

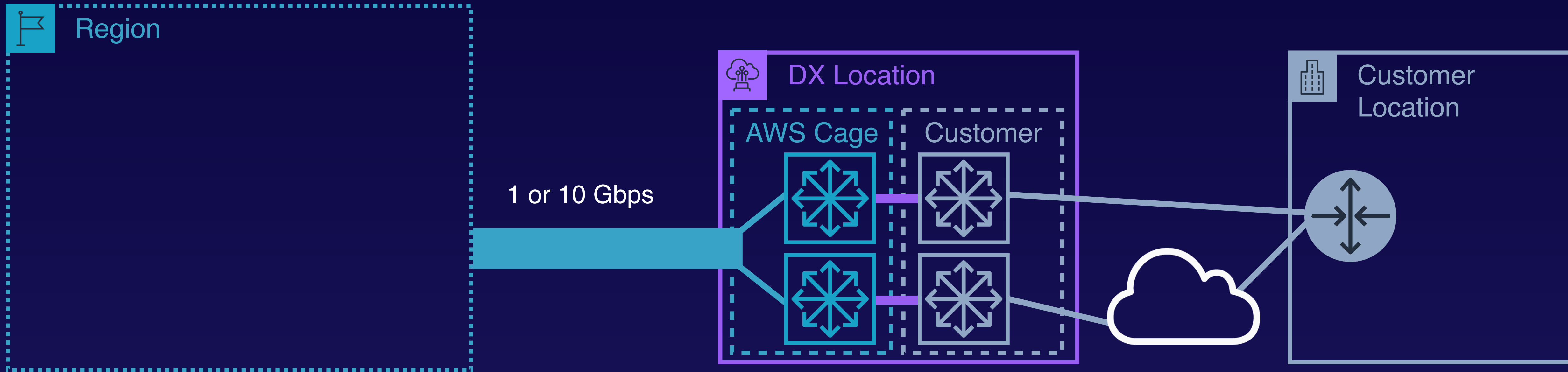
DX Connections



Steven Moran

TECHNICAL INSTRUCTOR

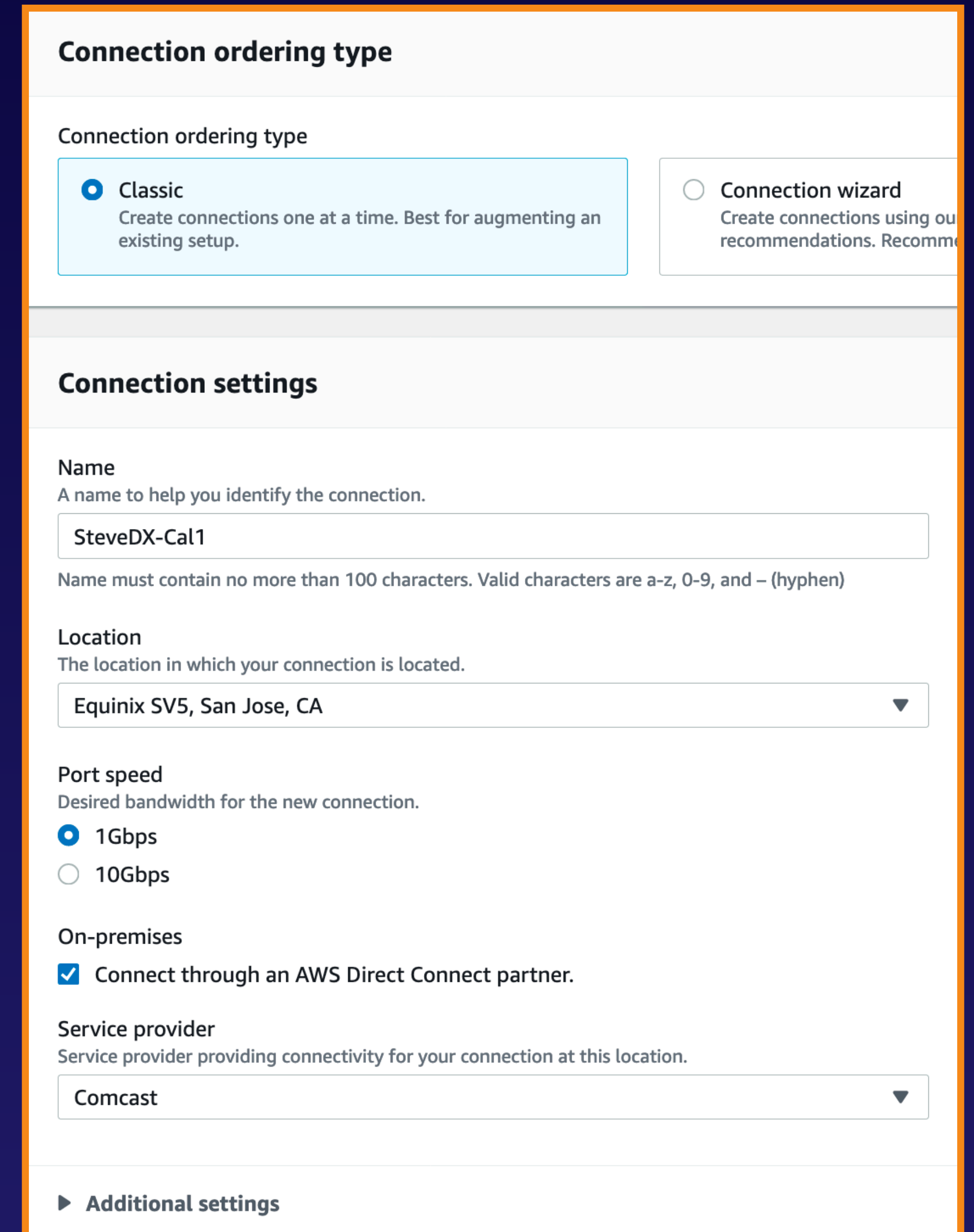
What Is a Dedicated Connection?



