Maintel Insight Services Standard

Mitel UC/CC Health and Performance Review

April 2024

Contents.

1. System Details.

The following report has been generated from a data capture from the following system.

Name	**XYZ Corp**
Type	**Mitel 3300 MXe-III Standard**
Audit date	**2017-10-06 18-35-46**

1.1 Platform details

Version	**MCD 6.0 SP3**
Revision	**42.0.3.9**
Product Version	**12.0.3.15**
IP Address	**10.68.64.11**
MAC Address	**08:00:0f:63:98:d4**
Application Record ID	**4646xxxx**

2. Insights.

2.1: Recommendations

A number of insights are derived from this audit, which are captured within different sections of the report.

	Maintel Insight	Standard	Advanced	Sections
Features	A full PABX component audit	•	•	**4,5,6,7,14,16**
	Details of all routing configurations	•	•	**8**
	Reports on all firmware versions including the identification of recalled/end-of-life devices	•	•	**12**
	Details of all handset features and 'out of service' devices	•	•	**6,16**
	A full system blueprint and comparative scans ('before and after' etc.)	•	•	**16,17**
	Central storage of the status & capacity of all hardware, exportable to Excel and CSV formats	•	•	**17**
	The management and measurement of capacities	•	•	**2,4,5,6,7,10,14, 16**
	Investigation of 'out of service' devices	•	•	**10**
	General management of the asset base	•	•	**2,3,4,5,6,7,16**
	The provision of system blueprints to aid business continuity	•	•	**5,6,8,16**
	ITIL based analytics		•	
	Portal-based real-time presentation		•	
	Real-time performance metrics		•	
	Workflow engine with tailored actions on alarms		•	
	Back-up based restoration and continuity		•	
	Cloud configuration backup		•	
	Real-time view, including status and location, of assets within a CMDB - includes licenses, firmware, software and hardware		•	
	Graphical schematic presentation		•	**5, 8**
	Identify voice quality-affecting network issues		•	
	Real-time and historic capacity data		•	
	Track and manage system changes		•	
	Manage software version control		•	**12**
	Manage communication, escalation and reporting centrally		•	

2.1.1 Migration Insights

The following metrics assist and forewarn the implementation teams for migration to hosted solutions.

Category	Count	Information
License status	(See section 14)	Controlled by AMC
Duplicate Extns	0	Usually caused by both extn and profile having same DN
Duplicate names	0	Will occur frequently in large organisations
Duplicate MAC addresses	0	Usually caused by legacy programming
Unsupported devices	0	Cisco 7960, 7940 and 7925 are not supported in HCS
Pickup groups with 1 member	3	Redundant programming of Pickups
Total devices	162	Total physical devices
Total DNs	157	Total DNs defined
Total DNs without name	0	Total DNs without a name defined
Total Hunt Groups	1	Total Hunt Groups in use
Total Pickup Groups	15	Total Pickup Groups in use
Extension numbers outside of normal length	33	Differing extension lengths cause issues when migrating to a hosted solution

2.1.2 General Insights

The following insights provide useful information for both migration and in-life support of the existing solution.

- MCD 6.0 SP3 **is significantly out of date** with MCD 7.0, 7.0 SP1, 7.1, 7.2, 7.2 SP1, 8.0, 8.0 SP1and the latest MCD 8.0 SP2 in general release. This system was last updated in January 2014
- The 'uptime' **is less than 1 day**. This could indicate power issues or simply that there hasbeen a programmed reboot of the system.
- The Analog device capacity **is running to 92.85%,** reduced to 89.88% when 'out ofservice' and partially programmed devices are account for.
- The system is functioning using **2 legacy SX-2000 Peripheral Cabinets** which are not supported from MCD 7.0 onwards.
- In addition to the two unsupported cabinets, the majority of the analogue extensions are being serviced through **14 legacy SX-2000 Extension Cards**
- A significant portion of this system is deemed "End of support" from October 2015
- This system has a very complex route plan with lots of inter-PABX routes defined, andwould benefit from using directory replication instead of ARS
- The system **only contains a signal DSP**, which would limit upgrade opportunities,particularly affecting the number of supported voicemail users.
- There is **no T38 Fax licenses** which would affect IP trunk implementation in a hosted ormixed IP environment.
- As it is a 'standard' MXe-III, it is limited to a maximum of 350 devices (300 IP phones/SIP devices), meaning that it is already at 46% *physical* capacity

3. Platform Overview.

The Mitel 3300 MXe III Standard supports a maximum of 350 phone devices, of which up to 300 can be IP/digital phones, making the system an ideal candidate for SMBs. Alternatively, all 350 devices can be analogue phones. An increased capacity of 16 5550 IP consoles are supported bythe 3300 MXe III Standard model.

The 3300 MXe III Expanded supports a maximum of 1,500 phone devices, of which up to 1,400can be IP/digital. Alternatively, all 1,500 can be analogue phones. The exact figures depend on the type of IP/digital phones. Up to 24 5500 IP consoles are supported by the 3300 MXe III Expanded model.

