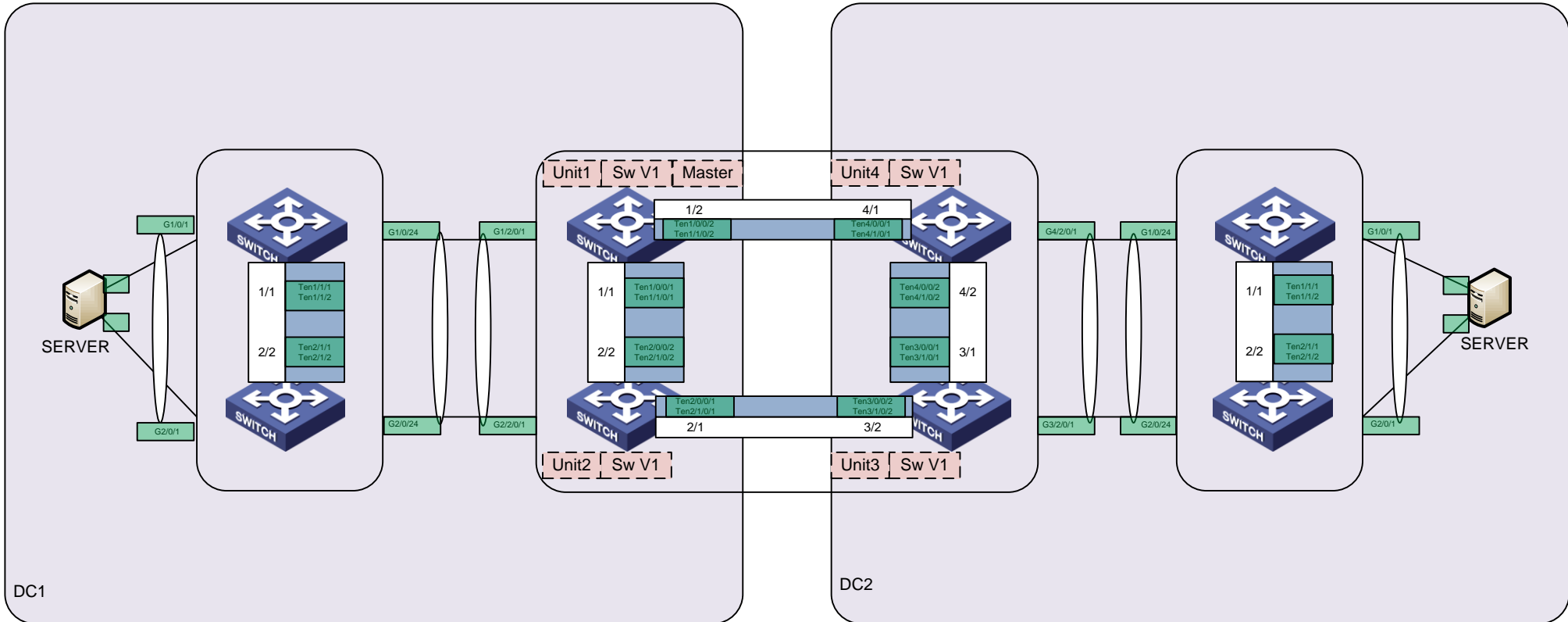


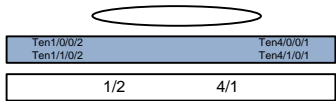
Phase 1.0 :  
Initial State, All units on V1, Unit1 Master, All links active

- Actions**
- \* tftp/copy v2.bin to local flash of all management boards
  - \* display irf
    - verify IRF unit priorities (U1:32,U2:31,U3:30,U4:29)
  - \* display mad verbose
    - verify MAD BFD is properly configured. MAD links not shown on topology diagram.



