

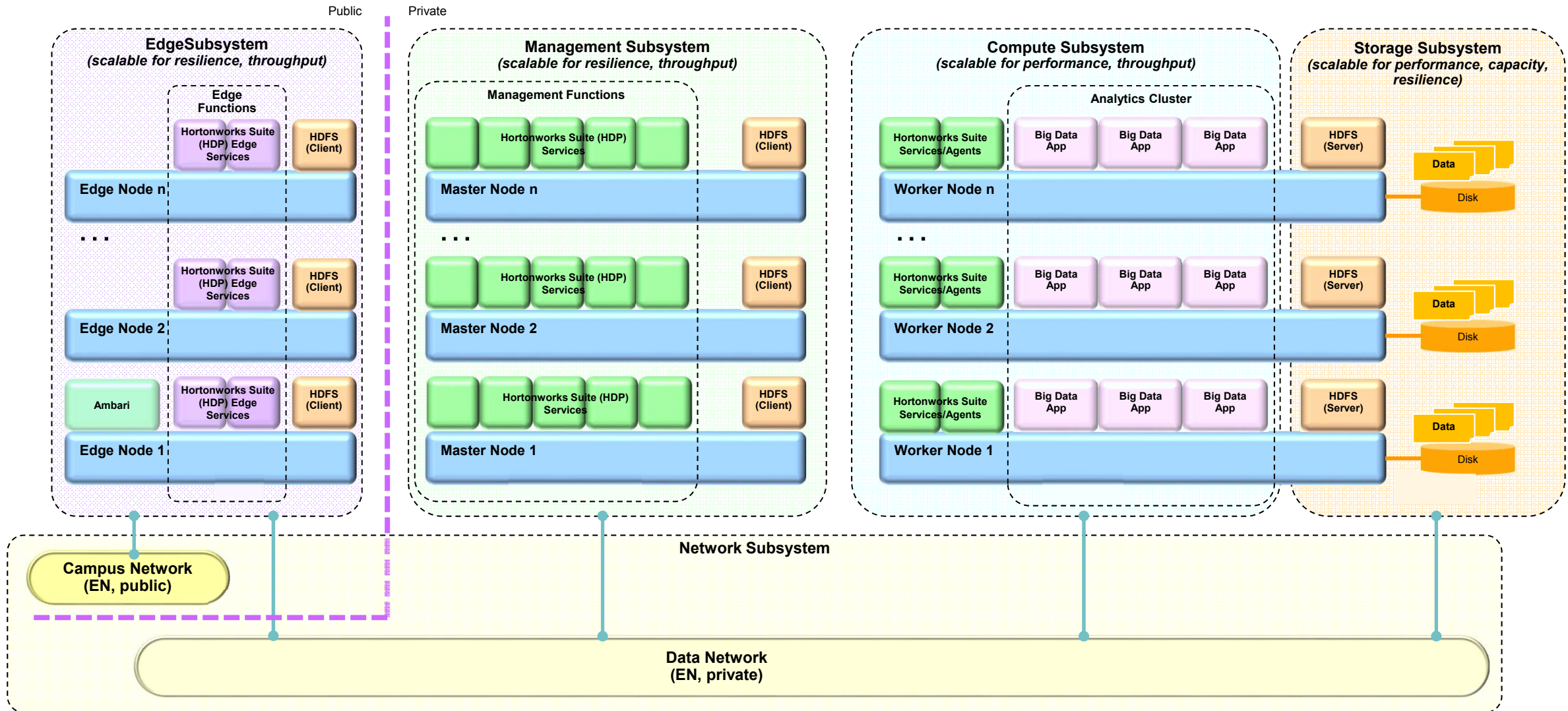


IBM Systems
Power Development

