

# France Unity / Oberon Project

Setup of 4 Unity arrays for France Customer's Metrosync Dev Environment

Setup of arrays that were procured for the project

Solo design to implementation to delivery

Design of rack and row layout

Physical rack and stack and cabling

Design of Infrastructure cabinet cabling and ip scheme

Back end reconfigurations and front end reconfigurations

**From:** excellence@emc.com <excellence@emc.com>  
**Sent:** Tuesday, April 4, 2017 7:42 AM  
**To:** Tran, Ngoc  
**Subject:** Congratulations, you've received an Excellence@Dell Award!

Hi Ngoc K Tran,

Congratulations !

I am pleased to notify you that you have been approved for an Excellence@Dell Bronze level award! Thank you for your continued contributions, which drive our culture of innovation, passion, and success.

Simply click the link below to view your award certificate.

<http://excellenceatemc.emc.com/mr/nominations/96461251/present>

For more information about Excellence@Dell, [click here](#).

**From:** [REDACTED]  
**Sent:** Thursday, March 30, 2017 8:13 AM  
**To:** Tran, Ngoc  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.29.17

Nice work and communication Kim.  
jc

**From:** Tran, Ngoc  
**Sent:** Wednesday, March 29, 2017 11:30 PM  
**To:** [REDACTED]

**Cc:**

**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.29.17

Folks,

\*Ready to handover\*

The 4 arrays are cabled, have been pxe/reinit with the merlin code (4.2.xxx)

Basic configuration have been performed and verified

Please reference RITM0227272 for more details on work/tasks done.

Array sp's management/unisphere and ssh connectivity have been verified

To my knowledge and understanding of original request:

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deployed as FC connected pairs for synchronous replication (mirror view).

This means we must have pairs of arrays directly connected through the  
SRM FC port (SPA of array1 to SPA of array2 and SPB or array1 connected to SPB of array2)

We need IP's and cabling to access subnets 10.109.165 and 10.109.173

We need to have FTP/http/cifs ports open for each ip

We need to have ssh port open for the system management

==

So connections were for sp's management (cooper).

Two 16gb fc connections per sp per array.

FC connection for array pairs (spa/spb) for 2 pairs of ob-d1404/ob-d1405 and ob-d1406/ob-d1407.

Connectivity to the 10.109.165 and 10.109.173 has been tested with ob-d1404:

PING 10.109.165.1 (10.109.165.1) from 10.109.17.35 : 56(84) bytes of data.

64 bytes from 10.109.165.1: icmp\_seq=1 ttl=255 time=1.44 ms

64 bytes from 10.109.165.1: icmp\_seq=2 ttl=255 time=1.25 ms

64 bytes from 10.109.165.1: icmp\_seq=3 ttl=255 time=1.44 ms

-- 10.109.165.1 ping statistics --

3 packets transmitted, 3 received, 0% packet loss, time 2002ms  
rtt min/avg/max/mdev = 1.254/1.381/1.447/0.099 ms

```
02:55:56 root@OB-D1404-spb spb:~> ping 10.109.173.1
PING 10.109.173.1 (10.109.173.1) from 10.109.17.35 : 56(84) bytes of data.
64 bytes from 10.109.173.1: icmp_seq=1 ttl=255 time=0.842 ms
64 bytes from 10.109.173.1: icmp_seq=2 ttl=255 time=1.07 ms
```

-- 10.109.173.1 ping statistics --

2 packets transmitted, 2 received, 0% packet loss, time 999ms

rtt min/avg/max/mdev = 0.842/0.957/1.073/0.119 ms

```
02:56:04 root@OB-D1404-spb spb:~>
```

Pings to the requested networks' gateway confirmed.

Presumptions would be similar results for the other arrays as they were configured the same, excluding any specific cases with network/vlan/configuration issues, for other protocols, please verify and open ticket as necessary to correct or as required with any additional cables or ip's requested.

Thanks,

Kim Tran

Lab Systems Engineer

Infrastructure Solutions Group

**Dell EMC | EOS<sup>2</sup> Cloud Operations**

(919) 767-0885

[ngoc.tran@dell.com](mailto:ngoc.tran@dell.com)

From [REDACTED]

Sent: Wednesday, March 29, 2017 8:24 PM

To: [REDACTED] Tran, Ngoc <[Ngoc.Tran@emc.com](mailto:Ngoc.Tran@emc.com)> [REDACTED]

Subject: RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.28.17

Hello,

Please note the 4 arrays are still being set up, target EOD 3.30.17 to complete. Once Tran has all arrays in-service you can open request for additional IPs and or I can work with networking to obtain the required IPs. From what I recall these will be used to test Harrier?

