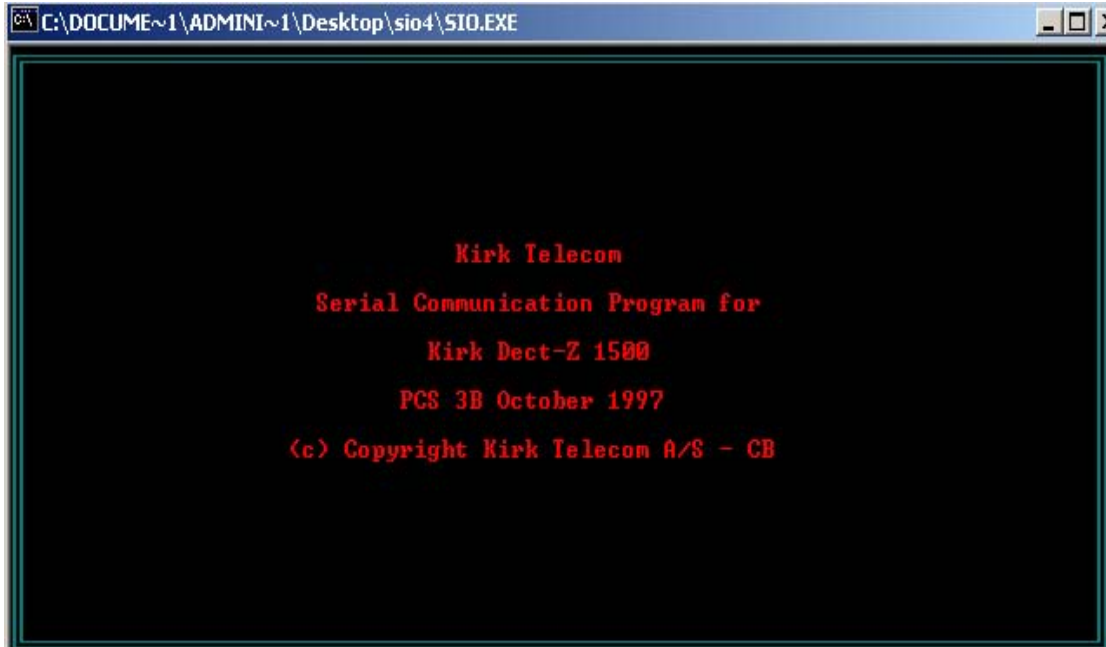


The transfer takes approximately 15 minutes, indicated by the progress bar. The DECT system will automatically restart when transfer completes.

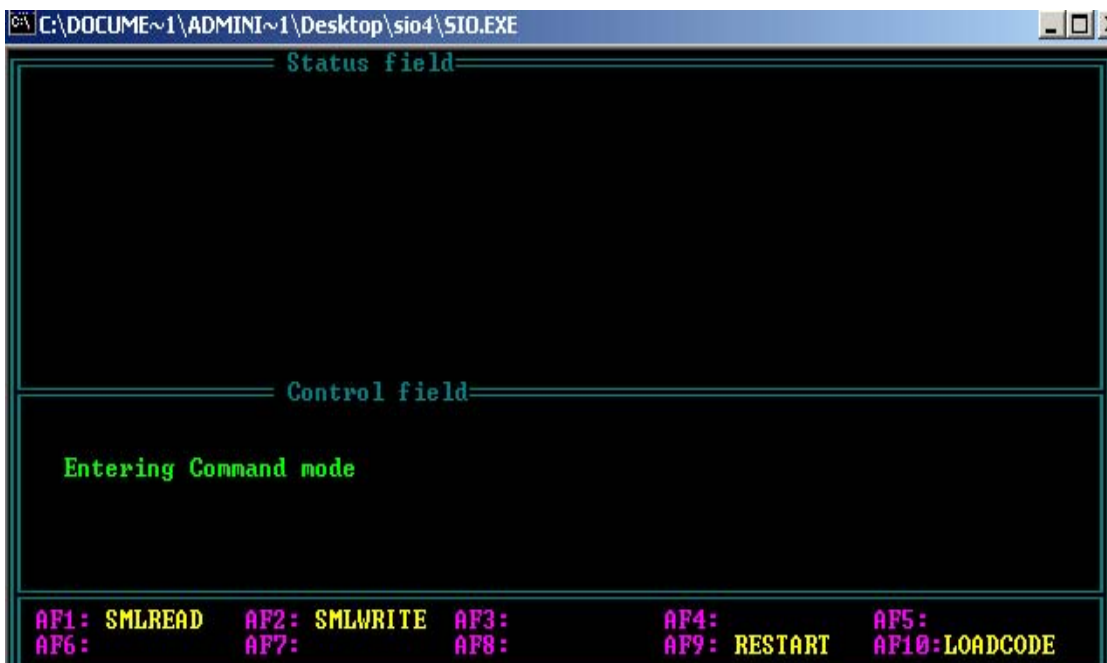


Modification of the Default KIRK 1500 Settings.

