

WELCOME TO THE DETROIT INTERNET EXCHANGE

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BRINGING NETWORK ACCESS CLOSER TO MICHIGAN BUSINESSES & COMMUNITIES



DETROIT INTERNET EXCHANGE

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WELCOME TO THE DET-IX

Thank You for Your Interest in the Detroit Internet Exchange (DET-iX)

WHAT IS THE DET-IX?

DET-iX (Detroit Internet Exchange) is a non-profit organization that operates an Internet exchange point (IXP) in Southfield, Michigan. It was founded in 2014 with the goal of facilitating peering connections between local and regional Internet service providers. As of now, DET-iX has more than 70 members with peak transfer speeds of over 1Tbps.

The DET-iX network consists of multiple high-capacity switches that are interconnected. Members connect to the network using 1, 10, 25, or 100G ports. By connecting directly to other members via DET-iX, rather than going through a third-party provider, traffic can be exchanged efficiently and locally, rather than being routed out of state to a different major city.

WHY JOIN THE DET-IX?

Joining the Detroit Internet Exchange is FREE. Members benefit from:

Cost Savings

- Routing a Large Percentage of Traffic Through an Exchange Decreases Spend on Transit Providers
- Ports at the Detroit Internet Exchange are FREE

Improved End-User Experience

Increase Network Speed, Reduce Hops & Lower Latency by Creating More Direct Paths Between Networks

Increased Redundancy

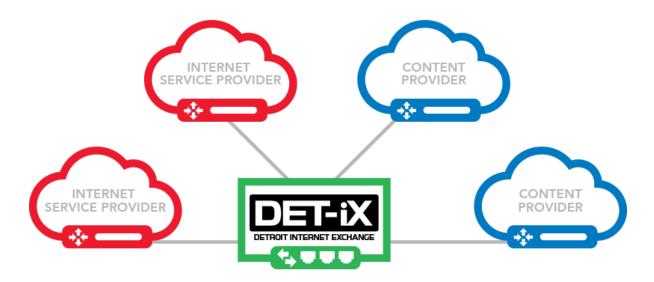
• Adding Peers Minimizes Transit Provider Dependence

Larger Bandwidth Capacity





• Distribute Large Traffic Amounts Across Many Networks



WHO CAN CONNECT?

Any organization that controls an ASN and IP addresses can connect to an exchange point. Some example organizations include Internet Service Providers, Content Delivery Networks, Automotive Manufacturing, Academic Institutions, Local Governments, and many more.

CONDITIONS OF JOINING

- Have Control of an Autonomous System Number (ASN) & IP Addresses (/24 or Larger)
- Network Access to a DET-iX Enabled Data Center
- Create an Entry in PeeringDB (peeringdb.com)

BECOME A MEMBER

For more information, use one of the following methods to contact:

- Email: <u>peering@detroitix.com</u>
- Phone: 1.800.227.1957





ROUTE SERVER CONNECTIONS

TRADITIONAL CONNECTIONS

Traditionally at an internet exchange, members will establish bilateral peering relationships with each other member connected to the exchange fabric. As the number of connected members increases, it becomes increasingly more difficult to manage peering relationships.

WHY USE DET-IX ROUTE SERVERS?

Peering with route servers creates a lower barrier to entry for incoming members. By using route servers for peering relationships, the number of Border Gateway Protocol (BGP) sessions per router stays at a couple or few instead of many. This is a more sustainable way of maintaining IXP peering relationships with many participants.

DET-IX ROUTE SERVER DETAILS

*Route Server	ASN	IPv4 Address	IPv6 Address
Route Server #1	7949	209.124.52.255	2607:f790:100::255
Route Server #2	7949	209.124.53.0	2607:f790:100::256
Route Server #3 (CDN)	7949	209.124.53.254	2607:f790:100::1000

*Route advertisement can be suppressed by using a standard BGP community of 0:(ASN).

*Due to AS7949 being removed from the AS Path when receiving routes, a 'no bgp enforce-first-as' is required.