- AWS hardware at DX location connects directly to **customer-managed** hardware.
- Supports either 1 Gbps or 10 Gbps connection speeds to AWS Region.
- Soft limit of 10 dedicated connections per Region, per account.

Creation Process – Request Dedicated DX Connection

- Create new connection request using Console, CLI, or API.
- Supply:
 - Name tag
 - DX location
 - Sub-location if applicable
 - Port speed
 - Direct Connect Partner, if applicable
 - Optional additional tags.
- New requests may take up to 72 hours for AWS to process.



The screenshot shows the 'Create Dedicated Connection' page in the AWS console. It is divided into two main sections: 'Connection ordering type' and 'Connection settings'.

Connection ordering type

Connection ordering type

- Classic**
Create connections one at a time. Best for augmenting an existing setup.
- Connection wizard**
Create connections using our recommendations. Recommended for new users.

Connection settings

Name
A name to help you identify the connection.
SteveDX-Cal1
Name must contain no more than 100 characters. Valid characters are a-z, 0-9, and - (hyphen)

Location
The location in which your connection is located.
Equinix SV5, San Jose, CA

Port speed
Desired bandwidth for the new connection.
 1Gbps
 10Gbps

On-premises
 Connect through an AWS Direct Connect partner.

Service provider
Service provider providing connectivity for your connection at this location.
Comcast

▶ **Additional settings**

Creation Process – Request Dedicated DX Connection

- Only tag keys and values may be modified after the connection request has been submitted.

Connection ordering type

Connection ordering type

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Create connections one at a time. Best for augmenting an existing setup.

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Comcast

▶ **Additional settings**

Creation Process – Download LOA-CFA

Letter of Authorization – Connecting Facility Assignment

- Authorizes DX location to connect your hardware to a specific port on AWS-owned hardware.
- Valid for 90 days.
- Contact AWS support if download link is not available more than 72 hours after submitting initial request.

Letter of Authorization and Connecting Facility Assignment

Issue Date June 24, 2014	Requested By [REDACTED]
Issued By* Amazon Corporate Services Pty Ltd	Issued To Global Switch SY6
Facility - Meet Me Room Global Switch SY6 - MMR3	Connection ID dxcon-xxxxxxx
Customer Demarkation/Z-Side Rack: 40 PatchPanel: PP1 Port: 1/2	Optic and Connector Types 1000BASE-LX Single Mode Fiber (SMF) Lucent Connector (LC)

Please consider this letter as notification for connecting facility assignment for the purpose of establishing or augmenting connectivity between the parties identified above. This document authorizes a connection to the ports indicated above. All charges for the physical connection are the sole responsibility of Company, Inc.

