Tadiran Telecom

APPLICATION NOTE	**June 2013**
AN1209-002 (V3)	
Converting Coral systems to Wave Gateways for the Aeonix	

www.tadirantele.com

1 Purpose

This Application note describes how to convert a Coral system to a Wave Gateway that will function as an integral part of the Aeonix soft switch while keeping as much as possible of the hardware in place.

This conversion will allow the customer to continue to use their hardware with a new pure IP soft-switch solution with new capabilities and applications.

There are many advantages to converting a Coral to a new soft-switch:

1. Unified Administration – Conversion is ideal for Coral networks as the whole network becomes one system and all the Wave Gateways are managed from one unified web-based management point.
2. Pure IP Solution – The soft-switch is a pure IP solution that can be deployed on a standard server or in a virtual environment in the private cloud of the enterprise. This allows easy and standard deployment, management, monitoring and upgrade.
3. Advanced Applications – New applications such as database sync by LDAP, Managed Video and Audio Conference and Call logging are available with the soft-switch
4. Scalability – Scaling up with the soft-switch requires only licensing and eliminates the need to purchase hardware. The soft-switch can scale up to larger sizes than the Coral (Aeonix R1 – 15,000 users, Aeonix R2 – 25,000 users)
5. Investment preservation – Peripheral cards, analog phones, digital phones and infrastructure can be reused.

The conversion process is possible for the following Coral systems:

Coral IPx Office
Coral IPx 500
Coral IPx 800
Coral IPx 3000
Coral IPx 4000
Coral FlexiCom 5000
Coral FlexiCom 6000
Coral III – 4GC
UCx

As a result of the conversion process the Coral becomes a Gateway for legacy equipment and trunks. Any IP phones, VoIP Gateways and SIP trunks are connected directly to the Aeonix soft switch.

2 Migration Assessment

2.1 Filling out the configuration forms

This section is structured by system type.

2.1.1   IPx Office

2.1.1.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave Office
IPx Office Main Unit	n/a	1	Keep
IMC 16	n/a	1	Keep
DBM 2/4/8	n/a	1-2	Keep
CUGW	n/a		Upgrade to latest release
SAU	n/a	1	Remove and return to Tadiran sales to obtain credit
FlexiCom 200 CSLX Expansion	n/a	1	Replace with IPx 500 Expansion Unit
IPx Office Expansion Unit	n/a	1-2	Keep
IPx 500X Expansion Unit	n/a	1-2	Keep
IPx 800X Expansion Unit	n/a	1-2	Keep

2.1.1.2 Peripheral Cards

For Main unit and IPx Office Expansion units - Fill out table in Appendix C – IPx Office Peripheral cards.
For IPx 500X Expansion units – Fill out table in Appendix B – IPx 500M/500X Peripheral cards.
For IPx 800 Expansions – Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.1.3 End points

Fill out table in Appendix D – End Points.

2.1.1.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.1.5 Applications

Fill out table in Appendix F – Applications.

2.1.2 IPx 500

2.1.2.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 500
IPx 500M Main Unit	n/a	1	Keep
MCP-IPx	n/a	1	Replace with MCP-IPx2
MCP-IPx2	n/a	1	Keep
IMC 8/16	n/a	1-2	Keep
DBM 2/4/8	n/a	1-2	Keep
DBX	n/a	1-2	Keep
CLA or F-CLA		1	Remove
MAP	n/a	1	If exists - Upgrade to latest release If not - Add
SAU	n/a	1	Remove and return to Tadiran sales to obtain credit
LIU	n/a	1	Remove
IPx 500X Expansion Unit	n/a	1-2	Keep
IPx 800X Expansion Unit	n/a	1-2	Keep

2.1.2.2 Peripheral Cards

For Main Unit and IPx 500X Expansion unit - Fill out table in Appendix B – IPx 500M/500X Peripheral cards.
For IPx 800X Expansion – Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.2.3 End points

Fill out table in Appendix D – End Points.

2.1.2.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.2.5 Applications

Fill out table in Appendix F – Applications.

2.1.3   IPx 800

2.1.3.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 800
IPx 800M Main Cage	n/a	1	Keep
MEX-IP	n/a	1	Replace with MEX-IP2
MEX-IP2	n/a	1	Keep
IMC 8/16	n/a	1-2	Keep
DBM 2/4/8	n/a	1-2	Keep
DBX	n/a	1-2	Keep
HDC	n/a	1	Keep
CLA or F-CLA	n/a		Remove
MAP	n/a		If exists - Upgrade to latest release If not - Add
SAU	n/a	1	Remove and return to Tadiran sales to obtain credit
LIU	n/a	1	Remove
IPx 500X/800X Expansion	n/a	1-2	Keep

2.1.3.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.3.3 End points

Fill out table in Appendix D – End Points.

2.1.3.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.3.5 Applications

Fill out table in Appendix F – Applications.

