1 VA_Port SW_ILSs Updates

17.7 VA_Port SW_ILSs

17.7.1 Overview

The VA_Port SW_ILSs are used to exchange information between Controlling Switches and FCDFs (i.e., they are not used to exchange information between FCDFs). If a Distributed Switch includes cascaded FCDFs, the intermediate FCDFs relay the SW_ILSs through a chain of Exchanges, as shown in figure 49. If one Exchange of this chain of Exchanges is abnormally terminated, then the other Exchanges in the chain shall be terminated as well.

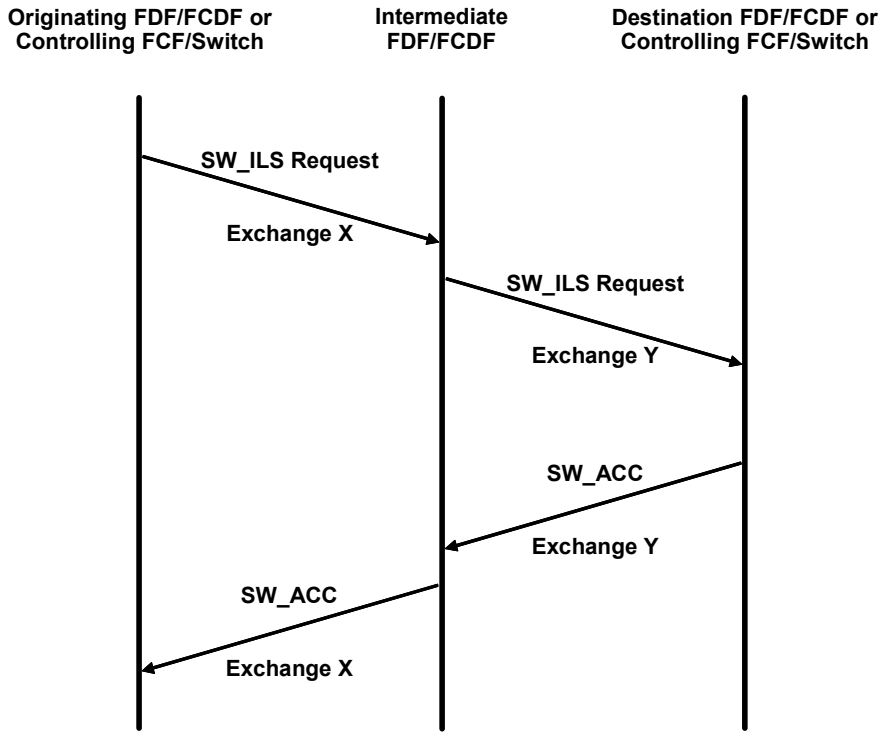

Figure 49 – VA_Port SW_ILS Relay

To enable this relay, all VA_Port SW_ILSs include the originating and destination FCDF or Controlling Switch Switch_Names in the first two fields of their payload. The subsequent part of a VA_Port SW_ILS is a list of self-identifying descriptors, as defined in 17.7.2. The descriptor list may be null.

To enable ~~this relay~~ the establishment of a chain of Exchanges, all VA_Port ~~SW_ILSs~~ SW_ILS Requests include the originating and destination FCDF or Controlling Switch Switch_Names in the first two fields of their payload. The subsequent part of a VA_Port SW_ILS Request is a list of self-identifying descriptors, as defined in 17.7.2. ~~The descriptor list may be null.~~ The response to a VA_Port SW_ILS Request (i.e., an SW_ACC or an SW_RJT) shall be processed by intermediate FCDFs to follow in the opposite direction the chain of Exchanges established when relaying the Request to its destination (i.e., the originating and destination FCDF or Controlling Switch Switch_Names in a VA_Port SW_ACC shall not be used to relay the SW_ACC to its destination).

~~The need for the originating and destination FCDF or Controlling Switch Switch_Names in the first two fields of the payload requires the definition of an updated SW_RJT, called here VA_RJT (see 17.7.3.1).~~

The VA_Port SW_ILSs have the same high-order byte in their command code~~, denoted here as XXh~~. Table 210 shows the VA_Port SW_ILSs command codes.