For location specific information on requesting a cross-connect, visit the "Requesting Cross-Connects" section of the user guide:
<http://docs.aws.amazon.com/DirectConnect/latest/UserGuide/Colocation.html>

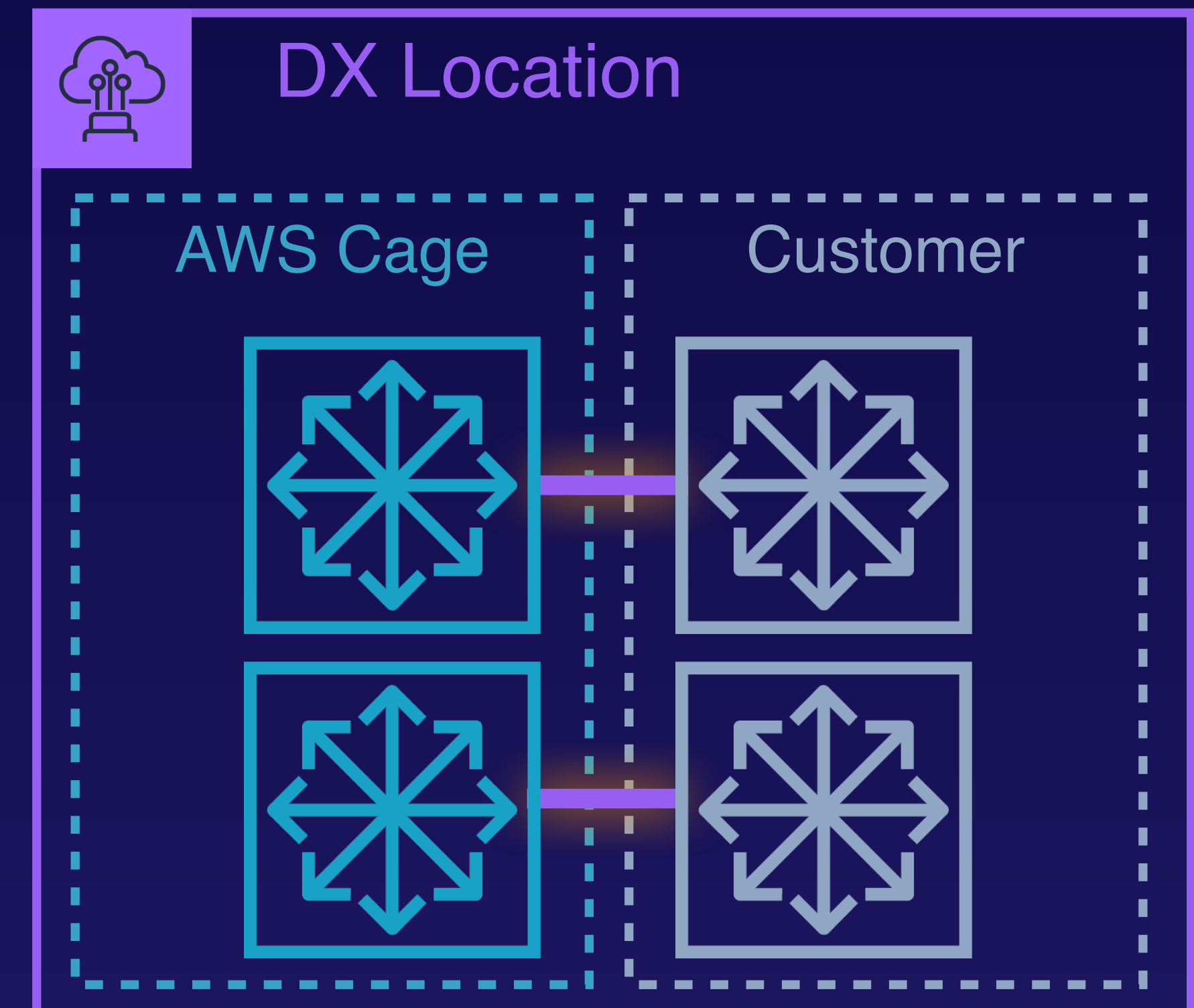
The requester(s) use of AWS services will be governed by the terms of the AWS Customer Agreement (available at <http://aws.amazon.com/agreement>), or a separate agreement between the requester(s) and AWS.