In order for the 3300 MXe III Standard and Expanded systems to reach their maximum capacityof analogue/digital phones, Cabinets must be used. The cabinets provide the necessary interfaces for the analogue/digital phones, and in turn connects to the Mitel 3300 MXe Controller.Multiple Cabinets can be used, depending on the system's configuration and business requirements.

The platform has 20 voicemail ports that can be expanded to a maximum of 30, if needed.With a maximum of 750 mailboxes on the standard MXe and up to 1,500 on the expanded version.

Examining the connectivity side, the 3300 MXe III Standard supports a maximum of three embedded T1/E1 digital trunk modules, a maximum of three embedded BRI modules, 12 embedded BRI interfaces and 2,000 SIP trunks. The 3300 MXe III Expanded marginally extends connectivity options by supporting a maximum of four embedded T1/E1 digital trunk modules, three embedded BRI modules, 12 embedded BRI interfaces and 2,000 SIP trunks.

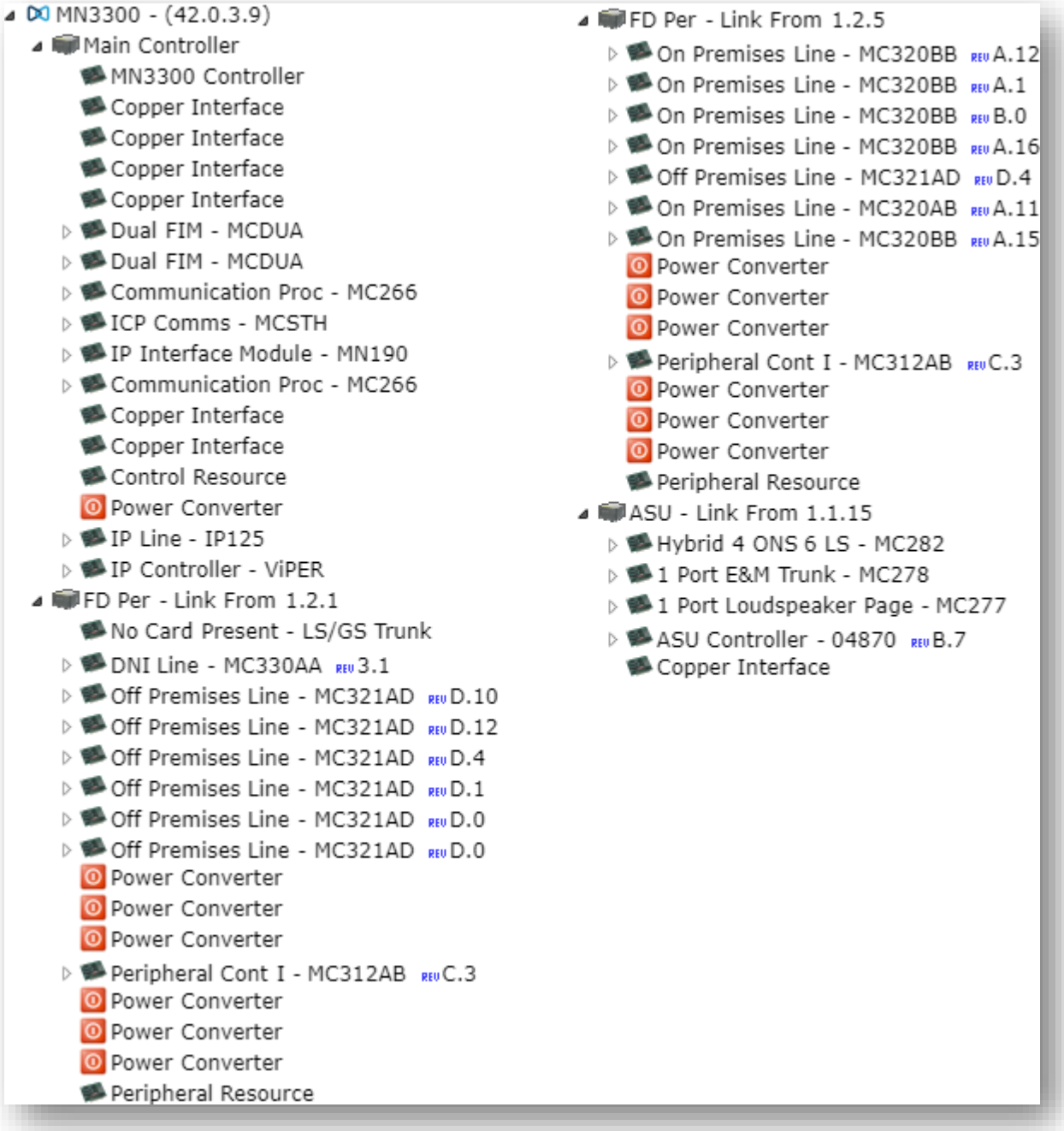
The Mitel 3300 MXe III Standard and Expanded models can support up to 128 and 192 G.729a compression channels, respectively, saving valuable bandwidth during SIP calls. These numbers also depend on the configuration of DSP modules installed on the systems.