It is recommended to peer to both Route Server #1 and #2 for redundancy. As of 12/2022, the route servers are learning approximately 110k IPv4 prefixes and 55k IPv6 prefixes. These prefixes are selected to be the best routes and the number per member is determined based on these factors:

- Filtering Mode Selected
- Your Peering Policy
- Peering Policy of Other Members

Route Server #3 is a high-capacity router connected to the DET-iX. This router has access to cache appliances or PNI's that do not support direct BGP peering (Netflix OCA's, Twitch, etc.).





PEERING PARTNERS

Member	ASN	Speed	IPv4 Address	IPv6 Address	RS
123.net	12129	200G	209.124.52.123	2607:F790:100::123	Ye
123.net	12129	100G	209.124.52.124	2607:F790:100::124	Ye
123.net - Grand Rapids	12129	100G	209.124.52.125	2607:F790:100::125	Ye
A2 Hosting, Inc.	55293	10G	209.124.52.4	2607:F790:100::4	Ye
AAA - The Auto Club Group	31923	10G	209.124.52.64	2607:F790:100::64	Ye
ACD.net/ACD Telecom, Inc.	14103	10G	209.124.52.99		Ye
Acenet, Inc	22878	10G	209.124.52.17	2607:F790:100::17	No
AcenTek	11904	20G	209.124.52.74	2607:F790:100::74	Ye
Air Advantage	27216	10G	209.124.52.50	2607:F790:100::50	Ye
Akamai Technologies	20940	200G	209.124.52.14	2607:F790:100::14	Ye
Akamai Technologies	20940	200G	209.124.52.71	2607:F790:100::71	Ye
Akamai Technologies	20940	200G	209.124.52.72	2607:F790:100::72	Ye
Amazon.com	16509	100G	209.124.52.35	2607:F790:100::35	No
Amazon.com	16509	100G	209.124.52.60	2607:F790:100::60	No
Amplex Electric, Inc	20205	100G	209.124.52.42	2607:F790:100::42	Ye
Apple	714	100G	209.124.52.88	2607:F790:100::88	No
Apple	714	100G	209.124.52.89	2607:F790:100::89	No
Aptient Consulting Group Inc.	63126	1G	209.124.52.24	2607:F790:100::24	Ye
Baker College	393665	10G	209.124.52.58	-	Ye
CacheFly	30081	10G	209.124.52.48	2607:F790:100::48	No
Casair	19310	20G	209.124.52.43	2607:F790:100::43	Ye
Cinergy Metronet	30600	100G	209.124.52.59	2607:F790:100::59	Ye
Clear Rate Communications, Inc	22438	1G	209.124.52.13	2607:F790:100::13	Ye
Cloudflare	13335	10G	209.124.52.26	2607:F790:100::26	Ye
CMSInter.net, LLC	26271	10G	209.124.52.16	2607:F790:100::16	Ye
Continent 8 Technologies	14537	10G	209.124.52.70	2607:F790:100::70	Ye
Cruise LLC	19755	10G	209.124.52.84	2607:F790:100::84	Ye
Cruise LLC	19755	10G	209.124.52.85	2607:F790:100::85	Ye
Cutting Edge Computers	62611	10G	209.124.52.62	2607:F790:100::62	Ye
D & P Communications	13728	10G	209.124.52.28	2607:F790:100::28	Ye
Daystarr Communications	21527	10G	209.124.52.25	2607:F790:100::25	Ye
Daystarr Communications	21527	10G	209.124.52.100	2607:F790:100::100	Ye
DET-iX Route Server #1	7949	-	209.124.52.255	2607:F790:100::255	-
DET-iX Route Server #2	7949	-	209.124.53.0	2607:F790:100::256	-