**Legend**

**Legend Link State**



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs

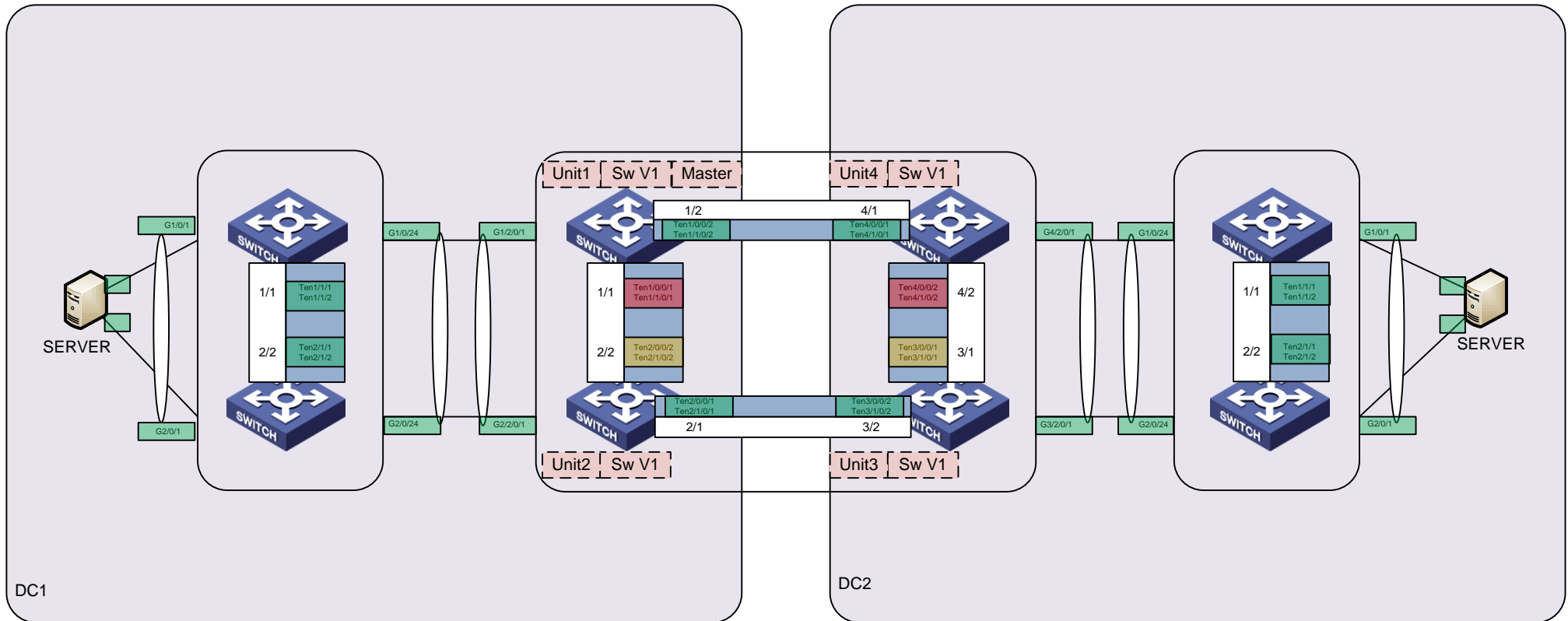
- DOWN – MAD Shut
- DOWN - Admin Shut
- DOWN – Link Down
- UP

Title: HP Network 4 Node IRF Core – Manual ISSU Procedure for incompatible updates

Revised by:	Version: 1.2	Revision date: 30/09/2012	Status: under Review
Created by: Peter Debruyne	Page:	Creation date: 17/09/2012	Customer:

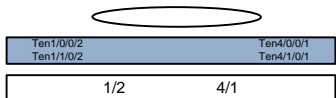
Phase 2.1 :  
 Shut 10G irf-ports on unit1+unit4  
 Isolate unit2+unit3

Actions  
 \* int range IRF-downlink int ten1/0/0/1 ten1/1/0/1 ten4/0/0/2 ten 4/1/0/2  
 shut



