

**UK - Weekend work plan: Weekend 14th January 2006 –
Work Co-ordinator:**

Consisting of 1 Items, and BAU out of hours work log.

BAU Out of Hours work log

- Item1: Issues brought forward that require weekend activity – 1 Item
- Item2: Break/Fix Snagging – 2 Items
- Item3: INSTALLATION DMX 14,15 & 16C – 3 Item
- Item4: VTOC AND BIN FILES DMX 14,15 & 16C – 1 Item
- Item5: INSTALLATION DMX 15 & 16R – 2 Item
- Item6: VTOC AND BIN FILES DMX 15 & 16R – 2 Item
- Item7: LOADING NEW DISKS INTO DMX 10C – 1 Item
- Item8: LOADING NEW DISKS INTO DMX 10R – 1 Item
- Item9: LOADING OF NEW MICROCODE FILES ALL CGC DMX'S – 9 Item
- Item10: LOADING OF NEW MICROCODE FILES ALL RDC DMX'S – 10 Item
- Item11: UPGRADING EUSAN-MGT3 & EUSAN-MGT4 TO SE 5.5 – 4 Item

Locations: CGC2 3rd floor / RDC 1st /4th floors

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

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Version Control

Date	Version	Reason for Change
10/01/06	291005_v0.1 GR	1 st Draft

Change Control Log

Reference: CR/VT/ART	Country	Description	Date of Scheduled work	Owner	Status
CR:06522704	UK	Installation DMX 14C, 15C 16C	14/01/2006	BAU	Draft
CR:06523021	UK	VTOC and bin files DMX 14C, 15C 16C	14/01/2006	BAU	Draft
CR:06523132	UK	Installation DMX 15R 16R	14/01/2006	BAU	Draft
CR: 06523153	UK	VTOC and bin files DMX 15R 16R	14/01/2006	BAU	Draft
CR: 06547132	UK	Installation of Modems for DMX 15R 16R	14/01/2006	BAU	Draft
CR: 06547172	UK	Installation of Modems for DMX 14C 15C 16C	14/01/2006	BAU	Draft
CR: 06547836	UK	Loading new disks into DMX 10C	14/01/2006	BAU	Draft
CR: 06547888	UK	Loading new disks into DMX 10R	14/01/2006	BAU	Draft
CR: 06548026	UK	Loading new microcode files on all CGC Production DMX	14/01/2006	BAU	Draft
CR: 06548070	UK	Loading new microcode files on all RDC Production DMX	14/01/2006	BAU	Draft
CR: 06549135	UK	Se5.5 Upgrade for eusan-mgt3 & 4	14/01/2006	BAU	Draft

BAU Out of Hours Work Log

Reference: CR/VT/ART	Description	Date of Scheduled work	Status	Sign off

Issues Found

Log of issues found during weekend activities

ITEM/SECTION NUMBER	ISSUE	FOLLOW UP ACTION / RESOLUTION	OWNER	SIGN OFF

Documentation Changes

Changes to be reflected in the documentation after successful completion of the whole of this work plan are as follows:

SAN Configuration Documentation to be updated to reflect additional DMXs

SAN floor plans to be updated

Switch plans to be updated

Eusan-mgt1 documentation to be updated

Eusan-mgt2 documentation to be updated

Eusan-mgt3 documentation to be updated

Eusan-mgt4 documentation to be updated

Documentation update Sign Off: To be returned to BAU on completion

Member of: BAU

NAME:

Date:

Future Tasks for Scheduling

Description	Date of Scheduled work	Owner	Change/VT Details

Overview of All Weekend Work

- Item1: Issues brought forward that require weekend activity – 1 Item**
- Item2: Break/Fix Snagging – 2 Items**
- Item3: INSTALLATION DMX 14,15 & 16C**
- Item4: VTOC AND BIN FILES DMX 14,15 & 16C**
- Item5: INSTALLATION DMX 15 & 16R**
- Item6: VTOC AND BIN FILES DMX 15 & 16R**
- Item7: LOADING NEW DISKS INTO DMX 10C**
- Item8: LOADING NEW DISKS INTO DMX 10R**
- Item9: LOADING OF NEW MICROCODE FILES ALL CGC DMX'S**
- Item10: LOADING OF NEW MICROCODE FILES ALL RDC DMX'S**
- Item11: UPGRADING EUSAN-MGT3 & EUSAN-MGT4 TO SE 5.5**

Required Resource

ALL RESOURCE IS UNCONFIRMED

MEMBER OF

EMC CE

Oliver Cabling

BUSINESS AS USUAL (Primary) David Coles

BUSINESS AS USUAL (Secondary) Paul Haynes

Work Co-ordinator Javed Dad

EMC Project Manager Zerrin Diren (& Mark Luff)

EMC SAM Paul Belcher

CGC RESOURCE

Patrick Caborn

RDC RESOURCE

Terry Brister

Paolo Sidoli

David Coles

Paul Haynes

Javed Dad

Zerrin Diren (& Mark Luff)

Paul Belcher

This document is to be used as a complement of the official project document and not as substitute.

Over All Sign Off

Item	Status	Owner	Sign off
Item 1: Items brought forward from previous installations			
Item2: Break/fix snagging			
Item3: Installation dmx 14,15 & 16c			
Item4: vtoc and bin files dmx 14,15 & 16c			
Item5: Installation dmx 15 & 16r			
Item6: vtoc and bin files dmx 15 & 16r			
Item7: Loading new disks into dmx 10c			
Item8: Loading new disks into dmx 10r			
Item9: Loading of new microcode files all cgc dmx's			
Item10:Loading of new microcode files all rdc dmx's			
Item11:Upgrading eusan-mgt3 & eusan-mgt4 to se 5.5			

UK Work Plan 14/01/2006 v0.1
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Overall Sign Off: 1 Page – To be returned to BAU on completion

Member of: BAU

NAME:

Date:

Item 1: Items brought forward from previous installations

1 ITEMS BROUGHT FORWARD

Item number	Reference	Description	Prerequisites	Comments	Resolution
1-1	06052901	Vendor remote access testing	Awaiting confirmation of Firewall rule completion and tokens for testing		

Item1 Sign Off: 1 Page – To be returned to BAU on completion

Member of: BAU

NAME:

Date:

Item 2: Break/Fix Snagging

Item Number	VT/EMC/ARTS Reference	Description	Comments	Resolution
2-1				
2-2				

Item2 Sign Off: 1 Page – To be returned to BAU on completion

Member of: BAU

NAME:

Date:

Item3: Installation of DMX 14C, 15C & 16C

Work number: 140106-UK01

Change control number: 06522704

Item co-ordinator:

Date: 14TH January 2006

Location: CGC2 L3

Start Time: 14:00 – 14/01/06

Compulsory back-out time: 14:00 – 15/01/06

Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's:

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 3: Section Checklist

Removal of UPM cards for re-deployment in RDC level4

Section	Details	Comments	Sign Off
3-1	Pre-requisites checks.		
3-2	Installation of DMX 14C, 15C & 16C		
3-3	Post checks.		
3-4	Back out plan		
Item 3 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU _____ NAME: _____ Date: _____			

Section 3-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
1	Before: 14 th January 2006	SAN P&I	Project and Integration will ensure correct change control is raised for the weekend work	Complete CR: 06522704	07/01/2006
2		SAN P&I	All Structured cabling in place	Correct	
3		SAN P&I	All Power sockets available	Confirmed	
4		SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 3-2: Installation of DMX 14C, 15C & 16C

Refer to Appendix:

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Step	Time	Owner	Details	Comment
3.2.1.	Start time: 14:00pm 14/01/2006		Installation DMX14C CGC2 L3	
3.2.2.		EMC CE	Fit baffle hood to DMX	
3.2.3.		Citigroup Electrician	Citigroup Electrician will do a visual check of the DMX 14C pre-installed power outlet and confirm the labelling on both main auxiliary power cords correspond to the designated PDU switches	
3.2.4.		EMC CE	Will confirm that the power cabling is correctly installed within the DMX	
3.2.5.		Citigroup Electrician with any required assistance from EMC CE	Will confirm the power supply to the sockets is turned off and connect the sockets to the supply with the assistance of the EMC CE connect the four power cables across the two PDU's as per appendix D	
3.2.6.		Citigroup Electrician	From the distribution board turn off the power from AUX A	
3.2.7.		EMC CE	Confirm power loss from AUX A and DMX stays up.	
3.2.8.		Citigroup Electrician	Restore power to AUX A	
3.2.9.		Citigroup Electrician	From the distribution board turn off the power from Main B	
3.2.10.		EMC CE	Confirm power loss from Main B and DMX stays up.	
3.2.11.		Citigroup Electrician	Restore power to Main B	
3.2.12.		Citigroup Electrician	From the distribution board turn off the power from AUX B	
3.2.13.		EMC CE	Confirm power loss from AUX B and DMX stays up.	

3.2.14.		Citigroup Electrician	Restore power to AUX B	
3.2.15.		Citigroup Electrician	From the distribution board turn off the power from Main A	
3.2.16.		EMC CE	Confirm power loss from Main A and DMX stays up.	
3.2.17.		Citigroup Electrician	Restore power to Main A	
3.2.18.		Citigroup Electrician	From the distribution board turn off the power from AUX A and Main B	
3.2.19.		EMC CE	Confirm power loss from AUX A and Main B and that DMX stays up.	
3.2.20.		Citigroup Electrician	Restore power to AUX A and Main B	
3.2.21.		Citigroup Electrician	From the distribution board turn off the power from AUX B and Main A	
3.2.22.		EMC CE	Confirm power loss from AUX B and Main A and that DMX stays up.	
3.2.23.		Citigroup Electrician	Restore power to AUX B and Main A	
3.2.24.		EMC CE	Confirm all FA and RA are turned off	
3.2.25.		BAU SA	Confirm all ports in appendix XXXX are blocked	
3.2.26.		Oliver Cabling	Cable DMX as per appendix XXXX	
3.2.27.		Oliver Cabling	Bring UTP cabling for future connection to CEP up into DMX and leave so that it may at a future date be connected to the service processor.	
3.2.28.	Start time: 14:00pm 14/01/2006		Installation DMX15C CGC2 L3	
3.2.29.		EMC CE	Fit baffle hood to DMX	

3.2.30.		Citigroup Electrician	Citigroup Electrician will do a visual check of the DMX 15C pre-installed power outlet and confirm the labelling on both main auxiliary power cords correspond to the designated PDU switches	
3.2.31.		EMC CE	Will confirm that the power cabling is correctly installed within the DMX	
3.2.32.		Citigroup Electrician with any required assistance from EMC CE	Will confirm the power supply to the sockets is turned off and connect the sockets to the supply with the assistance of the EMC CE connect the four power cables across the two PDU's as per appendix D	
3.2.33.		Citigroup Electrician	From the distribution board turn off the power from AUX A	
3.2.34.		EMC CE	Confirm power loss from AUX A and DMX stays up.	
3.2.35.		Citigroup Electrician	Restore power to AUX A	
3.2.36.		Citigroup Electrician	From the distribution board turn off the power from Main B	
3.2.37.		EMC CE	Confirm power loss from Main B and DMX stays up.	
3.2.38.		Citigroup Electrician	Restore power to Main B	
3.2.39.		Citigroup Electrician	From the distribution board turn off the power from AUX B	
3.2.40.		EMC CE	Confirm power loss from AUX B and DMX stays up.	
3.2.41.		Citigroup Electrician	Restore power to AUX B	
3.2.42.		Citigroup Electrician	From the distribution board turn off the power from Main A	
3.2.43.		EMC CE	Confirm power loss from Main A and DMX stays up.	

3.2.44.		Citigroup Electrician	Restore power to Main A	
3.2.45.		Citigroup Electrician	From the distribution board turn off the power from AUX A and Main B	
3.2.46.		EMC CE	Confirm power loss from AUX A and Main B and that DMX stays up.	
3.2.47.		Citigroup Electrician	Restore power to AUX A and Main B	
3.2.48.		Citigroup Electrician	From the distribution board turn off the power from AUX B and Main A	
3.2.49.		EMC CE	Confirm power loss from AUX B and Main A and that DMX stays up.	
3.2.50.		Citigroup Electrician	Restore power to AUX B and Main A	
3.2.51.		EMC CE	Confirm all FA and RA are turned off	
3.2.52.		BAU SA	Confirm all ports in appendix XXXX are blocked	
3.2.53.		Oliver Cabling	Cable DMX as per appendix XXXX	
3.2.54.		Oliver Cabling	Bring UTP cabling for future connection to CEP up into DMX and leave so that it may at a future date be connected to the service processor.	
3.2.55.	Start time: 14:00pm 14/01/2006		Installation DMX16C CGC2 L3	
3.2.56.		EMC CE	Fit baffle hood to DMX	
3.2.57.		Citigroup Electrician	Citigroup Electrician will do a visual check of the DMX 16C pre-installed power outlet and confirm the labelling on both main auxiliary power cords correspond to the designated PDU switches	
3.2.58.		EMC CE	Will confirm that the power cabling is correctly installed within the DMX	

3.2.59.		Citigroup Electrician with any required assistance from EMC CE	Will confirm the power supply to the sockets is turned off and connect the sockets to the supply with the assistance of the EMC CE connect the four power cables across the two PDU's as per appendix D	
3.2.60.		Citigroup Electrician	From the distribution board turn off the power from AUX A	
3.2.61.		EMC CE	Confirm power loss from AUX A and DMX stays up.	
3.2.62.		Citigroup Electrician	Restore power to AUX A	
3.2.63.		Citigroup Electrician	From the distribution board turn off the power from Main B	
3.2.64.		EMC CE	Confirm power loss from Main B and DMX stays up.	
3.2.65.		Citigroup Electrician	Restore power to Main B	
3.2.66.		Citigroup Electrician	From the distribution board turn off the power from AUX B	
3.2.67.		EMC CE	Confirm power loss from AUX B and DMX stays up.	
3.2.68.		Citigroup Electrician	Restore power to AUX B	
3.2.69.		Citigroup Electrician	From the distribution board turn off the power from Main A	
3.2.70.		EMC CE	Confirm power loss from Main A and DMX stays up.	
3.2.71.		Citigroup Electrician	Restore power to Main A	
3.2.72.		Citigroup Electrician	From the distribution board turn off the power from AUX A and Main B	
3.2.73.		EMC CE	Confirm power loss from AUX A and Main B and that DMX stays up.	
3.2.74.		Citigroup Electrician	Restore power to AUX A and Main B	

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3.2.75.		Citigroup Electrician	From the distribution board turn off the power from AUX B and Main A	
3.2.76.		EMC CE	Confirm power loss from AUX B and Main A and that DMX stays up.	
3.2.77.		Citigroup Electrician	Restore power to AUX B and Main A	
3.2.78.		EMC CE	Confirm all FA and RA are turned off	
3.2.79.		BAU SA	Confirm all ports in appendix XXXX are blocked	
3.2.80.		Oliver Cabling	Cable DMX as per appendix XXXX	
3.2.81.		Oliver Cabling	Bring UTP cabling for future connection to CEP up into DMX and leave so that it may at a future date be connected to the service processor.	