EXPIRATION NOTICE The authorized connectivity must be completed within 90 days of this LOA-CFA's issue date or this LOA-CFA will expire.

* Amazon Corporate Services Pty Ltd is a subsidiary of Amazon.com, Inc.

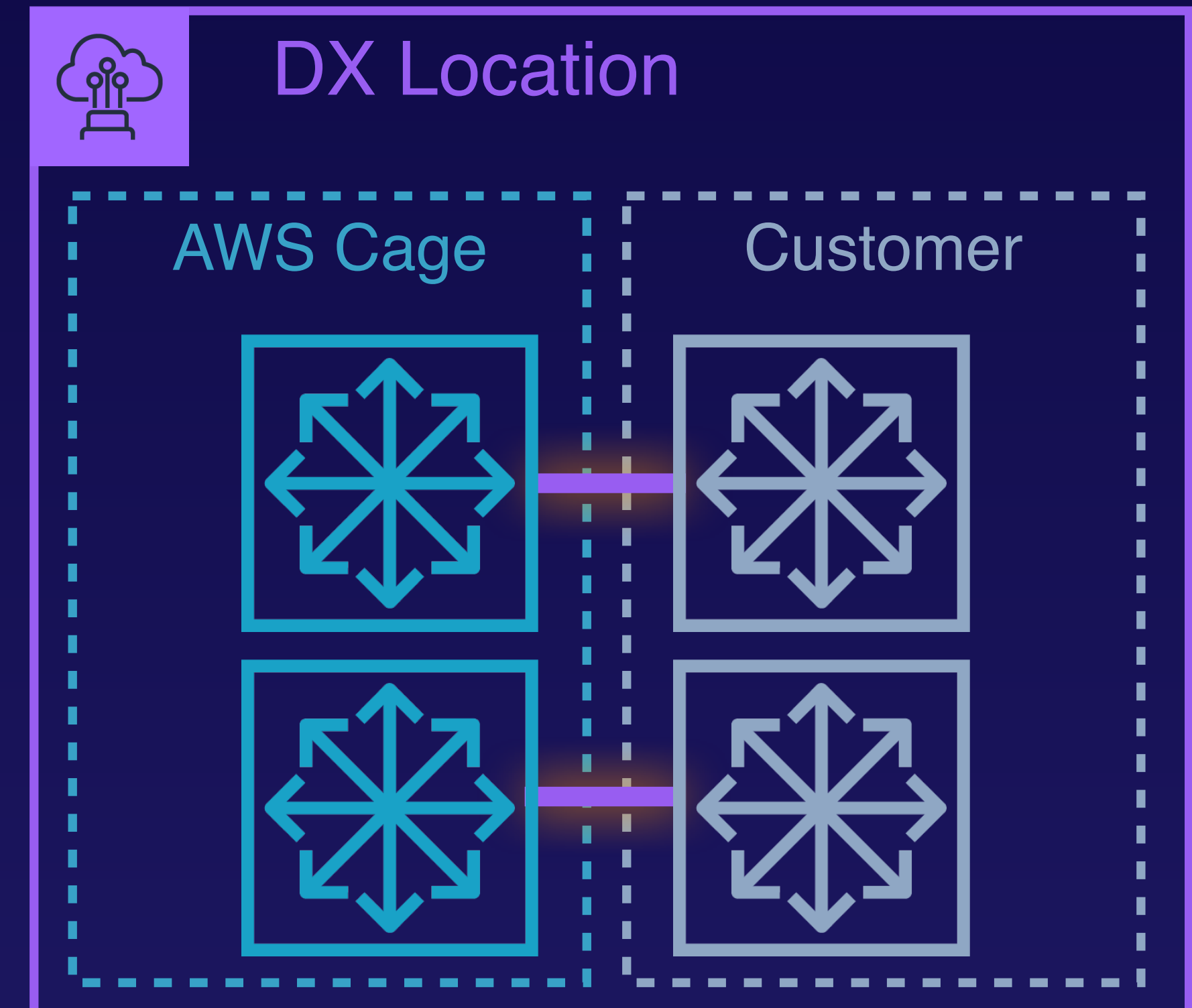
Creation Process – Establish Cross-Connect at DX Location

- DX location connects customer-managed hardware to AWS-owned hardware.
- Send LOA-CFA to DX location to initiate process.
 - Send to AWS DX Partner if appropriate.

