IBM Cloud Private V2.1, the next-generation private cloud platform, helps transform enterprise workloads with cloud native services and analytical insights

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At a glance

IBM(R) **Cloud Private:**

- Provides an integrated IaaS and PaaS private cloud platform for enterprise workloads that need to be securely run behind the client's firewalls. It also includes integrations to popular open source and cloud native tools, as well as IBM application middleware and development services.
- Is built on the latest versions of Kubernetes and Docker, the leading open source container technologies. It also offers operations management and DevOps capabilities through integrations with MongoDB, Redis, and many other services, so that developers and administrators have the flexibility and control needed over their environments.
- Provides optional Cloud Foundry runtimes for the creation of microservices and 12-factor applications. These runtimes are managed by the same operational and support services as the Kubernetes and Docker runtime environments on IBM Cloud Private.
- Contains application analytics and integrations to monitoring tools, including Kibana and Elasticsearch, so that enterprises can act on data insights and prescriptive guidance on how to modernize and improve their workloads.
- Includes IBM Cloud Automation Manager as a fully entitled and fully supported component of IBM Cloud Private. IBM Cloud Automation Manager is used for provisioning VMs and bare-metal servers, and delivering application environments reliably and repeatably in IBM Cloud, VMware, Amazon AWS, Microsoft(TM) Azure, and PowerVC.

IBM Cloud Private for Application Modernization:

- IBM Cloud Private for Application Modernization provides the IBM Cloud Private capabilities plus IBM WebSphere(R) Application Server Network Deployment, IBM MQ Advanced, IBM API Connect(TM) Professional, IBM DB2(R) Direct Advanced and IBM Urban Code Deploy.
- IBM WebSphere Application Server Network Deployment provides an advanced, flexible runtime environment for large-scale application deployments. It offers near-continuous availability with advanced performance and management capabilities for mission-critical applications.
- IBM MQ Advanced is a robust messaging middleware that simplifies and accelerates the integration of diverse applications and business data across multiple platforms.
- IBM API Connect Professional provides a comprehensive solution to manage your entire API lifecycle from creation to management.

- IBM DB2 Direct Advanced is the transformation data platform for transactional and analytical workloads in the era of digital, cloud, and cognitive. It provides continuous availability of data to keep transactional and analytics operations at maximum efficiency to ensure access to data is not impacted by any planned or unplanned downtime.
- IBM Urban Code Deploy is an application release automation solution that combines robust visibility, traceability and auditing capabilities.

IBM Cloud Private for Data Science:

- IBM Cloud Private for Data Science provides the above capabilities plus IBM Data Science Experience Enterprise Edition (DSX) and IBM Db2$^{(R)}$ Warehouse.
- IBM Data Science Experience Enterprise Edition is designed from the ground up to help data scientists and organizations to drive deeper insights out of their protected and regulated data sets. Including things like Jupyter notebooks, Spark, machine and deep learning libraries, and a rich set of security, collaboration, and management features, DSX is packaged with the IBM Cloud Private for Data Science bundle.
- IBM Db2 Warehouse is a software-defined data warehouse for private clouds and virtual private clouds that support Docker container technology. It is optimized for fast and flexible deployment on IBM Cloud Private and is packaged together with IBM Cloud Private for Data Science. Fusing IBM Db2 and Netezza$^{(R)}$ technologies, IBM Db2 Warehouse offers cloud elasticity combined with the simplicity of a software appliance. The real power of IBM Db2 Warehouse is the high-performing analytics engine that combines in-memory processing with in-database analytics across a massively parallel processing (MPP) architecture.
- The combination of IBM Cloud Private, IBM Data Science Experience Enterprise Edition, and IBM Db2 Warehouse brings together a powerful analytics package for enterprises.

IBM Spectrum$^{™}$ Access:

- Provides quick and valuable insights and advantages that a better understanding of your data and quick decisions about your client and business data bring
- Enables customers to react quickly and easily deploy the resources needed
- Delivers a common management interface or pane of glass for the entire stack, from performance to infrastructure to capacity and orchestration
- Lets customers move from technology silos to a cloud model that transforms your data center infrastructure
- Helps customers monitor and manage applications and provide resource consumption reports

Overview

IBM Cloud Private provides a private and integrated IaaS and PaaS cloud environment, built on open source frameworks, including Kubernetes and Cloud Foundry. It contains operational management and DevOps capabilities to enable enterprises to securely manage and scale their critical workloads and apps on a private cloud environment behind their firewalls.

Enterprises are turning to IBM Cloud Private for three key use cases:

- Developing and running production cloud native applications in a private cloud
- Refactoring and modernizing monolithic or legacy enterprise applications
- Securely using and integrating to public cloud services from within their data centers

IBM Cloud Private is compatible with leading systems manufacturers, including Cisco, Lenovo, and NetApp. It has been optimized for IBM Z, the industry-leading secure transaction platform, IBM Power Systems$^{™}$, the platform designed for AI and cognitive workloads, and IBM PureApplication$^{(R)}$ System.

To modernize enterprise applications and manage consistently in a private cloud, IBM Cloud Private for Application Modernization includes the IBM Cloud Private platform, plus core enterprise application capabilities such as Java™ runtimes, messaging, and API management. By leveraging these capabilities, enterprises can operationalize their existing applications in a consistent manner as cloud native applications. Customers can also choose to open existing application architectures and leverage business logic and existing technology in new ways which differentiate from their competition.