2.1.4   IPx 3000

2.1.4.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 3000
Cabinets	n/a	1-4	Keep
IPx 3000M Main Cage	n/a	1-2	Keep
MEX-IP	n/a	1-2	Replace with MEX-IP2
MEX-IP2	n/a	1-2	Keep
IMC 8/16	n/a	1-2	Keep
DBM 2/4/8	n/a	1-2	Keep
DBX	n/a	1-2	Keep
4GC	Issue 25B- 7.17/9.00 Issue 32 - 7.19/9.01	1-2	Keep. Verify HW issue and firmware version
CLA or F-CLA	n/a	0-2	Remove
MAP		0-2	If exists - Upgrade to latest release If not - Add
SAU	n/a	1-2	Remove and return to Tadiran sales to obtain credit
LIU	n/a	0-2	Remove
IPx 3000-XE	n/a	1-6	Keep
IPx 3000-XO	n/a	1-6	Keep

2.1.4.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.4.3 End points

Fill out table in Appendix D – End Points.

2.1.4.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.4.5 Applications

Fill out table in Appendix F – Applications.

2.1.5   IPx 4000

2.1.5.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 3000
Cabinets	n/a	1-4	Keep
IPx 4000C Control Cage	n/a	1	Remove
IPx 3000M Main Cage	n/a	1-4	Add (including Control cards and PS)
MCP-ATS	n/a	1-2	Remove
16GC/32GC	n/a	1-2	Remove
CLA-ATS	n/a	0-2	Remove
PS-ATS	n/a	1-3	Remove
MAP		-	Add 1 per Mex-IP2
SAU	n/a	1-2	Remove and return to Tadiran sales to obtain credit
4000 Peripheal Shelves	n/a	1-15	Replace with IPx 3000XE (includes PB24) and IPx 3000XO
PB24	n/a	1-8	Add 1 per IPx 3000M Main Cage and 1 per IPx 3000XE Cage
PS19DC, DCD-19	n/a	1-15	Keep

Notes:
1. An IPx 4000C with 32GC supports 3K time slots. The converted Wave 3000 supports 512 time slots per control. For large systems with heavy traffic load, an IPx 4000 should be converted into two, three or even four Wave 3000 gateways.
2. When replacing IPx 4000XE/XO peripheral shelves with 3000 peripheral shelves some cards will have to be moved between shelves as all IPx 4000XE/XO shelves can host 10 peripheral cards each, while IPx 3000 M, XE and XO can host 8, 10 or 12 cards respectively.

2.1.5.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.5.3 End points

Fill out table in Appendix D – End Points.

2.1.5.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.5.5 Applications

Fill out table in Appendix F – Applications.

2.1.6   FlexiCom 5000

2.1.6.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 5000
Cabinets	n/a	1-4	Keep
Control Cage	n/a	1-2	Keep
MEX-IP	n/a	1-2	Replace with MEX-IP2
MEX-IP2	n/a	1-2	Keep
IMC 8/16	n/a	1-2	Keep
DBM 2/4/8	n/a	1-2	Keep
DBX	n/a	1-2	Keep
4GC	Issue 25B- 7.17/9.00 Issue 32 - 7.19/9.01	1-2	Keep. Verify HW issue and firmware version
CLA or F-CLA	n/a	1-2	Remove
MAP		0-2	If exists - Upgrade to latest release If not - Add one per MEX-IP2
SAU	n/a	1-2	Remove and return to Tadiran sales to obtain credit
LIU	n/a	0-2	Remove
Peripheral Shelves	n/a	1-8	Keep

2.1.6.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.6.3 End points

Fill out table in Appendix D – End Points.

2.1.6.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.6.5 Applications

Fill out table in Appendix F – Applications.

### 2.1.7	FlexiCom 6000

2.1.7.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave 3000
Cabinets	n/a	1-4	Replace with 19" cabinets
FlexiCom 6000 Control Shelf	n/a	1	Replace with 1-4 IPx 3000M Main cages including control cards
MCP_ATS	n/a	1-2	Remove
16GC/32GC	n/a	1-2	Remove
CLA_ATS	n/a	1-2	Remove
MAP			Add 1 per Mex-IP2
SAU	n/a	1-2	Remove and return to Tadiran sales to obtain credit
6000 Peripheral Shelves	n/a	1-18	Replace with 3000 XE (includes PB24) and 3000 XO
PPS and RPS power supplies	n/a	1-16	Replace with PS19AC or PS19DC-D

Notes:
1. A FlexiCom 6000 with 16GC or 32GC supports 2048 and 3000 time slots respectively. The converted Wave 3000 supports 512 for a single control or 1024 time slots when using full duplication (2 controls).
For large systems with heavy traffic load, an IPx 4000 should be converted into two, three or even four Wave 3000 gateways.
FlexiCom 6000 peripheral shelves can host 16 and 18 peripheral cards (for XE and XO respectively), while IPx 3000 M, XE and XO can host 8, 11 and 12 cards respectively). It is likely that the number of peripheral shelves would have to be increased.
2. FlexiCom 6000 total number of peripheral slots is 254 while Wave 3000 total number of slots is 174. FlexiCom 6000 systems with more than 174 cards would need to be converted into 2 Wave 3000 gateways.