Legend

Legend Link State



Bridge-Aggregation (linkagg)  
 Physical Ports in IRF Port  
 IRF link IDs

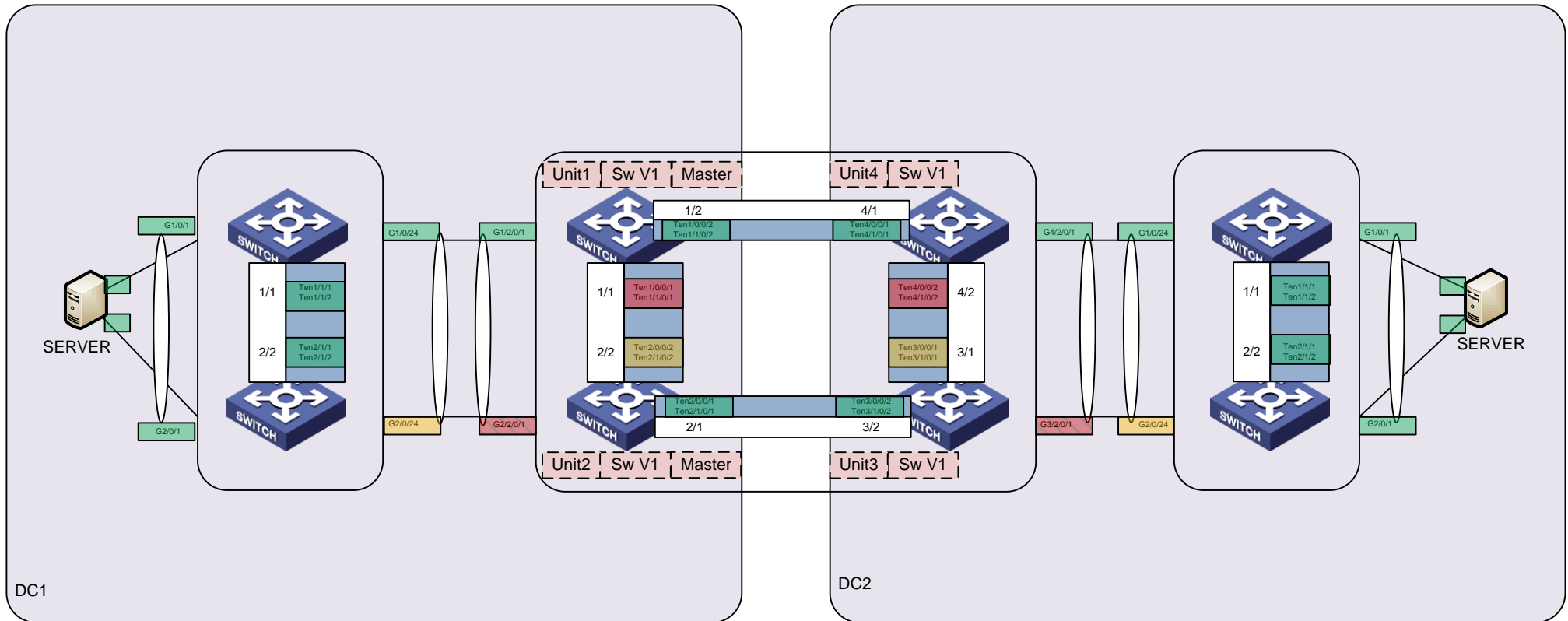


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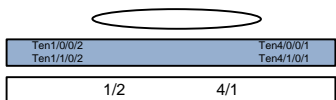
Phase 2.2 :  
Verify MAD shuts down unit2+unit3 external ports

Actions

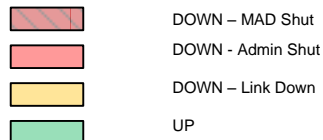


Legend

Legend Link State



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs



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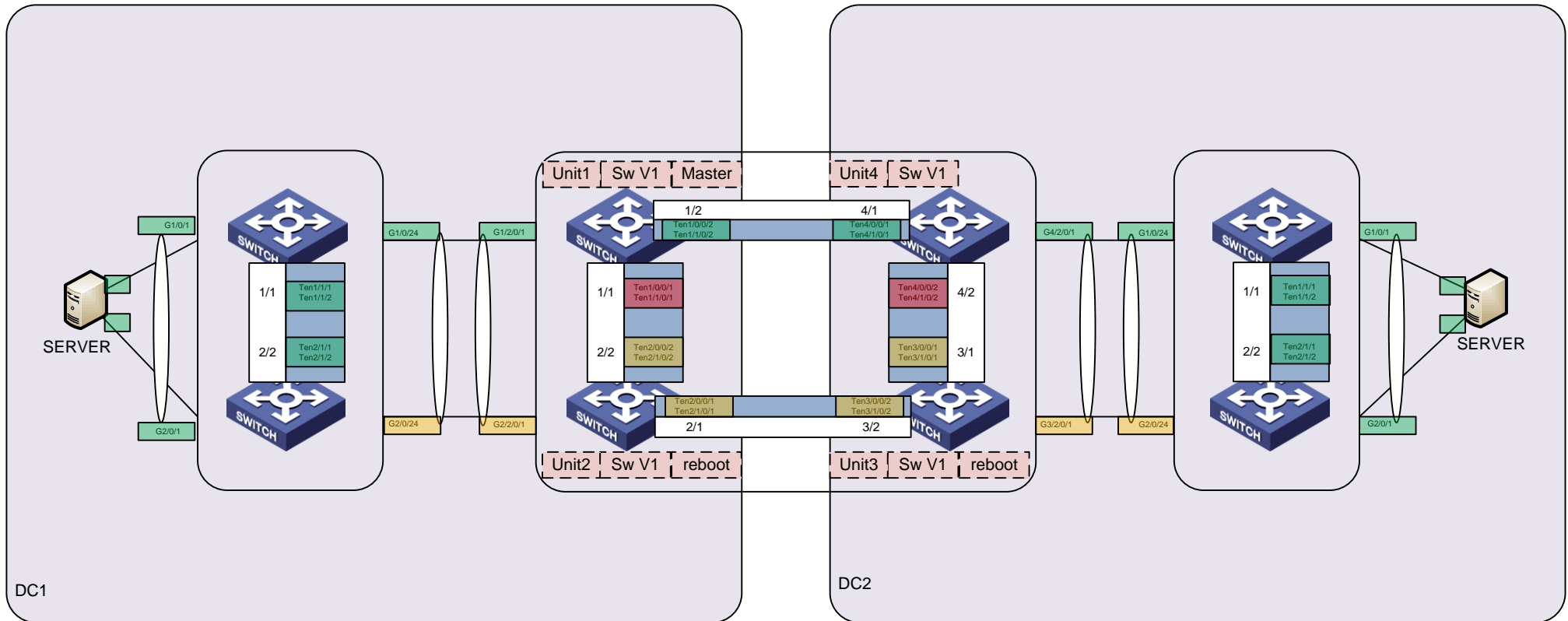
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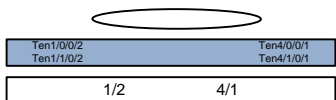
Phase 2.3 :  
Reboot unit2+unit3 into new software version

- Actions**
- \* boot-loader chassis 2 v2.bin
  - \* boot-loader chassis 3 v2.bin
  - \* reboot chassis 2
  - \* reboot chassis 3



**Legend**

**Legend Link State**



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs

- DOWN - MAD Shut
- DOWN - Admin Shut
- DOWN - Link Down
- UP

Title: HP Network 4 Node IRF Core – Manual ISSU Procedure for incompatible updates

