

= Juniper MX @-@ Series =

The Juniper MX @-@ Series is a family of ethernet routers and switches designed and manufactured by Juniper Networks . In 2006 , Juniper released the first of the MX @-@ series , the MX960 , MX240 , and MX480 . The second generation routers , called MX " 3D " , were first released in 2009 and featured a new Trio chipset and IPv6 support . In 2013 , the MX routers were improved to increase their bandwidth , and a virtualized MX 3D router , the vMX 3D , was released in 2014 . Utilizing the Juniper Extension Toolkit (JET) , third party software can be integrated into the routers .

= = History = =

= = = Early releases = = =

On October 18 , 2006 , the MX Series was publicly announced . Before its release , Ethernet aggregation was a missing component of Juniper 's edge network products , which was causing it to lose market @-@ share to Alcatel . The MX Series was late to market , but it was well received by analysts and customers . It was part of a trend at @-@ the @-@ time to incorporate additional software features in routers and switches .

The first product release of the MX series was the MX960 , a 14 @-@ slot , 480 Gbit / s switch and router . In late 2006 , Juniper introduced the MX240 and MX480 , which are smaller versions of the 960 . They had a throughput of 240 Gbit / s and 480 Gbit / s respectively .

= = = Further development = = =

In 2009 a new line of MX " 3D " products were introduced , using Juniper 's programmable Trio chipset . Trio is a proprietary semiconductor technology with custom network instructions . It provides a cross between network processing units and ASICs . IPv6 features were added and the MX80 , a smaller 80Gbit / s router , was introduced the following year .

In 2011 new switch fabric cards increased the capacity of MX 3D routers . In May 2011 Juniper introduced several new products including the MX5 , MX10 and MX40 3D routers , which have a throughput of 20 , 40 and 60 Gbit / s respectively and can each be upgraded to an MX80 . A collection of features called MobileNext was introduced in 2011 at Mobile World Congress , then discontinued in August 2013 . According to Network World , it allowed MX 3D products to serve as a mobile " gateway , an authentication and management control plan for 2G / 3G and LTE mobile packet cores and as a policy manager for subscriber management systems . "

In October 2012 , Juniper introduced the MX2020 and 2010 3D Universal Edge Routers , with throughputs of 80 Tbit / s and 40 Tbit / s respectively . Juniper also released a video caching system for the MX family and a suite of software applications that include parental control , firewall and traffic monitoring . New " Virtual Chassis " features allowed network operators to manage multiple boxes as though they were a single router or switch .

= = = Recent developments = = =

In 2013 , Juniper introduced new line cards for the MX series and a new switch fabric module , intended to upgrade the MX series ' for higher bandwidth needs and for software defined networking applications . The capacity of the MX240 , 480 and 960 were increased by double or more . A new Multiservice Modular Interface Card (MS @-@ MIC) was incorporated that supports up to 9 Gbit / s for services like tunneling software .

In March 2013 , Juniper released the EX9200 switch , which isn 't part of the MX Series , but uses the same software and Trio chipset . A virtualized MX series 3D router , the vMX 3D , was introduced in November 2014 . A suite of updates were announced in late 2015 . New MPC line

cards were introduced , which have a throughput of up to 1 @. @ 6 Tbit / s . Simultaneously the Juniper Extension Toolkit (JET) was announced . JET is a programming interface for integrating third @-@ party applications that automate provisioning , maintenance and other tasks . The Junos Telemetry Interface was also announced at the same time . It reports data to applications and other equipment to automate changes to the network in response to faults or in order optimize performance .

= = Current products and specifications = =

According to Juniper 's website , Juniper 's current MX Series products include the following :