Section 3-3: Post checks

Refer to Appendix:

Step	Time	Owner	Details	Comment
3.3.1	On completion of task	EMC CE	DMX is powered up	

Section 3-4: Back out plan

Refer to appendix:

Reason for Back Out				
The level of back out will depend on the issues encountered, and may not require complete back out, BAU will make an educated decision at the time.				
Step	Time		Details	Comment
3.4.1	14:00 – 15 ^{/10/06}		1. Power down DMX 2. Disconnect from power sockets	

Item4: Installation of DMX 15R & 16R

Work number: 140106-UK02

Change control number: 06522704

Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/06

Compulsory back-out time: 14:00 – 15/01/06

Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's:

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 4: Section Checklist

Suspect UPM swap Blue/Black switches in CGC

Section	Details	Comments	Sign Off
4-1	Pre-requisites checks.		
4-2	Suspect UPM swap Blue/Black switches in CGC		
4-3	Post checks.		
4-4	Back out plan		
Item 4 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU _____ NAME: _____ Date: _____			

Section 4-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
4.1.1	Before: 14 th January 2006	SAN P&I	Project and Integration will ensure correct change control is raised for the weekend work	Complete CR: 06522704	07/01/2006
4.1.2		SAN P&I	All Structured cabling in place	Correct	
4.1.3		SAN P&I	All Power sockets available	Confirmed	
4.1.4		SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 4-2: Installation of DMX 15R & 16R

Refer to Appendix:

Step	Time	Owner	Details	Comment
4.2.1.	Start time: 14:00pm 14/01/2006		Installation DMX15R CGC2 L3	
4.2.2.		EMC CE	Fit baffle hood to DMX	
4.2.3.		EMC CE	Will confirm that the power cabling is correctly installed within the DMX	
4.2.4.		Citigroup Electrician with any required assistance from EMC CE	Will confirm the power supply to the sockets is turned off and connect the sockets to the supply with the assistance of the EMC CE connect the four power cables across the two PDU's as per appendix D	
4.2.5.		Citigroup Electrician	From the distribution board turn off the power from AUX A	
4.2.6.		EMC CE	Confirm power loss from AUX A and DMX stays up.	
4.2.7.		Citigroup Electrician	Restore power to AUX A	
4.2.8.		Citigroup Electrician	From the distribution board turn off the power from Main B	
4.2.9.		EMC CE	Confirm power loss from Main B and DMX stays up.	
4.2.10.		Citigroup Electrician	Restore power to Main B	
4.2.11.		Citigroup Electrician	From the distribution board turn off the power from AUX B	
4.2.12.		EMC CE	Confirm power loss from AUX B and DMX stays up.	
4.2.13.		Citigroup Electrician	Restore power to AUX B	

4.2.14.		Citigroup Electrician	From the distribution board turn off the power from Main A	
4.2.15.		EMC CE	Confirm power loss from Main A and DMX stays up.	
4.2.16.		Citigroup Electrician	Restore power to Main A	
4.2.17.		Citigroup Electrician	From the distribution board turn off the power from AUX A and Main B	
4.2.18.		EMC CE	Confirm power loss from AUX A and Main B and that DMX stays up.	
4.2.19.		Citigroup Electrician	Restore power to AUX A and Main B	
4.2.20.		Citigroup Electrician	From the distribution board turn off the power from AUX B and Main A	
4.2.21.		EMC CE	Confirm power loss from AUX B and Main A and that DMX stays up.	
4.2.22.		Citigroup Electrician	Restore power to AUX B and Main A	
4.2.23.		EMC CE	Confirm all FA and RA are turned off	
4.2.24.		BAU SA	Confirm all ports in appendix XXXX are blocked	
4.2.25.		Oliver Cabling	Cable DMX as per appendix XXXX	
4.2.26.		Oliver Cabling	Bring UTP cabling for future connection to CEP up into DMX and leave so that it may at a future date be connected to the service processor.	
4.2.27.	Start time: 14:00pm 14/01/2006		Installation DMX16R CGC2 L3	
4.2.28.		EMC CE	Fit baffle hood to DMX	

4.2.29.		Citigroup Electrician	Citigroup Electrician will do a visual check of the DMX 16R pre-installed power outlet and confirm the labelling on both main auxiliary power cords correspond to the designated PDU switches	
4.2.30.		EMC CE	Will confirm that the power cabling is correctly installed within the DMX	
4.2.31.		Citigroup Electrician with any required assistance from EMC CE	Will confirm the power supply to the sockets is turned off and connect the sockets to the supply with the assistance of the EMC CE connect the four power cables across the two PDU's as per appendix D	
4.2.32.		Citigroup Electrician	From the distribution board turn off the power from AUX A	
4.2.33.		EMC CE	Confirm power loss from AUX A and DMX stays up.	
4.2.34.		Citigroup Electrician	Restore power to AUX A	
4.2.35.		Citigroup Electrician	From the distribution board turn off the power from Main B	
4.2.36.		EMC CE	Confirm power loss from Main B and DMX stays up.	
4.2.37.		Citigroup Electrician	Restore power to Main B	
4.2.38.		Citigroup Electrician	From the distribution board turn off the power from AUX B	
4.2.39.		EMC CE	Confirm power loss from AUX B and DMX stays up.	
4.2.40.		Citigroup Electrician	Restore power to AUX B	
4.2.41.		Citigroup Electrician	From the distribution board turn off the power from Main A	

4.2.42.		EMC CE	Confirm power loss from Main A and DMX stays up.	
4.2.43.		Citigroup Electrician	Restore power to Main A	
4.2.44.		Citigroup Electrician	From the distribution board turn off the power from AUX A and Main B	
4.2.45.		EMC CE	Confirm power loss from AUX A and Main B and that DMX stays up.	
4.2.46.		Citigroup Electrician	Restore power to AUX A and Main B	
4.2.47.		Citigroup Electrician	From the distribution board turn off the power from AUX B and Main A	
4.2.48.		EMC CE	Confirm power loss from AUX B and Main A and that DMX stays up.	
4.2.49.		Citigroup Electrician	Restore power to AUX B and Main A	
4.2.50.		EMC CE	Confirm all FA and RA are turned off	
4.2.51.		BAU SA	Confirm all ports in appendix XXXX are blocked	
4.2.52.		Oliver Cabling	Cable DMX as per appendix XXXX	
4.2.53.		Oliver Cabling	Bring UTP cabling for future connection to CEP up into DMX and leave so that it may at a future date be connected to the service processor.	

Section 4-3: Post checks

Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
4.3.1	On completion of task	EMC CE	DMX is powered up	

Section 4-4: Back out plan

Refer to appendix: N/A

Table 1

Reason for Back Out				
The level of back out will depend on the issues encountered, and may not require complete back out, BAU will make an educated decision at the time.				
Step	Time		Details	Comment
4.4.1.	14:00 – 15 ^{/10/06}	i) Power down DMX ii) Disconnect from power sockets		

Item5: VTOC and bin file Load DMX 14C, 15C, 16C

Work number: 140106-UK04

Change control number: 06523021

Item co-ordinator:

Date: 14TH January 2006

Location: CGC2 L3

Start Time: 14:00 – 14/01/2006

Compulsory back-out time: None non-production Installation

Compulsory Completion time: 17:59 – 20/01/2006

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 5: Section Checklist

Section	Details	Comments	Sign Off
5-1	Pre-requisites checks.		
5-2	VTOC and bin file Load DMX 14C, 15C, 16C		
5-3	Post checks.		
5-4	Back out plan		
Item 5 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU_____ NAME: _____ Date:			

Section 5-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
5.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 5-2: VTOC and bin file Load DMX 14C, 15C, 16C

Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
5.2.1	14:00 – 14/01/2006	EMC CE	Load bin file onto DMC14C	
5.2.2		EMC CE	VTOC DMC14C	
5.2.3		EMC CE	Load bin file onto DMC15C	
5.2.4		EMC CE	VTOC DMC15C	
5.2.5		EMC CE	Load bin file onto DMC16C	
5.2.6		EMC CE	VTOC DMC16C	

Section 5-3: Post checks

Step	Time	Owner	Details	Comment
5.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 5-4: Back out plan

Reason for Back Out	
None production equipment being installed back out not required	

Item6: VTOC and bin file Load DMX 15R, 16R

Work number: 140106-UK05

Change control number: 06523153

Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/2006

Compulsory back-out time: None non-production Installation

Compulsory Completion time: 17:59 – 20/01/2006

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 6: Section Checklist

Section	Details	Comments	Sign Off
6-1	Pre-requisites checks.		
6-2	VTOC and bin file Load DMX 15R, 16R		
6-3	Post checks.		
6-4	Back out plan		
Item 5 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU_____ NAME: _____ Date:			

Section 6-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
6.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 6-2: VTOC and bin file Load DMX 14C, 15C, 16C

Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
6.2.1	14:00 – 14/01/2006	EMC CE	Load bin file onto DMC15R	
6.2.2		EMC CE	VTOC DMC15R	
6.2.3		EMC CE	Load bin file onto DMC16R	
6.2.4		EMC CE	VTOC DMC16R	

Section 6-3: Post checks

Step	Time	Owner	Details	Comment
6.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 6-4: Back out plan

Reason for Back Out	
None production equipment being installed back out not required	

Item7: Loading new Disks into DMX 10C

Work number: 140106-UK07

Change control number: 06547836

Item co-ordinator:

Date: 14TH January 2006

Location: CGC2 L3

Start Time: 14:00 – 14/01/2006

Compulsory back-out time: 14:00 – 15/01/06

Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 7: Section Checklist

Section	Details	Comments	Sign Off
7-1	Pre-requisites checks.		
7-2	Loading new Disks into DMX 10C		
7-3	Post checks.		
7-4	Back out plan		
Item 6 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU_____ NAME: _____ Date:			

Section 7-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
7.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00
7.1.2		EMC CE	Correct amount of disks are available on site.		Before Commencement

Section 7-2: Loading new Disks into DMX 10C

Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
7.2.1	14:00 – 14/01/2006	EMC CE	Physically load new disks into DMX 10C but do logically added them, i.e. disks not to be visible to DMX	

Section 7-3: Post checks

Step	Time	Owner	Details	Comment
7.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 7-4: Back out plan

Reason for Back Out	
None production equipment being installed back out not required	

Item8: Loading new Disks into DMX 10R

Work number: 140106-UK07

Change control number: 06547836

Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/2006

Compulsory back-out time: 14:00 – 15/01/06

Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 8: Section Checklist

Section	Details	Comments	Sign Off
8-1	Pre-requisites checks.		
8-2	Loading new Disks into DMX 10R		
8-3	Post checks.		
8-4	Back out plan		
Item 8 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU_____ NAME: _____ Date:			

Section 8-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
8.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00
8.1.2		EMC CE	Correct amount of disks are available on site.		Before Commencement

Section 8-2: Loading new Disks into DMX 10C

Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
8.2.1	14:00 – 14/01/2006	EMC CE	Physically load new disks into DMX 10C but do logically added them, i.e. disks not to be visible to DMX	

Section 8-3: Post checks

Step	Time	Owner	Details	Comment
8.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 8-4: Back out plan

Reason for Back Out	
None production equipment being installed back out not required	

**Item9: Placing New Microcode on SP for DMX
5C,6C,7C,8C,9C,10C,11C,12C,13C For Future Activation.**

Work number: 140106-UK08
Change control number: 06548026
Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/2006
Compulsory back-out time: 14:00 – 15/01/06
Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 8: Section Checklist

Section	Details	Comments	Sign Off
9-1	Pre-requisites checks.		
9-2	Placing New Microcode on SP for DMX 5C,6C,7C,8C,9C,10C,11C,12C,13C For Future Activation.		
9-3	Post checks.		
9-4	Back out plan		
Item 8 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU _____ NAME: _____ Date: _____			

Section 9-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
9.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 9-2: Placing New Microcode on SP for DMX 5C,6C,7C,8C,9C,10C,11C,12C,13C For Future Activation. Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
9.2.1	14:00 – 14/01/2006	EMC CE	Load required code on to the SP for DMX5C, but do not load onto DMX	
9.2.2		EMC CE	Check DMX and SP is still functioning correct.	
9.2.3		EMC CE	Load required code on to the SP for DMX6C, but do not load onto DMX	
9.2.4		EMC CE	Check DMX and SP is still functioning correct.	
9.2.5		EMC CE	Load required code on to the SP for DMX7C, but do not load onto DMX	
9.2.6		EMC CE	Check DMX and SP is still functioning correct.	
9.2.7		EMC CE	Load required code on to the SP for DMX8C, but do not load onto DMX	
9.2.8		EMC CE	Check DMX and SP is still functioning correct.	
9.2.9		EMC CE	Load required code on to the SP for DMX9C, but do not load onto DMX	
9.2.10		EMC CE	Check DMX and SP is still functioning correct.	
9.2.11		EMC CE	Load required code on to the SP for DMX10C, but do not load onto DMX	
9.2.12		EMC CE	Load required code on to the SP for DMX11C, but do not load onto DMX	

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9.2.13		EMC CE	Check DMX and SP is still functioning correct.	
9.2.14		EMC CE	Load required code on to the SP for DMX12C, but do not load onto DMX	
9.2.15		EMC CE	Check DMX and SP is still functioning correct.	
9.2.16		EMC CE	Load required code on to the SP for DMX13C, but do not load onto DMX	
9.2.17		EMC CE	Check DMX and SP is still functioning correct.	