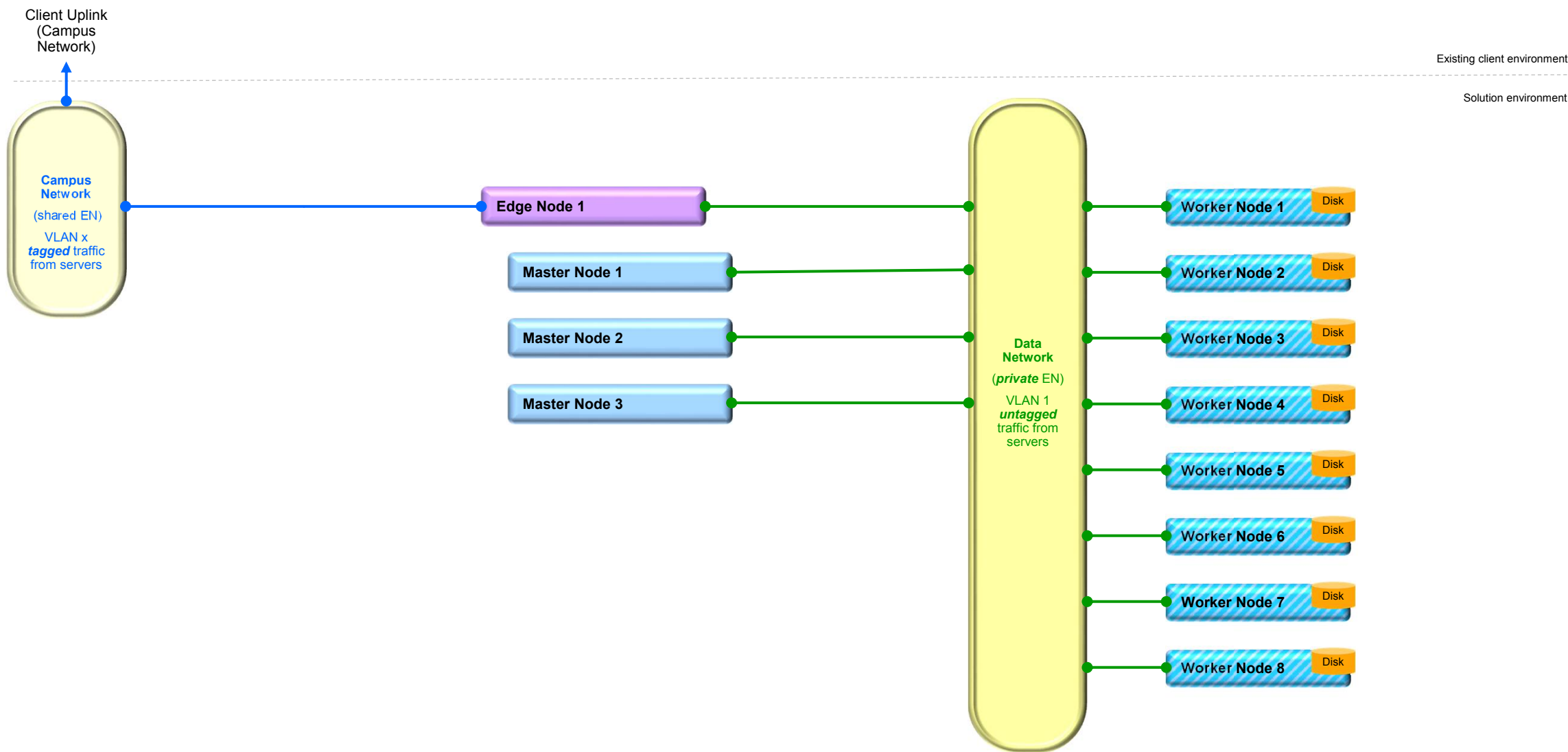
Hortonworks Data Platform on IBM Power (HDP on Power) Deployment Guide