2.1.7.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.7.3 End points

Fill out table in Appendix D – End Points.

2.1.7.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.7.5 Applications

Fill out table in Appendix F – Applications.

2.1.8   Coral III – 4GC

2.1.8.1 System

Fill out the following table – System and peripheral shelves

Item	Ver	QTY	Solution
Item	Ver	QTY	Wave Coral III - 4GC
Cabinets	n/a	1-4	Keep
Control Cage	n/a	1	Keep
MEX-IP	n/a	1-2	Replace with MEX-IP2
MEX-IP2	n/a	1-2	Keep
IMC 8/16	n/a	1-2	Keep
DBM 2/4/8	n/a	1-2	Keep
DBX	n/a	1-2	Keep
4GC	Issue 25B- 7.17/9.00 Issue 32 - 7.19/9.01	1-2	Keep. Verify HW issue and firmware version
CLA or F-CLA	n/a	1-2	Remove
MAP		1-2	If exists - Upgrade to latest release If not - Add
SAU	n/a	1-2	Remove and return to Tadiran sales to obtain credit
LIU	n/a	1-2	Remove
Peripheral Shelves	n/a	1-8	Keep

2.1.8.2 Peripheral Cards

Fill out table in

Appendix A – Coral Full Size Peripheral cards.

2.1.8.3 End points

Fill out table in Appendix D – End Points.

2.1.8.4 Voice Mail

Fill out table in Appendix E – Voice Mails.

2.1.8.5 Applications

Fill out table in Appendix F – Applications.

2.1.9   UCx

Any UCx can be used as a SIP-PRI Trunking Gateway for the Aeonix soft switch. This implementation uses the standard UCx software (no change) and is done by configuration only. Configuration instructions can be found in the "UCx Installation Procedure and Hardware Reference" Manual.
As with the Coral migration, when using the UCx as a Trunking Gateway all IP phones and Gateways that are connected to the UCx need to be connected to the Aeonix soft switch.
The Voice mail becomes the SeaMail of the Aeonix.
The UCx Gateway uses SIP protocol to communicate to the Aeonix.

2.2 Assess Conversion Process

The outcome of filling out the forms is to generate a few lists of items
1. Items to be kept
2. Items to be removed
3. Items to be updated
4. Items to be added

Now it's time to add media gateway resources and take into consideration some special requirements.

2.2.1   Calculate Required PUGW and MRC cards

The number of media channels required in the gateway assumes that trunks must be non-blocking (I.e. all trunks are in use 100% of the time) and phones are given 0.5 Erlang (I.e. a phone is in use 50% of the time).

Required Media Channels = No. of trunks + No. of Endpoints x 0.5

Please note that only PUGW and MRC can be used and old UGW with TPM modules need to be removed or replaced.
To determine the number of required PUGWs and MRCs we need to calculate the required number of media channels using the load assumption above and taking into consideration the codecs that would be used.
The following table defines the media channels that are supported by each MRC

MRC Type	MRC uses Voice CODEC:		PUGW, PUGWipx, IPx Office (MCB Office)
	G.729 or G711 (when using Coral Version 14)	G.711 (Coral Version 15 or higher)	
MRC-8	8	32	
MRC-16	16	64	
MRC-32	32	64	
MRC-64	64	128	

Example:

A system with 100 trunks and 500 phones would need 350 media channels

If G729 codecs are required the implementation would require 6 x MRC-64s (350 / 64)

If G711 codecs are enough 3 x MRC-64 (350/128) or 6 x MRC-16 (350/64) are required.

The PUGW acts as a motherboard for the MRC thus

Required Number of PUGW's = Total number of MRC's

Add the PUGW's and MRC's to the list of items that need to be added.

Note: MRC-8 and MRC-32, can be used but are not available for purchase

Note: PUGW-2G includes embedded MRC-32

2.2.2 Verify Availability of Peripheral Slots

Count number of available peripheral slots. Take into account the slots that are freed by peripheral cards that should be removed in the process.

Verify there are enough peripheral slots to accommodate the required additional PUGW cards. If there are not enough slots you may consider the following options:

a. Replacing some of the legacy phones with IP phones (Note that IP phones are managed directly by the Aeonix soft switch and do not require any resources from the Coral Wave Gateway).

b. Adding an expansion unit.

Add the IP phones or the expansion unit to the list of items that need to be added.

2.2.3   Verify Possibility to add MAP cards

A MAP card per control is required for the Wave Gateway solution. The MAP card is connected to the MEX-IP2 card as a daughter board using the on-board connectors. The same connectors are used to connect the CLA card and Memory cards.

The order of connection does not matter and up to 2 daughter cards can be connected at the same time.

If there is a CLA card it should be removed to make place for the MAP card. If the system is using two memory cards you may consider the following options:

a. Removing one of the memory cards. Since the Wave gateway consumes much less memory than the Coral, most likely this will work.
b. If the cards are of the type DBM-4 they can be replaced by a single DBM-8 card.
c. Splitting up the Coral Wave Gateway into two systems by adding a control unit. Each system will surely have half the need for memory.