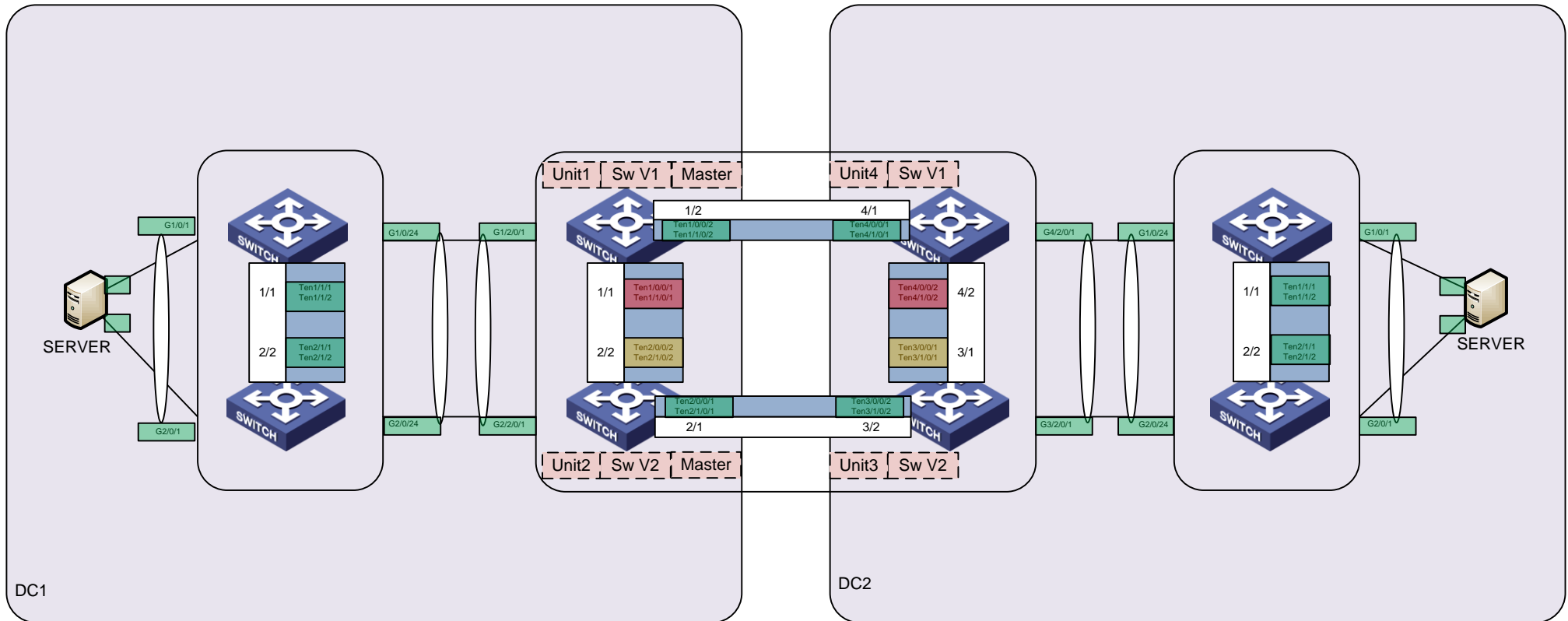
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**Phase 2.4 :**

Unit2 comes online, Unit3 starts joining Unit2  
 Unit2+Unit3 shortly comes online on external net

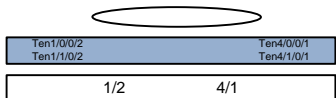
**Actions**

- \* "short" means subsecond, just time needed for MAD BFD to work
- \* with default BFD configuration : 800ms