Section 9-3: Post checks

Step	Time	Owner	Details	Comment
9.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 9-4: Back out plan

Reason for Back Out				
Step	Time		Details	Comment
9.4.1.	14:00 – 15/01/06	Removed added disks		

**Item10: Placing New Microcode on SP for DMX
5C,6C,7C,8C,9C,10C,11C,12C,13C For Future Activation.**

Work number: 140106-UK08
Change control number: 06548026
Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/2006
Compulsory back-out time: 14:00 – 15/01/06
Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item 10: Section Checklist

Section	Details	Comments	Sign Off
10-1	Pre-requisites checks.		
10-2	Placing New Microcode on SP for DMX 5C,6C,7C,8C,9C,10C,11C,12C,13C For Future Activation.		
10-3	Post checks.		
10-4	Back out plan		
Item 8 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU _____ NAME: _____ Date: _____			

Section 10-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
10.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00

Section 10-2: Placing New Microcode on SP for DMX 5R,6R,7R,8R,9R,10R,11R,12R13R 14R Future Activation. Refer to Appendix: N/A

Step	Time	Owner	Details	Comment
10.2.1	14:00 – 14/01/2006	EMC CE	Load required code on to the SP for DMX5CRbut do not load onto DMX	
10.2.2		EMC CE	Check DMX and SP is still functioning correct.	
10.2.3		EMC CE	Load required code on to the SP for DMX6R but do not load onto DMX	
10.2.4		EMC CE	Check DMX and SP is still functioning correct.	
10.2.5		EMC CE	Load required code on to the SP for DMX7R but do not load onto DMX	
10.2.6		EMC CE	Check DMX and SP is still functioning correct.	
10.2.7		EMC CE	Load required code on to the SP for DMX8R but do not load onto DMX	
10.2.8		EMC CE	Check DMX and SP is still functioning correct.	
10.2.9		EMC CE	Load required code on to the SP for DMX9R but do not load onto DMX	
10.2.10		EMC CE	Check DMX and SP is still functioning correct.	
10.2.11		EMC CE	Load required code on to the SP for DMX10R but do not load onto DMX	
10.2.12		EMC CE	Load required code on to the SP for DMX11R but do not load onto DMX	

10.2.13		EMC CE	Check DMX and SP is still functioning correct.	
10.2.14		EMC CE	Load required code on to the SP for DMX12R but do not load onto DMX	
10.2.15		EMC CE	Check DMX and SP is still functioning correct.	
10.2.16		EMC CE	Load required code on to the SP for DMX13R but do not load onto DMX	
10.2.17		EMC CE	Check DMX and SP is still functioning correct.	
10.2.18		EMC CE	Load required code on to the SP for DMX14Rbut do not load onto DMX	
10.2.19		EMC CE	Check DMX and SP is still functioning correct.	

Section 10-3: Post checks

Step	Time	Owner	Details	Comment
10.3.1	On completion of task	EMC CE	DMX is working correctly	

Section 10-4: Back out plan

Reason for Back Out				
Step	Time		Details	Comment
10.4.1.	14:00 – 15/01/06	Removed added disks		

Item11: Upgrading Solution Enabler 5.3 to 5.5 eusan-mgt3 & 4

Work number: 140106-UK08

Change control number: 06548026

Item co-ordinator:

Date: 14TH January 2006

Location: RDC L4

Start Time: 14:00 – 14/01/2006

Compulsory back-out time: 14:00 – 15/01/06

Compulsory Completion time: 17:59 – 15/01/06

Applicable Appendix's: Not required

Conference Call Number: +44 (0)1452 586935

Conference Code: 0207500656 (participant #)

Item11: Section Checklist

Section	Details	Comments	Sign Off
11-1	Pre-requisites checks.		
11-2	Upgrading Solution Enabler 5.3 to 5.5 eusan-mgt3 & 4		
11-3	Post checks.		
11-4	Back out plan		
Item 8 completion Sign Off: 1 page To be returned to BAU on completion.			
Member of: BAU_____ NAME: _____ Date:			

Section 11-1: Pre-requisites checks

Step	Time	Owner	Details	Comment	Date Due
11.1.1	Before: 12/01/2006	SAN P&I	BAU will ensure the Access request is submitted to DCSM for entry into the data centers and associated vendor storerooms.	Access request XXXXXX- If access problems delay entry for over 20 minutes - Please escalate to work co-ordinator, and this can THEN be escalated to DCSM.	12/01/2006 – 15:00
11.1.2	Before: 12/01/2006	SAN P&I	Software is available on intranet	Checked and correct 9/1/2006	

Section 11-2: Upgrading Solution Enabler 5.3 to 5.5 eusan-mgt3 & 4

Refer to Appendix: [Insert any appropriate appendix]

11.2.1	Start time: 14:00pm 14/01/2006	BAU SA	Confirm eusan-mgt1 and eusan-mgt2 are online and working correctly.	
11.2.2		Server SA	Downgrade and eusan-mgt4 for re-boot	
11.2.3		Server SA	On eusan-mgt3 carry out the de-install and upgrade as per appendix E	
11.2.4		Server SA	On eusan-mgt1 and eusan-mgt3 carry out the crontab changes as in appendix H	
11.2.5		BAU SA	Confirm basic read functionality of eusan-mgt3 is correct	
11.2.6	On confirmation from SAN BAU that eusan-mgt3 was successful.	Server SA	On eusan-mgt4 carry out the de-install and upgrade as per appendix E	
11.2.7		Server SA	On eusan-mgt2 and eusan-mgt4 carry out the crontab changes as in appendix J	
11.2.8		BAU SA	Confirm basic read functionality of eusan-mgt4 is correct	
11.2.9				

Appendix A: Contact details

Company/Department	Title	Name	Contact Number 1	Contact Number 2	Contact Email
Citigroup - Applied Engineering	Work Co-ordinator	Carl Woolward	07900 915 024	020 7500 1104	carl.woolward@citigroup.com
Citigroup - Applied Engineering	Work Co-ordinator	Graham Rodell	07813 602 734	020 7508 9070	graham.rodell@citigroup.com
Citigroup - Applied Engineering	Item Co-ordinator	Carl Williams	07966 466 956	020 7986 5693	carl.patrick.williams@citigroup.com
Citigroup - BAU	BAU - On Call Representative	Salauddin Ahmed	07764 823 914	020 7500 6566	salauddin.ahmed@citigroup.com
Citigroup - BAU	BAU - On Call Representative	Javed Dad	07841 429 769	020 7500 9757	javed.dad@citigroup.com
Citigroup - BAU	BAU - On Call Representative	Hadi Al-Ali	07867 802 398	020 7500 4972	hadi.alali@citigroup.com
Citigroup - BAU	BAU - On Call Representative	Paul Haynes	07796 307 355	020 7500 4972	paul.haynes@citigroup.com
Citigroup - BAU	BAU - On Call Representative	David Coles	07834 807 687	020 7500 9855	david.peter.coles@citigroup.com
Citigroup -Oliver Cabling	Team Leader	Trevor Whelan	07835 186 452	020 7986 2596	trevor.whelan@citigreoup.com
Citigroup -Oliver Cabling	Site Engineer	Paolo Sidoli	N/A	020 7986 9962	paolo.sidoli@citigroup.com
Citigroup -Oliver Cabling	Site Engineer	Carl Elrick	N/A	020 7986 9962	carl.elrick@citigroup.com
Citigroup – DCSM – UK	DCSM Manager	Mark Matthews	07979 607 118	020 7500 8025	mark.a.matthews@citigroup.com
Citigroup – DCSM – UK	DCSM Manager	Kevin Last	07778 814 088	020 7986 2648	kevin.last@citigroup.com
Citigroup – DCSM – UK	DCSM Representative	Matt Neill	07971 008 665	020 7500 8025	matthew.neill@citigroup.com
Citigroup – DCSM – UK	DCSM Representative	Bob Coe	N/A	020 7986 2651	bob.coe@citigroup.com
Citigroup – DCSM – UK	DCSM Representative	John Mc Bride	07710 419 677	776754073 - Mobex	john.mcbride@citigroup.com
Citigroup – CRS – UK	CRS	CRS	67788	N/A	TBA
Citigroup – Command centre	Command Centre	Command Centre	62020	020 7986 2020	TBA
Citigroup - Security - CGC	Security – CGC	Security - CGC	62400	020 7986 2400	TBA
Citigroup - Security - RDC	Security – RDC	Security - RDC	54393	020 7500 4393	TBA
EMC	Project Manager/Work Coordinator	Gary Battersby	07747 765 660	N/A	Battersby Gary@emc.com
EMC	SAM	Paul Belcher	07730 781 388	N/A	Belcher Paul@emc.com
EMC	CE	Terry Brister	07713 505 896	N/A	brister terry@emc.com
EMC	CE	Patrick Caborn	07801 214 303	N/A	caborn patrick@emc.com
EMC	TS	Ian Gray	07715 012 248	N/A	grey_ian@emc.com

Appendix B: Cabinet information – RDC (Updated 29/09/05)

Red Fabric											
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Local IP Address	Firmware	Type	Hub Port
1R	MC5IN03437	RDC1	BX16	MC5TN02319	RED	ED-140M	2	10.1.8.1	6.01.00.18	Core	BX16-Hub-7/8
3R	MC5IN03438	RDC1	BX16	MC5TN02319	RED	ED-140M	28	10.1.8.2	6.01.00.18	Edge	BX16-Hub-5/6
5R	MC5IN03439	RDC1	BX16	MC5TN02319	RED	ED-140M	27	10.1.8.3	6.01.00.18	Edge	BX16-Hub-1/2
7R	MC5FJ01858	RDC4	BU18	MC5TN01560	RED	ED-140M	26	10.2.8.1	6.01.00.18	Edge	RDC4-BU18-HUB-7/8 RDC4-BU18-Hub-24 to RDC4-M01-Hub-24
9R	MC5FJ01292	RDC1	BX04	MC5CN04024	RED	RD-64M	22	10.1.8.4	6.01.00.18	Edge	BX16-Hub-15/16
11R	MC5CI01485	RDC1	BX11	MC5N07128	RED	ED-140M	3	10.3.8.1	6.01.00.18	Core	BX16-Hub-17/18
13R	MC5CI01684	RDC1	BX11	MC5N07128	RED	ED-140M	21	10.3.8.2	6.01.00.18	Edge	BX16-Hub13/19
15R	MC5IN02551	RDC4	M01	MC5TN01559	RED	ED-140M	4	10.4.8.1	6.01.00.18	Core	RDC4-M01-Hub-5/6
17R	MC5FJ01848	RDC3	Z02	MC5CN04014	RED	ED-64M	20	10.5.8.1	6.01.00.18	Edge	RDC3-Z02-Hub-13/14 Z02 Hub-23 Links via Media convertor to RDC4-M02-Hub-23
19R	MC5FJ01848	RDC1	BX11	MC5N07128	RED	ED-140M	19	10.3.8.3	6.01.00.18	Edge	BX16-Hub16/20
21R	MC5FJ02061	RDC3	Z02	MC5CN04014	RED	ED-64M	25	10.5.8.2	6.01.00.18	Edge	RDC3-Z02-Hub-01/02 Z02 Hub-23 Links via Media convertor to RDC4-M02-Hub-

											23
TEST		RDC3	Z03		Test - RED	ED-64M	TBA	10.6.8.1	6.01.00.18	TEST	TBA

Blue Fabric

Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Local IP Address	Firmware	Type	Hub Port
2R	MC5IN03434	RDC1	BX30	MC5TN02318	Blue	ED-140M	2	10.1.8.1	6.01.00.18	Core	BX30-Hub-7/8
4R	MC5IN03435	RDC1	BX30	MC5TN02318	Blue	ED-140M	28	10.1.8.2	6.01.00.18	Edge	BX30-Hub-5/6
6R	MC5IN03436	RDC1	BX30	MC5TN02318	Blue	ED-140M	27	10.1.8.3	6.01.00.18	Edge	BX30-Hub-1/2
8R	MC5FJ02020	RDC4	BU26	MC5TN01562	Blue	ED-140M	26	10.2.8.1	6.01.00.18	Edge	RDC4-BU26-HUB-7/8 RDC4-BU26-Hub-24 to RDC4-M46-Hub-24
10R	MC5FJ01297	RDC1	BX40	MC5CN04016	Blue	RD-64M	22	10.1.8.4	6.01.00.18	Edge	BX30-Hub-13/14
12R	MC5CI01482	RDC1	BX34	MC5CN06898	Blue	ED-140M	3	10.3.8.1	6.01.00.18	Core	BX30-Hub-17/18
14R	MC5CI01585	RDC1	BX34	MC5CN06898	Blue	ED-140M	21	10.3.8.2	6.01.00.18	Edge	BX30-Hub-15/16
16R	MC5IN02566	RDC4	M46	MC5TN01563	Blue	ED-140M	4	10.4.8.1	6.01.00.18	Core	M46-Hub-7/8
18R	MC5FJ02020	RDC3	Z44	MC5CN04016	Blue	ED-64M	20	10.5.8.1	6.01.00.18	Edge	RDC3-Z44-Hub-01/02 Z44 Hub-23 Links via Media convertor to RDC4-M46-Hub-23
20R	MC5IN02562	RDC1	BX34	MC5CN06898	Blue	ED-140M	19	10.3.8.3	6.01.00.18	Edge	BX30-Hub
22R	MC5FJ07236	RDC3	Z44	MC5CN04016	Blue	ED-64M	25	10.5.8.2	6.01.00.18	Edge	RDC3-Z44-Hub-03/04 Z44 Hub-23 Links via Media convertor to RDC4-M46-Hub-23
Test	MC5FJ02060	RDC3	Z43		TEST	ED-64M	TBA		6.01.00.18		

Black RDF Fabric											
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Local IP Address	Firmware	Type	Hub Port
rdfs91r	MC5FJ21144	RDC1	BX33	MC5TN01409	Black	ED-64M	4	10.201.7.1	6.01.00.18	rdf	BX33-Hub-24 via media convertor to M45-Hub-24
rdfs93r	MC5FJ21146	RDC4	M45	MC5TN01411	Black	ED-64M	8	10.204.7.1	6.01.00.18	rdf	M45-Hub-07/08
rdfs9test		RDC3	Z43			ED-64M			6.01.00.18		
Green RDF Fabric											
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Local IP Address	Firmware	Type	Hub Port
rdfs91r	MC5FJ21148	RDC1	BX17	MC5TN01413	Green	ED-64M	3	10.201.7.1	6.01.00.18	rdf	BX17-Hub-24 via media convertor to M02-Hub-24
rdfs93r	MC5FJ21147	RDC4	M02	MC5TN01412	Green	ED-64M	7	10.204.7.1	6.01.00.18	rdf	M02-Hub-07/08
rdfs9test		RDC3	Z03			ED-64M		10.5.8.3	6.01.00.18		

