ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L7683 – NETWORK SWITCH

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1 Introduction

Not Applicable

1.1 Asset Details

Class Code:	L7683
Class Name:	Network Switch
Class Lineage:	Construction Products>Services>Information/Communication Services Products>Communication Systems>Network Switches

1.2 Description

A network switch is device that filters and forwards packets between LAN segments. Network switches operate at the data link layer (layer 2) and sometimes the network layer (layer 3) of the OSI Reference Model and therefore support any packet protocol. LANs that use switches to join segments are called switched LANs or, in the case of Ethernet networks, switched Ethernet LANs.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

2 Asset Tag Identification Rules

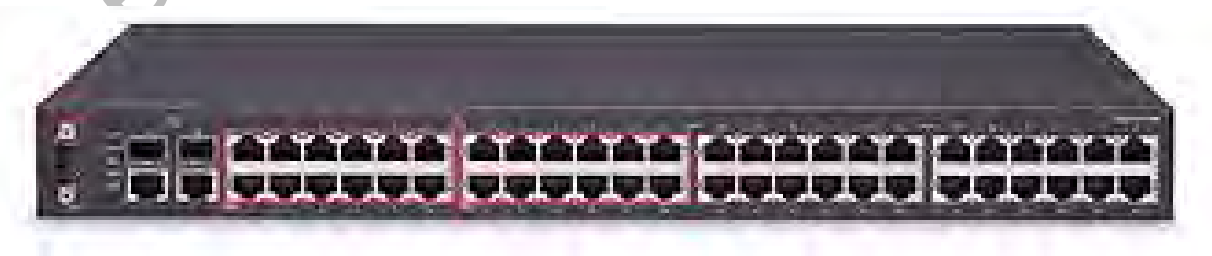
Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031), in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

e.g. C125-TSP-12345

Information and guidance on the standard naming convention for all asset classes is contained within the latest revision of the Asset Naming Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

2.1 Example Images



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3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Depth (Millimetres)	Millimetres	NU	0		The maximum depth of the network switch
Height (Millimetres)	Millimetres	NU	0		The maximum vertical dimension of the network switch
Input Data Transfer Speed (Gbps)	Gbps	NU	1		The capacity of the network switch to transfer data from the input to the route processor
Network Switch Interface Type		PD		Copper Fibre	Type of connectivity interfaces
Network Switch Mounting		PD		Stand Alone Rack Mounted	Describes whether the network switch is free standing or rack mounted in an equipment cabinet.

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Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Network Switch Type		PD		IEEE 802.3x for Flow Control IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid STP IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging	Type of Network Switch
Number of POE Ports (#)	#	NU	0		How many Power over Ethernet ports are within the network switch
Number of Ports (#)	#	NU	0		Number of available connections
OSI Support		PD		Switching Switching & Routing	Type of OSI support
Output Data Transfer Speed (Gbps)	Gbps	NU	1		The capacity of the network switch to transfer data from the route processor to the output
POE Power per Port (Amps)	Amps	NU	2		Power available through each POE port
Width (Millimetres)	Millimetres	NU	0		The maximum horizontal dimension of the network switch

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

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4 Performance Data

This section is to be used to specify the performance data to be gathered from this Class of asset when in operation. To be populated once the performance measures have been agreed with the Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration document - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- <ADD OTHER REFERENCE DOCUMENTS HERE>

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Project Manager - C660 Communications and Control Systems	

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