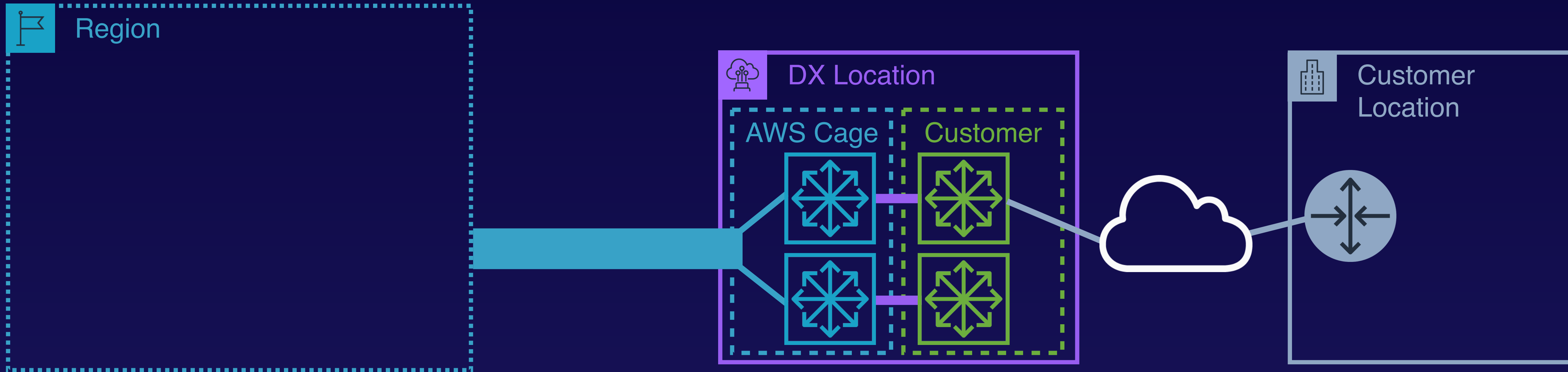


Creation Process – Establish Cross-Connect at DX Location

- Cross-connect must:
 - Be single-mode fiber.
 - Use either 1000BASE-LX (for 1 Gbps) or 10GBASE-LR (for 10 Gbps) transceivers.



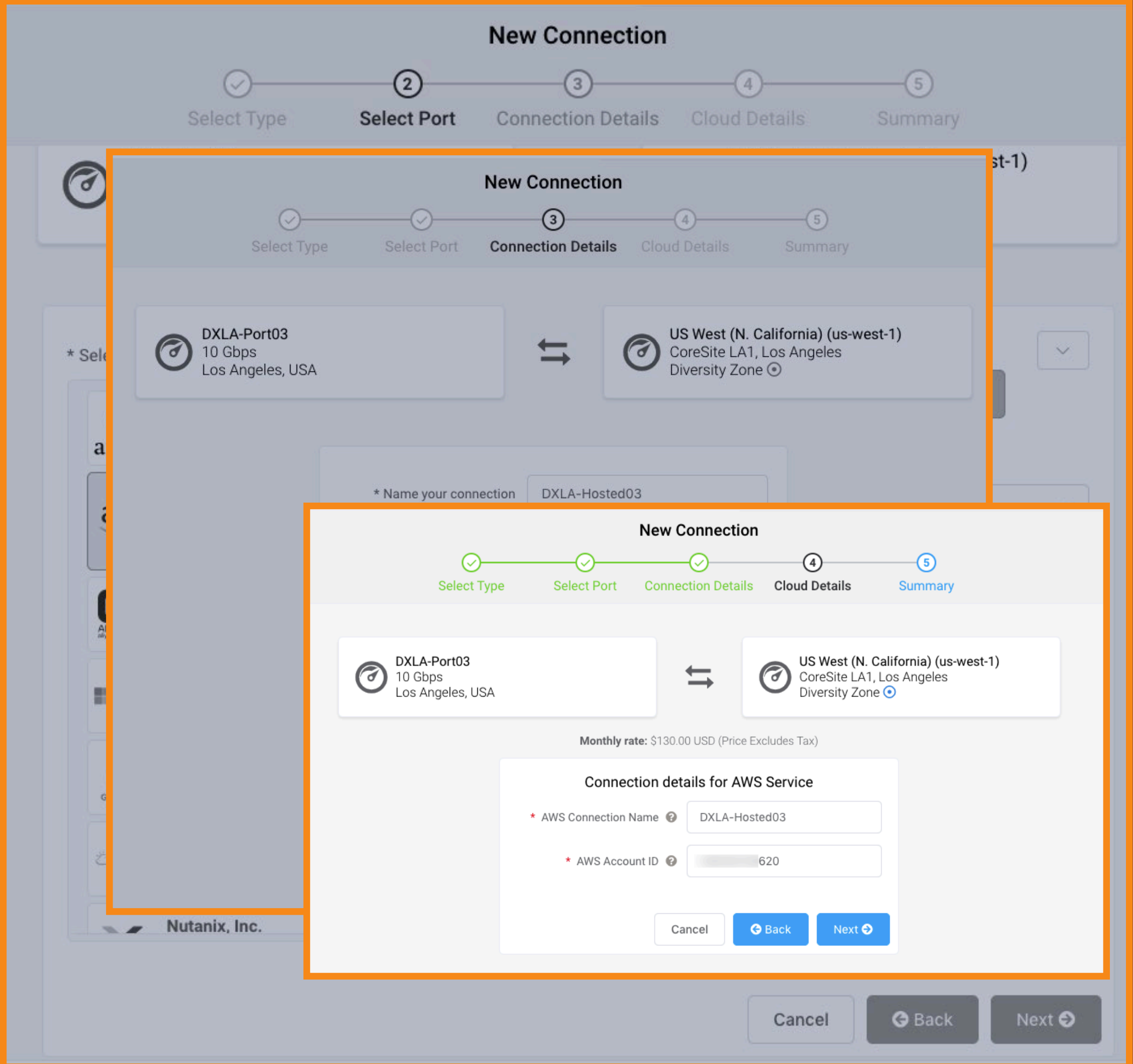
What Is a DX Hosted Connection?