4. Server.

The main controller is an **MXe-III** running MCD6.0SP3

Bootrom Image	3.1/11 Aug 10 2012
BOOTROM Rev	3.1/11 Aug 10 2012
Bus Speed	266666400
Core Image	3.1/11 Jan 23 2014
Core Speed	533332800
CPU PartMask#	0x80480021
FPGA Flash Rev	0x00026123
FPGA Version Reg	0x00026123
IP Address	10.68.64.11
MAC Address	8:0:f:63:98:d4
Main Load version	12.0.3.15 **(MCD 6.0SP3)**
Memory Size	536870912
Memory size (in MB)	512
PCB Assembly & Rev Level	56009581 Ra.4
Platform Name	MXe-III
POST Image	3.1/11 Aug 10 2012
POST Rev	3.1/11 Aug 10 2012
Processor Name	RTC
Slot ID	0
Software Product Name	Mitel 3300
Software Product Version	12.0.3.15
Uptime	19:34 up 0 days 13:01:54 46914
Virtualized Environment	NO

5. Cabinet Overview.



This system configuration shows 4 Cabinet(s).

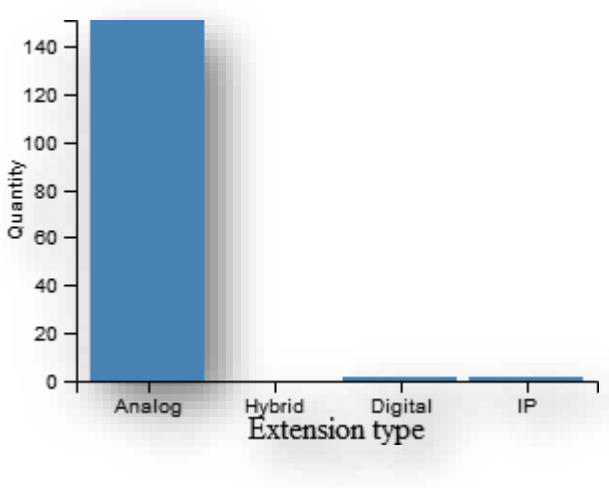
6 Handset Summary.

This details a summary of all of the extensions and trunks captured within the audit.

6.1: Extensions

There are **16** extension cards within the system, providing the following capacities:

	Capacity	Used
Total	309	160
Analog	168	156
Digital	16	2
Hybrid (i.e. COV)	0	0
IP	125	2



There were 2 extensions marked as *'out of service'*

6.2: Actual Utilisation

This table shows all circuit types in use and their actual utilisation after Out-of-Service, and un-numberedextensions and trunks are removed from the programmed counts.

Circuit type	Capacity	Programmed	Out of Service	No Circuit ID	% Utilised	% Actual utilised
Extns - Analog	168	156	0	5	92.85	89.88
Extns - Digital	16	3	1	0	18.75	12.50
Extns - IP	125	3	1	0	2.40	1.60
Trunks - Analog	6	1	0	-	16.66	16.66

6.3: Consoles

There are **0** console(s) programmed within the system.

6.4: Extension Number (DN) Ranges

Prefix	Total allocated	Start number	End number
*1*****	1	*125220	*125220
10**	1	1093	1093
12**	2	1211	1246
13**	3	1354	1384
14**	2	1468	1493
17**	3	1713	1779
18**	1	1802	1802
20**	1	2037	2037
21**	1	2155	2155
22**	1	2246	2246
23**	1	2334	2334
24**	1	2436	2436
25**	1	2550	2550
26**	1	2681	2681
27**	2	2740	2749
28**	2	2809	2871
35**	2	3500	3503
46**	1	4652	4652
47**	2	4744	4754
37**	1	3785	3785
49**	2	4948	4971
51**	1	5164	5164
52**	20	5217	5293
42**	1	4232	4232
34**	1	3434	3434
57**	1	5737	5737
59**	1	5997	5997
69*****	32	6940053	6940331
72**	1	7257	7257
75**	1	7531	7531
76**	5	7617	7672
78**	1	7829	7829
79**	1	7933	7933
87**	47	8701	8799
88**	5	8801	8815

6.5: Handset Types

Handset	Model	Programmed	OOS	No Extn #	Details
	5320 IP	2	0	0	The MiVoice 5320 IP Phone is a full-feature, applications telephone that features a large graphics display and eight self-labeling keys that can be programmed as speed dial keys, line keys, or feature access keys. Twelve fixed-function keys provide convenient one-touch access to commonly used telephony features, navigation keys and menus, as well as customizable user settings. The MiVoice 5320 IP Phone also has three contextual softkeys to help users easily navigate through telephony functions.
	Analog	156	0	5	Unknown
	Mobile DN	1	1	0	Unknown
	Superset 4025	1	0	0	Digital DNIC Handset with 2 line backlit LCD display and 14 programmable keys
	Superset 4150	2	1	0	Digital DNIC Handset with 4 line backlit touch-screen LCD display and 14 programmable keys and backlight

6.6: Call Forwarding

Extension	Risk	Destination number
3938	No Answer Internal	0001
3938	No Answer External	5000

6.7: COS/COR Usage

The main Class of Server 1 / Class of Restriction 4 are used by the majority of users. Should a migration to a hosted platform be undertaken, the remaining users should be identified by type so that the appropriate facilities can be assigned to them.