Table 210 – VA_Port SW_ILSs Command Codes

Encoded Value	Description	Abbreviation
A000 0001h	VN_Port Reachability Notification	VNRN
A000 0002h	VN_Port Unreachability Notification	VNUN
A000 0003h	FCDF Reachability Notification	FDRN
A000 0004h	FCDF Unreachability Notification	FDUN
A000 0005h	N_Port_ID Route Distribution	NPRD
A000 0006h	N_Port_ID and Zoning ACL Distribution	NPZD
A000 0007h	Active Zoning ACL Distribution	AZAD
A000 0008h	Distributed Switch Membership Distribution	DFMD
A000 0009h	Distributed ELS	DELS

17.7.2 VA_Port SW_ILS Descriptors

17.7.2.1 Descriptor Format

Each VA_Port SW_ILS descriptor has the format shown in table 211. This format applies also to the descriptors for the Redundancy Protocol SW_ILSs (see 17.8).

Table 211 – Descriptor Format

Item	Size (Bytes)
Descriptor Tag	4
Descriptor Length	4
Descriptor Value	variable

Descriptor Tag: the two most significant bytes of this field are reserved, the two least significant bytes contain the tag value. The defined tag values are shown in table 212.

Table 212 – Descriptor Tags

Tag Value	Descriptor	Reference
0001h	VN_Port Reachability	17.7.2.2
0002h	FLOGI/NPIV FDISC Parameters	17.7.2.3
0003h	VN_Port Unreachability	17.7.2.4
0004h	FCDF Reachability	17.7.2.5
0005h	Sequence Number	17.7.2.6
0006h	Controlling Switch Reachability	17.7.2.7
0007h	N_Port_IDs Reachability	17.7.2.8
0008h	Domain_IDs Reachability	17.7.2.9
0009h	Allocation Status	17.7.2.10

Table 212 – Descriptor Tags

Tag Value	Descriptor	Reference
000Ah	Peering Status	17.7.2.11
000Bh	Membership Set	17.7.2.12
000Ch	Integrity	17.7.2.13
000Dh	FCDF Identification	17.7.2.14
000Eh	~~Reject~~ SW_ILS Request Information	17.7.2.15
000Fh	ELS Payload	17.7.2.16
0011h	Controlling Switch State	17.8.2.2
0012h	FCDF Topology	17.8.2.3
0013h	FCDF N_Port_IDs	17.8.2.4
0014h	RHello Interval	17.8.2.5
~~0015h~~	~~ELS Payload~~	~~17.7.2.16~~
all others	Reserved	

Descriptor Length: contains the length in bytes of the Descriptor Value.

Descriptor Value: contains the specific information carried in the descriptor.

...

17.7.2.15 ~~Reject~~ SW_ILS Request Information Descriptor

The format of the ~~Reject~~ SW_ILS Request Information descriptor is shown in table 230.

Table 230 – ~~Reject~~ SW_ILS Request Information Descriptor Format

Item	Size (Bytes)
Tag Value = 000Eh	4
Length = 4	4
SW_ILS Request Opcode	4

SW_ILS Request Opcode: contains the opcode of the SW_ILS Request to which the SW_ACC containing this descriptor is replying.

17.7.3 VA_Port SW_ILSs Definition

~~**17.7.3.1 VA_RJT**~~

~~The VA_RJT SW_ILS is used in place of an SW_RJT as a reply Sequence to a VA_Port SW_ILS Request to reject that request.~~

~~**Addressing:** The S_ID field shall be set to the value of the D_ID field in the SW_ILS request. The D_ID field shall be set to the value of the S_ID field in the SW_ILS request.~~

~~**Payload:** the format of the VA_RJT Payload is shown in table 232.~~

~~**Table 232 – VA_RJT Payload**~~

Item	Size (bytes)
SW_ILS Code = 0300 0000h	4
Destination Switch_Name	8
Originating Switch_Name	8
Descriptor List Length	4
Reject Descriptor	see 17.7.2.15

~~**Destination Switch_Name:** contains the Switch_Name of the destination entity.~~

~~**Originating Switch_Name:** contains the Switch_Name of the originating entity.~~

~~**Descriptor List Length:** contains the length in bytes of the subsequent list of descriptors.~~

~~**Reject Descriptor:** see 17.7.2.15~~

17.7.3.2 VN_Port Reachability Notification (VNRN)

The VN_Port Reachability Notification SW_ILS is used by an FCDF to communicate to the Primary Controlling Switch that a VN_Port is attempting Fabric login through an FLOGI Request or a NPIV FDISC Request. If the FCDF does not have an ASL with the Primary Controlling Switch, the VNRN SW_ILS is relayed to the Primary Controlling Switch by the intermediate FCDFs.