Add the DBM-8 cards or the additional control unit to the list of items that need to be added or replaced.

2.2.4   Select Wave GW number of systems

In most cases the conversion of a Coral system to a Wave Gateway is a 1:1 straight forward conversion, however, and this may never happen, in some extreme cases a Coral PBX will have to be converted into two Coral Wave Gateway systems. These cases are:

1. Large system with two daughter DBM-8 (data-base memory expansion) cards. In this case please consult with Tadiran Support if the data base can fit into a single DBM-8 card thus allowing the 2nd DBM-8 card to be removed.
2. An IPx 4000 or a FlexiCom 6000 with requirement for non-blocking time slots (see IPx 4000 and FlexiCom 6000 sections above)
3. A FlexiCom 6000 with more than 174 peripheral cards that is converted to a Wave 3000

In such cases there is a need to add a control unit and split up the peripheral units into two separate systems.

Add the Control unit to the list of items that need to be added

3 Migration Execution

3.1 Ordering required articles

1. Order all the items that are required to be added or replaced.
2. Verify peripheral cards and phones firmware versions match the version number in the version column. If not – upgrade. Consult with Tadiran Support team on how to upgrade.
3. Download the wave gateway software version from the Tadiran web site. It's free of charge. Use the FMPROG tool to create a Wave Gateway FLASH card.
4. Order Aeonix and Required licensing for ALL system ports including wave gateway ports
5. Check with Tadiran sales about rebates and discounts that you are entitled to upon return of the Coral SAU dongle to Tadiran.

Note: The SAU is not used in Coral Wave Gateway (WG) systems. Authorization for Coral WG systems is enabled via the Aeonix License Key.

3.2 Conversion Process

To perform the conversion process please refer to the"Coral Wave Gateway Conversion Procedure for Coral IPx/FlexiCom Systems" manual.

Conversion from Coral v15.27 or higher to a Wave Gateway will keep all the hardware related configuration parameters intact.

Conversion from Coral running a lower version than v15.27 requires 2 steps:
1. Upgrading the Coral version to v16 and checking that all hardware is functioning properly.
2. Converting the Coral to Wave Gateway.

After the conversion the system has to be configured as a new system. User list can be ported with help of Tadiran support team (see professional services below)

3.3 Licensing Policy

Licensing for converted systems (Coral to Wave Gateway) is very cost effective as there are special discounts on Aeonix licenses. However, the Coral SAU dongle must be shipped back to Tadiran Support in order to receive these discounts. For details, please consult with your regional desk manager.

Adding legacy phones or trunks to a converted system will be charged according to price list with dealer discounts.

Phones or trunks for a new Wave Gateway (not converted) will be charged according to price list with dealer discounts.

3.4 Support and Warranty

Wave Gateway shall be treated as part of the Aeonix system. This includes Support fees and SLA.

New hardware will be covered by 12 months warranty as with all Tadiran hardware.

Hardware repair policy will be identical to any hardware manufactured or supplied by Tadiran.

3.5 Professional Services (data base migration)

Porting of user and trunk names from the Coral to the Aeonix can be done in a semi-automatic manner. Please consult with Tadiran support team.

Appendix A – Coral Full Size Peripheral cards

Card Type	Item	Version	QTY	Solution
Analog Trunks	4ALS	n/a		Remove
Analog Trunks	4ALS/M	n/a		Remove
Analog Trunks	4BID	n/a		Remove
Analog Trunks	4CID (Daughter board)	n/a		Keep
Analog Trunks	4GID	n/a		Remove
Analog Trunks	4T	14.33		Keep
Analog Trunks	4T/S PF-G	14.40		Keep. Calls would be disconnected upon power resume
Analog Trunks	4T/S-PF-ES	14.34		Keep. Calls would be disconnected upon power resume
Analog Trunks	4T-C	1.24		Keep
Analog Trunks	4T-C FJ	1.24		Keep
Analog Trunks	4T-CID	1.24		Keep
Analog Trunks	4TEM, 4TEM/S	1709(27C64) ; 1802(27C512)		Keep
Analog Trunks	4TEM-P	1709(27C64) ; 1802(27C512)		Keep
Analog Trunks	4TMR/S-12/16PF	14.34		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR/S-12PF-ES	14.34		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR/S-50/16-PF-G	14.33		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR-PF-G	14.33		Keep A. Calls will disconnect upon power resume B. No metering detection