Total devices	%	COS (Day)	COR (Day)	Phone type	Comment
104	66.24	1	4	Analog	Normal users
33	21.02	1	1	Analog	
9	5.73	2	4	Analog	
3	1.91	1	4	Digital	
3	1.91	1	5	Analog	
2	1.27	1	1	Digital	
1	0.64	2	5	Digital	
1	0.64	3	4	Analog	
1	0.64	11	4	Analog	

7. Trunks.

7.1: Trunk Utilisation

There is **1** trunk card within the system, providing the following capacities:

	Capacity	Used
Total	4	1
Analog	4	1
Digital	0	0
Hybrid (i.e. AC13/AC15/E&M)	0	0
IP	0	0
AC13	0	
AC15	0	
E&M	0	

There were 0 extensions marked as *'out of service'*

7.2: Trunk Groups

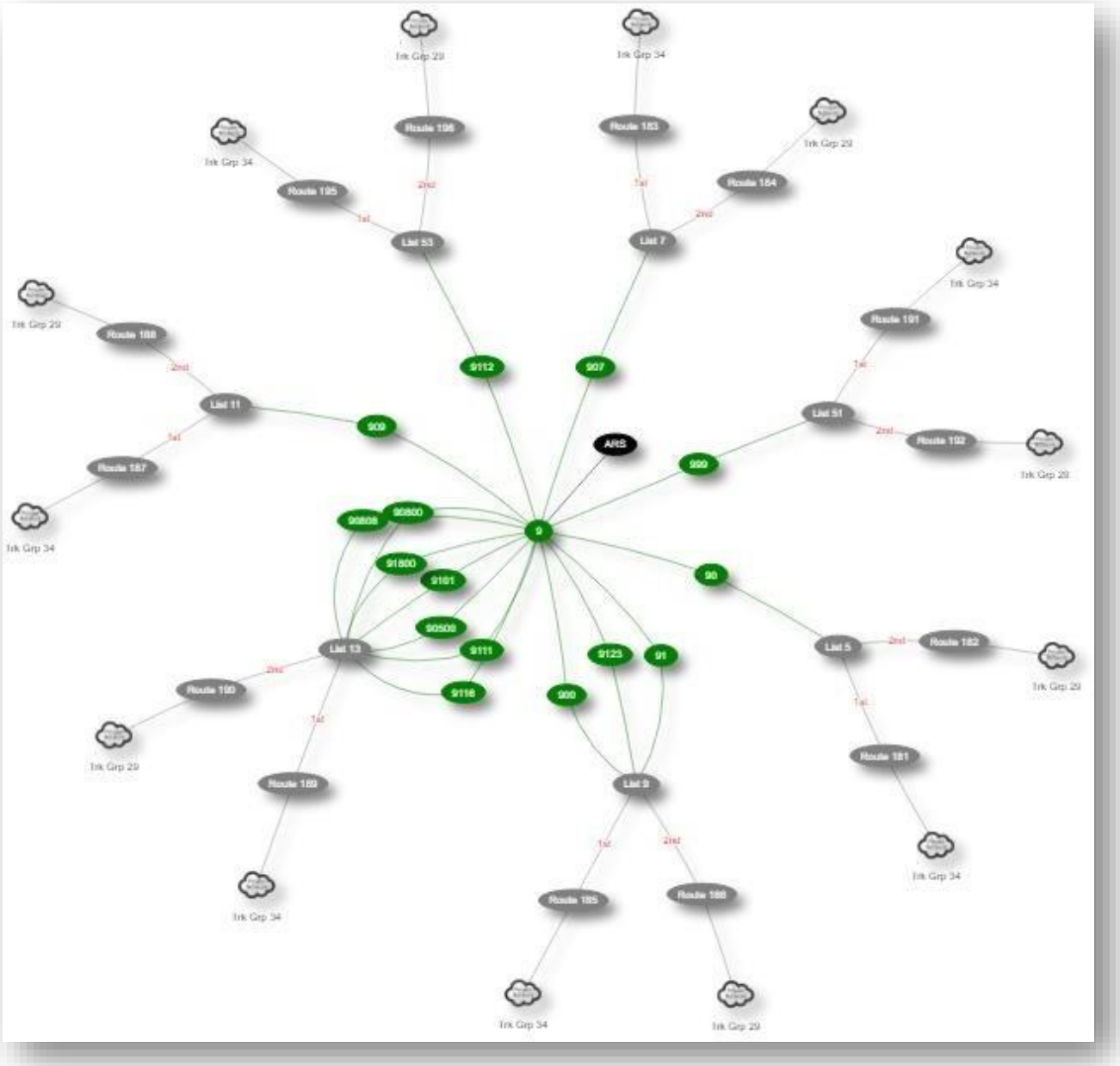
This will only show Digital, LS/GS, CO and SIP trunk groups. Inter-PABX Mitel trunking is not available.