Service Processors									
Service Processor	Serial number	Location		Model	IP Address	Connectrix Manager version	CEP connection		Modem Details
Blue Active	MC5L51BWU470012	RDC4	M46	1U	169.186.192.197	7.0.2	srdcfwe13 3/7		020 7508 0879
Black Active	MC5L51BWU450137	RDC4	M45	1U	169.186.192.196	7.0.2	srdcfwe14 3/6		020 7508 0880
Blue Standby		RDC1	BX40	Laptop	169.186.192.69	7.0.1	srdcfwe10 3/38		020 8318 0680
Black Standby	MC5L51BWU450100	RDC1	BX33	1U	169.186.192.68	7.0.2	srdcfwe09 3/37		
Green Active	MC5L51BWU480006	RDC4	M02	1U	169.186.192.132	7.0.2	srdcfwe13 3/2		020 75008738
Red Active	MC5L51BWU470039	RDC4	M01	1U	169.186.192.133	7.0.2	srdcfwe14 3/3		020 7508 0834

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Green Standby	MC5L51BWU400076	RDC1	BX17	Laptop	169.186.192.4	7.0.2	srdcfwe10 3/29		
Red Standby		RDC1	BX04	1U	169.186.192.5	7.0.1	srdcfwe09 3/30		020 8318 0509

DMX/SYMM/CLARION							
DMX/ SYMM	Serial number	Location		Model	Microcode	Software	Modem Details
1R	CK284700428	RDC1	BX42-44	8730	5567.55.32.	SYMMIP	
2R	CK284701227	RDC1	BX01-03	8730	5567.55.32.	SYMMIP	
3R	CK284701079	RDC1	BX06-08	8730	5567.55.32.	SYMMIP	
4R	CK284700466	RDC1	BX36-38	8730	5568.67.26	SYMMIP	
5R	SA287750107	RDC1	BX10	DMX2000	5670.83.78A	SYMMIP	
6R	SA287750096	RDC1	BX19	DMX2000	5670.83.78A	SYMMIP	
7R	SA287750200	RDC1	BX22	DMX2000	5670.83.78A	SYMMIP	
8R	SA287750442	RDC1	BX13	DMX2000	5670.83.78A	SYMMIP	
CX1R	MSL00040900021	RDC1	BX35	CX600			
CX1C	MSL00040800040	CGC2	CA101	CX600	Flare16		
9R	CK287890275	RDC4	C04	DMX3000	5670.83.78A	SYMMIP	020 7500 8632
10R	CK287890300	RDC4	C42	DMX3000	5670.83.78A	SYMMIP	020 7986 9964
11R	CK287890293	RDC4	F04	DMX3000	5670.83.78A	SYMMIP	020 7508 0881
12R	CK287890581	RDC4	F43	DMX3000	5670.83.78A	SYMMIP	020 8297 4911
13R	CK287890596	RDC4	J04	DMX3000	5670.83.78A	SYMMIP	020 8297 4909
14R	CK287890602	RDC4	J43	DMX3000	5670.83.78A	SYMMIP	020 8297 4913

Appendix B: Cabinet information – CGC (Updated 29/09/05)

Red Fabric										
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Firmware	Type	Hub Port
1	MC5FJ01158	CGC1	60AN	MC5CN03485	RED	ED-64M	1	6.01.00.18	Core	60AN Hub 01/02
3	MC5IN02560	CGC2	CA95	MC5TN01558	RED	ED-140M	18	6.01.00.18	Edge	CA95 Hub 07/08
5	MC5FJ01267	CGC1	60AN	MC5CN03485	RED	ED-64M	30	6.01.00.18	Edge	60AN Hub 07/08
7	MC5FJ01159	CGC1	60AN	MC5CN03485	RED	ED-64M	29	6.01.00.18	Edge	60AN Hub 04/05
9	MC5FJ07225	CGC2	BW100	MC5CN03485	RED	ED-64M	25	6.01.00.18	Edge	BW100 Hub 01/02
11	MC5FJ01673	CGC2	BW100	MC5CN04635	RED	ED-64M	24	6.01.00.18	Edge	BW100 Hub 03/04
13	MC51N01268	CGC2	BW100	MC5CN04635	RED	ED-140M	23	6.01.00.18	Core	BW100 Hub 05/06
15	MC5CIN01483	CGC2	BW101	MC5CN07127	RED	ED-140M	20	6.01.00.18	Edge	BW100 Hub 07/20
17	MC5IN03430	CGC2	CA95	MC5TN01558	RED	ED-140M	2	6.01.00.18	Core	CA95 Hub 05/06
19	MC5IN03431	CGC2	CA95	MC5TN01558	RED	ED-140M	28	6.01.00.18	Edge	CA95 Hub 03/04

Green RDF Fabric										
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Firmware	Type	Hub Port
rdfsw91C	MC5FJ21145	CGC1	59AN	MC5TN01410	Green	ED-64M	1	6.01.00.18	RDF	59AN Hub 07/08
rdfsw93C	MC5FJ21149	CGC2	CA96	MC5TN01414	Green	ED-64M	5	6.01.00.18	RDF	CA96 Hub 07/08

Blue Fabric										
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Firmware	Type	Hub Port
2	MC5FJ01182	CGC1	71CF	MC5CN03484	Blue	ED-64M	1	6.01.00.18	Core	71CF Hub 01/02
4	MC5IN02580	CGC2	CB15	MC5TN01561	Blue	ED-140M	18	6.01.00.18	Edge	CB15 Hub 07/08
6	MC5FJ01308	CGC1	71CF	MC5CN03484	Blue	ED-64M	30	6.01.00.18	Edge	71CF Hub 07/08
8	MC5FJ01183	CGC1	71CF	MC5CN03484	Blue	ED-64M	29	6.01.00.18	Edge	71CF Hub 04/05
10	MC5FJ07208	CGC2	CB05	MC5CN04634	Blue	ED-64M	25	6.01.00.18	Edge	CB05 Hub 01/02
12	MC5FJ09611	CGC2	CB05	MC5CN04634	Blue	ED-64M	24	6.01.00.18	Edge	CB05 Hub 03/04
14	MCF1N01267	CGC2	CB05	MC5CN04634	Blue	ED-140M	23	6.01.00.18	Core	CB05 Hub 07/08
16	MC5IN01484	CGC2	CB06	MC5TN06731	Blue	ED-140M	20	6.01.00.18	Edge	CB05 Hub 13/14
18	MC5IN03428	CGC2	CB15	MC5TN01561	Blue	ED-140M	2	6.01.00.18	Core	CB15 Hub 05/06
20	MC5IN03429	CGC2	CB15	MC5TN01561	Blue	ED-140M	28	6.01.00.18	Edge	CB15 Hub 03/04
Black RDF Fabric										
Switch	Switch serial number	Location		Connectrix cab	Fabric	Model	Domain ID	Firmware	Type	Hub Port
rdfsw92C	MC5FJ21143	CGC1	70CF	MC5TN01408	Black	ED-64M	2	6.01.00.18	RDF	70CF Hub 07/08
rdfsw94C	MC5FJ21150	CGC2	CB14	MC5TN01415	Black	ED-64M	6	6.01.00.18	RDF	CB14 Hub 07/08

Service Processors								
Service Processor	Serial number	Location		Model	IP Address	Connectrix Manager version	CEP connection	Modem Details
Blue Active	MC5L51BWU470049	CGC2	CB15	1U	169.186.141.197	7.0.2	sol2fwe01 4/10	020 7500 1723
Black Standby	MC5L51BWU420058	CGC1	70CF	1U	169.186.141.69	7.0.2	sol1fwe15 4/10	/
Blue Standby		CGC1	71CF	Laptop	169.186.141.68	7.0.1	sol1fwe16 4/10	/
Black Active	MC5L51BWU460087	CGC2	CB14	1U	169.186.141.196	7.0.2	sol2fwe02 4/9	020 7508 0626
Green Stanby	MC5L51BWU450066	CGC1	59AN	1U	169.186.141.4	7.0.2	sol1fwe16 4/1	/
Red Active	MC5L51BWU470003	CGC2	CA95	1U	169.186.141.133	7.0.2	sol2fwe02 4/3	020 7500 1165
Green active	MC5L51BWU460040	CGC2	CA96	1U	169.186.141.132	7.0.2	sol2fwe01 4/2	020 7508 8025
Red Standby		CGC1	60AN	Laptop	169.186.141.5	7.0.1	sol1fwe15 4/2	/
DMX/SYMM/CLARION								
DMX/ SYMM	Serial number	Location		Model	Microcode	Software		Modem Details
1C	CK284700679	CGC1	69AZ	8730	5567.55.32.	SYMMIP		
2C	CK284700995	CGC1	56AZ	8730	5567.55.32.	SYMMIP		
3C	CK284701078	CGC1	67BN	8730	5567.55.32.	SYMMIP		
4C	CK284700214	CGC2	BW98	8730	5568.67.26	SYMMIP		020 7516 9101
5C	SA287750129	CGC2	CB09	DMX2000	5670.83.78A	SYMMIP		020 7516 9095
6C	SA287750125	CGC2	BW94	DMX2000	5670.83.78A	SYMMIP		020 7516 9097
7C	SA287750122	CGC2	CB12	DMX2000	5670.83.78A	SYMMIP		020 7519 6812
8C	SA287750383	CGC2	BW92	DMX2000	5670.83.78A	SYMMIP		020 7516 6803
9C	CK287890296	CGC2	BC06	DMX3000	5670.83.78A	SYMMIP		020 7508 0813
10C	CK287890294	CGC2	BH100	DMX3000	5670.83.78A	SYMMIP		020 7508 0614
11C	CK287890298	CGC2	AZ07	DMX3000	5670.83.78A	SYMMIP	020 7508 0820	

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12C	CK287890587	CGC2	BH96	DMX3000	5670.83.78A	SYMMIP	020 7512 9212
13C	CK287890603	CGC2	AV07	DMX3000	5670.83.78A	SYMMIP	020 7519 1456

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Appendix C: DMX 15R, 16R, Power Cabling Diagrams.

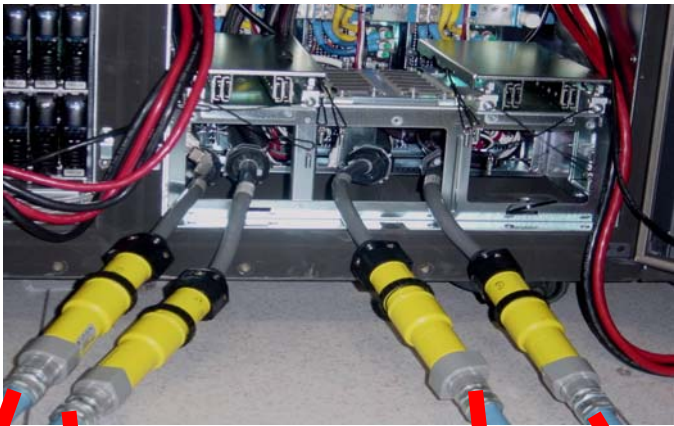
Weekend Date: 14/01/2006
Owner: Carl Williams

Field Wiring Inspection Checklist DMX 15R

- Serial Number of cabinet _____
- CE Name _____
- Customer name CITIGROUP
- Site # 42023025
- How many PDUs are supplying power to this DMX cabinet? 2
- Are the customers' AC power connectors labeled? _____

ACTION: The customer electrician must verify the source of AC power for each AC power feed.

This photo shows a rear view of the DMX2000 or DMX3000 cabinet. Note the order of the power cables as they exit the cabinet when filling in the answer to the next question.



PDU AUX A	X	PDU MAIN B	X
--------------	---	---------------	---

PDU AUX B	Y	PDU MAIN A	Y
--------------	---	---------------	---

- Fill in the **green** blocks above (marked x and y to indicate the two PDUs) with the label information that indicates the actual PDU of AC power that's connected to each of the DMX cabinet AC plugs.
- Manager Approval for Inspection** _____

Field Wiring Inspection Checklist DMX 16R

- Serial Number of cabinet _____
- CE Name _____
- Customer name CITIGROUP
- Site # 42023025
- How many PDUs are supplying power to this DMX cabinet? 2
- Are the customers' AC power connectors labeled? _____

ACTION: The customer electrician must verify the source of AC power for each AC power feed.

This photo shows a rear view of the DMX2000 or DMX3000 cabinet. Note the order of the power cables as they exit the cabinet when filling in the answer to the next question.



PDU AUX A	X	PDU MAIN B	X
--------------	---	---------------	---

PDU AUX B	Y	PDU MAIN A	Y
--------------	---	---------------	---

- Fill in the **green** blocks above (marked x and y to indicate the two PDUs) with the label information that indicates the actual PDU of AC power that's connected to each of the DMX cabinet AC plugs.
- **Manager Approval for Inspection** _____

Appendix D: DMX 14C, 15C, 16C, Power Cabling Diagrams.

Weekend Date: 14/01/2006

Owner: Carl Williams

Field Wiring Inspection Checklist DMX 14C

- Serial Number of cabinet _____
- CE Name _____
- Customer name CITIGROUP
- Site # 42023025
- How many PDUs are supplying power to this DMX cabinet? 2
- Are the customers' AC power connectors labeled? _____

ACTION: The customer electrician must verify the source of AC power for each AC power feed.

This photo shows a rear view of the DMX2000 or DMX3000 cabinet. Note the order of the power cables as they exit the cabinet when filling in the answer to the next question.



PDU AUX A	X	PDU MAIN B	X
--------------	---	---------------	---

PDU AUX B	Y	PDU MAIN A	Y
--------------	---	---------------	---

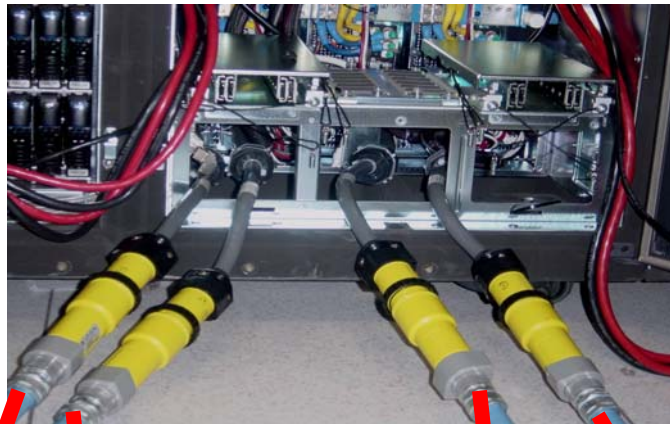
- Fill in the **green** blocks above (marked x and y to indicate the two PDUs) with the label information that indicates the actual PDU of AC power that's connected to each of the DMX cabinet AC plugs.
- **Manager Approval for Inspection** _____

Field Wiring Inspection Checklist DMX 15C

- Serial Number of cabinet _____
- CE Name _____
- Customer name CITIGROUP
- Site # 42023025
- How many PDUs are supplying power to this DMX cabinet? 2
- Are the customers' AC power connectors labeled? _____

ACTION: The customer electrician must verify the source of AC power for each AC power feed.