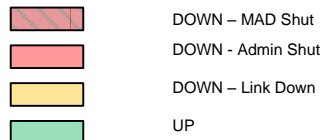


**Legend**

**Legend Link State**



Bridge-Aggregation (linkagg)  
 Physical Ports in IRF Port  
 IRF link IDs

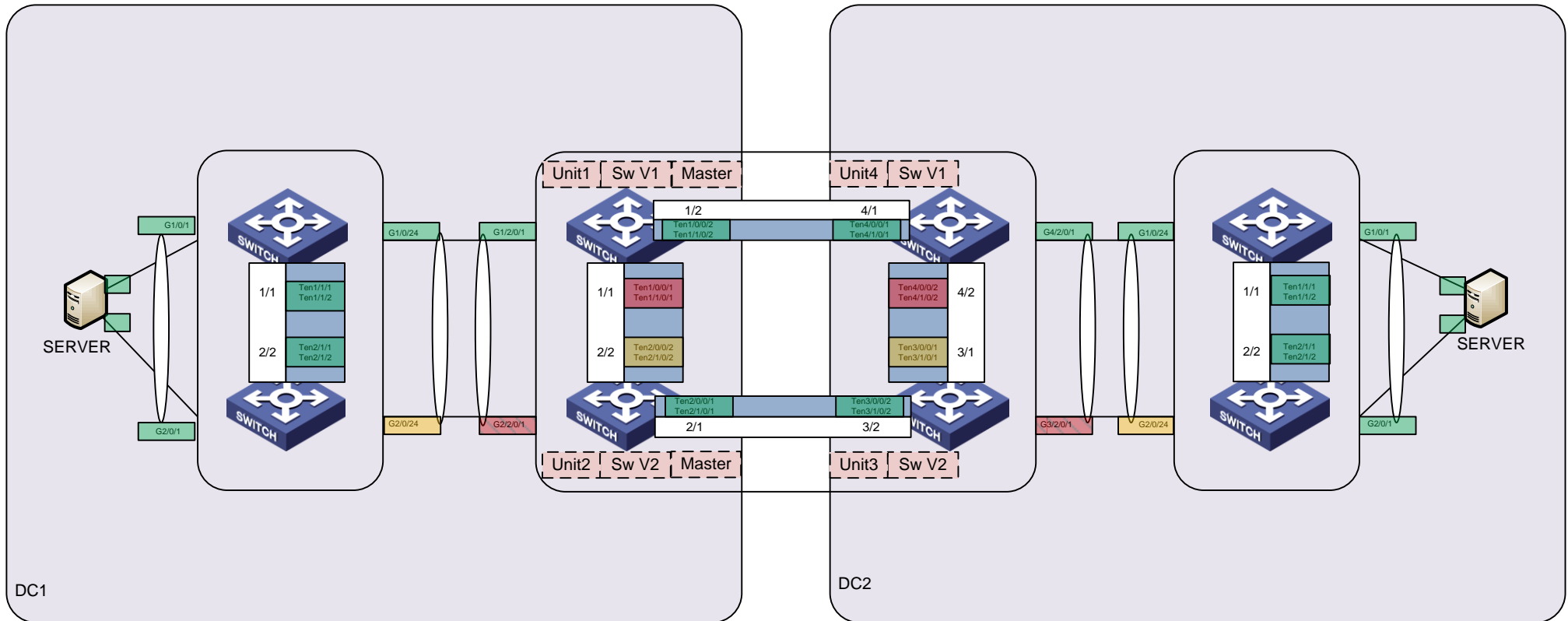


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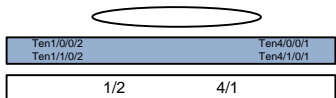
Phase 2.5 :  
Unit2 and Unit3 external ports are shut by MAD

Actions  
\* no actions, BFD mad operates in about 800ms



Legend

Legend Link State



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs

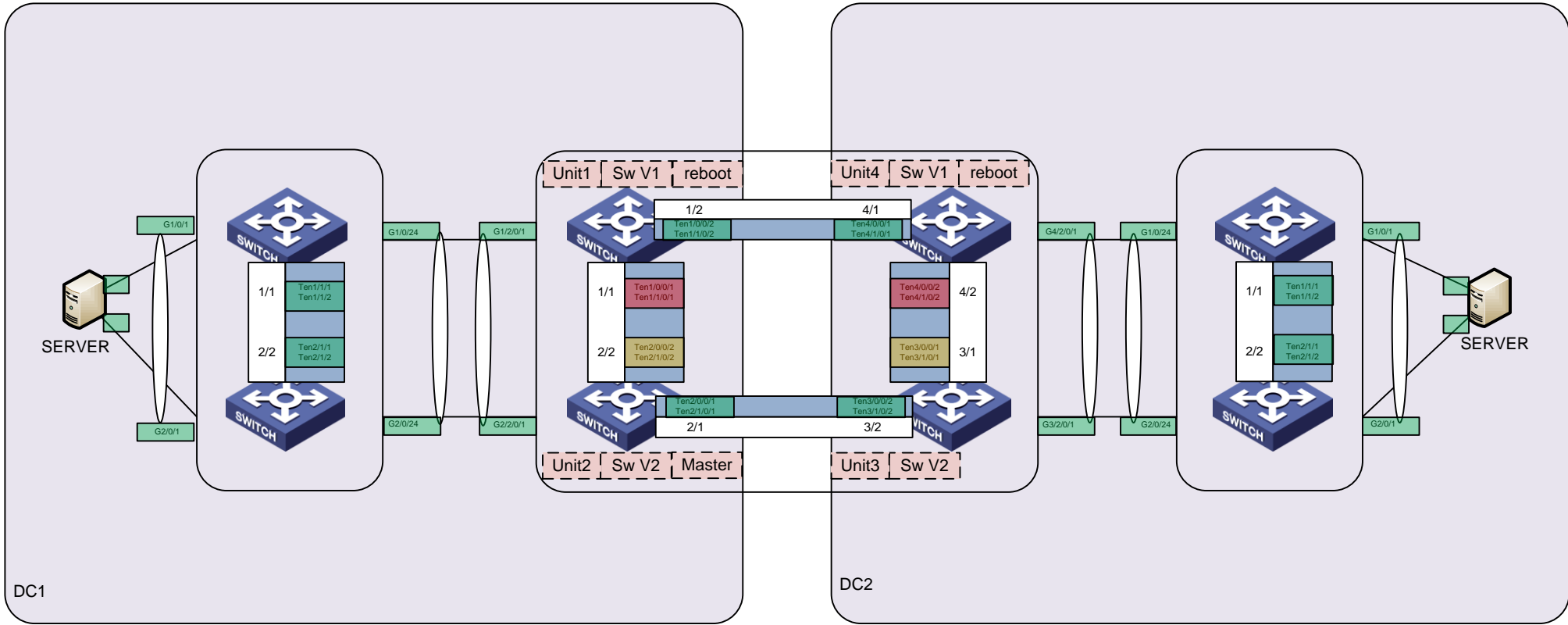


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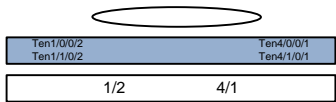
**Phase 3.1**  
**Switchover phase – concurrent actions on active/standby**