Trunk Group	# of Members	Description	Group type
None (Satellite system)			

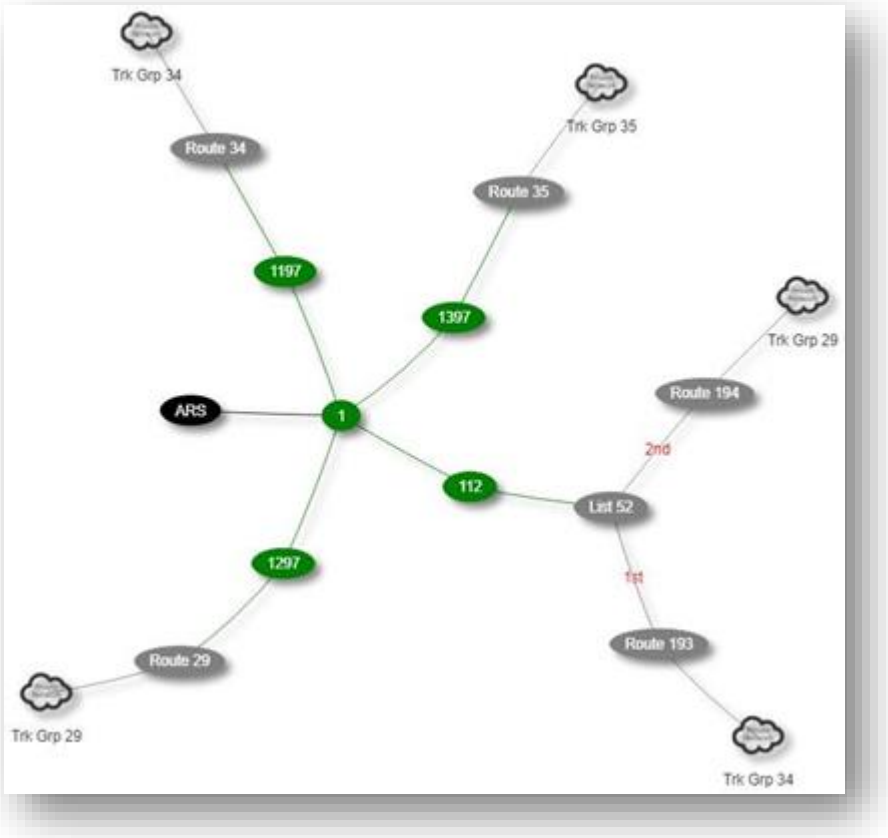
8. Route Plans.

This system has a very complex route plan with lots of inter-pabx routes defined, and would benefit from using directory replication instead of ARS