Design Overview

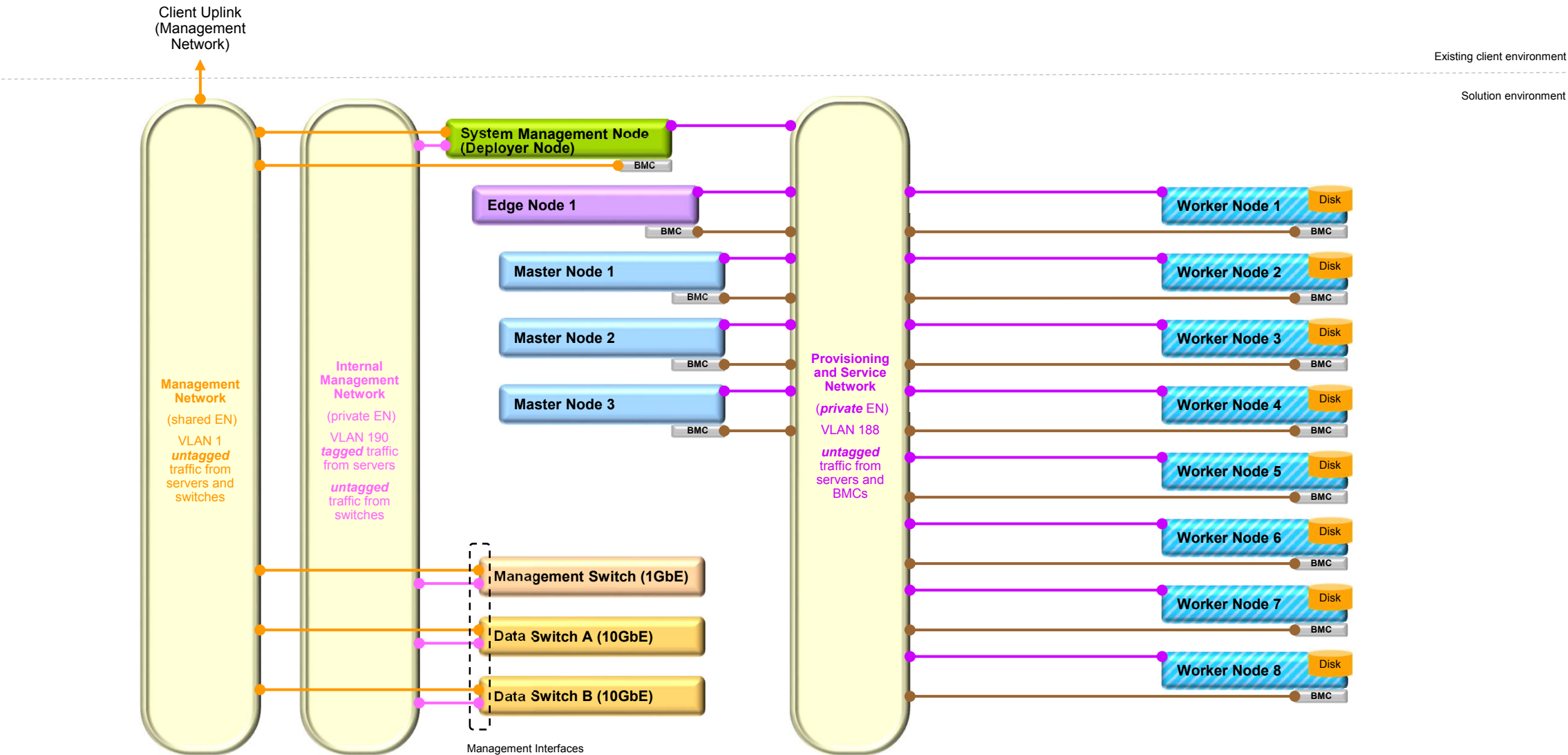
Architecture – Infrastructure/Hosting Overview