Cheers,  
Joey

**From:** [REDACTED]  
**Sent:** Wednesday, March 29, 2017 3:39 AM  
**To:** Tran, Ngoc <[Ngoc.Tran@emc.com](mailto:Ngoc.Tran@emc.com)>  
[REDACTED]  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.28.17

Thank You for the update! Please let us know when it's all set!

I still have a question. When I swarm ob-d1404 I do not see any IO IPs assigned to the array, is it something that we've forgot to ask or is it still on-going?

If I remember correctly I think we've asked for connection to the 10.109.72.x subnet but did we ask for IO IP addresses? Anyway, we will need 8 IO IPs for each array (that means 4\*8 IPs in total)

Thanks!

--  
Michel.

**From:** Tran, Ngoc  
**Sent:** mercredi 29 mars 2017 03:05  
[REDACTED]  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.28.17

Folks,

The first pair of arrays, ob-d1404 and ob-d1405 are currently being pxe reinit now, along with verification.  
The second pair of arrays ob-d1406 and ob-d1407 are scheduled for bmc/network connectivity and pxe reinit/verification for tomorrow.  
Estimate turnover for all arrays is for Thursday, without further delays or complications expected.

Thanks,

Kim Tran  
Lab Systems Engineer  
Infrastructure Solutions Group  
**Dell EMC** | EOS<sup>2</sup> Cloud Operations  
(919) 767-0885  
[ngoc.tran@dell.com](mailto:ngoc.tran@dell.com)

**From:** Tran, Ngoc  
**Sent:** Monday, March 27, 2017 5:00 PM  
**To:** [REDACTED]  
<sy> [REDACTED]  
**Cc:** [REDACTED]  
<Ch> [REDACTED]  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.27.17

Folks,

-Cable matrix done  
-Cable run done {2 fc connections / sp, in addition to fc connection for replication: ob-d1404/ob-d1405 and ob-d1406 /ob-d1407 pairs)  
-zoning, may be required – PLEASE CONFIRM IF THIS IS THE CASE  
-ip's for interfaces have been configured

Please see attached matrix for details

-Currently working through issues with networking team, on resolving the bmc/mgmt interfaces and attaining the dhcp reserved ip's  
-this is holding up the rest of the process of initializing arrays with latest array code and verification

Kim Tran  
Lab Systems Engineer  
Infrastructure Solutions Group  
**Dell EMC | EOS<sup>2</sup> Cloud Operations**  
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[ngoc.tran@dell.com](mailto:ngoc.tran@dell.com)

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Go:** [REDACTED]  
**Cc:** [REDACTED]  
[<Ngoc.Tran@emc.com>](mailto:<Ngoc.Tran@emc.com>)  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.24.17

Tran, Ngoc

Thank you to keep us updated.

Regards  
Fred

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED] Tran, Ngoc  
**Subject:** RE: Hardware in Durham ( 4 Oberon's ) - Status update 3.24.17

All,  
Please see below for an update on your hardware setup.

IP's have been requested, Swarm names assigned and the cable matrix is complete. Cabling will commence today and conclude Monday, followed by final configurations. Target Readiness will be EOD 3.28.17 EST.  
Arrays Names will be.

OB-D1404  
OB-D1405  
OB-D1406  
OB-D1407

RITM0227272

Cheers,  
Joey [REDACTED]

**From:**

**Sent:**

**To:** R

**Cc:** C

Frederic <[f](#)>; Tran, Ngoc <[Ngoc.Tran@emc.com](mailto:Ngoc.Tran@emc.com)>

**Subject:** RE: Hardware in Durham ( 4 Oberon's )

All,

Please see below for a status update on the 4 Oberon's listed.

As of 3.21.17 the arrays have been racked and powered and we have fulfilled the infrastructure needs. Work has started on the cable Matrix and general setup. As requested we

Will provide 2 16GB FC connections per SP ( 4 per array ) and will load all arrays with latest Merlin code and assign all arrays to the 10.109.xx.xx subnet.

One RITM will be created for all associated task and the target for readiness is Friday 3.24.17 PM EST.