- Actions**
- \* unit1 : shutdown bfd vlan, to avoid false MAD due to timing
  - \* synchronized action:
    - unit1 : reboot
    - unit2 : mad restore
  - \* brief overlap of 2 core devices : switchover should stay within 5 seconds

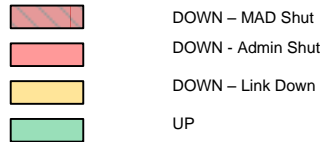


**Legend**

**Legend Link State**



Bridge-Aggregation (linkagg)  
 Physical Ports in IRF Port  
 IRF link IDs



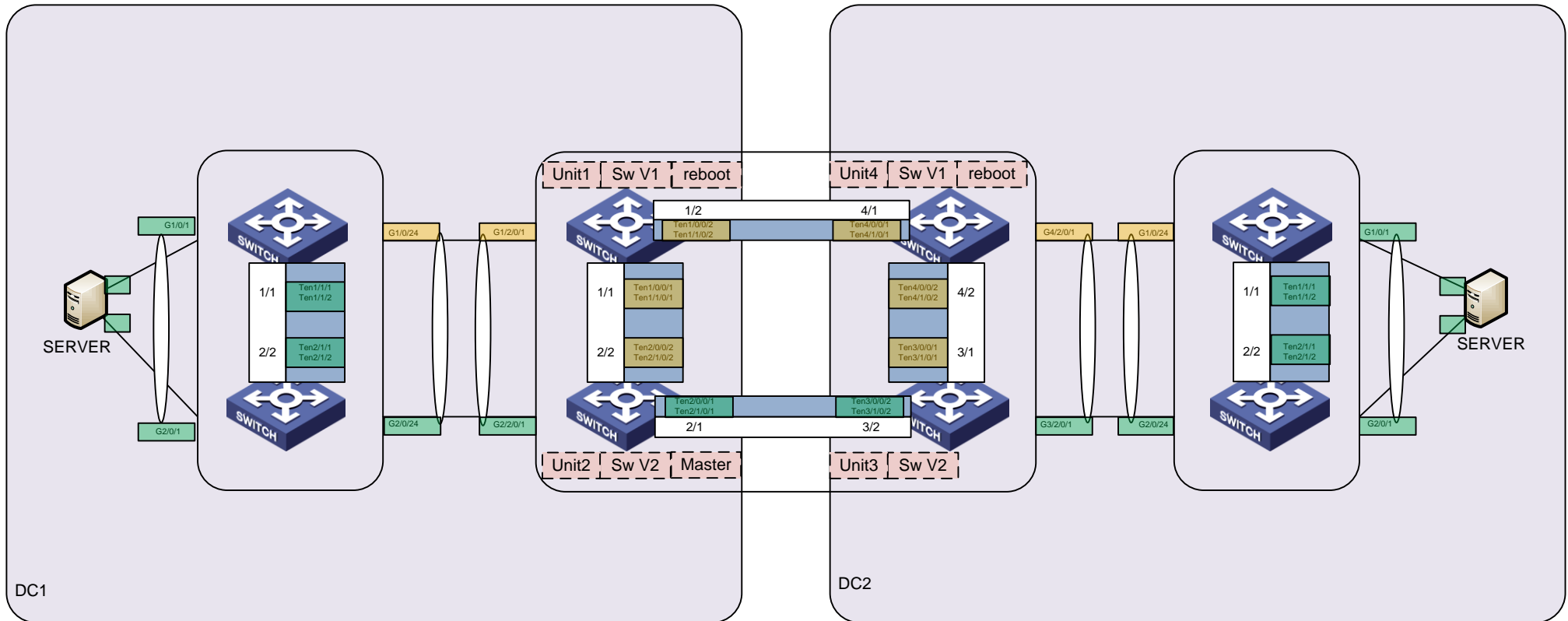
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### Phase 3.2

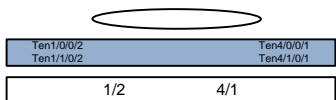
Unit1+unit4 reboot and will join IRF master on Unit2

### Actions



### Legend

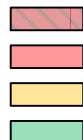
### Legend Link State



Bridge-Aggregation (linkagg)