This photo shows a rear view of the DMX2000 or DMX3000 cabinet. Note the order of the power cables as they exit the cabinet when filling in the answer to the next question.



PDU AUX A	X	PDU MAIN B	X
--------------	---	---------------	---

PDU AUX B	Y	PDU MAIN A	Y
--------------	---	---------------	---

- Fill in the **green** blocks above (marked x and y to indicate the two PDUs) with the label information that indicates the actual PDU of AC power that's connected to each of the DMX cabinet AC plugs.
- **Manager Approval for Inspection** _____

Field Wiring Inspection Checklist DMX16C

- Serial Number of cabinet _____
- CE Name _____
- Customer name CITIGROUP
- Site # 42023025
- How many PDUs are supplying power to this DMX cabinet? 2
- Are the customers' AC power connectors labeled? _____

ACTION: The customer electrician must verify the source of AC power for each AC power feed.

This photo shows a rear view of the DMX2000 or DMX3000 cabinet. Note the order of the power cables as they exit the cabinet when filling in the answer to the next question.



PDU AUX A	X	PDU MAIN B	X
--------------	---	---------------	---

PDU AUX B	Y	PDU MAIN A	Y
--------------	---	---------------	---

- Fill in the **green** blocks above (marked x and y to indicate the two PDUs) with the label information that indicates the actual PDU of AC power that's connected to each of the DMX cabinet AC plugs.
- **Manager Approval for Inspection** _____

Appendix E: SE 5.3 to 5.5 Upgrade Instructions.

Weekend Date: 14/01/2006

Owner: Carl Williams

Back and Copy 5.3 Files

update symapi database

```
symcfg discover
```

backup /opt/emc/WideSky directory

```
tar cvf /var/tmp/WideSky.tar /opt/emc/WideSky
```

backup /usr/emc directory

```
tar cvf /var/tmp/usremc.tar /usr/emc
```

backup /opt/emc/SYMACL directory

```
tar cvf /var/tmp/SYMACL.tar /opt/emc/SYMACL
```

backup /etc/system file

```
cp -p /etc/system /etc/system.20060114
```

Copy license file

```
cp -p /var/symapi/config/symapi_licenses.dat /var/tmp
```

copy Symapi data base

```
cp -p /var/symapi/db/symapi_db.bin /var/tmp
```

uninstall solution enabler 5.3

you should be asked if you want to save old copies answer y

```
cd /net/lonsoe/export/opt/repository/Vendor/EMC/Solutions_Enabler/5.3
```

```
./emc_install.csh
```

```
Kit Location [/net/lonsoe/export/opt/repository/Vendor/EMC/Solutions_Enabler/5.3/osl_cd] :
```

```
What would you like to do? Install (i) Uninstall (u) Register (r) Exit (x): u
```

```
Enter item number (from installed) to uninstall: 01
```

Install solution enable 5.5

accept all default answers

```
cd /net/stealth.nj.ssmb.com/export1/home1.localhost/sw/PKG/emcsolena5.5.0_A2
```

```
pkgadd -d .
```

```
Installation type (default: native):
```

```
Enter installation directory (default: /export/opt/emc):
```

copy back the saved symapi_db.bin to /var/symapi/db/symapi_db.bin

```
cp -p /var/tmp/symapi_db.bin /var/symapi/db/
```

Copy back the saved license file

```
cp -p /var/tmp/symapi_licenses.dat /var/symapi/config/
```

Check system parameters as in the s.e 5.5 document section 10.1

If any of the values are lower than above they should be increased to the figures shown. Higher values

should be unchanged. The host should be rebooted after any changes to /etc/system file

#The following /etc/system parameters must be set:

```
set semsys:seminfo_semmni=600
```

```
set semsys:seminfo_semmns=600
```

```
set semsys:seminfo_semume=600
```

```
set semsys:seminfo_semmnu=600
```

```
set shmsys:shminfo_shmmax=1048576
```

```
set shmsys:shminfo_shmmni=600
```

The following file permissions should be checked and changed if they are not at the values indicated.

```
chmod 1755 /usr/emc/API/symapi
chmod 1755 /usr/emc/API/symapi/config
chmod 1755 /usr/emc/API/symapi/daemons
chmod 1755 /usr/emc/API/symapi/db
chmod 1755 /usr/emc/API/symapi/ldb
chmod 1755 /usr/emc/API/symapi/log
chmod 1755 /usr/emc/API/symapi/ldb/profiles
cd /usr/emc/API/symapi/config
chmod 755 README*
chmod 755 symapinlck
```

update symapi database

```
symcfg discover
```

Appendix F: crontab Changes to eusan-mgt1 and eusan-mgt3.

Weekend Date: 14/01/2006

Owner: Carl Williams

Eusan-mgt1

```
#ident      "@(#)root 1.19 98/07/06 SMI"  /* SVr4.0 1.1.3.1  */
#
# The root crontab should be used to perform accounting data collection.
#
# The rtc command is run to adjust the real time clock if and when
# daylight savings time changes.
#
10 3 * * 0,4 /etc/cron.d/logchecker
10 3 * * 0   /usr/lib/newsyslog
15 3 * * 0 /usr/lib/fs/nfs/nfsfind
1 2 * * * [ -x /usr/sbin/rtc ] && /usr/sbin/rtc -c > /dev/null 2>&1
30 3 * * * [ -x /usr/lib/gss/gsscred_clean ] && /usr/lib/gss/gsscred_clean
# SCpacct Entry - DO NOT REMOVE
18 13 * * * /opt/SCpacct/bin/preprocess # SCpacct Entry
# SCpacct Entry - DO NOT REMOVE
# solsec
45 03 1-7 * * ksh -c '[[ `date +%a` = 'Sun' ]] && /opt/solsec/bin/solsec_audit.pl -html >
/tmp/solsec.log 2>&1'
#
#
# SYM Monitoring
#
1 0 * * * /opt/PRsanmtr/bin/mon_backend > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_backend_prefetch > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_cache > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_cache_lru > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_frontend_cache > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_frontend_port > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_srdf > /dev/null 2>&1
# Audit
01 02 * * * /opt/PRsanmtr/bin/Capture_Audit.ksh > /dev/null 2>&1
#
```

```

#
1,21,41 * * * * /opt/PRsanmtr/bin/gather_stats_eqtgdb1lnp.ksh > /dev/null 2>&1
#
# inventory job
#
0 0 * * * /opt/PRsanmtr/bin/saninv > /dev/null 2>&1
0,30 * * * * /opt/PRclrctrl/bin/get_all_clariions.sh cx01c_spa > /dev/null 2>&1
55 23 * * * /opt/PRclrctrl/bin/roll_clariion_data.sh > /dev/null 2>&1
#
# delete old backups
#
55 01 * * * /bin/find /var/opt/san/Vcldb_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
57 01 * * * /bin/find /var/opt/san/Symacl_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
59 01 * * * /bin/find /var/opt/san/Info -mtime 6 -exec rm {} \; > /dev/null 2>&1
#
# Symmetrix configuration backups
#
00 02 * * * /opt/PRsymctrl/bin/vcldb_backup > /dev/null 2>&1
# comment
00 03 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
#
# export dgs to eusan-mgt3
#
# comment
0 01 * * * /opt/PRsymctrl/bin/export_dgs > /dev/null 2>&1
#
#### uncomment to import dgs from eusan-mgt3
#
#0 30 * * * /opt/PRsymctrl/bin/import_dgs_from_cob > /dev/null 2>&1
#
####
#
#
#0,15,30,45 * * * * /opt/PRpclient1.1/bin/pclient.sh > /dev/null 2>&1 #Added by PRplcient1.1 -cron

```

```

#
# check SRDF links
#
#0 7,18 * * * /opt/PRsanmtr/bin/SRDF_links_checker > /dev/null 2>&1
#
# list logins every morning
#
0 6 * * * /opt/PRsanmtr/bin/list-all-logins > /var/tmp/list-all-logins.out 2>&1
#
# FA checks
#
#0 6,9,12,15,18 * * * /opt/PRsanmtr/bin/dailychecks > /dev/null 2>&1
#
# SRDF Checks
#
#10 07 * * * /opt/PRsymctrl/bin/srdf-pair-status | /usr/ucb/mail -s "RDF Pair Status from eusan-mgt1"
san.support@imceu.eu.ssmb.com > /dev/null 2>&1
40 07 * * * /opt/PRsymctrl/bin/srdf-pair-status.slow | grep -v Synchronized | grep -v Split |
/usr/ucb/mail -s "Mixed,Suspended and Failed Over RDF groups on eusan-mgt1"
san.support@imceu.eu.ssmb.com > /dev/null 2>&1
#
3 2 * * * /opt/TIscan/bin/scan -t -0 -c /etc/opt/TIscan/system/sysscan.cfg > /dev/null 2>&1
8 2 * * 0 /opt/SCaudit/bin/scaudit > /dev/null 2>&1
# sarcheck reports, created and sent to sarcheckrep
39 03 * * * /usr/lib/sa/sarcheck_export >> /var/opt/sarcheck/reports/sarcheck.`date +%Y%m%d`.log 2>&1

```

EUSAN-MGT3

```
#ident      "@(#)root 1.19 98/07/06 SMI"  /* SVr4.0 1.1.3.1  */
#
# The root crontab should be used to perform accounting data collection.
#
# The rtc command is run to adjust the real time clock if and when
# daylight savings time changes.
#
10 3 * * 0,4 /etc/cron.d/logchecker
10 3 * * 0   /usr/lib/newsyslog
15 3 * * 0 /usr/lib/fs/nfs/nfsfind
1 2 * * * [ -x /usr/sbin/rtc ] && /usr/sbin/rtc -c > /dev/null 2>&1
30 3 * * * [ -x /usr/lib/gss/gsscred_clean ] && /usr/lib/gss/gsscred_clean
# SCpacct Entry - DO NOT REMOVE
8 3 * * * /opt/SCpacct/bin/preprocess # SCpacct Entry
# SCpacct Entry - DO NOT REMOVE
# solsec
45 03 1-7 * * ksh -c '[[ `date +%a` = 'Sun' ]] && /opt/solsec/bin/solsec_audit.pl -html >
/tmp/solsec.log 2>&1'
#
#
# SYM Monitoring
#
#
# inventory job
#
0 0 * * * /opt/PRsymctrl/bin/saninv > /dev/null 2>&1
#0,30 * * * * /opt/PRclarctrl/bin/get_all_clariions.sh cx01c_spa > /dev/null 2>&1
#55 23 * * * /opt/PRclarctrl/bin/roll_clariion_data.sh > /dev/null 2>&1
#
```

```

# delete old backups
#
55 01 * * * /bin/find /var/opt/san/Vcldb_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
55 01 * * * /bin/find /var/opt/san/Symacl_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
59 01 * * * /bin/find /var/opt/san/Info -mtime 6 -exec rm {} \; > /dev/null 2>&1
#
# Symmetrix configuration backups
#
30 02 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
#
# import dgs from eusan-mgt1
#
0 02 * * * /opt/PRsymctrl/bin/import_dgs > /dev/null 2>&1
#
##### uncomment export_dgs_from_cob and symacl_backup_from_cob if primary server eusan-mgt1 fails
#
#0 01 * * * /opt/PRsymctrl/bin/export_dgs_from_cob > /dev/null 2>&1
#0 30 * * * /opt/emc/SYMACL/bin/symacl_backup_from_cob >/dev/null 2>&1
#
#####
#
# 0,15,30,45 * * * * /opt/PRpclient1.1/bin/pclient.sh > /dev/null 2>&1 #Added by PRplclient1.1 -cron
#
# check SRDF links
#
#
# list logins every morning
#
#
# FA checks
#
#
# kill symevent processes
0 0 * * * ps -ef |grep symevent |grep -v grep|awk '{print $2}'|xargs -i kill {} > /dev/null 2>&1

```

```

#
# SRDF Checks
#
#10 07 * * * /opt/PRsymctrl/bin/srdf-pair-status | /usr/ucb/mail -s "RDF Pair Status from eusan-mgt3"
san.support@imceu.eu.ssmb.com >/dev/null 2>&1
#40 07 * * * /opt/PRsymctrl/bin/srdf-pair-status.slow | grep -v Synchronized | grep -v Split |
/usr/ucb/mail -s "Mixed,Suspended and Failed Over RDF groups on eusan-mgt3"
san.support@imceu.eu.ssmb.com >/dev/null 2>&1
#
16 2 * * * /opt/TIscan/bin/scan -t -0 -c /etc/opt/TIscan/system/sysscan.cfg > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr1.3/bin/mon_backend > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_backend_prefetch > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_cache > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_cache_lru > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_frontend_cache > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_frontend_port > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_srdf > /dev/null 2>&1 #Added by PRsanmtr1.3
0 0 * * * /opt/PRsanmtr1.3/bin/csv_saninv > /dev/null 2>&1 #Added by PRsanmtr1.3
0 6 * * * /opt/PRsanmtr1.3/bin/list-all-logins > /var/tmp/list-all-logins.out 2>&1 #Added by
PRsanmtr1.3
17 2 * * 0 /opt/SCaudit/bin/scaudit > /dev/null 2>&1
# sarcheck reports, created and sent to sarcheckrep
35 03 * * * /usr/lib/sa/sarcheck_export >> /var/opt/sarcheck/reports/sarcheck.`date +%Y%m%d`.log 2>&1

```

Appendix F: crontab Changes to eusan-mgt2 and eusan-mgt4.