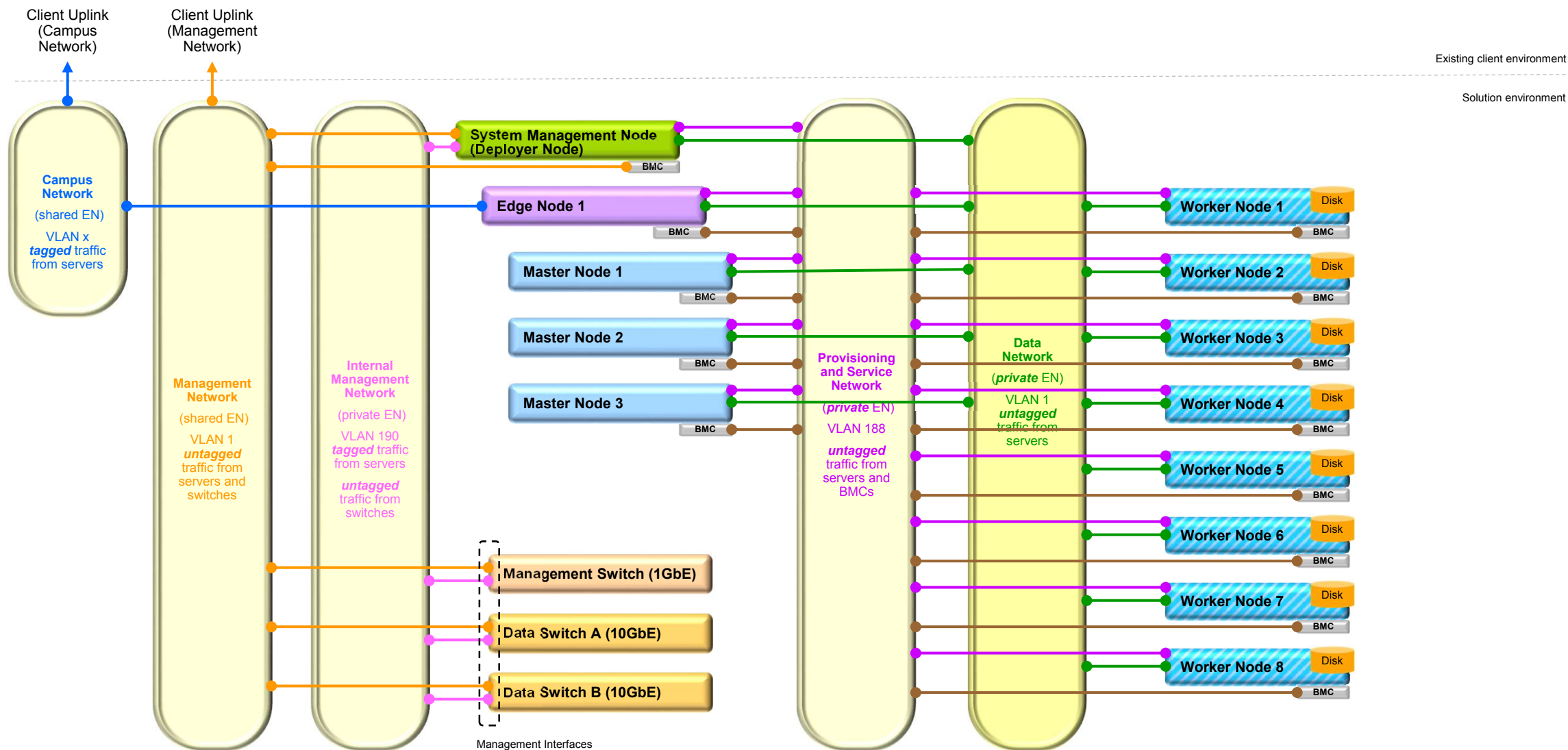
Minimum Production Configuration – Logical Network Topology – Application Level View



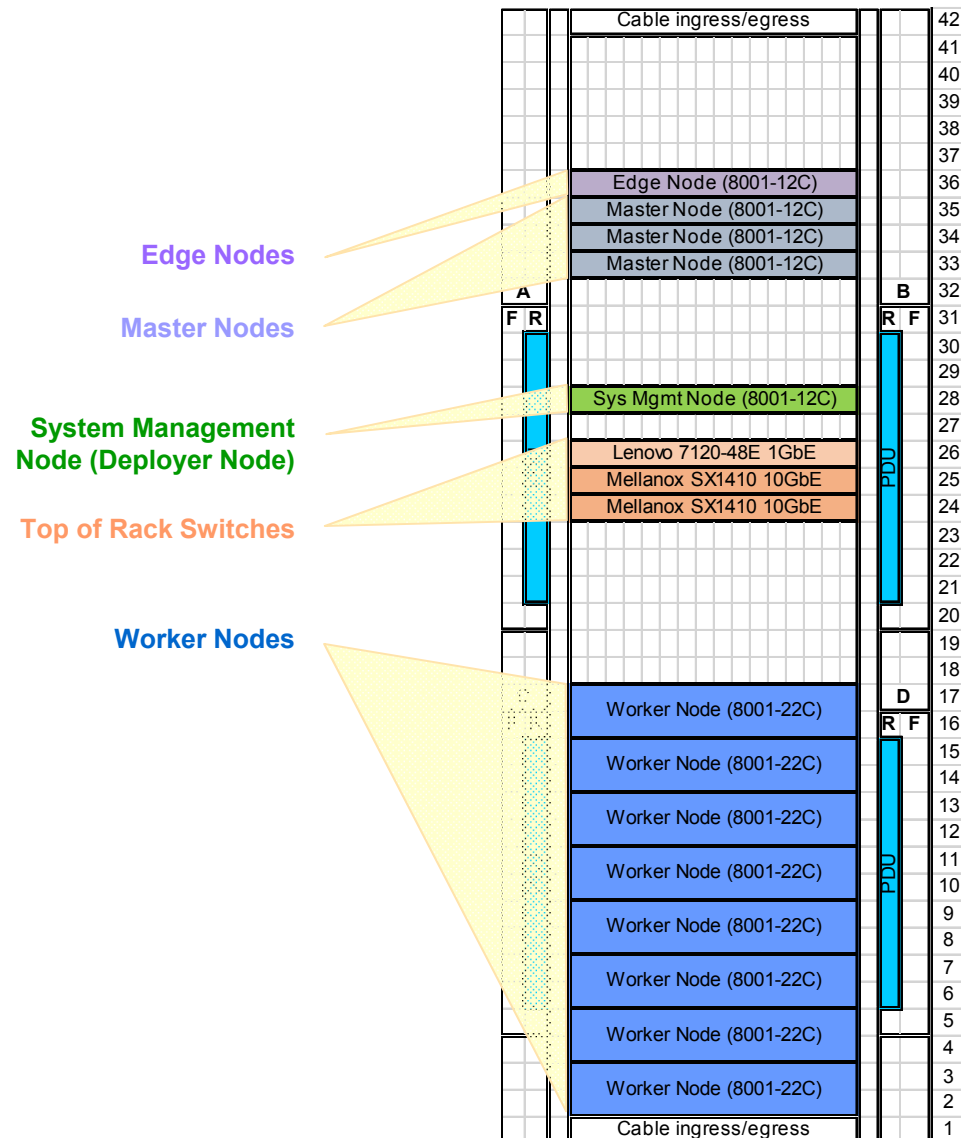
Minimum Production Configuration – Logical Network Topology – Infrastructure Level View