Physical Ports in IRF Port

IRF link IDs



DOWN - MAD Shut

DOWN - Admin Shut

DOWN - Link Down

UP

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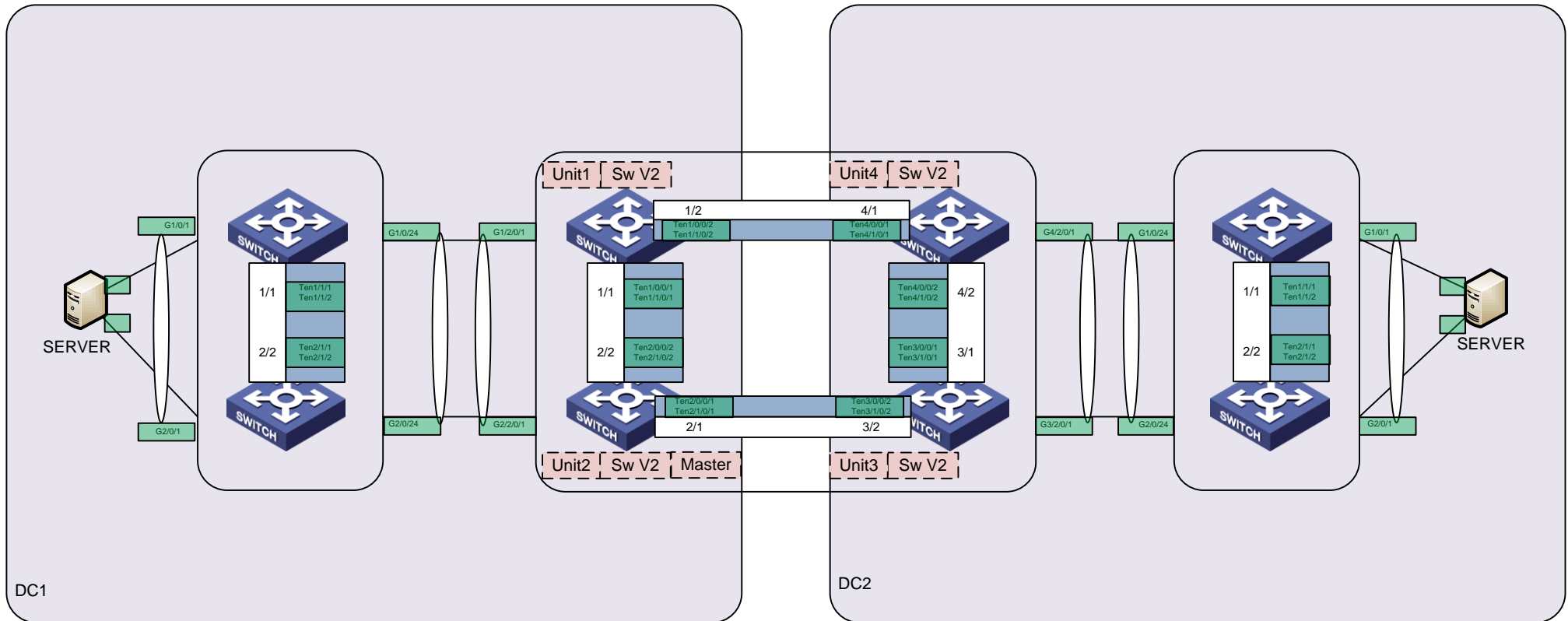
Customer:



### Phase 3.3

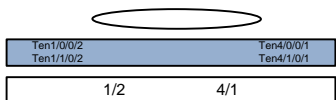
All units active on V2, Master on Unit2

### Actions



### Legend

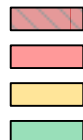
### Legend Link State



Bridge-Aggregation (linkagg)

Physical Ports in IRF Port

IRF link IDs



DOWN - MAD Shut

DOWN - Admin Shut

DOWN - Link Down

UP

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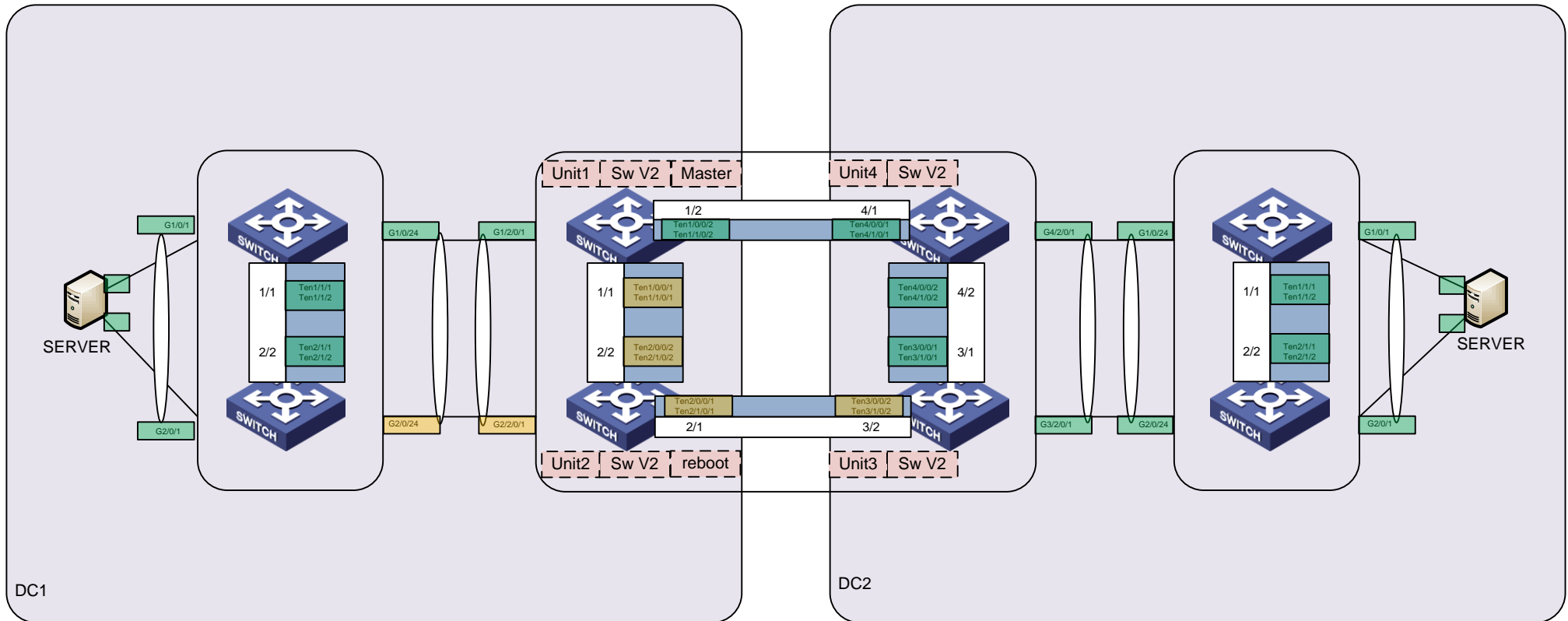
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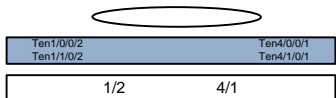
**Phase 3.4**  
Promote Unit1 to Master by reboot unit2