**REQ0192398**

Install - physical setup of EMC Unity 300 - APM00170709445  
Install - physical setup of EMC Unity 300 - APM00170706848  
Install - physical setup of EMC Unity 300 - APM00170706850  
Install - physical setup of EMC Unity 300 - APM00170709441

Cheers,

Joey

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
Fred [REDACTED]  
**Subject:** RE: Hardware in Durham

+FredC

Joe plans to provide an update soon.

-Sylvia

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
<[fran](#)>  
**Subject:** RE: Hardware in Durham

Hi Joseph

Having discussed with Alain, here are our needs (added to Michel mail)

We need IP's and cabling to access subnets 10.109.165 and 10.109.173

We need to have FTP/http/cifs ports open for each ip  
We need to have ssh port open for the system management

Thanks for your help

Regards

Fred

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** C [REDACTED]  
**Cc:** C [REDACTED]  
**Subject:** RE: Hardware in Durham

Hi Joseph,

As far as I know, there's no requirement for specific zoning on these arrays.

On my side the only requirement I have is to that they must be deployed as FC connected pairs for synchronous replication (mirror view). This means we must have pairs of arrays directly connected through the SRM FC port (SPA of array1 to SPA of array2 and SPB or array1 connected to SPB of array2)

Ideally we would have the following pairs set for synchronous replication: bc-h1404 with bc-h1405 and bc-h1564 with bc-h1254.

For Ethernet connectivity, Alain may confirm but I believe it would be good to have the arrays file Ethernet ports connected to the 10.109.165.x network (please alain correct me if I'm wrong)

Thanks for your support!

--  
Michel.

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** L [REDACTED]  
**Cc:** C [REDACTED]  
**Subject:** RE: Hardware in Durham

All  
Any input on the query below?

Cheers,  
Joey

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
<[sy](#)>  
**Subject:** RE: Hardware in Durham

Hi Joseph

+Alain Ledouaron that drives the Dur LAB1 test setups for protocol area,  
+ Michel Gosse that works closely on sync replication  
+ Sylvia, because this is Sylvia ☺

Alain, Michel, , we have these two pairs of hdw to conduct metrosync test and dev, we need to be able to execute regression test ops 'as usual'  
Alain, please indicate the connectivity requirements to address functional testing , Michel, please follow the replication aspects.

Thanks All

Regards

Fred

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** FW: Hardware in Durham

Fred,

Need your help sir. As noted below the 4 Oberon's listed are for your use as part of "US protocol lab (Durham lab 1)" and should beaded to SWARM in the CPO Office Restricted and CI-Client Interoperability Pools? As of today I have found a location in the Oberon area (Durham Lab 1) to locate the 4 arrays, however we need to gather what your setup requirements are for these units. i.e. code, connectivity, any zoning etc... Any help much appreciated.

**REQ0192398**

Install - physical setup of EMC Unity 300 - APM00170709445  
Install - physical setup of EMC Unity 300 - APM00170706848  
Install - physical setup of EMC Unity 300 - APM00170706850  
Install - physical setup of EMC Unity 300 - APM00170709441

Cheers,  
Joey Chippewa

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
<[fr](#)>  
**Subject:** RE: Hardware in Durham

Hi Joey,

These systems should be installed in Fred [REDACTED] lab. This should be US protocol lab (Durham lab 1).

They do need to be deployed as FC connected pairs for Sync (Mirrorview) replication testing).

Currently Lab 2 in Hopkinton should have SC-H1404 and BC-H1405 in this configuration. LAB 1 in Hopkinton has BC-H1564 and BC-H1254. I can follow up with DM team if more info is needed. Also John [REDACTED] team in Hopkinton is setting up sync replication pairs as well so they should have info to shared.

The systems in SWARM should be in CPO Office Restricted and CI-Client Interoperability Pools.

Thanks,  
--Julie

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** Name [REDACTED]  
**Cc:** Work [REDACTED]  
**Subject:** Hardware in Durham

Hello,

We have received the following hardware in Durham and I was informed that you might be able to provide the requirements. Any help much appreciated.

**REQ0192398**

Work in Progress	Joseph [REDACTED]	Install - physical setup of EMC Unity 300 - APM00170709445
Work in Progress	Joseph [REDACTED]	Install - physical setup of EMC Unity 300 - APM00170706848
Work in Progress	Joseph [REDACTED]	Install - physical setup of EMC Unity 300 - APM00170706850
Work in Progress	Joseph [REDACTED]	Install - physical setup of EMC Unity 300 - APM00170709441

Cheers,  
Joey

**Joey**  
Sr. Project Manager  
**Dell EMC**  
(919)742-XXXX  
[Joseph](#)