VNRN Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the VNRN Request Sequence Payload is shown in table 233.

Table 233 – VNRN Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0001h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch_Name	8
Descriptor List Length	4
VN_Port Reachability Descriptor	see 17.7.2.2
FLOGI/NPIV FDISC Parameters Descriptor	see 17.7.2.3

Destination Controlling Switch Switch_Name: contains the Switch_Name of the destination Controlling Switch.

Originating FCDF Switch_Name: contains the Switch_Name of the originating FCDF.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

VN_Port Reachability Descriptor: see 17.7.2.2.

FLOGI/NPIV FDISC Parameters Descriptor: contains the payload of the received FLOGI or NPIV FDISC Request (see FC-LS-2).

VNRN Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the VNRN Request Sequence. As a result, a FLOGI LS_RJT or a NPIV FDISC LS_RJT is sent as response to the FLOGI Request or NPIV FDISC Request that caused the issuance of the VNRN Request.

SW_ACC: indicates the acceptance of the VNRN Request Sequence. The format of the VNRN SW_ACC Payload is shown in table 234.

Table 234 – VNRN SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
SW_ILS Request Information Descriptor	12
FLOGI / NPIV FDISC Parameters Descriptor	see 17.7.2.3

SW_ILS Request Information Descriptor: see 17.7.2.15**.**

FLOGI / NPIV FDISC Parameters Descriptor: this descriptor contains the payload of the LS_ACC generated by the Primary Controlling Switch in response to the FLOGI or NPIV FDISC payload provided in the VNRN Request Sequence.

17.7.3.3 VN_Port Unreachability Notification (VNUN)

The VN_Port Unreachability Notification SW_ILS is used by an FCDF to communicate to the Primary Controlling Switch that one or more of its VN_Ports have been logged out. If the FCDF does not have an ASL with the Primary Controlling Switch, the VNUN SW_ILS is relayed to the Primary Controlling Switch by the intermediate FCDFs.

VNUN Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the VNUN Request Sequence Payload is shown in table 235.

Table 235 – VNUN Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0002h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch_Name	8
Decriptor List Length	4
VN_Port Unreachability Descriptor	see 17.7.2.4

Destination Controlling Switch Switch_Name: contains the Switch_Name of the destination Controlling Switch.

Originating FCDF Switch_Name: contains the Switch_Name of the requesting FCDF.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

VN_Port Unreachability Descriptor: see 17.7.2.4**.**

VNUN Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the VNUN Request Sequence.

SW_ACC: indicates the acceptance of the VNUN Request Sequence. The format of the VNUN SW_ACC Payload is shown in table 236.

Table 236 – VNUN SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15**.**

17.7.3.4 FCDF Reachability Notification (FDRN)

The FCDF Reachability Notification SW_ILS is used by an FCDF to communicate to the Primary Controlling Switch that it has instantiated an ASL with another FCDF or with the Secondary Controlling Switch. If the FCDF does not have an ASL with the Primary Controlling Switch, the FDRN SW_ILS is relayed to the Primary Controlling Switch by the intermediate FCDFs.

The FDRN SW_ILS is also used between Primary and Secondary Controlling Switch to keep their state synchronized.

FDRN Request Sequence

Addressing: when used between a FCDF and the Primary Controlling Switch the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port. When used between the two Controlling Switches the S_ID field shall be set to FFFFFDh, indicating the originating VE_Port, and the D_ID field shall be set to FFFFFDh, indicating the destination VE_Port.

Payload: the format of the FDRN Request Sequence Payload is shown in table 237.