- Stop the DECT Integration service. Using the SIO.exe contact the KIRK DCU/CCFP 1500 unit.



- Press **Alt** key and **Home** key together, when contacting the unit with SIO.exe The unit will show 'Entering Command Mode'



- Press 'Return' to refresh the default Command Mode options.

```

C:\DOCUME~1\ADMINI~1\Desktop\sio4\SIO.EXE
: Flash program part number 13300110. Flash Program Edition PCS05B_
+ Command ---+ Syntax -----+ Description
: Load       : L B!A          : Load into Base Stations / ARI
: Connect    : C              : Set up Switch in Connect Mode
: Message    : M              : Set up Switch in Message Mode
: IWU        : I 0!..!7      : Set Up to IWU
: Heap       : H              : Show Heap Status
: Heap view  : W              : Show Heap allocation
: Clear      : E              : Erases EEPROM Data
: Fill       : F A S P        : Fill EEPROM A=ADDR, S=SIZE, P=Pattern < Hex >
: Insert CD  : BILRPN][DELAY] : Insert Cable Delay <Tick * 96.5 ns><Dec.>
: EEPROM     : P A S          : Read block in EEPROM A=ADDR<Hex>, S=SIZE<Dec.>
: Debug      : N              : Enter debug mode
: Ciphering  : K 0!1         : Disable<0> / Enable<1> ciphering
: Secur.Conf.: A !val1       : Security Config. <Val is 2 hex digits>
: Diagnostic : T              : Diagnostic tool
: Block      : X 0!1         : Block<0> / Enable<1> for further calls
: Disconnect : D I C          : Disconnect call. I=IWU card, C=Channel.
: Restart    : S              : Restart system
: View PCS's : U              : Display the PCS for all RFP's
: Ring delay : Y !val1       : Ring delay Delay < in units of 20 millisec.>
: Baudrate   : Z !val1       : RS232 baudrate <val=1 => 9600 bps else 19200>
: CCFP role  : RI0!1!2!3!   : 0=Solo, 1=Master, 2=Slave, 3=SoloNoTraffic.
  
```

- Enter **Y80** and then press the return key.
- Check by pressing 'Y' and press the return key.
- Press **F1** key to exit Command Mode.
- Press **F10** to exit SIO from the DCU/CCFP unit.
- Restart the DECT Integration service.

DCU/CCFP Failed Upgrade Process

If the upgrade process fails then the DCU/CCFP unit can be reloaded with the Flash.ktb file through the SIO.exe

Copy the SIO.exe file into the working directory of C:\Program Files\CCFP Administration

Click on SIO to administer the DCU/CCFP.

```

C:\PROGRA~1\CCFPAD~1.04\SIO.EXE
*** ERROR: UNKNOWN COMMAND

+***** BOOT COMMAND INTERPRETER *****+
: Kirk telecom dect-z Central Control Fixed Part          Solo CCFP :
: Boot SW Part No.: 14017500      Boot SW PCS: PCS 6B      :
: FLASH SW Part No.: Unknown      FLASH SW PCS: Unknown    :
:                               HW PCS:      ?              :
+ Command syntax + Description -----+
: LOAD F!A       : Load flash / ARI
: READ N         : Read non-volatile memory <NUM>
: WRITE N        : Write non-volatile memory <NUM>
: ERASE P!N      : Erase SerialLink PASSWORD/Erase non-vol. mem. <NUM>
: FILL           : Fill part of non-vol. mem. <NUM> with a pattern
: RESTART        : Restart system
: MEM a s        : Read block in memory. a=Addr, s=Size <Hex>
: ROLE           : View and change 'Role of this CCFP' in non-vol. mem.
+-----+
LOAD F
Enter filename:FLASH.KTB

Loading code   13:57:43
Record: 6c/dc \
  
```

Enter the command **LOAD F**

The flash file will be located from the working directory and will automatically start loading. This process will take approximately 15 minutes.

The DCU/CCFP will automatically restart when finished.

Close the SIO.exe by pressing F10 and then reopen the windows interface to administer the unit. Full administration can be done via SIO.exe if you have previous experience of the SIO operation.

Software Download

All required IPO DECT files and software are available from <ftp.avaya.com> entering the log-in username **ipoffice** password being **ipotier4**

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