Weekend Date: 14/01/2006

Owner: Carl Williams

Eusan-mgt2

```
#ident      "@(#)root 1.19 98/07/06 SMI"  /* SVr4.0 1.1.3.1  */
#
# The root crontab should be used to perform accounting data collection.
#
# The rtc command is run to adjust the real time clock if and when
# daylight savings time changes.
#
10 3 * * 0,4 /etc/cron.d/logchecker
10 3 * * 0   /usr/lib/newsyslog
15 3 * * 0 /usr/lib/fs/nfs/nfsfind
1 2 * * * [ -x /usr/sbin/rtc ] && /usr/sbin/rtc -c > /dev/null 2>&1
30 3 * * * [ -x /usr/lib/gss/gsscred_clean ] && /usr/lib/gss/gsscred_clean
# SCpacct Entry - DO NOT REMOVE
18 13 * * * /opt/SCpacct/bin/preprocess # SCpacct Entry
# SCpacct Entry - DO NOT REMOVE
# solsec
45 03 1-7 * * ksh -c '[[ `date +%a` = 'Sun' ]] && /opt/solsec/bin/solsec_audit.pl -html >
/tmp/solsec.log 2>&1'
#
#
# SYM Monitoring
#
1 0 * * * /opt/PRsanmtr/bin/mon_backend > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_backend_prefetch > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_cache > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_cache_lru > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_frontend_cache > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_frontend_port > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr/bin/mon_srdf > /dev/null 2>&1
# Audit
01 02 * * * /opt/PRsanmtr/bin/Capture_Audit.ksh > /dev/null 2>&1
#
```

```

#
1,21,41 * * * * /opt/PRsanmtr/bin/gather_stats_eqtgdb1lnp.ksh > /dev/null 2>&1
#
# inventory job
#
0 0 * * * /opt/PRsanmtr/bin/saninv > /dev/null 2>&1
0,30 * * * * /opt/PRclrctrl/bin/get_all_clariions.sh cx01c_spa > /dev/null 2>&1
55 23 * * * /opt/PRclrctrl/bin/roll_clariion_data.sh > /dev/null 2>&1
#
# delete old backups
#
55 01 * * * /bin/find /var/opt/san/Vcldb_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
57 01 * * * /bin/find /var/opt/san/Symacl_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
59 01 * * * /bin/find /var/opt/san/Info -mtime 6 -exec rm {} \; > /dev/null 2>&1
#
# Symmetrix configuration backups
#
00 02 * * * /opt/PRsymctrl/bin/vcldb_backup > /dev/null 2>&1
# comment
00 03 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
#
# export dgs to eusan-mgt4
#
# comment
0 01 * * * /opt/PRsymctrl/bin/export_dgs > /dev/null 2>&1
#
#### uncomment to import dgs from eusan-mgt4
#
#0 30 * * * /opt/PRsymctrl/bin/import_dgs_from_cob > /dev/null 2>&1
#
####
#
#
#0,15,30,45 * * * * /opt/PRpclient1.1/bin/pclient.sh > /dev/null 2>&1 #Added by PRplcient1.1 -cron

```

```

#
# check SRDF links
#
#0 7,18 * * * /opt/PRsanmtr/bin/SRDF_links_checker > /dev/null 2>&1
#
# list logins every morning
#
0 6 * * * /opt/PRsanmtr/bin/list-all-logins > /var/tmp/list-all-logins.out 2>&1
#
# FA checks
#
#0 6,9,12,15,18 * * * /opt/PRsanmtr/bin/dailychecks > /dev/null 2>&1
#
# SRDF Checks
#
#10 07 * * * /opt/PRsymctrl/bin/srdf-pair-status | /usr/ucb/mail -s "RDF Pair Status from eusan-mgt1"
san.support@imceu.eu.ssmb.com > /dev/null 2>&1
40 07 * * * /opt/PRsymctrl/bin/srdf-pair-status.slow | grep -v Synchronized | grep -v Split |
/usr/ucb/mail -s "Mixed,Suspended and Failed Over RDF groups on eusan-mgt1"
san.support@imceu.eu.ssmb.com > /dev/null 2>&1
#
3 2 * * * /opt/TIscan/bin/scan -t -0 -c /etc/opt/TIscan/system/sysscan.cfg > /dev/null 2>&1
8 2 * * 0 /opt/SCaudit/bin/scaudit > /dev/null 2>&1
# sarcheck reports, created and sent to sarcheckrep
39 03 * * * /usr/lib/sa/sarcheck_export >> /var/opt/sarcheck/reports/sarcheck.`date +%Y%m%d`.log 2>&1

```

EUSAN-MGT4

```
#ident      "@(#)root 1.19 98/07/06 SMI"  /* SVr4.0 1.1.3.1  */
#
# The root crontab should be used to perform accounting data collection.
#
# The rtc command is run to adjust the real time clock if and when
# daylight savings time changes.
#
10 3 * * 0,4 /etc/cron.d/logchecker
10 3 * * 0   /usr/lib/newsyslog
15 3 * * 0 /usr/lib/fs/nfs/nfsfind
1 2 * * * [ -x /usr/sbin/rtc ] && /usr/sbin/rtc -c > /dev/null 2>&1
30 3 * * * [ -x /usr/lib/gss/gsscred_clean ] && /usr/lib/gss/gsscred_clean
# SCpacct Entry - DO NOT REMOVE
8 3 * * * /opt/SCpacct/bin/preprocess # SCpacct Entry
# SCpacct Entry - DO NOT REMOVE
# solsec
45 03 1-7 * * ksh -c '[[ `date +%a` = 'Sun' ]] && /opt/solsec/bin/solsec_audit.pl -html >
/tmp/solsec.log 2>&1'
#
#
# SYM Monitoring
#
#
# inventory job
#
0 0 * * * /opt/PRsymctrl/bin/saninv > /dev/null 2>&1
#0,30 * * * * /opt/PRclarctrl/bin/get_all_clariions.sh cx01c_spa > /dev/null 2>&1
#55 23 * * * /opt/PRclarctrl/bin/roll_clariion_data.sh > /dev/null 2>&1
#
```

```

# delete old backups
#
55 01 * * * /bin/find /var/opt/san/Vcldb_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
55 01 * * * /bin/find /var/opt/san/Symacl_backups -mtime 6 -exec rm {} \; > /dev/null 2>&1
59 01 * * * /bin/find /var/opt/san/Info -mtime 6 -exec rm {} \; > /dev/null 2>&1
#
# Symmetrix configuration backups
#
30 02 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
#
# import dgs from eusan-mgt2
#
0 02 * * * /opt/PRsymctrl/bin/import_dgs > /dev/null 2>&1
#
##### uncomment export_dgs_from_cob and symacl_backup_from_cob if primary server eusan-mgt1 fails
#
#0 01 * * * /opt/PRsymctrl/bin/export_dgs_from_cob > /dev/null 2>&1
#0 30 * * * /opt/emc/SYMACL/bin/symacl_backup_from_cob >/dev/null 2>&1
#
#####
#
# 0,15,30,45 * * * * /opt/PRpclient1.1/bin/pclient.sh > /dev/null 2>&1 #Added by PRplclient1.1 -cron
#
# check SRDF links
#
#
# list logins every morning
#
#
# FA checks
#
#
# kill symevent processes
0 0 * * * ps -ef |grep symevent |grep -v grep|awk '{print $2}'|xargs -i kill {} > /dev/null 2>&1

```

```

#
# SRDF Checks
#
#10 07 * * * /opt/PRsymctrl/bin/srdf-pair-status | /usr/ucb/mail -s "RDF Pair Status from eusan-mgt3"
san.support@imceu.eu.ssmb.com >/dev/null 2>&1
#40 07 * * * /opt/PRsymctrl/bin/srdf-pair-status.slow | grep -v Synchronized | grep -v Split |
/usr/ucb/mail -s "Mixed,Suspended and Failed Over RDF groups on eusan-mgt4"
san.support@imceu.eu.ssmb.com >/dev/null 2>&1
#
16 2 * * * /opt/TIscan/bin/scan -t -0 -c /etc/opt/TIscan/system/sysscan.cfg > /dev/null 2>&1
1 0 * * * /opt/PRsanmtr1.3/bin/mon_backend > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_backend_prefetch > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_cache > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_cache_lru > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_frontend_cache > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_frontend_port > /dev/null 2>&1 #Added by PRsanmtr1.3
1 0 * * * /opt/PRsanmtr1.3/bin/mon_srdf > /dev/null 2>&1 #Added by PRsanmtr1.3
0 0 * * * /opt/PRsanmtr1.3/bin/csv_saninv > /dev/null 2>&1 #Added by PRsanmtr1.3
0 6 * * * /opt/PRsanmtr1.3/bin/list-all-logins > /var/tmp/list-all-logins.out 2>&1 #Added by
PRsanmtr1.3
17 2 * * 0 /opt/SCaudit/bin/scaudit > /dev/null 2>&1
# sarcheck reports, created and sent to sarcheckrep
35 03 * * * /usr/lib/sa/sarcheck_export >> /var/opt/sarcheck/reports/sarcheck.`date +%Y%m%d`.log 2>&1

```

Appendix G: Solution Enabler Rollback

Weekend Date: 14/01/2006

Owner: Carl Williams

Remove S.E 5.5

pkgrm <packagename>

install S.E 5.3

cd /net/lonsoe/export/opt/repository/Vendor/EMC/Solutions_Enabler/5.3

./emc_install.csh

Kit Location [/net/lonsoe/export/opt/repository/Vendor/EMC/Solutions_Enabler/5.3/osl_cd] :

What would you like to do? Install (i) Uninstall (u) Register (r) Exit (x): i

Enter item number (from installed) to install: 01

copy /etc/system the backed up system file

cp -p /etc/system.20060114 /etc/system

Copy backed up license file

cp -p /var/tmp/symapi_licenses.dat /var/symapi/config/symapi_licenses.dat

copy backed up Symapi data base

cp -p /var/tmp/symapi_db.bin /var/symapi/db/symapi_db.bin

Check system parameters below

If any of the values are lower than above they should be increased to the figures shown. Higher values

should be unchanged. The host should be rebooted after any changes to /etc/system file

#The following /etc/system parameters must be set:

```
set semsys:seminfo_semmni=600
set semsys:seminfo_semmns=600
set semsys:seminfo_semume=600
set semsys:seminfo_semmnu=600
set shmsys:shminfo_shmmax=1048576
set shmsys:shminfo_shmmni=600
```

The following file permissions should be checked and changed if they are not at the values indicated.

```
chmod 1755 /usr/emc/API/symapi
chmod 1755 /usr/emc/API/symapi/config
chmod 1755 /usr/emc/API/symapi/daemons
chmod 1755 /usr/emc/API/symapi/db
chmod 1755 /usr/emc/API/symapi/ldb
chmod 1755 /usr/emc/API/symapi/log
chmod 1755 /usr/emc/API/symapi/ldb/profiles
cd /usr/emc/API/symapi/config
chmod 755 README*
chmod 755 symapinlck
```

reboot

update symapi database

symcfg discover

Check with SAN BAU that system is working.

Appendix H: SAN Management Servers Contingency Documentation

Weekend Date: 14/01/2006

Owner: Carl Williams

Appendix I: Intentionally Not Used

SAN Management Servers Contingency Documentation

Classification: **Internal**
Issuer: Vipul Davda
Department: Engineering
Authors: Vipul Davda

Introduction

The two SAN management servers are configured to run Live-Live. The build and setup of the servers are detailed in the SAN Management Server Build document.

There are two management servers in both CGC and RDC data centre, they are:

CGC: eusan-mgt1 (Primary) and eusan-mgt3 (Secondary)
RDC: eusan-mgt2 (Primary) and eusan-mgt4 (Secondary)

Each server consist of the following hardware:

2 x UltraSPARC IIIi 1GHz & 1.2GHz processors
2 x 73GB internal Hard drives
8GB of memory
4 x built-in gigabit ethernet ports (10/100/1000)
Dual redundant power supplies with separate power cords

System Recovery

In the event that a primary server fails, the following procedure is needed to recover a server:

- o . Replace hardware as necessary
- o . Boot the system over the network (from lonsoe)
- o . Restore the root file system from backup
- o . Reintroduce the syncing of files

Failure of System Disks

In the event of a system disk failure, an error would be sent to the monitoring system. The server will continue to operate as normal, as the system disk is mirrored.

Primary SAN Management Server Failure

In a situation where a Primary SAN Management server is unavailable, the following procedures should be used to cutover processes from Primary to Secondary Management Servers:

Table 2

Task No	Description	Responsibility	Details
1	Shutdown eusan-mgt1 or eusan-mgt2 , if up.	ISA	Init 0
2	Comment the following CRON entries on eusan-mgt3 or eusan-mgt4	ISA	<u>Import Disk Groups</u> # # import dgs from eusan-mgt1/2 # #0 01 * * * /opt/PRsymctrl/bin/import_dgs > /dev/null 2>&1
3	Once the server Primary server eusan-mgt1 or eusan-mgt2 is up, comment the following CRON entries.	ISA	<u>Export Disk Groups</u> # # export dgs to eusan-mgt3/4 # #0 01 * * * /opt/PRsymctrl/bin/export_dgs > /dev/null 2>&1 Export SYMACL WORK, ACTIVE, ACTBCK # # symacl backups – rsync to eusan-mgt3/4 # #00 03 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
4	Inform SAN Support	ISA	Inform SAN support.
5	Check the Secondary server, eusan-mgt3 or eusan-mgt4	SAN Support	Check the secondary server is operational ok

CUT-BACK PROCEDURES FOR SAN MANAGEMENT SERVER:

The following procedures should be used to roll back services on the management server.

This will normally be an out of hours task.