Table 237 – FDRN Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0003h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch_Name	8
Descriptor List Length	4
FCDF Reachability Descriptor	see 17.7.2.5

Destination Controlling Switch Switch_Name: contains the Switch_Name of the destination Controlling Switch.

Originating FCDF Switch_Name: contains the Switch_Name of the requesting FCDF.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

FCDF Reachability Descriptor: describes the instantiated ASL **(**see 17.7.2.5).

FDRN Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the FDRN Request Sequence.

SW_ACC: indicates the acceptance of the FDRN Request Sequence. The format of the FDRN SW_ACC Payload is shown in table 238.

Table 238 – FDRN SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15**.**

17.7.3.5 FCDF Unreachability Notification (FDUN)

The FCDF Unreachability Notification SW_ILS is used by an FCDF to communicate to the Primary Controlling Switch that it has deinstantiated an ASL with another FCDF or with the Secondary Controlling Switch. If the FCDF does not have an ASL with the Primary Controlling Switch, the FDUN SW_ILS is relayed to the Primary Controlling Switch by the intermediate FCDFs.

The FDUN SW_ILS is also used between Primary and Secondary Controlling Switch to keep their state synchronized.

FDUN Request Sequence

Addressing: when used between a FCDF and the Primary Controlling Switch the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port. When used between the two Controlling Switches the S_ID field shall be set to FFFFFDh, indicating the originating VE_Port, and the D_ID field shall be set to FFFFFDh, indicating the destination VE_Port.

Payload: the format of the FDUN Request Sequence Payload is shown in table 239.

Table 239 – FDUN Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0004h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch_Name	8
Descriptor List Length	4
FCDF Reachability Descriptor	see 17.7.2.5

Destination Controlling Switch Switch_Name: contains the Switch_Name of the destination Controlling Switch.

Originating FCDF Switch_Name: contains the Switch_Name of the requesting FCDF.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

FCDF Reachability Descriptor: describes the deinstantiated ASL **(**see 17.7.2.5)..

FDUN Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the FDUN Request Sequence.

SW_ACC: indicates the acceptance of the FDUN Request Sequence. The format of the FDUN SW_ACC Payload is shown in table 240.

Table 240 – FDUN SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15**.**

17.7.3.6 N_Port_ID Route Distribution (NPRD)

The N_Port_ID Route Distribution SW_ILS is used by the Primary Controlling Switch to communicate to an FCDF the N_Port_ID routing information for the Distributed Switch. If the Primary Controlling Switch does not have an ASL with the destination FCDF, the NPRD SW_ILS is relayed to the destination FCDF by the intermediate FCDFs.

NPRD Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the NPRD Request Sequence Payload is shown in table 241.

Table 241 – NPRD Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0005h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
Sequence Number Descriptor	see 17.7.2.6
Primary Controlling Switch Reachability Descriptor	see 17.7.2.7
Secondary Controlling Switch Reachability Descriptor	see 17.7.2.7
N_Port_IDs Reachability Descriptor	see 17.7.2.8
Domain_IDs Reachability Descriptor	see 17.7.2.9

Destination FCDF Switch_Name: contains the Switch_Name of the destination FCDF.

Originating Controlling Switch Switch_Name: contains the Switch_Name of the requesting Controlling Switch.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

Sequence Number Descriptor: see 17.7.2.6.

Primary Controlling Switch Reachability Descriptor: contains the reachability information toward the Primary Controlling Switch.

NOTE 1 – Paths toward the Primary Controlling Switch are fundamental for the operation of an FCDF. Specifying higher cost paths enables more redundancy, because if the lowest cost path toward the Primary Controlling Switch fails, a higher cost path may be used.

Secondary Controlling Switch Reachability Descriptor: contains the reachability information toward the Secondary Controlling Switch.

N_Port_IDs Reachability Descriptor: see 17.7.2.8.

Domain_IDs Reachability Descriptor: see 17.7.2.9.

NPRD Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the NPRD Request Sequence.

SW_ACC: indicates the acceptance of the NPRD Request Sequence. The format of the NPRD SW_ACC Payload is shown in table 242.

Table 242 – NPRD SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15.

