IBM DataPower Gateways

Ozair Sheikh

Program Director of Offering Management API Connect & Gateways



IBM DataPower Gateway 90-day Offer

Protect critical IT infrastructure from overwhelming demand and security exposures

Due to the Covid-19 epidemic, industries are experiencing a spike in demand for their essential services, putting a lot of pressure on existing systems.

- IBM will offer <u>extended entitlement at no-charge</u> to existing DataPower customers.
- <u>Sign-up before April 30,2020</u> to extend your entitlement for ninety (90) days at no charge from the date of sign-up.

Offer is available to customers who have active entitlement to either physical or virtual appliances.

Sign up free for 90-days to extend your DataPower Gateway entitlement



- Enterprise-grade security gateway
- Simplified integration
- Reduced cost and complexity
- Smart insights and troubleshooting

IBM DataPower Gateway 90-day Offer Details

What is included?

- Deployment of DataPower Gateway Virtual Edition for both production and non-production scenarios
- Usage of any DataPower Gateway Virtual Edition, such as VMWare, Linux or Docker
- Up to 100 cores of DataPower Gateway Virtual Edition

After signing up, an IBM representative will contact customers with further details on how to take advantage of this offer with an existing license.







Sign up free for 90-days to extend your DataPower Gateway entitlement

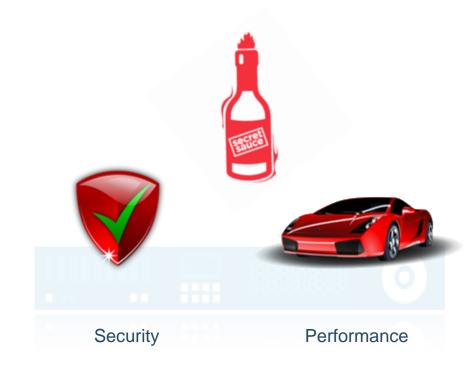
DataPower Secret Sauce

Security: Secure to the core with secure platform & self-contained signed & encrypted firmware image to *minimize risk of security exposures*

Performance: patented gateway technology that executes transactions natively within the OS, delivering 30K TPS at wire speed

DataPower Gateways help reduce TCO

- Less security exposures reduces time spent patching systems
- Minimal performance tuning reduces infrastructure and operational costs
- Less hardware needed to support workload which lowers capital expenditure



DataPower Gateways can deploy anywhere...

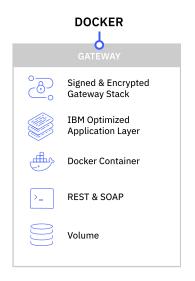
Physical appliances: All-in-one (HW / SW), DMZ-ready with physical security including crypto acceleration and optional hardware security module (HSM)

Software: virtual appliance, application (Linux) & container (Docker/Kubernetes) provide flexible deployment options for both cloud and on-prem environments

GATEWAY Signed & Encrypted Gateway Stack IBM Optimized Embedded OS REST & SOAP HARDWARE Trusted Platform & Hardware Security Crypto Acceleration







Choosing the right Gateway form factor

Physical appliances provides the most comprehensive security combined physical with firmware security.

Virtual, Linux and Container offer "right sized" units of capacity, as few as 4 CPUs

Container provide ability to leverage autoscaling and runtime health monitoring

Container is "cloud ready" to facilitate both public and private cloud based deployments









Enhanced Troubleshooting with DataPower Operations Dashboard

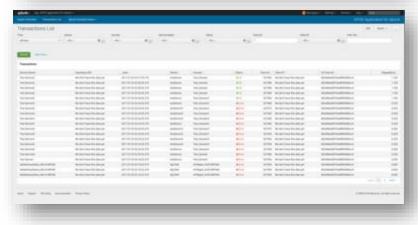
Powerful API diagnostics with detailed views across latency, version, policy, and consumer

Non-intrusive tracking of transactions across multiple gateways without any manual policy instrumentation

Supercharged performance for demanding workloads via new distributed, federated server architecture

Reduce Splunk licensing cost with DPOD plugin for Splunk, empowering Splunk admins unique operational insight collected from DPOD



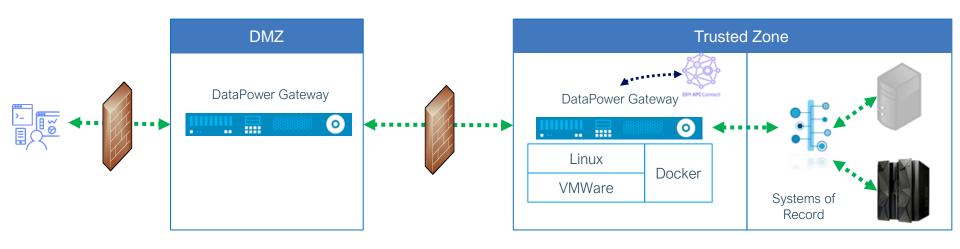


Best Practices

Deployment Scenarios

DataPower Gateways are typically deployed in either the DMZ or Trusted Zone

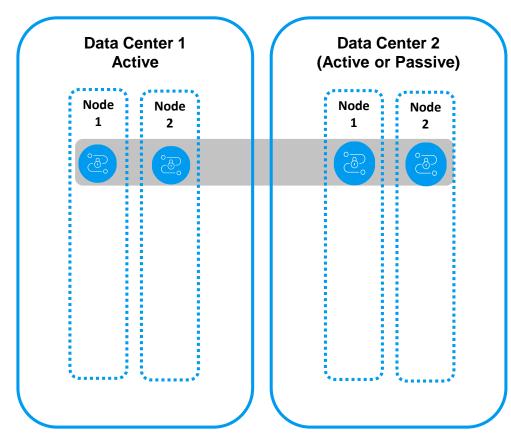
- Physical appliances are suitable for deployment in DMZ
- All form factors can be deployed in Trusted zone