- AWS hardware at DX location connects directly to **AWS DX Partner-managed** hardware.
- Wider range of bandwidth options:
 - Mbps – 50, 100, 200, 300, 400, 500
 - Gbps – 1, 2, 5, 10 (only supported by certain partners).

Creation Process - Request Hosted Connection

- DX Partner creates hosted connection via their own APIs.
- Request process, available DX Locations, and other DX options may vary by Partner.



New Connection

1 Select Type 2 **Select Port** 3 Connection Details 4 Cloud Details 5 Summary

* Select

DXLA-Port03
10 Gbps
Los Angeles, USA

US West (N. California) (us-west-1)
CoreSite LA1, Los Angeles
Diversity Zone

* Name your connection DXLA-Hosted03

New Connection

1 Select Type 2 Select Port 3 **Connection Details** 4 Cloud Details 5 Summary

DXLA-Port03
10 Gbps
Los Angeles, USA

US West (N. California) (us-west-1)
CoreSite LA1, Los Angeles
Diversity Zone

Monthly rate: \$130.00 USD (Price Excludes Tax)

Connection details for AWS Service

* AWS Connection Name ? DXLA-Hosted03

* AWS Account ID ? 620

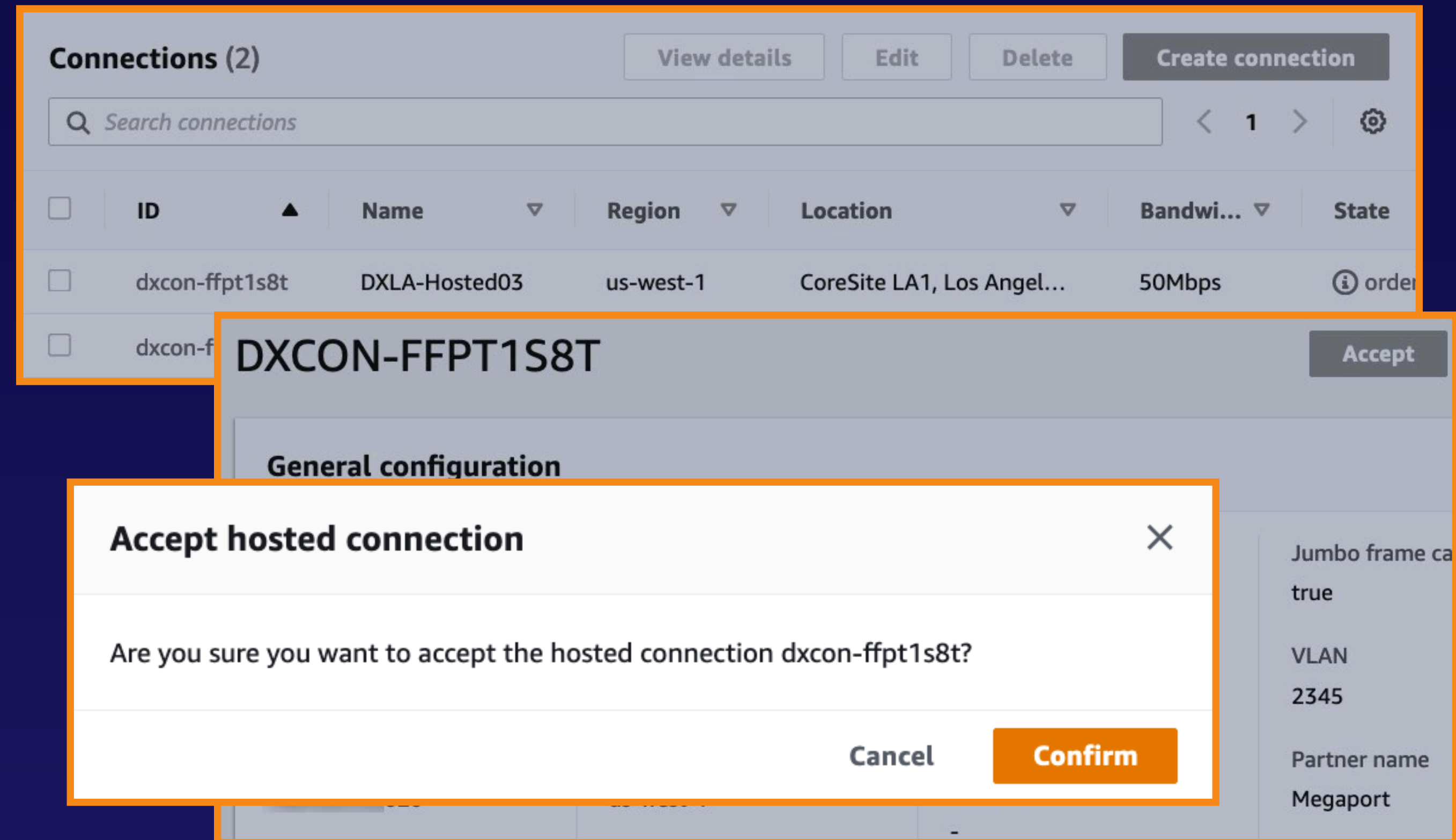
Cancel Back Next

Nutanix, Inc.

Cancel Back Next

Creation Process - Request Hosted Connection

- Once AWS Partner creates the connection, it must be accepted by the AWS customer before it can be used.