17.7.3.7 N_Port_ID and Zoning ACL Distribution (NPZD)

The N_Port_ID and Zoning ACL Distribution SW_ILS is used by the Primary Controlling Switch to communicate to the Secondary Controlling Switch the allocation of an N_Port_ID and/or the deallocation of one or more N_Port_IDs and to communicate to an FCDF the allocation of an N_Port_ID and its associated Zoning ACL information and/or the deallocation of one or more N_Port_IDs and their associated Zoning ACL information. Upon receiving an NPZD Request, an FCDF shall update its Zoning enforcement according to the received Zoning ACLs only for the listed Principal N_Port_IDs. If the Primary Controlling Switch does not have an ASL with the destination FCDF, the NPZD SW_ILS is relayed to the destination FCDF by the intermediate FCDFs.

NPZD Request Sequence

Addressing: when used between a FCDF and the Primary Controlling Switch the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port. When used between the two Controlling Switches the S_ID field shall

be set to FFFFFDh, indicating the originating VE_Port, and the D_ID field shall be set to FFFFFDh, indicating the destination VE_Port.

Payload: the format of the NPZD Request Sequence Payload is shown in table 243.

Table 243 – NPZD Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0006h	4
Destination FCDF or Controlling Switch Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
Sequence Number Descriptor	see 17.7.2.6
Allocation Status Descriptor	see 17.7.2.10
Peering Status Descriptor	see 17.7.2.11

Destination FCDF or Controlling Switch Switch_Name: contains the Switch_Name of the destination FCDF or Controlling Switch.

Originating Controlling Switch Switch_Name: contains the Switch_Name of the requesting Controlling Switch.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

Sequence Number: see 17.7.2.6.

Allocation Status Descriptor: see 17.7.2.10.

Peering Status Descriptor: see 17.7.2.11.

When present, the Peering Status descriptor contains Peering entries per each VN_Port currently logged into the destination FCDF and with which the allocated N_Port_ID is allowed to communicate or with which the deallocated N_Port_IDs were allowed to communicate, according to the current fabric zoning configuration. In case of allocation, the Peering Status descriptor for the FCDF that receives the allocated N_Port_ID also contains a Peering Entry with a Principal N_Port_ID equal to the allocated N_Port_ID. In case of deallocation, the Zoning ACLs for the deallocated N_Port_IDs are implicitly removed and the Peering Status descriptor for the FCDF that had the deallocated N_Port_IDs does not contain Peering Entries with a Principal N_Port_ID equal to any the deallocated N_Port_IDs.

NPZD Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the NPZD Request Sequence.

SW_ACC: indicates the acceptance of the NPZD Request Sequence. The format of the NPZD SW_ACC Payload is shown in table 244.

Table 244 – NPZD SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15.

17.7.3.8 Active Zoning ACL Distribution (AZAD)

The Active Zoning ACL Distribution SW_ILS is used by the Primary Controlling Switch to communicate to an FCDF new Zoning ACL information when a new Zone Set is activated in the fabric. Upon receiving an AZAD Request, an FCDF shall completely replace its Zoning enforcement according to the received Zoning ACLs. If the Primary Controlling Switch does not have an ASL with the destination FCDF, the AZAD SW_ILS is relayed to the destination FCDF by the intermediate FCDFs.

AZAD Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the AZAD Request Sequence Payload is shown in table 245.

Table 245 – AZAD Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0007h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
Sequence Number Descriptor	see 17.7.2.6
Peering Status Descriptor	see 17.7.2.11

Destination FCDF Switch_Name: contains the Switch_Name of the destination FCDF.

Originating Controlling Switch Switch_Name: contains the Switch_Name of the requesting Controlling Switch.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

Sequence Number: see 17.7.2.6.

Peering Status Descriptor: see 17.7.2.11.

AZAD Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the AZAD Request Sequence.

SW_ACC: indicates the acceptance of the AZAD Request Sequence. The format of the AZAD SW_ACC Payload is shown in table 246.

Table 246 – AZAD SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch Switch_Name	8
Descriptor List Length ~~= 0000 0000h~~	4
SW_ILS Request Information Descriptor	12

SW_ILS Request Information Descriptor: see 17.7.2.15.