Card Type	Item	Version	QTY	Solution
Analog Trunks	4TPF	14.33		Keep Calls will disconnect upon power resume
Analog Trunks	4TWL			Remove
Analog Trunks	8ALS	n/a		Remove
Analog Trunks	8ALS/M	n/a		Remove
Analog Trunks	8BID	n/a		Remove
Analog Trunks	8CID (daughter board)	n/a		Keep
Analog Trunks	8DID, 8DID/S, 8DID/S-Z	n/a		Remove
Analog Trunks	8T	14.33		Keep
Analog Trunks	8T/S PF-G	14.34		Keep Calls will disconnect upon power resume
Analog Trunks	8T-C	1.24		Keep
Analog Trunks	8T-C FJ	1.24		Keep
Analog Trunks	8T-CID	1.24		Keep
Analog Trunks	8TPF	14.33		Keep Calls will disconnect upon power resume
Digital Trunks	30T,30T/E,30T/X (X varies by market)	52.51		Keep
Digital Trunks	30TM (Bi-Directional)	n/a		Remove
Digital Trunks	30TM (Brazil)	17.104		Remove
Digital Trunks	4TBR	5.30		Keep
Digital Trunks	8TBR	5.30		Keep
Digital Trunks	8TBRP	5.30		Keep. Supports trunk interface only
Digital Trunks	DPC	n/a		Remove
Digital Trunks	PRI-23	6.22		Keep
Digital Trunks	PRI-2DT	57.31		Keep. 2nd channel is supported in R2
Digital Trunks	PRI-30	6.22		Keep. Supports trunk interface only
Digital Trunks	SS7	SS7 - 002909031 SS7-R 0028R9021		Keep

Card Type	Item	Version	QTY	Solution
Digital Trunks	T1	14.38		Keep
Digital Trunks	UDT	52.51		Keep
Digital Trunks	UDT-T1	Layout B1 - 50.21 Layout C - 52.51		Keep
Resource Cards	4DTR, 8DTR, 8DTR/S	14.05		Keep
Resource Cards	4VS, 4VSN, 4IAA	n/a		Remove
Resource Cards	8DRCF	4.30		Keep. DTR, DTD are supported. KB, Modem, CNF/3W, Relay, Paging and Music - Are not supported.
Resource Cards	8DRCM	4.30		Keep. DTR, DTD are supported. KB, Modem, CNF/3W, Relay, Paging and Music - Are not supported.
Resource Cards	8DRCM-2	4.30		Keep. DTR, DTD are supported. KB, Modem, CNF/3W, Relay, Paging and Music - Are not supported.
Resource Cards	8DTD, 8DTD/S	14.27		Keep
Resource Cards	8DTMF	4.30		Keep
Resource Cards	ASU	n/a		Remove
Resource Cards	CNF, CNF-3W	n/a		Remove
Resource Cards	IDSP	2.5		Keep
Resource Cards	MFR	17.32		Keep
Resource Cards	RMI, RMI-212,RMI/S-212	n/a		Remove. Use SIP solutions for Bell, Relay and Page
Station Cards	16SDT	1.20		Keep
Station Cards	16SFT	3.05		Keep
Station Cards	16SH	14.81		Keep
Station Cards	16SH/S	14.81		Keep
Station Cards	16SH/S-LL	14.81		Keep

Card Type	Item	Version	QTY	Solution
Station Cards	16SH-LL	14.81		Keep
Station Cards	16SKD	4.01		Replace with SFT
Station Cards	16SKK	n/a		Remove and install a KWS8000 external system (replace base stations if not DECT)
Station Cards	16SKT	n/a		Remove
Station Cards	16SLS	Layout D-3.03 Layout E-4.27		Keep
Station Cards	24SA	6.36		Keep
Station Cards	24SDT	1.20		Keep
Station Cards	24SFT	3.05		Keep
Station Cards	24SLS	Layout D-3.06 Layout E-4.27		Keep
Station Cards	2SD,8SD	n/a		Remove
Station Cards	2SK, 4SK,8SK	n/a		Remove
Station Cards	2SKW,4SKW,8SKW	n/a		Remove and install a KWS8000 external system
Station Cards	4SH/S	14.81		Keep
Station Cards	4SH/S-LL	14.81		Keep
Station Cards	8SA	6.36		Keep
Station Cards	8SDT	1.20		Keep
Station Cards	8SFT	3.05		Keep
Station Cards	8SH/S	14.81		Keep
Station Cards	8SH/S-LL	14.81		Keep
Station Cards	8SKD	4.01		Replace with 8SFT
Station Cards	8SKK	n/a		Remove and install a KWS8000 external system (replace base stations if not DECT)
Station Cards	8SKT	n/a		Remove
Station Cards	8SLS	Layout D-3.03 Layout E-4.27		Keep
Station Cards	8SM	n/a		Remove
Station Cards	8SVD	n/a		Remove
VoIP Gateway	FlexiGate-BRI	n/a		Remove
VoIP Gateway	FlexiGate-E&M	n/a		Remove
VoIP Gateway	IPG	n/a		Remove
VoIP Gateway	PUGW+MRC	11.07		Keep
VoIP Gateway	PUGW-2G	12.xx		Keep

Card Type	Item	Version	QTY	Solution
VoIP Gateway	UGW + TPM200	n/a		Replace with PUGW + MRC or with PUGW-2G
VoIP Gateway	UGW-E+ TPM1100	n/a		Replace with PUGW + MRC or with PUGW-2G