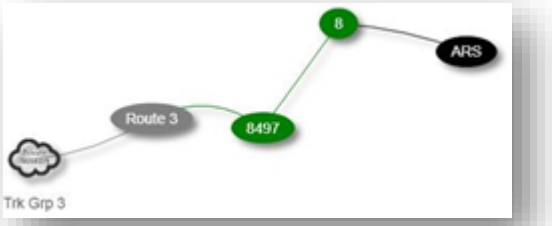
8.1.1 – Access Digit 9



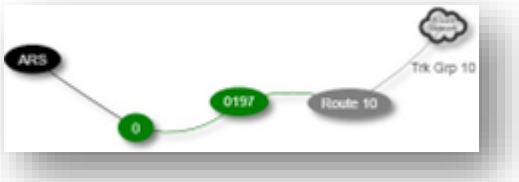
8.1.2 – Access Digit 1



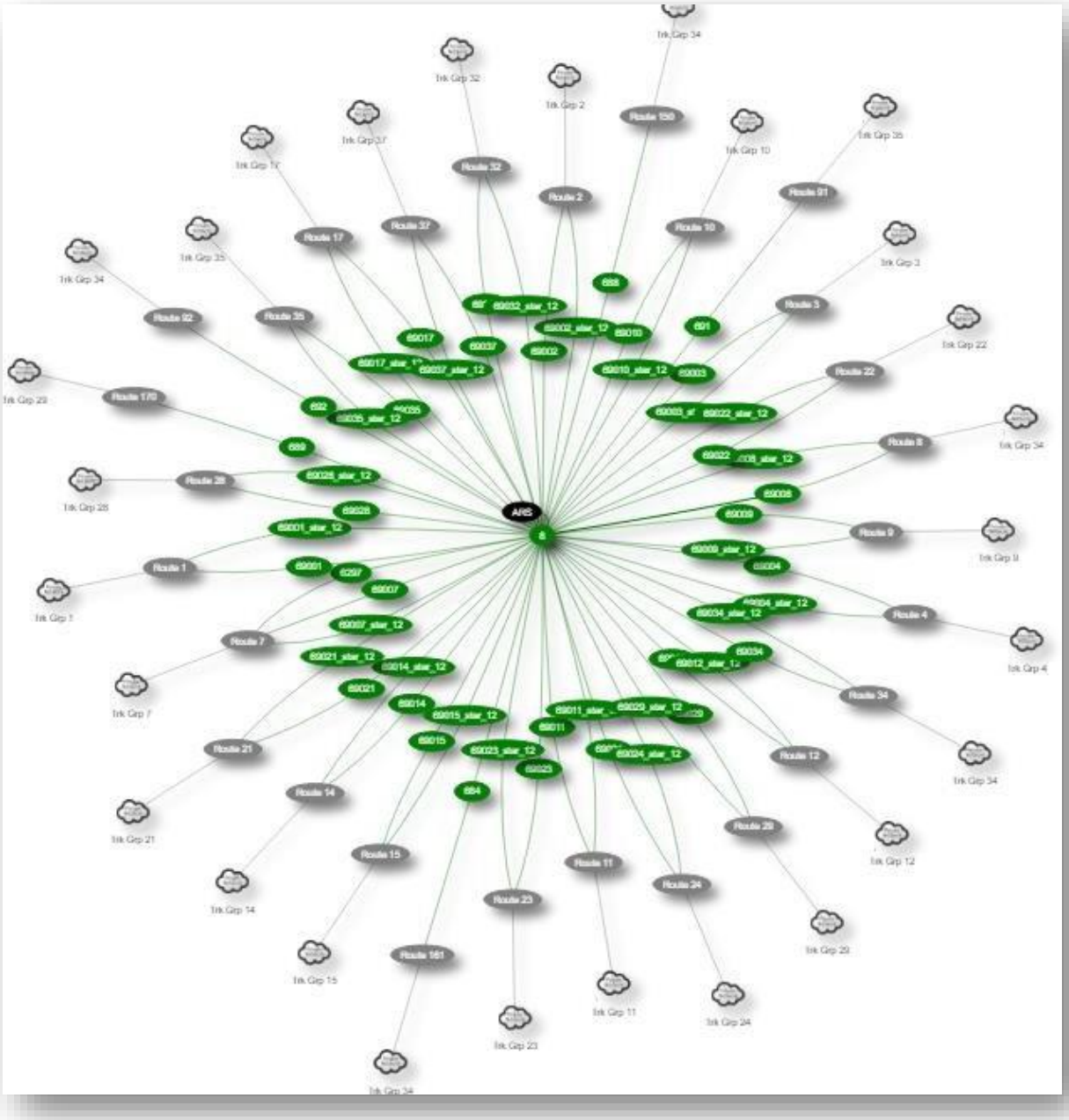
8.1.3 – Access Digit 8



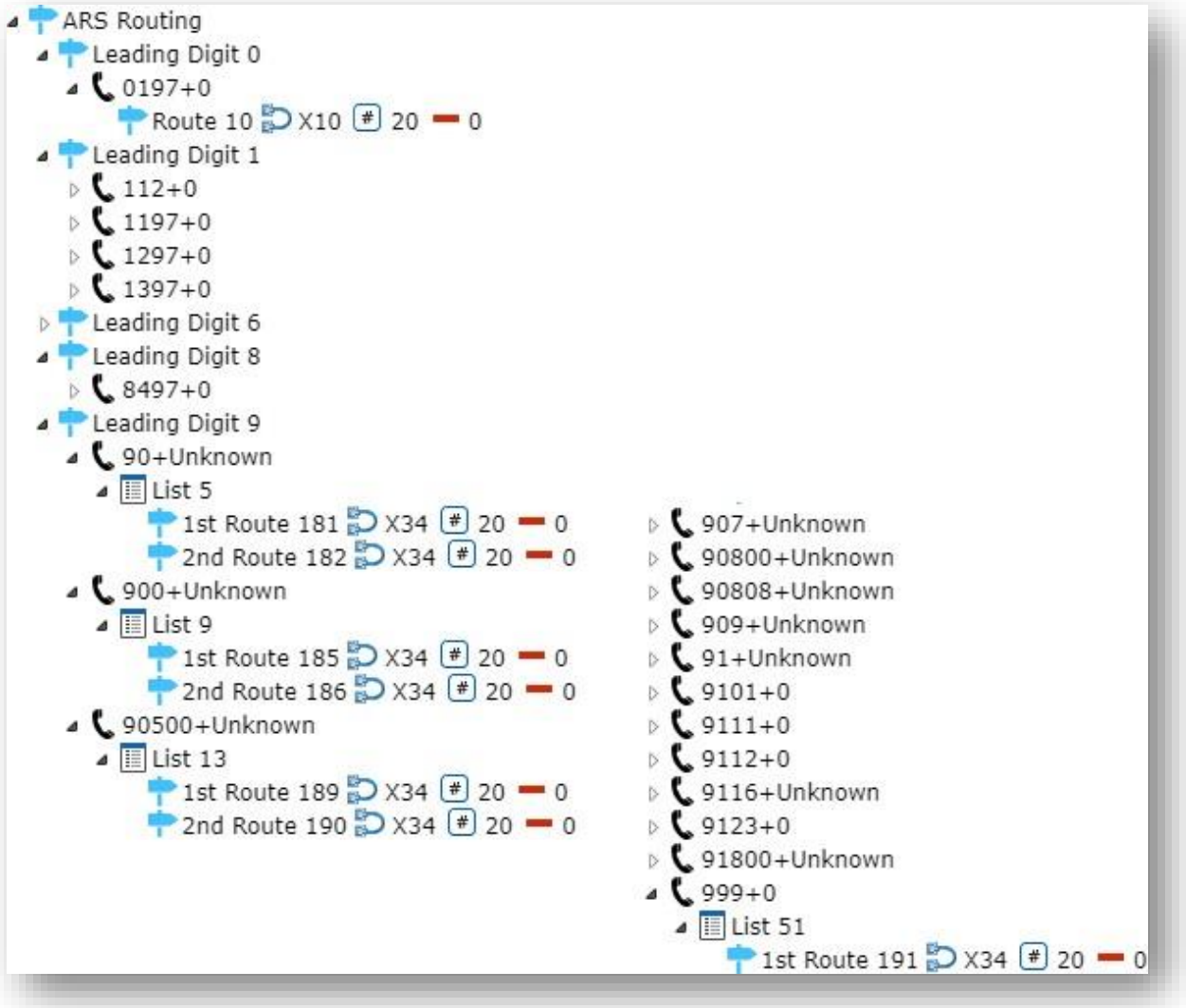
8.1.4 – Access Digit 0



8.1.5 – Access Digit 6



8.16 – Tree View



9. Hunt Groups.

Category	Pilot Number	Name	# of Members	Warning
Hunt	5259		4	
Pickup	811		5	
Pickup	812		8	
Pickup	813		3	
Pickup	814		2	
Pickup	815		4	
Pickup	816		1	Single member of group
Pickup	817		2	
Pickup	818		6	
Pickup	819		2	
Pickup	820		7	
Pickup	821		1	Single member of group
Pickup	822		7	
Pickup	823		1	Single member of group
Pickup	824		3	
Pickup	825		2	

10. Out of Service.

This shows the total of all "Out of Service" devices. This is determined as: Analog Extensions/Trunks that have been marked "OOS" by an Engineer; Digital Extensions/Trunks that have been marked "OOS" by either the PABX or an Engineer (e.g. If a digital set is unplugged, it is usually marked "OOS" by the PABX automatically).

Type	Sub-type	State	Total OOS	Resilient	Actual OOS
Extension	**Digital**	Out of Service	1	0	1
Extension	**IP Extn**	Out of Service	1	0	1

11. System Speed-Dials.

Speed-dial code	Actual number	Type
0	0086	S/C
0043	#812758#909999450071	S/C
0044	0046	S/C
0045	0047	S/C
0059	1001	S/C
0192	5999	S/C
1161	3893	S/C
1206	5858	S/C
1501	2772	S/C
1555	901999257600	S/C
1704	5400	S/C
1727	3893	S/C
1833	901999220424	S/C
2001	2490	S/C
2136	1461	S/C
2473	901999365139	S/C
2552	2772	S/C
2771	2772	S/C
2777	1000	S/C
2996	5600	S/C
3111	3333	S/C
3686	0094	S/C
3723	5252	S/C
3730	1000	S/C
3928	4366	S/C
4343	5600	S/C