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DET-iX Route Server #3 (CDN)	7949	-	209.124.53.254	2607:F790:100::1000	-
Netflix, Twitch					
Easy Online Solutions, Ltd.	27589	100G	209.124.52.8	2607:F790:100::8	Yes
EDGOO NETWORKS LDA	47787	10G	209.124.52.82	2607:F790:100::82	Yes
Enzu	18978	10G	209.124.52.87	2607:F790:100::87	Yes
Everstream	30517	100G	209.124.52.18	2607:F790:100::18	Yes
Facebook	63293	10G	209.124.52.37	2607:F790:100::37	No
Fastly, Inc.	54113	100G	209.124.52.34	2607:F790:100::34	Yes
General Motors LLC	30383	10G	209.124.52.53	2607:F790:100::53	Yes
General Motors LLC	30383	10G	209.124.52.54	2607:F790:100::54	Yes
Google Inc.	15169	100G	209.124.52.21	2607:F790:100::21	Yes
Grid4 Communications	36394	10G	209.124.52.49	2607:F790:100::49	Yes
Holland Board of Public Works	395945	10G	209.124.52.75	2607:F790:100::75	Yes
Holland Board of Public Works	395945	10G	209.124.52.76	2607:F790:100::76	Yes
Hurricane Electric	6939	100G	209.124.52.27	2607:F790:100::27	Yes
INCX Global	13737	20G	209.124.52.3	2607:F790:100::3	Yes
IVS Comm	398233	10G	209.124.52.57	2607:F790:100::57	Yes
LakeNet LLC	11910	10G	209.124.52.52	2607:F790:100::52	Yes
LightSpeed Communications, LLC	63242	10G	209.124.52.6	2607:F790:100::6	Yes
Limelight Networks	22822	100G	209.124.52.63	2607:F790:100::63	No
M3 Wireless	54932	10G	209.124.52.51	2607:F790:100::51	Yes
ManagedWay Company	53292	10G	209.124.52.2	2607:F790:100::2	Yes
May Mobility	398351	10G	209.124.52.69	2607:F790:100::69	No
MEI Telecom	54373	10G	209.124.52.44	2607:F790:100::44	Yes
Mercury Network Corporation	13549	10G	209.124.52.23	2607:F790:100::23	Yes
Merit Network Inc.	237	100G	209.124.52.12	2607:F790:100::12	No
Michigan Signal	397816	100G	209.124.52.90	2607:F790:100::90	Yes
Microsoft	8075	100G	209.124.52.65	2607:F790:100::65	No
Microsoft	8075	100G	209.124.52.66	2607:F790:100::66	No
Miller Canfield	36127	10G	209.124.52.67	2607:F790:100::67	Yes
MITCON	64223	20G	209.124.52.45	2607:F790:100::45	Yes
MITCON	64223	20G	209.124.52.46	2607:F790:100::46	Yes
MultiTEL LLC	16315	10G	209.124.52.32	2607:F790:100::32	Yes
Network Services Group	15154	10G	209.124.52.19	2607:F790:100::19	Yes
Nexcess.net LLC	36444	10G	209.124.52.5	2607:F790:100::5	Yes
Oakland Schools	14241	10G	209.124.52.41	2607:F790:100::41	Yes

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DETROIT INTERNET EXCHANGE

Packet Clearing House	3856	10G	209.124.52.97	2607:F790:100::97	Yes
Packet Clearing House AS42	42	10G	209.124.52.96	2607:F790:100::96	Yes
Salesforce.com	14340	10G	209.124.52.47	2607:F790:100::47	Yes
Secant / Aunalytics	27287	1G	209.124.52.31	2607:F790:100::31	Yes
St. Clair County RESA	393474	10G	209.124.52.40	2607:F790:100::40	Yes
StackPath	33438	100G	209.124.52.80	2607:F790:100::80	Yes
StackPath	33438	100G	209.124.52.81	2607:F790:100::81	Yes
STELLAR Broadband	10423	20G	209.124.52.15	2607:F790:100::15	Yes
Submit Digital	393268	10G	209.124.52.68		Yes
Subrigo Corporation	19257	1G	209.124.52.36	2607:F790:100::36	Yes
Synergy Fiber	22768	10G	209.124.52.61	2607:F790:100::61	Yes
T-Mobile USA	21928	300G	209.124.52.78	2607:F790:100::78	Yes
TelNet Worldwide	27553	10G	209.124.52.29	2607:F790:100::29	Yes
US Signal	26554	20G	209.124.52.7	2607:F790:100::7	No
Verizon Digital Media Services (EdgeCast Networks)	15133	100G	209.124.52.39	2607:F790:100::39	Yes
Washtenaw Fiber Properties	267	10G	209.124.52.56	2607:F790:100::56	Yes
Xfernet	27630	10G	209.124.52.33	2607:F790:100::33	Yes
Xiber LLC	27630	10G	209.124.52.55	2607:F790:100::55	Yes

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