Appendix B – IPx 500M/500X Peripheral cards

Card Type	Item	Version	QTY	Solution
Analog Trunks	4T-CIDipx	1.24		Keep
Analog Trunks	4T-CIDsl	1.20		Keep (only slots 1-3 of the IPx 500M)
Analog Trunks	4T-Cipx	1.24		Keep
Analog Trunks	4T-Cipx FJ	1.24		Keep
Analog Trunks	4T-Csl	1.24		Keep (only slots 1-3 of the IPx 500M)
Analog Trunks	4TEMipx	18.02		Keep
Analog Trunks	4TEMsl	18.02		Keep (only slots 1-3 of the IPx 500M)
Analog Trunks	4TMR/S-12/16-PF-Gipx	14.33		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR/S-12/16-PF-Gsl	14.33		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR-PF-Gipx	14.33		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR-PF-Gsl	14.34		Keep A. Calls will disconnect upon power resume B. No metering detection
Analog Trunks	4TMR-PFipx	14.33		Keep Calls will disconnect upon power resume
Analog Trunks	4TMR-PFsl	14.33		Keep Calls will disconnect upon power resume
Analog Trunks	4T-PFsl	14.33		Keep Calls will disconnect upon power resume
Analog Trunks	4TWLipx			Remove
Analog Trunks	4TWLsl			Remove
Analog Trunks	8T-CIDipx	1.24		Keep
Analog Trunks	8T-CIDsl	1.24		Keep (only slots 1-3 of the IPx 500M)
Analog Trunks	8T-Cipx	1.24		Keep
Analog Trunks	8T-Cipx FJ	1.24		Keep
Analog Trunks	8T-Csl	1.24		Keep (only slots 1-3 of the IPx 500M)
Analog Trunks	8T-Csl FJ	1.24		Keep (only slots 1-3 of the IPx 500M)

Card Type	Item	Version	QTY	Solution
Analog Trunks	8TPFsl	14.33		Keep Calls will disconnect upon power resume
Digital Trunks	30T/Xipx (X varies by market)	52.51		Keep
Digital Trunks	30T/Xsl (X varies by market)	52.36		Keep
Digital Trunks	4TBRipx	5.30		Keep
Digital Trunks	4TBRsl	5.30		Keep
Digital Trunks	8TBRipx	5.30		Keep
Digital Trunks	8TBRPipx	5.30		Keep. Supports trunk interface only
Digital Trunks	8TBRPsl	5.30		Keep. Supports trunk interface only
Digital Trunks	8TBRsl	5.30		Keep
Digital Trunks	PRI-23ipx	6.22		Keep
Digital Trunks	PRI-23sl	6.22		Keep. Supports trunk interface only
Digital Trunks	PRI-2DTipx	57.31		Keep. 2nd channel is supported in R2
Digital Trunks	PRI-30ipx	6.22		Keep
Digital Trunks	PRI-30sl	6.22		Keep. Supports trunk interface only
Digital Trunks	T1ipx	52.41		Keep
Digital Trunks	T1sl	52.36		Keep
Digital Trunks	UDTipx	Layout A - 52.51		Keep
Digital Trunks	UDTipx-T1	52.51		Keep
Resource Cards	URC (on backplan)	1.33		Keep
Station Cards	16SAipx	6.36		Keep
Station Cards	16SAXipx (Daughter)	n/a		Keep
Station Cards	16SFTipx	3.05		Keep
Station Cards	16SLSipx	4.27		Keep
Station Cards	24SAipx	6.36		Keep
Station Cards	2SKWsl	n/a		Remove and install a KSW8000 external system
Station Cards	4SKWsl	n/a		Remove and install a KSW8000 external system
Station Cards	8SA+16SAX ipx	6.36		Keep

Card Type	Item	Version	QTY	Solution
Station Cards	8SA+8SAX ipx	6.36		Keep
Station Cards	8SAipx	6.36		Keep
Station Cards	8SAXipx (Daughter)	n/a		Keep
Station Cards	8SDTsl	1.20		Replace with 8SFT Ipx
Station Cards	8SFTipx	3.05		Keep
Station Cards	8SKKipx	n/a		Remove and install a KWS8000 external system (replace base stations if not DECT)
Station Cards	8SKKsl	n/a		Remove and install a KWS8000 external system (replace base stations if not DECT)
Station Cards	8SLSipx	4.27		Keep
Station Cards	8SLSXipx	4.27		Keep
Station Cards	8SMipx	n/a		Remove
VoIP Gateway	PUGWipx	11.07		Keep
VoIP Gateway	PUGW-2Gipx	12.xx		Keep
VoIP Gateway	UGW-Eipx	n/a		Replace with PUGW + MRC or with PUGW-2G
VoIP Gateway	UGWipx	n/a		Replace with PUGW + MRC or with PUGW-2G