4344	901999220424	S/C
4345	901999220424	S/C
4392	4366	S/C
4405	4366	S/C
4629	4366	S/C
4666	4366	S/C
4732	901999220854	S/C
4970	901999385555	S/C
5050	6060	S/C
5100	5400	S/C
5200	5400	S/C
555	1699	S/C

12. Firmware and End-of-Life.

MCD6.0SP3 is "End of Life" and has been superseded by the latest Mitel release MiVoice 8.0, and most of the peripheral legacy SX2000 hardware is now end-of-support.

- There is **1 extension** that is supported.
- There are **14 cards** that are ☠ end-of-support
- There are **2 cabinets** that are ☠ end-of-support
- There are **3 handsets** that are ☠ end-of-support

Qty	Device Type	Detail	Vintage	Vendor status
2	**FD PER**	Peripheral Cabinets 	n/a	Not supported from MCD7 and above. End of Support 10/2015
1	**Superset 4025**			Not supported from MCD7 and above – Legacy SX2000 device
2	**Superset 4150**			Not supported from MCD7 and above – Legacy SX2000 device
2	**5320 IP**			✔
1	**DNI Card**	Digital extension card	MC330AA	Not supported from MCD7 and above – Legacy SX2000 card superseded by MC330AB. End of Support 10/2015
1	**Hybrid 4 ONS 6 LS**	Analog extension and trunk card	MC282	on main controller
7	**Off Premises Line**	Analog extension cards	MC321AD	Not supported from MCD7 and above – Legacy SX2000 card. End of Support 10/2015
1	**On Premises Line**	Analog extension cards	MC320AB	Not supported from MCD7 and above – Legacy SX2000 card – supersede by MC320CL. End of Support 10/2015

13. Carbon Footprint.

The report below is based on the notion of 'all circuits being in use at the same time'. This should b1e treated as an indicative view of carbon usage for comparison with alternative systems
.