17.7.3.9 Distributed Switch Membership Distribution (DFMD)

The Distributed Switch Membership Distribution SW_ILS is used by the Primary Controlling Switch to communicate to an FCDF the identities of the Primary and Secondary Controlling Switches and of all the FCDFs that compose the Distributed Switch. The DFMD payload may be integrity protected by a cryptographic hash; in this case the involved entities shall be provided with a shared key. If the Primary Controlling Switch does not have an ASL with the destination FCDF, the DFMD SW_ILS is relayed to the destination FCDF by the intermediate FCDFs.

DFMD Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the DFMD Request Sequence Payload is shown in table 247.

Table 247 – DFMD Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0008h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
Membership Set Descriptor	see 17.7.2.12
Integrity Descriptor	see 17.7.2.13

Destination FCDF Switch_Name: contains the Switch_Name of the destination FCDF.

Originating Controlling Switch Switch_Name: contains the Switch_Name of the originating Controlling Switch.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

Membership Set Descriptor: see 17.7.2.12.

Integrity Descriptor: see 17.7.2.13.

DFMD Reply Sequence

~~**VA_RJT**~~ **SW_RJT:** indicates the rejection of the DFMD Request Sequence.

SW_ACC: indicates the acceptance of the DFMD Request Sequence. The format of the DFMD SW_ACC Payload is shown in table 248.

Table 248 – DFMD SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch Switch_Name	8
Descriptor List Length	4
SW_ILS Request Information Descriptor	12
FCDF Identification Descriptor	see 17.7.2.14

SW_ILS Request Information Descriptor: see 17.7.2.15**.**

FCDF Identification Descriptor: see 17.7.2.14**.**

17.7.3.10 Distributed ELS (DELS)

The Distributed ELS SW_ILS is used by a Controlling Switch to:

a) request an F_Port Controller in an FCDF to perform an ELS function; or

b) request an F_Port Controller in an FCDF to perform an ELS ~~exchange~~Exchange with an attached N_Port.

DELS Request Sequence

Addressing: the S_ID field shall be set to FFFFF9h, indicating the originating VA_Port, and the D_ID field shall be set to FFFFF9h, indicating the destination VA_Port.

Payload: the format of the DELS Request Sequence Payload is shown in table 249.

Table 249 – DELS Request Payload

Item	Size (bytes)
SW_ILS Code = A000 0009h	4
Destination FCDF Switch_Name	8
Originating Controlling Switch Switch_Name	8
Descriptor List Length	4
ELS Payload Descriptor	see 17.7.2.16

Destination FCDF Switch_Name: contains the Switch_Name of the destination FCDF.

Originating Controlling Switch Switch_Name: contains the Switch_Name of the originating Controlling Switch.

Descriptor List Length: contains the length in bytes of the subsequent list of descriptors.

ELS Payload Descriptor: see 17.7.2.16.

The ELS ~~requests~~Requests that are allowed in a DELS ~~DS_ILS request~~SW_ILS Request are

a) RNID forwarded to an FCDF when received by the Fabric Controller;

b) RLS forwarded to an FCDF when received by the Domain Controller;

c) RDP forwarded to an FCDF when received by the Domain Controller;

d) CB request from a Controlling Switch to an FCDF; and

e) LOGO request from a Controlling Switch to an FCDF.

DELS Reply Sequence

~~VA_RJT~~ SW_RJT: indicates the rejection of the DELS Request Sequence. As a result, the Controlling Switch shall either answer a received ELS Request that caused the issuance of the DELS Request, if possible, or reject the received ELS with a LS_RJT.

SW_ACC: indicates the acceptance of the DELS Request Sequence. The format of the DELS SW_ACC Payload is shown in table 250.

Table 250 – DELS SW_ACC Payload

Item	Size (bytes)
SW_ILS Code = 0200 0000h	4
Destination Controlling Switch Switch_Name	8
Originating FCDF Switch Switch_Name	8
Descriptor List Length	4
SW_ILS Request Information Descriptor	12
ELS Payload Descriptor	see 17.7.2.16

SW_ILS Request Information Descriptor: see 17.7.2.15.

ELS Payload descriptor: see 17.7.2.16. ~~this~~This descriptor contains the payload of the LS_RJT or LS_ACC generated by the FCDF in response to the ELS ~~request~~Request provided in the DELS Request.