The screenshot displays the AWS DX console interface. At the top, there are buttons for 'View details', 'Edit', 'Delete', and 'Create connection'. Below this is a search bar and a table of connections. The table has columns for ID, Name, Region, Location, Bandwidth, and State. One connection is highlighted: ID 'dxcon-ffpt1s8t', Name 'DXLA-Hosted03', Region 'us-west-1', Location 'CoreSite LA1, Los Angel...', and Bandwidth '50Mbps'. An 'Accept' button is visible next to this connection. A modal dialog titled 'Accept hosted connection' is open, asking 'Are you sure you want to accept the hosted connection dxcon-ffpt1s8t?' with 'Cancel' and 'Confirm' buttons. The background shows the 'General configuration' section for the connection, including 'Jumbo frame ca true', 'VLAN 2345', and 'Partner name Megaport'.

ID	Name	Region	Location	Bandwi...	State
dxcon-ffpt1s8t	DXLA-Hosted03	us-west-1	CoreSite LA1, Los Angel...	50Mbps	order
dxcon-f	DXCON-FFPT1S8T				

Dedicated DX connections use customer-managed hardware at the DX location.

Dedicated DX connection owner must work with DX Location staff to finalize connection with AWS DX hardware.

DX hosted connections provide more flexible options for throughput speeds and port charges.

DX hosted connections can be established faster than dedicated connections.