Appendix C – IPx Office Peripheral cards

Card Type	Item	Version	QTY	Solution
Analog Trunks	4CID Office (Daughter)	n/a		Keep
Analog Trunks	4SA	6.36		Keep
Analog Trunks	4T Office	1.24		Keep
Analog Trunks	4T-CID Office	1.24		Keep
Analog Trunks	8T Office	1.24		Keep
Analog Trunks	8T-CID Office	1.24		Keep
Digital Trunks	30T Office	52.51		Keep
Digital Trunks	4TBR Office	7.08		Keep
Digital Trunks	PRI-2DT Office	57.31		Keep. 2nd channel is supported in R2
Digital Trunks	PRI-30 Office	52.51		Keep
Digital Trunks	UDT Office	52.51		Keep
Resource Cards	CNF	n/a		Remove
Resource Cards	UMR, URMI, RMI, MR Office	n/a		Remove. Use SIP solutions for Bell, Relay and Page
Station cards	12Sx Office	n/a		Keep
Station cards	16Fx Office	3.05		Keep
Station cards	16SA Office	6.36		Keep
Station cards	16SAx Office	6.36		Keep
Station cards	16SFT Office	3.05		Keep
Station cards	24SA Office	6.36		Keep
Station cards	24SFT Office	3.05		Keep
Station cards	4/8/20S Office	4.27		Keep
Station cards	4S+16Fx Office	4.27(27C512) + 3.05(27C010)		Keep
Station cards	4S+8Fx Office	4.27(27C512) + 3.05(27C010)		Keep
Station cards	4SA Office	6.36		Keep
Station cards	4SA+16Fx Office	6.36		Keep
Station cards	4SA+8Fx Office	6.36		Keep
Station cards	8Fx Office	3.05		Keep
Station cards	8S Office	4.27		Keep
Station cards	8S+12Sx Office	4.27		Keep

Card Type	Item	Version	QTY	Solution
Station cards	8S+16Fx Office	4.27 + 3.05		Keep
Station cards	8S+8Fx Office	4.27 + 3.05		Keep
Station cards	8SA Office	6.36		Keep
Station cards	8SA+16Fx Office	6.36		Keep
Station cards	8SA+16SAx Office	6.36		Keep
Station cards	8SA+8Fx Office	6.32		Keep
Station cards	8SA+8SAx Office	6.32		Keep
Station cards	8SAx Office	n/a		Keep
Station cards	8SFT Office	3.05		Keep
VoIP Gateway	CUGW	11.07		Keep

Appendix D – End Points

Item	Version	Qty	Solution
ACC			Remove
ACC-R			Remove
APA-F			Remove
ARM			Remove
CoralAIR handset			Replace with FlexAir handset T-404
CPA			Remove
Dect Base Station - RFP2			Replace with RFP5 Base station
Dect Base Station - RFP3			Replace with RFP5 Base station
Dect Base Station - RFP4	SW part no. (indicated on label) 14024502		Verify SW part no. Upgraed sw version to latest
Dect Base Station - RFP5	SW part no. (indicated on label) 14170201		Verify SW part no. Upgraed sw version to latest
DIM			Remove
DKT 11xx	6.04		Keep
DKT 2xxx	6.04		Keep
DPEM	1.04		Keep (Supported in R2)
DST	6.04		Keep
EIS			Remove
EKT			Replace with T322P
EKT-PF			Replace with SLT + SA card
FlexAPDL			Remove
FlexIP Softphone (FLIPS)	3.03.004		Keep
FlexSet 120	10.10		Keep
FlexSet 120D	10.10		Keep
FlexSet 120L			Replace with Flexset 120D
FlexSet 120S	3.59		Keep
FlexSet 121S	10.10		Keep - 3rd line soft keys is supported in Aeonix R2
FlexSet 280	10.10		Keep
FlexSet 280D	10.10		Keep
FlexSet 280D-HS	10.10		Keep
FlexSet 280D-Z	10.10		Replace with T328P
FlexSet 280S	3.59		Keep

Item	Version	Qty	Solution
FlexSet 281S	10.10		Keep - 3rd line soft keys is supported in Aeonix R2
FlexSet 40B	02.00		Keep (Supported in R2)
FlexSet 80P			Replace with T328P
FlexSet 80S			Replace with T328P
FlexSet IP 280S	3.26		Keep
FLIPS-handset	n/a		Keep
GKT-4320, GKT-4321			Replace phone with T328 + X39 expansion. Note that the T328 is qualified as general purpose phone but not to work in conjunction with Sea Navigator, Sea Attendant or in a Contact Center
IP Video Phone VP-2009P, VP-530			Keep
KSI			Remove
MPEM			Replace phone with T328 + X39 expansion. Note that the T328 is qualified as general purpose phone but not to work in conjunction with Sea Navigator, Sea Attendant or in a Contact Center
P-335			Keep
P-450			Keep
PEM			Replace phone with T328 + X39 expansion. Note that the T328 is qualified as general purpose phone but not to work in conjunction with Sea Navigator, Sea Attendant or in a Contact Center
PEX/APA-F	n/a		Can be used for wall power connection. Does not support APA and 2nd handset.
PEX/APA-FS	n/a		Can be used for wall power connection. Does not support APA and 2nd handset.
PEX-F	n/a		Can be used for wall power connection. Does not support 2nd handset.