Minimum Production Configuration – Logical Network Topology – All Networks



Minimum Production Configuration – Physical View – Rack Layout

**System Management Node**

Quantity: **1**
 Power 821LC (Stratton) 8001-12C
 1x POWER8 CPUs, 8 Cores
 32GB Memory
 2x 4TB HDDs
 1x 2-port SPF+ Ethernet Adapter

Management Switch

Quantity: **1**
 Lenovo G8052 7120-48E, 1GbE

Data Switch

Quantity: **2**
 Mellanox SX1410, 10GbE

Master Node

Quantity: **3**
 Power 821LC (Stratton) 8001-12C
 2x POWER8 CPUs, 20 Cores
 256GB Memory
 4x 4TB HDDs
 1x 2-port SPF+ Ethernet Adapter

Rack

Quantity: **1**
 42U 7965-94Y + PDUs

Edge Node

Quantity: **1**
 Power 821LC (Stratton) 8001-12C
 2x POWER8 CPUs, 20 Cores
 256GB Memory
 4x 4TB HDDs
 2x 2-port SPF+ Ethernet Adapter

Worker Node

Quantity: **8**
 Power 822LC (Briggs) 8001-22C
 2x POWER8 CPUs, 22 Cores
 256GB Memory
 12x 4TB HDDs
 1x 2-port SPF+ Ethernet Adapter

Minimum Production Configuration – Component Specifications

	System Mgmt Node	Master Node	Edge Node	Worker Node
Server Type	1U S821LC (Stratton) 8001-12C	1U S821LC (Stratton) 8001-12C	1U S821LC (Stratton) 8001-12C	2U S822LC (Briggs) 8001-22C
Quantity	1	3	1	8
Cores	8	20	20	22
Memory	32GB	256GB	256GB	256GB
Storage - HDD	2x 4TB HDD	4x 4TB HDD	4x 4TB HDD	12x 4TB HDD
Storage Controller	Marvell (internal)	LSI MegaRAID 9361-8i (2GB cache)	LSI MegaRAID 9361-8i (2GB cache)	LSI MegaRAID 9361-8i (2GB cache)
Network - 1GbE	4 ports (internal)	4 ports (internal)	4 ports (internal)	4 ports (internal)
Network - 10GbE	1x 2-port SPF+ adapter	1x 2-port SPF+ adapter	2x 2-port SPF+ adapter	1x 2-port SPF+ adapter

	Management Switch	Data Switch	Rack
Type	Lenovo G8052 7120-48E	Mellanox SX1410 8831-S48	42U Rack 7965-94Y
Quantity	1	2	1