Table 3

Task No	Description	Responsibility	Details
1	Bring up eusan-mgt1 or eusan-mgt2 , if not up	ISA	Boot the server
2	SAN Support to inform ISA when to roll back	SAN Support	Inform ISA to sync up disk groups and symacIs
3	Synchronize data	ISA	<u>Export Disk Groups to COB</u> Run following: <code>/opt/PRsymctrl/bin/export_dgs_from_cob</code> Export SYMACL WORK, ACTIVE, ACTBCK to COB <code>/opt/emc/SYMACL/bin/symacl_backup_from_cob</code>
4	Uncomment the following CRON entries on eusan-mgt3 or eusan-mgt4	ISA	<u>Import Disk Groups</u> # # import dgs from eusan-mgt1/2 # 0 01 * * * /opt/PRsymctrl/bin/import_dgs > /dev/null 2>&1
5	Uncomment the following CRON entries on eusan-mgt1 or eusan-mgt2	ISA	<u>Export Disk Groups</u> # # export dgs to eusan-mgt3/4 # 0 01 * * * /opt/PRsymctrl/bin/export_dgs > /dev/null 2>&1 Export SYMACL WORK, ACTIVE, ACTBCK # # symacl backups – rsync to eusan-mgt3/4 # 00 03 * * * /opt/emc/SYMACL/bin/symacl_backup > /dev/null 2>&1
6	Inform SAN Support	ISA	Inform SAN Support
7	Check the Primary server, eusan-mgt1 or eusan-mgt2	ISA	Check the primary server is operational ok

Appendix J: Patching Table for DMX10C

Weekend Date: 14/01/2006

Owner: Carl Williams

DMX10C - BH100 (LC)	DASD (SCDC)		Frame(SCDC)		SWITCH_PORT	Fabric	End to End		Blocked/ Unblocked
DMX10C_7Ba	- BT96-DASD-10		BH100-DASD-10	-	SW17C_34		DMX10C_7Ba	- SW17C_34	B
DMX10C_7Ca	- BT96-DASD-11		BH100-DASD-11	-	SW17C_30		DMX10C_7Ca	- SW17C_30	B
DMX10C_8Aa	- BT96-DASD-13		BH100-DASD-13	-	SW17C_22		DMX10C_8Aa	- SW17C_22	B
DMX10C_8Ba	- BT96-DASD-14		BH100-DASD-14	-	SW17C_18		DMX10C_8Ba	- SW17C_18	B
DMX10C_8Ca	- BT96-DASD-15		BH100-DASD-15	-	SW17C_14		DMX10C_8Ca	- SW17C_14	B
DMX10C_9Aa	- BT04-DASD-01		BH100-DASD-01	-	SW18C_14		DMX10C_9Aa	- SW18C_14	B
DMX10C_9Ba	- BT04-DASD-02		BH100-DASD-02	-	SW18C_18		DMX10C_9Ba	- SW18C_18	B
DMX10C_9Ca	- BT04-DASD-03		BH100-DASD-03	-	SW18C_22		DMX10C_9Ca	- SW18C_22	B
DMX10C_10Aa	- BT04-DASD-05		BH100-DASD-05	-	SW18C_30		DMX10C_10Aa	- SW18C_30	B
DMX10C_10Ca	- BT04-DASD-07		BH100-DASD-07	-	SW18C_34		DMX10C_10Ca	- SW18C_34	B

Appendix K: Patching Table for DMX14C

Weekend Date: 14/01/2006

Owner: Carl Williams

Switch_Port	-	Frame/DASD	DMX Cable	-	DMX-Fa	Fabric	End to End		Blocked/ Unblocked
SW17C_61	BT96 - BD96	DASD-01	Cable 1-1	AU14 - BD96	DMX14C_3aA		SW17C_61	DMX14C_3aA	B
SW17C_65	BT96 - BD96	DASD-02	Cable 1-2	AU14 - BD96	DMX14C_3bA		SW17C_65	DMX14C_3bA	B
SW17C_69	BT96 - BD96	DASD-03	Cable 1-3	AU14 - BD96	DMX14C_3cA		SW17C_69	DMX14C_3cA	B
SW17C_73	BT96 - BD96	DASD-04	Cable 1-4	AU14 - BD96	DMX14C_3dA		SW17C_73	DMX14C_3dA	B
SW17C_77	BT96 - BD96	DASD-05	Cable 1-5	AU14 - BD96	DMX14C_4aA		SW17C_77	DMX14C_4aA	B
SW17C_81	BT96 - BD96	DASD-06	Cable 1-6	AU14 - BD96	DMX14C_4bA		SW17C_81	DMX14C_4bA	B
SW17C_85	BT96 - BD96	DASD-07	Cable 1-7	AU14 - BD96	DMX14C_4cA		SW17C_85	DMX14C_4cA	B
SW17C_89	BT96 - BD96	DASD-08	Cable 1-8	AU14 - BD96	DMX14C_4dA		SW17C_89	DMX14C_4dA	B
SW17C_93	BT96 - BD96	DASD-09	Cable 1-9	AU14 - BD96	DMX14C_7aA		SW17C_93	DMX14C_7aA	B
SW17C_97	BT96 - BD96	DASD-10	Cable 1-10	AU14 - BD96	DMX14C_7bA		SW17C_97	DMX14C_7bA	B
SW17C_101	BT96 - BD96	DASD-11	Cable 1-11	AU14 - BD96	DMX14C_7cA		SW17C_101	DMX14C_7cA	B
SW93C_23	BT96 - BD96	DASD-12	Cable 1-12	AU14 - BD96	DMX14C_7dA		SW93C_23	DMX14C_7dA	B
SW17C_105	BT96 - BD96	DASD-13	Cable 2-1	AU14 - BD96	DMX14C_8aA		SW17C_105	DMX14C_8aA	B
	BT96 - BD96	DASD-14	Cable 2-2	AU14 - BD96	DMX14C_8bA			DMX14C_8bA	
	BT96 - BD96	DASD-15	Cable 2-3	AU14 - BD96	DMX14C_8cA			DMX14C_8cA	
SW93C_18	BT96 - BD96	DASD-16	Cable 2-4	AU14 - BD96	DMX14C_8dA		SW93C_18	DMX14C_8dA	B
	-								
	BT08 - BD96	DASD-16	Cable 2-4	AU31 - BD96	DMX14C_9aA			DMX14C_9aA	
SW18C_105	BT08 - BD96	DASD-15	Cable 2-3	AU31 - BD96	DMX14C_9bA		SW18C_105	DMX14C_9bA	B
	BT08 - BD96	DASD-14	Cable 2-2	AU31 - BD96	DMX14C_9cA			DMX14C_9cA	
SW94C_18	BT08 - BD96	DASD-13	Cable 2-1	AU31 - BD96	DMX14C_9dA		SW94C_18	DMX14C_9dA	B
SW18C_101	BT08 - BD96	DASD-12	Cable 1-12	AU31 - BD96	DMX14C_10aA		SW18C_101	DMX14C_10aA	B
SW18C_97	BT08 - BD96	DASD-11	Cable 1-11	AU31 - BD96	DMX14C_10bA		SW18C_97	DMX14C_10bA	B
SW18C_93	BT08 - BD96	DASD-10	Cable 1-10	AU31 - BD96	DMX14C_10cA		SW18C_93	DMX14C_10cA	B
SW94C_23	BT08 - BD96	DASD-09	Cable 1-9	AU31 - BD96	DMX14C_10dA		SW94C_23	DMX14C_10dA	B
SW18C_89	BT08 - BD96	DASD-08	Cable 1-8	AU31 - BD96	DMX14C_13aA		SW18C_89	DMX14C_13aA	B
SW18C_85	BT08 - BD96	DASD-07	Cable 1-7	AU31 - BD96	DMX14C_13bA		SW18C_85	DMX14C_13bA	B
SW18C_81	BT08 - BD96	DASD-06	Cable 1-6	AU31 - BD96	DMX14C_13cA		SW18C_81	DMX14C_13cA	B
SW18C_77	BT08 - BD96	DASD-05	Cable 1-5	AU31 - BD96	DMX14C_13dA		SW18C_77	DMX14C_13dA	B
SW18C_73	BT08 - BD96	DASD-04	Cable 1-4	AU31 - BD96	DMX14C_14aA		SW18C_73	DMX14C_14aA	B

SW18C_69	BT08 - BD96	DASD-03		Cable 1-3	AU31 - BD96	DMX14C_14bA		SW18C_69	DMX14C_14bA	B
SW18C_65	BT08 - BD96	DASD-02		Cable 1-2	AU31 - BD96	DMX14C_14cA		SW18C_65	DMX14C_14cA	B
SW18C_61	BT08 - BD96	DASD-01		Cable 1-1	AU31 - BD96	DMX14C_14dA		SW18C_61	DMX14C_14dA	B

Appendix L: Patching Table for DMX15C

Weekend Date: 14/01/2006

Owner: Carl Williams

Switch_Port	-	Frame/DASD		DMX Cable	-	DMX-Fa	Fabric	End to End		Blocked/ Unblocked
SW17C_62	BT96 - AS07	DASD-01		Cable 1-1	AU14 - AS07	DMX15C_3aA		SW17C_62	DMX15C_3aA	B
SW17C_66	BT96 - AS07	DASD-02		Cable 1-2	AU14 - AS07	DMX15C_3bA		SW17C_66	DMX15C_3bA	B
SW17C_70	BT96 - AS07	DASD-03		Cable 1-3	AU14 - AS07	DMX15C_3cA		SW17C_70	DMX15C_3cA	B
SW17C_74	BT96 - AS07	DASD-04		Cable 1-4	AU14 - AS07	DMX15C_3dA		SW17C_74	DMX15C_3dA	B
SW17C_78	BT96 - AS07	DASD-05		Cable 1-5	AU14 - AS07	DMX15C_4aA		SW17C_78	DMX15C_4aA	B
SW17C_82	BT96 - AS07	DASD-06		Cable 1-6	AU14 - AS07	DMX15C_4bA		SW17C_82	DMX15C_4bA	B
SW17C_86	BT96 - AS07	DASD-07		Cable 1-7	AU14 - AS07	DMX15C_4cA		SW17C_86	DMX15C_4cA	B
SW17C_90	BT96 - AS07	DASD-08		Cable 1-8	AU14 - AS07	DMX15C_4dA		SW17C_90	DMX15C_4dA	B
SW17C_94	BT96 - AS07	DASD-09		Cable 1-9	AU14 - AS07	DMX15C_7aA		SW17C_94	DMX15C_7aA	B
SW17C_98	BT96 - AS07	DASD-10		Cable 1-10	AU14 - AS07	DMX15C_7bA		SW17C_98	DMX15C_7bA	B
SW17C_102	BT96 - AS07	DASD-11		Cable 1-11	AU14 - AS07	DMX15C_7cA		SW17C_102	DMX15C_7cA	B
SW93C_15	BT96 - AS07	DASD-12		Cable 1-12	AU14 - AS07	DMX15C_7dA		SW93C_15	DMX15C_7dA	B
SW17C_106	BT96 - AS07	DASD-13		Cable 2-1	AU14 - AS07	DMX15C_8aA		SW17C_106	DMX15C_8aA	B
	BT96 - AS07	DASD-14		Cable 2-2	AU14 - AS07	DMX15C_8bA			DMX15C_8bA	
	BT96 - AS07	DASD-15		Cable 2-3	AU14 - AS07	DMX15C_8cA			DMX15C_8cA	
SW93C_22	BT96 - AS07	DASD-16		Cable 2-4	AU14 - AS07	DMX15C_8dA		SW93C_22	DMX15C_8dA	B
	-									
	BT08 - AS07	DASD-16		Cable 2-4	AU31 - AS07	DMX15C_9aA			DMX15C_9aA	
SW18C_106	BT08 - AS07	DASD-15		Cable 2-3	AU31 - AS07	DMX15C_9bA		SW18C_106	DMX15C_9bA	B
	BT08 - AS07	DASD-14		Cable 2-2	AU31 - AS07	DMX15C_9cA			DMX15C_9cA	
SW94C_22	BT08 - AS07	DASD-13		Cable 2-1	AU31 - AS07	DMX15C_9dA		SW94C_22	DMX15C_9dA	B
SW18C_102	BT08 - AS07	DASD-12		Cable 1-12	AU31 - AS07	DMX15C_10aA		SW18C_102	DMX15C_10aA	B
SW18C_98	BT08 - AS07	DASD-11		Cable 1-11	AU31 - AS07	DMX15C_10bA		SW18C_98	DMX15C_10bA	B
SW18C_94	BT08 - AS07	DASD-10		Cable 1-10	AU31 - AS07	DMX15C_10cA		SW18C_94	DMX15C_10cA	B
SW94C_15	BT08 - AS07	DASD-09		Cable 1-9	AU31 - AS07	DMX15C_10dA		SW94C_15	DMX15C_10dA	B
SW18C_90	BT08 - AS07	DASD-08		Cable 1-8	AU31 - AS07	DMX15C_13aA		SW18C_90	DMX15C_13aA	B
SW18C_86	BT08 - AS07	DASD-07		Cable 1-7	AU31 - AS07	DMX15C_13bA		SW18C_86	DMX15C_13bA	B
SW18C_82	BT08 - AS07	DASD-06		Cable 1-6	AU31 - AS07	DMX15C_13cA		SW18C_82	DMX15C_13cA	B
SW18C_78	BT08 - AS07	DASD-05		Cable 1-5	AU31 - AS07	DMX15C_13dA		SW18C_78	DMX15C_13dA	B
SW18C_74	BT08 - AS07	DASD-04		Cable 1-4	AU31 - AS07	DMX15C_14aA		SW18C_74	DMX15C_14aA	B
SW18C_70	BT08 - AS07	DASD-03		Cable 1-3	AU31 - AS07	DMX15C_14bA		SW18C_70	DMX15C_14bA	B

SW18C_66	BT08 - AS07	DASD-02		Cable 1-2	AU31 - AS07	DMX15C_14cA		SW18C_66	-	DMX15C_14cA	B
SW18C_62	BT08 - AS07	DASD-01		Cable 1-1	AU31 - AS07	DMX15C_14dA		SW18C_62	-	DMX15C_14dA	B