**Actions**  
\* reboot chassis 2



**Legend**

**Legend Link State**



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs



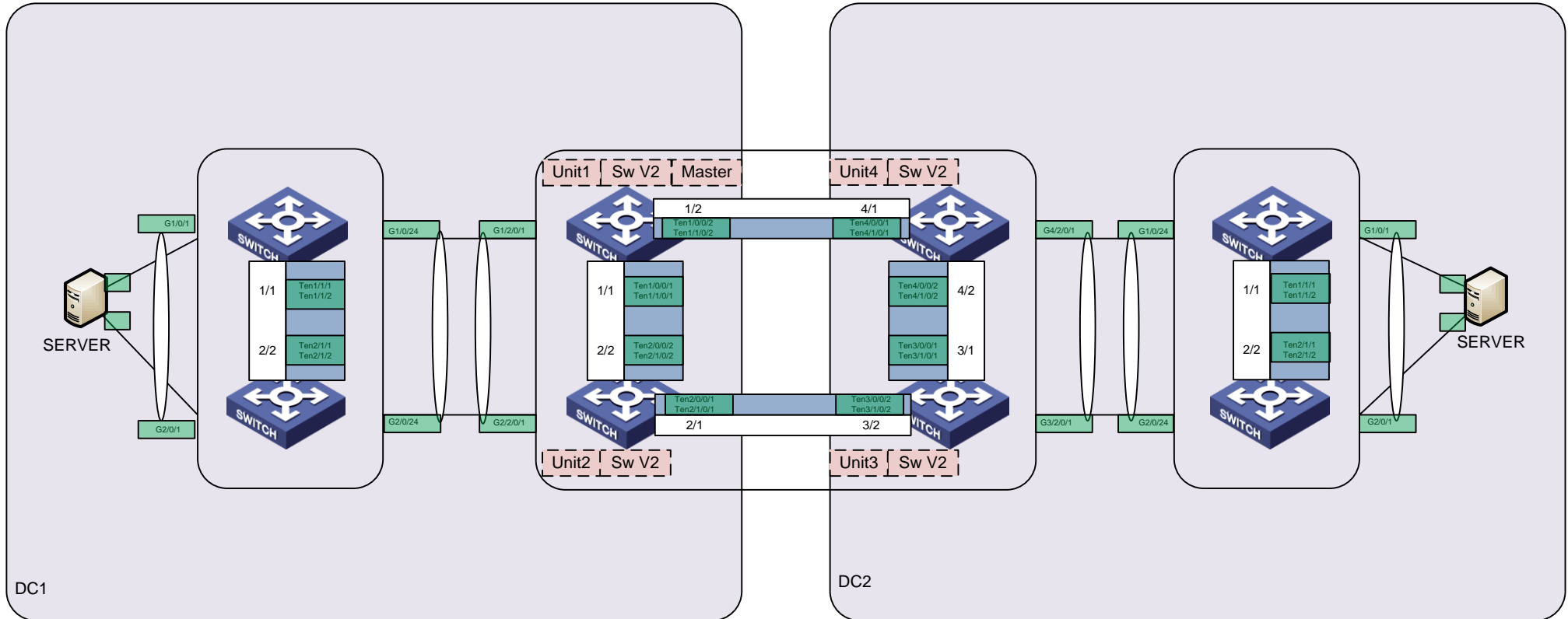
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Phase 3.5

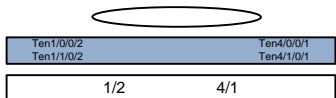
Final State: Unit1 Master, full core on V2

Actions

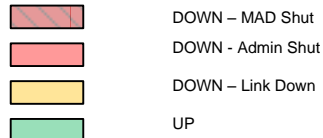


Legend

Legend Link State



Bridge-Aggregation (linkagg)  
Physical Ports in IRF Port  
IRF link IDs



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