Item	Version	Qty	Solution
PEX-FS	n/a		Can be used for wall power connection. Does not support 2nd handset.
QLD			Remove
QND			Remove
SDU			Remove
SeaBeam stick	n/a		Keep
SeaBeam sw	1.5.17,build 44686		Keep
Sentinel Pro	6.58		Keep
Sentinel terminal			Replace with Sentinel Pro
SLT 500/2500 Type	n/a		Keep
T207M	4.70		Keep
T207M/NP	4.70		Keep
T207S			Replace with T322P
T208M	4.70		Keep
T208M/BL	4.70		Keep
T208S			Replace with T328P
T-304	Veify with Tadiran Support		Keep. Install a KSW8000 external system. Verify Base station compatibility with KWS8000 and upgrade BS version if required Verify Handset sw version and upgrade if required.
T322P			Keep
T328P			Keep
T-402	Veify with Tadiran Support		Keep. Install a KSW8000 external system. Verify Base station compatibility with KWS8000 and upgrade BS version if required Verify Handset sw version and upgrade if required.
T-404	Veify with Tadiran Support		Keep. Install a KSW8000 external system. Verify Base station compatibility with KWS8000 and upgrade BS version if required Verify Handset sw version and upgrade if required.

Item	Version	Qty	Solution
T-408	Veify with Tadiran Support		Keep. Install a KSW8000 external system. Verify Base station compatibility with KWS8000 and upgrade BS version if required Verify Handset sw version and upgrade if required.
TA-1088/PT Magneto			Remove
TEM	n/a		Keep
TIM			Remove
VDK			Replace phone with T322 phone. Note that the T322 is qualified as general purpose phone but not to work in conjunction with Sea Navigator, Sea Attendant or in a Contact Center
VDM			Remove
VIC			Remove
VSM			Remove
X38	n/a		Keep
X39	n/a		Keep

Appendix E – Voice Mails

VM	Version	Y/N	Solution
iCMC			Remove Card - Use Aeonix SeaMail
iCMC-200			Remove Card - Use Aeonix SeaMail
IPC			Remove Card
IPC Office			Remove Card
IPC2			Remove Card
IPC2 Office			Remove Card
IPC2 Office/SFC			Remove Card - Use Aeonix SeaMail
IPC2 Office/uCMC			Remove Card - Use Aeonix SeaMail
IPC2 Office/WiCMC			Remove Card - Use Aeonix SeaMail Does not support PMS
IPC2/SFC			Remove Card - Use Aeonix SeaMail
IPC2/uCMC			Remove Card - Use Aeonix SeaMail
IPC2/WiCMC			Remove Card - Use Aeonix SeaMail Does not support PMS
IPC2ipx			Remove Card
IPC2ipx/SFC,			Remove Card - Use Aeonix SeaMail
IPC2ipx/uCMC			Remove Card - Use Aeonix SeaMail
IPC2ipx/WiCMC			Remove Card - Use Aeonix SeaMail Does not support PMS
IPCipx			Remove Card
iVMFipx			Remove Card - Use Aeonix SeaMail
SeaMail for IPx Office			Not Supported - Use Aeonix SeaMail
SeaMail on PC			Upgrade to latest released version - Reconfigure to work with Aeonix

Appendix F – Applications

Type	App	Y/N	Solution
Admin	CVA - CoralVIEW Administrator		Not Required - Unified Admin is available from the soft switch
Attendant Position	CAP		Replace with Sea Attendant application
Conf Manager	CBM - Conference Bridge Manager		Replace with External Conference Application
Contact Center	Composit Contact Center (Pro/Express)		Will be available in Aeonix R2
CTI	CSTS iAPA		Not Supported
CTI	RAPA		Not Supported
Logging	VCLog Voice Logging System		Keep
Maintenance	ASCII Database conversion software		Not Required - All DB is kept in the softs switch
Maintenance	FMprog		Keep. Use for WG upgrades
Monitoring	CFM - Coral Fault Manager		Not Supported
Monitoring	Coral Traffic Report (CTR)		Not Supported
UC	Coral Navigator		Replace with Sea Navigator
UC	CVD - CoralVIEW Designer		Not Required - Unifies Admin is available from the soft switch
UC	FlexAttendent		Replace with Sea Attendant
UC	FlexCT Call Center		Not Supported
UC	FlexCT CallMaster (CCM)		Not Supported
UC	FlexCT Client SDK		Not Supported
UC	FlexCT ContactLauncher		Not Supported
UC	FlexCT IVR		Not Supported
UC	FlexCT PathFinder		Not Supported. Replace with Incoming Call in User programming
UC	FlexCT Server		Not Supported

Type	App	Y/N	Solution
UC	FlexCT TAPIDriver		Not Supported. Replace with TAPI driver in Sea Navigator.
UC	FlexCT Telephony Toolbar or desk phone		Not Supported. Replace with Sea Navigator
UC	FlexCT VIC		Not Supported
UC	FlexCT WWO		Not Supported
	CCP - Composit Contact Pro		Upgrade to latest version

* * * End * * *

If you have any questions regarding this note, please contact our support team at:

Country	Email Address	Phone Number
Worldwide (excluding U.S.A. and China)	support@tadirantele.com	+972-3-9262019
U.S.A.	support@tadiranamerica.com	+1-516-632-7300
China	support@tadiran-ktt.com	+86-871-63811899