Appendix M: Patching Table for DMX16C

Weekend Date: 14/01/2006

Owner: Carl Williams

Switch_Port	-	Frame/DASD		DMX Cable	-	DMX-Fa	Fabric	End to End		Blocked/ Unblocked
SW17C_63	BT96 - BA96	DASD-01		Cable 1-1	AU14 - BA96	DMX16C_3aA		SW17C_63	- DMX16C_3aA	B
SW17C_67	BT96 - BA96	DASD-02		Cable 1-2	AU14 - BA96	DMX16C_3bA		SW17C_67	- DMX16C_3bA	B
SW17C_71	BT96 - BA96	DASD-03		Cable 1-3	AU14 - BA96	DMX16C_3cA		SW17C_71	- DMX16C_3cA	B
SW17C_75	BT96 - BA96	DASD-04		Cable 1-4	AU14 - BA96	DMX16C_3dA		SW17C_75	- DMX16C_3dA	B
SW17C_79	BT96 - BA96	DASD-05		Cable 1-5	AU14 - BA96	DMX16C_4aA		SW17C_79	- DMX16C_4aA	B
SW17C_83	BT96 - BA96	DASD-06		Cable 1-6	AU14 - BA96	DMX16C_4bA		SW17C_83	- DMX16C_4bA	B
SW17C_87	BT96 - BA96	DASD-07		Cable 1-7	AU14 - BA96	DMX16C_4cA		SW17C_87	- DMX16C_4cA	B
SW17C_91	BT96 - BA96	DASD-08		Cable 1-8	AU14 - BA96	DMX16C_4dA		SW17C_91	- DMX16C_4dA	B
SW17C_95	BT96 - BA96	DASD-09		Cable 1-9	AU14 - BA96	DMX16C_7aA		SW17C_95	- DMX16C_7aA	B
SW17C_99	BT96 - BA96	DASD-10		Cable 1-10	AU14 - BA96	DMX16C_7bA		SW17C_99	- DMX16C_7bA	B
SW17C_103	BT96 - BA96	DASD-11		Cable 1-11	AU14 - BA96	DMX16C_7cA		SW17C_103	- DMX16C_7cA	B
SW93C_11	BT96 - BA96	DASD-12		Cable 1-12	AU14 - BA96	DMX16C_7dA		SW93C_11	- DMX16C_7dA	B
SW17C_107	BT96 - BA96	DASD-13		Cable 2-1	AU14 - BA96	DMX16C_8aA		SW17C_107	- DMX16C_8aA	B
	BT96 - BA96	DASD-14		Cable 2-2	AU14 - BA96	DMX16C_8bA			- DMX16C_8bA	
	BT96 - BA96	DASD-15		Cable 2-3	AU14 - BA96	DMX16C_8cA			- DMX16C_8cA	
SW93C_26	BT96 - BA96	DASD-16		Cable 2-4	AU14 - BA96	DMX16C_8dA		SW93C_26	- DMX16C_8dA	B
					-					
	BT08 - BA96	DASD-16		Cable 2-4	AU31 - BA96	DMX16C_9aA			- DMX16C_9aA	
SW18C_107	BT08 - BA96	DASD-15		Cable 2-3	AU31 - BA96	DMX16C_9bA		SW18C_107	- DMX16C_9bA	B
	BT08 - BA96	DASD-14		Cable 2-2	AU31 - BA96	DMX16C_9cA			- DMX16C_9cA	
SW94C_26	BT08 - BA96	DASD-13		Cable 2-1	AU31 - BA96	DMX16C_9dA		SW94C_26	- DMX16C_9dA	B
SW18C_103	BT08 - BA96	DASD-12		Cable 1-12	AU31 - BA96	DMX16C_10aA		SW18C_103	- DMX16C_10aA	B
SW18C_99	BT08 - BA96	DASD-11		Cable 1-11	AU31 - BA96	DMX16C_10bA		SW18C_99	- DMX16C_10bA	B
SW18C_95	BT08 - BA96	DASD-10		Cable 1-10	AU31 - BA96	DMX16C_10cA		SW18C_95	- DMX16C_10cA	B
SW94C_11	BT08 - BA96	DASD-09		Cable 1-9	AU31 - BA96	DMX16C_10dA		SW94C_11	- DMX16C_10dA	B
SW18C_91	BT08 - BA96	DASD-08		Cable 1-8	AU31 - BA96	DMX16C_13aA		SW18C_91	- DMX16C_13aA	B
SW18C_87	BT08 - BA96	DASD-07		Cable 1-7	AU31 - BA96	DMX16C_13bA		SW18C_87	- DMX16C_13bA	B
SW18C_83	BT08 - BA96	DASD-06		Cable 1-6	AU31 - BA96	DMX16C_13cA		SW18C_83	- DMX16C_13cA	B
SW18C_79	BT08 - BA96	DASD-05		Cable 1-5	AU31 - BA96	DMX16C_13dA		SW18C_79	- DMX16C_13dA	B
SW18C_75	BT08 - BA96	DASD-04		Cable 1-4	AU31 - BA96	DMX16C_14aA		SW18C_75	- DMX16C_14aA	B

SW18C_71	BT08 - BA96	DASD-03		Cable 1-3	AU31 - BA96	DMX16C_14bA		SW18C_71	DMX16C_14bA	B
SW18C_67	BT08 - BA96	DASD-02		Cable 1-2	AU31 - BA96	DMX16C_14cA		SW18C_67	DMX16C_14cA	B
SW18C_63	BT08 - BA96	DASD-01		Cable 1-1	AU31 - BA96	DMX16C_14dA		SW18C_63	DMX16C_14dA	B

Appendix N: Patching Table for DMX10R

Weekend Date: 14/01/2006

Owner: Carl Williams

SWITCH/PORT	TO	DASD		DASD	TO	DEVICE/PORT	FABRIC	End to End			Blocked/ Unblocked
DMX10R_8Ca	-	AU15-DASD-03		C42-DASD-03	-	SW15R_3		DMX10R_8Ca	-	SW15R_3	B
DMX10R_9Ca	-	AU30-DASD-03		C42-DASD-03	-	SW16R_3		DMX10R_9Ca	-	SW16R_3	B

Appendix O: Intentionally Not Used

Appendix P: Patching Table for DMX15R

Weekend Date: 14/01/2006

Owner: Carl Williams

Switch_Port	-	Frame/DASD		DMX Cable	-	DMX-Fa	Fabric	End to End		Blocked/ Unblocked
SW15R_11	AU14 - M05	DASD-01		Cable 1-1	AU14 - M05	DMX15R_3aA		SW15R_11	- DMX15R_3aA	B
SW15R_60	AU14 - M05	DASD-02		Cable 1-2	AU14 - M05	DMX15R_3bA		SW15R_60	- DMX15R_3bA	B
SW15R_66	AU14 - M05	DASD-03		Cable 1-3	AU14 - M05	DMX15R_3cA		SW15R_66	- DMX15R_3cA	B
SW15R_94	AU14 - M05	DASD-04		Cable 1-4	AU14 - M05	DMX15R_3dA		SW15R_94	- DMX15R_3dA	B
SW15R_106	AU14 - M05	DASD-05		Cable 1-5	AU14 - M05	DMX15R_4aA		SW15R_106	- DMX15R_4aA	B
SW15R_114	AU14 - M05	DASD-06		Cable 1-6	AU14 - M05	DMX15R_4bA		SW15R_114	- DMX15R_4bA	B
SW15R_118	AU14 - M05	DASD-07		Cable 1-7	AU14 - M05	DMX15R_4cA		SW15R_118	- DMX15R_4cA	B
SW15R_122	AU14 - M05	DASD-08		Cable 1-8	AU14 - M05	DMX15R_4dA		SW15R_122	- DMX15R_4dA	B
SW15R_126	AU14 - M05	DASD-09		Cable 1-9	AU14 - M05	DMX15R_7aA		SW15R_126	- DMX15R_7aA	B
SW15R_134	AU14 - M05	DASD-10		Cable 1-10	AU14 - M05	DMX15R_7bA		SW15R_134	- DMX15R_7bA	B
SW15R_138	AU14 - M05	DASD-11		Cable 1-11	AU14 - M05	DMX15R_7cA		SW15R_138	- DMX15R_7cA	B
SW93R_10	AU14 - M05	DASD-12		Cable 1-12	AU14 - M05	DMX15R_7dA		SW93R_10	- DMX15R_7dA	B
SW15R_142	AU14 - M05	DASD-13		Cable 2-1	AU14 - M05	DMX15R_8aA		SW15R_142	- DMX15R_8aA	B
	AU14 - M05	DASD-14		Cable 2-2	AU14 - M05	DMX15R_8bA			- DMX15R_8bA	
	AU14 - M05	DASD-15		Cable 2-3	AU14 - M05	DMX15R_8cA			- DMX15R_8cA	
SW93R_14	AU14 - M05	DASD-16		Cable 2-4	AU14 - M05	DMX15R_8dA		SW93R_14	- DMX15R_8dA	B
	-				-					
	AU31 - M05	DASD-16		Cable 2-4	AU31 - M05	DMX15R_9aA			- DMX15R_9aA	
SW16R_142	AU31 - M05	DASD-15		Cable 2-3	AU31 - M05	DMX15R_9bA		SW16R_142	- DMX15R_9bA	B
	AU31 - M05	DASD-14		Cable 2-2	AU31 - M05	DMX15R_9cA			- DMX15R_9cA	
SW94R_14	AU31 - M05	DASD-13		Cable 2-1	AU31 - M05	DMX15R_9dA		SW94R_14	- DMX15R_9dA	B
SW16R_138	AU31 - M05	DASD-12		Cable 1-12	AU31 - M05	DMX15R_10aA		SW16R_138	- DMX15R_10aA	B
SW16R_134	AU31 - M05	DASD-11		Cable 1-11	AU31 - M05	DMX15R_10bA		SW16R_134	- DMX15R_10bA	B
SW16R_126	AU31 - M05	DASD-10		Cable 1-10	AU31 - M05	DMX15R_10cA		SW16R_126	- DMX15R_10cA	UB
SW94R_10	AU31 - M05	DASD-09		Cable 1-9	AU31 - M05	DMX15R_10dA		SW94R_10	- DMX15R_10dA	B
SW16R_122	AU31 - M05	DASD-08		Cable 1-8	AU31 - M05	DMX15R_13aA		SW16R_122	- DMX15R_13aA	UB
SW16R_118	AU31 - M05	DASD-07		Cable 1-7	AU31 - M05	DMX15R_13bA		SW16R_118	- DMX15R_13bA	UB
SW16R_114	AU31 - M05	DASD-06		Cable 1-6	AU31 - M05	DMX15R_13cA		SW16R_114	- DMX15R_13cA	UB
SW16R_106	AU31 - M05	DASD-05		Cable 1-5	AU31 - M05	DMX15R_13dA		SW16R_106	- DMX15R_13dA	B

SW16R_94	AU31 - M05	DASD-04		Cable 1-4	AU31 - M05	DMX15R_14aA		SW16R_94	-	DMX15R_14aA	B
SW16R_66	AU31 - M05	DASD-03		Cable 1-3	AU31 - M05	DMX15R_14bA		SW16R_66	-	DMX15R_14bA	B
SW16R_60	AU31 - M05	DASD-02		Cable 1-2	AU31 - M05	DMX15R_14cA		SW16R_60	-	DMX15R_14cA	B
SW16R_11	AU31 - M05	DASD-01		Cable 1-1	AU31 - M05	DMX15R_14dA		SW16R_11	-	DMX15R_14dA	B

Appendix Q: Patching Table for DMX16R

Weekend Date: 14/01/2006

Owner: Carl Williams

Switch_Port	-	Frame/DASD		DMX Cable	-	DMX-Fa	Fabric	End to End		Blocked/ Unblocked
SW15R_91	AU14 - M42	DASD-01		Cable 1-1	AU14 - M42	DMX16R_3aA		SW15R_91	- DMX16R_3aA	B
SW15R_95	AU14 - M42	DASD-02		Cable 1-2	AU14 - M42	DMX16R_3bA		SW15R_95	- DMX16R_3bA	B
SW15R_103	AU14 - M42	DASD-03		Cable 1-3	AU14 - M42	DMX16R_3cA		SW15R_103	- DMX16R_3cA	B
SW15R_107	AU14 - M42	DASD-04		Cable 1-4	AU14 - M42	DMX16R_3dA		SW15R_107	- DMX16R_3dA	B
SW15R_111	AU14 - M42	DASD-05		Cable 1-5	AU14 - M42	DMX16R_4aA		SW15R_111	- DMX16R_4aA	B
SW15R_115	AU14 - M42	DASD-06		Cable 1-6	AU14 - M42	DMX16R_4bA		SW15R_115	- DMX16R_4bA	B
SW15R_119	AU14 - M42	DASD-07		Cable 1-7	AU14 - M42	DMX16R_4cA		SW15R_119	- DMX16R_4cA	B
SW15R_123	AU14 - M42	DASD-08		Cable 1-8	AU14 - M42	DMX16R_4dA		SW15R_123	- DMX16R_4dA	B
SW15R_127	AU14 - M42	DASD-09		Cable 1-9	AU14 - M42	DMX16R_7aA		SW15R_127	- DMX16R_7aA	B
SW15R_135	AU14 - M42	DASD-10		Cable 1-10	AU14 - M42	DMX16R_7bA		SW15R_135	- DMX16R_7bA	B
SW15R_139	AU14 - M42	DASD-11		Cable 1-11	AU14 - M42	DMX16R_7cA		SW15R_139	- DMX16R_7cA	B
SW93R_11	AU14 - M42	DASD-12		Cable 1-12	AU14 - M42	DMX16R_7dA		SW93R_11	- DMX16R_7dA	B
SW15R_143	AU14 - M42	DASD-13		Cable 2-1	AU14 - M42	DMX16R_8aA		SW15R_143	- DMX16R_8aA	B
	AU14 - M42	DASD-14		Cable 2-2	AU14 - M42	DMX16R_8bA			- DMX16R_8bA	
	AU14 - M42	DASD-15		Cable 2-3	AU14 - M42	DMX16R_8cA			- DMX16R_8cA	
SW93R_15	AU14 - M42	DASD-16		Cable 2-4	AU14 - M42	DMX16R_8dA		SW93R_15	- DMX16R_8dA	B
	-				-					
	AU31 - M42	DASD-16		Cable 2-4	AU31 - M42	DMX16R_9aA			- DMX16R_9aA	
SW16R_143	AU31 - M42	DASD-15		Cable 2-3	AU31 - M42	DMX16R_9bA		SW16R_143	- DMX16R_9bA	B
	AU31 - M42	DASD-14		Cable 2-2	AU31 - M42	DMX16R_9cA			- DMX16R_9cA	
SW94R_15	AU31 - M42	DASD-13		Cable 2-1	AU31 - M42	DMX16R_9dA		SW94R_15	- DMX16R_9dA	B
SW16R_139	AU31 - M42	DASD-12		Cable 1-12	AU31 - M42	DMX16R_10aA		SW16R_139	- DMX16R_10aA	B
SW16R_135	AU31 - M42	DASD-11		Cable 1-11	AU31 - M42	DMX16R_10bA		SW16R_135	- DMX16R_10bA	B
SW16R_127	AU31 - M42	DASD-10		Cable 1-10	AU31 - M42	DMX16R_10cA		SW16R_127	- DMX16R_10cA	B
SW94R_11	AU31 - M42	DASD-09		Cable 1-9	AU31 - M42	DMX16R_10dA		SW94R_11	- DMX16R_10dA	B
SW16R_123	AU31 - M42	DASD-08		Cable 1-8	AU31 - M42	DMX16R_13aA		SW16R_123	- DMX16R_13aA	UB
SW16R_119	AU31 - M42	DASD-07		Cable 1-7	AU31 - M42	DMX16R_13bA		SW16R_119	- DMX16R_13bA	UB
SW16R_115	AU31 - M42	DASD-06		Cable 1-6	AU31 - M42	DMX16R_13cA		SW16R_115	- DMX16R_13cA	UB
SW16R_111	AU31 - M42	DASD-05		Cable 1-5	AU31 - M42	DMX16R_13dA		SW16R_111	- DMX16R_13dA	UB
SW16R_107	AU31 - M42	DASD-04		Cable 1-4	AU31 - M42	DMX16R_14aA		SW16R_107	- DMX16R_14aA	B

SW16R_103	AU31 - M42	DASD-03		Cable 1-3	AU31 - M42	DMX16R_14bA		SW16R_103	-	DMX16R_14bA	B
SW94R_95	AU31 - M42	DASD-02		Cable 1-2	AU31 - M42	DMX16R_14cA		SW94R_95	-	DMX16R_14cA	B
SW94R_91	AU31 - M42	DASD-01		Cable 1-1	AU31 - M42	DMX16R_14dA		SW94R_91	-	DMX16R_14dA	B