Description	Type	Subtype	Qty	Total kWh	Watts/ item	kgCO2	gCO2 /item
Power Converter	Card		13	0.39	30.00	0.20	15.74
Copper Interface	Card		7	0.21	30.00	0.11	15.74
Off Premises Line MC321AD	Card	Analog Extn	7	0.21	30.00	0.11	15.74
MN3300 (42.0.3.9)	System		1	0.20	200.00	0.10	104.92
On Premises Line MC320BB	Card	Analog Extn	5	0.15	30.00	0.08	15.74
ASU Link From 1.1.15	Cabinet/ Gateway		1	0.10	100.00	0.05	52.46
FD Per Link From 1.2.1	Cabinet/ Gateway		1	0.10	100.00	0.05	52.46
FD Per Link From 1.2.5	Cabinet/ Gateway		1	0.10	100.00	0.05	52.46
Main Controller	Cabinet/ Gateway		1	0.10	100.00	0.05	52.46
Communication Proc MC266	Card		2	0.06	30.00	0.03	15.74
Dual FIM MCDUA	Card		2	0.06	30.00	0.03	15.74
Peripheral Cont I MC312AB	Card		2	0.06	30.00	0.03	15.74
Peripheral Resource	Card		2	0.06	30.00	0.03	15.74
ASU Controller 04870	Card		1	0.03	30.00	0.02	15.74
Control Resource	Card		1	0.03	30.00	0.02	15.74
ICP Comms MCSTH	Card		1	0.03	30.00	0.02	15.74
IP Controller ViPER	Card		1	0.03	30.00	0.02	15.74
IP Interface Module MN190	Card		1	0.03	30.00	0.02	15.74
MN3300 Controller	Card		1	0.03	30.00	0.02	15.74
No Card Present LS/GS Trunk	Card		1	0.03	30.00	0.02	15.74
Hybrid 4 ONS 6 LS MC282	Card	Analog Extn	1	0.03	30.00	0.02	15.74
On Premises Line MC320AB	Card	Analog Extn	1	0.03	30.00	0.02	15.74
DNI Line MC330AA	Card	Hybrid Extn	1	0.03	30.00	0.02	15.74
1 Port Loudspeaker Page MC277	Card	Analog Trunk	1	0.03	30.00	0.02	15.74
1 Port E&M Trunk MC278	Card	Digital Trunk	1	0.03	30.00	0.02	15.74
IP Line IP125	Card	IP Extn	1	0.03	30.00	0.02	15.74
IP Line 5320 IP	Extension	IP Extn	2	0.01	5.00	0.01	2.63
On Premises Line	Extension	Analog Extn	96	0.01	0.10	0.01	0.05
DNI Line Superset 4150	Extension	Hybrid Extn	2	0.01	3.50	0.00	1.83
Off Premises Line	Extension	Analog Extn	56	0.01	0.10	0.00	0.05
IP Line Mobile DN	Extension	IP Extn	1	0.01	5.00	0.00	2.62
DNI Line Superset 4025	Extension	Hybrid Extn	1	0.00	3.50	0.00	1.84
Hybrid 4 ONS 6 LS	Trunk	Hybrid Trunk	1	0.00	1.00	0.00	0.52
Hybrid 4 ONS 6 LS	Extension	Analog Extn	4	0.00	0.10	0.00	0.05
Total kWh:	2.23			Total kgCO2:	1.17		

14. Licence Usage.

This table will automatically be populated for systems running software levels lower than MCD4. All systems running MCD4 and higher are controlled through Mitel AMC licensing, and the details can be accessed using the application ID shown in section 1.1 with appropriate maintainer credentials.

License type	Name	ID	Fixed Value	Maximum	Used	Available	% Used
Dimension And Feature Counts	IP Device Licenses		-				-
Dimension And Feature Counts	IP User Licenses		-				-
Dimension And Feature Counts	Mailbox Licenses		-				-
Dimension And Feature Counts	Programmed Mailboxes		-				-
Dimension And Feature Counts	SIP Licenses		-				-
Dimension And Feature Counts	SIP User Licenses		-				-
Dimension And Feature Counts	Voicemail State		-				-
Dimension And Feature Selection	Disk Space OK		-				-
Dimension And Feature Selection	T38 FAX		-				-
Licence And Option Selection	ACD Agent Licenses		-				-
Licence And Option Selection	Advanced Voicemail		-				-
Licence And Option Selection	Compression Licenses		-				-
Licence And Option Selection	Digital Link Licenses		-				-
Licence And Option Selection	IP Device Licenses		-				-
Licence And Option Selection	IP User Licenses		-				-
Licence And Option Selection	Mailbox Licenses		-				-
Licence And Option Selection	SIP Licenses		-				-
Licence And Option Selection	SIP User Licenses		-				-
Licence And Option Selection	Voicemail Purchased		-				-

15. Miscellaneous Assignment.

This section details settings captured within the Miscellaneous Assignment form within the Mitel platform.

Field	Value
Hot Desking Access Number	0300
Music Source Port	1.4.24.1
Set Languages	Default: English - Aux1: French - Aux2: Italian

16. System Audit.

An Excel spreadsheet containing an export of all devices discovered during the audit will be provided. This sheet separates Analog devices to allow for easier migration plans.

Note: The data is also held within SQL server for customised exports in any format that is required.

17. Comparison.

The comparison is taken from the two most recent audits of the platform and shows any additions andremovals from the platform, along with any cards swaps or device changes (i.e. Extn renumbering)

Type	Added	Removed	Changed name	Changed firmware	Changed detail
Phone	10	3	0	0	0

Other Changes

Type	DN	Old DN	Changes
Phone	4012	5513	
Phone	5355	5556	
Phone	5655		**Detail**: 'Superset 4150' from 'Analog'