Traditional Topology – Active for HA; Passive For DR

Traditional deployment consists of two data centers

- Two DataPower Gateways instances per Data Center
- Requires external load balancer to route traffic between data centers
- Optionally, use AO self-balancing to route traffic between DataPower Gateways within the data center
- Passive instances are pre-configured but without live traffic



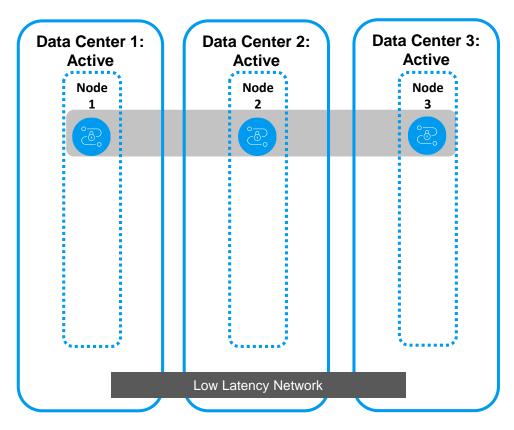
^{**}Nodes represent physical appliances or VMs

Kubernetes Topology - Three Data Centers for HA

Deployment of three DataPower Gateway instances is required for HA in Kubernetes

Deployment with API Connect mandates three instances to ensure quorum

 Instances can be deployed within application domains / tenants to achieve quorum requirement



^{**}Nodes represent physical machine or VMs

DevOps – Manage DataPower Configuration

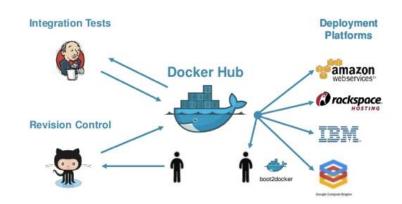
DataPower configuration is persisted on file system per domain

Programmatically modify configuration using following methods:

- Command Line Interface (CLI)
- SOAP Management interface (SOMA)
- REST Management interface (ROMA)

Manage environment / domain specific configuration

- Deployment policy objects
- DevOps pipeline to templatize and modify configuration



DevOps - Deploy DataPower Configuration

Deploy configuration and crypto material

- Secure Backup/Restore to manage configuration + crypto material
- Import/Export to manage configuration only (keys managed separately if stored in cert/sharedcert folders)
- Container/Linux only: Map host machine volume (ie source control systems) to DataPower file system (local/config)

Key Management

Form factor drives the optimal approach to store sensitive information

- Embedded & Network Hardware Security Module (HSM) provides additional level of security using dedicated hardware
- Virtual Appliances store crypto material within flash memory with additional layer of security
- Linux & Container form factors map file system directories for easier DevOps

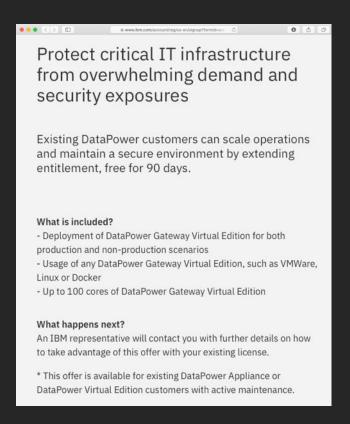
Use password aliases to mask sensitive information within firmware





Start using the 90-day Offer now!

- Sign up free for 90-days.
- 2. IBM representative will contact customers with further details on how to take advantage of this offer with an existing license.
- 3. Explore Online Learning Material.



https://ibm.biz/Bdq2ci

Summary

- Free 90 day entitlement for DataPower Gateway customers
- DataPower Gateway form factors
- DataPower Operation Dashboards
- Best practices for deploying DataPower Gateways for HA, including Kubernetes
- Architectural guidance for managing DataPower configuration

Notices and disclaimers

© 2018 International Business Machines Corporation. No part of this document may be reproduced or transmitted in any form without written permission from IBM.

U.S. Government Users Restricted Rights — use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM.

Information in these presentations (including information relating to products that have not yet been announced by IBM) has been reviewed for accuracy as of the date of initial publication and could include unintentional technical or typographical errors. IBM shall have no responsibility to update this information. This document is distributed "as is" without any warranty, either express or implied. In no event, shall IBM be liable for any damage arising from the use of this information, including but not limited to, loss of data, business interruption, loss of profit or loss of opportunity. IBM products and services are warranted per the terms and conditions of the agreements under which they are provided.

IBM products are manufactured from new parts or new and used parts. In some cases, a product may not be new and may have been previously installed. Regardless, our warranty terms apply."

Any statements regarding IBM's future direction, intent or product plans are subject to change or withdrawal without notice.

Performance data contained herein was generally obtained in a controlled, isolated environments. Customer examples are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual performance, cost, savings or other results in other operating environments may vary.

References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business.

Workshops, sessions and associated materials may have been prepared by independent session speakers, and do not necessarily reflect the views of IBM. All materials and discussions are provided for informational purposes only, and are neither intended to, nor shall constitute legal or other guidance or advice to any individual participant or their specific situation.

It is the customer's responsibility to insure its own compliance with legal requirements and to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the customer follows any law.

Notices and disclaimers continued

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products about this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products. IBM does not warrant the quality of any third-party products, or the ability of any such third-party products to interoperate with IBM's products. **IBM expressly disclaims all warranties, expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a purpose.**

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents, copyrights, trademarks or other intellectual property right.

IBM, the IBM logo, ibm.com and [names of other referenced IBM products and services used in the presentation] are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at: www.ibm.com/legal/copytrade.shtml.