IBM Cloud Private for Data Science takes the above capabilities and applies them to the needs of data scientists and organizations looking to get insights from their protected or regulated data sets. IBM Cloud Private for Data Science bundles together the power of IBM Cloud Private with IBM Db2 Warehouse and IBM Data Science Experience Enterprise Edition. IBM Db2 Warehouse, purpose built for containers, provides in-memory and in-database processing at cloud scale. IBM Data Science Experience Enterprise Edition provides a private environment on IBM Cloud Private where data scientists can work with a variety of tools such as Spark, R, Python, and Anaconda, all integrated to work together in a productive collaborative experience. With IBM Db2 Warehouse and IBM Data Science Experience Enterprise Edition, enterprises will have a full solution to solve their most important and sensitive data and analysis challenges.

Deploy IBM Cloud Private with the right cloud foundation, IBM Spectrum Access with VersaStack

IBM Spectrum Access delivers enterprise data management and protection in hybrid and multicloud environments with operational control and efficiency. Deployable with VersaStack converged systems from IBM and Cisco, it offers everything your business needs to deploy a private cloud solution designed to deliver the economics and simplicity of the cloud, with the accessibility, virtualization, security, and performance of an on-premises implementation.

Key prerequisites

For details, see the System requirements.

Planned availability date

October 24, 2017

Description

IBM Cloud Private is the next generation of private cloud for the enterprise. Enterprises that have stringent regional, governmental, and industry-based regulations require strict control over their applications and data. They want operations optimization, infrastructure access, development efficiencies, and speed to market, which can be gained from public clouds, but they must abide by the regulations that are imposed for their industry, geographical region, and corporation.

IBM Cloud Private

IBM Cloud Private is an integrated IaaS and PaaS environment for developing and managing on-premises, containerized applications. This integrated environment can be deployed behind firewalls and managed or controlled by whomever the enterprise determines. It is built on the container orchestrator Kubernetes, and contains a private image repository, a management console, and monitoring frameworks. With a lightweight footprint, yet powerful platform capabilities, IBM Cloud Private allows enterprises to unleash their development creativity, using industry-common technologies and process guidance, in a minimal timeframe.

Many enterprises have business-critical applications that have been developed in a monolithic, waterfall approach. These applications are running in production successfully, but are a closed box that cannot be used for innovation and modern application needs as required by the business. To help enterprises modernize these applications, IBM Cloud Private provides a platform management dashboard that leverages application analytics to provide prescriptive guidance for refactoring these applications to be modular, resilient, and managed efficiently. This opens opportunities for developers to harness the powerful information of business-critical applications and data in modern development models such as microservices and 12-factor applications.

Platform technologies enabling cloud native development include Docker containers and Kubernetes with integrated operations management for security, logging, monitoring, and event management. IBM Cloud Private also provides access to necessary application runtimes and data services such as IBM Websphere Liberty, Microservice Builder, MQ, Data Science Experience, and Cloud Automation Manager, along with many other IBM and third-party services.

This next-generation private cloud is the platform for developing cloud native applications, securely integrating external data and services, and modernizing heritage enterprise workloads in a cloud world.

IBM Cloud Private for Application Modernization

Application modernization is a direct reflection of IBM's experience in helping enterprise developers build cloud-native applications. IBM Cloud Private for Application Modernization delivers an enterprise-focused platform designed to adhere to the best practices of developing with microservices. It also delivers a robust set of application runtimes, software, data, and other value-added services designed to enable cloud-native applications. IBM continues to integrate enterprise-relevant open source services with its enterprise-grade software and integration portfolio to deliver innovation, reliability, and security in a single platform.

- IBM Cloud Private Application Modernization provides the IBM Cloud Private capabilities plus IBM WebSphere Application Server Network Deployment, IBM MQ Advanced, IBM API Connect Professional, IBM DB2 Direct Advanced, and IBM Urban Code Deploy.
- IBM WebSphere Application Server Network Deployment provides an advanced, flexible runtime environment for large-scale application deployments. It offers near-continuous availability with advanced performance and management capabilities for mission-critical applications.
- IBM MQ Advanced is robust messaging middleware that simplifies and accelerates the integration of diverse applications and business data across multiple platforms.
- IBM API Connect Professional provides a comprehensive solution to manage your entire API lifecycle from creation to management.
- IBM DB2 Direct Advanced is the transformation data platform for transactional and analytical workloads in the era of digital, cloud, and cognitive. It provides continuous availability of data to keep transactional and analytics operations at maximum efficiency to ensure access to data is not impacted by any planned or unplanned downtime.
- IBM Urban Code Deploy is an application release automation solution that combines robust visibility, traceability, and auditing capabilities.

IBM Cloud Private for Data Science

IBM Cloud Private for Data Science provides all of the features and benefits of an integrated IaaS and PaaS environment in support of data science and analytics based use cases. Organizations around the world are looking to leverage the power of advanced analytics integrated with or deployed as cloud native applications. They are looking to use enterprise-grade data and analytics services for statistical analysis and big data applications to make faster and more informed business decisions on their most sensitive and regulated data sets. IBM Cloud Private for Data

Science packages IBM Cloud Private with IBM Db2 Warehouse and IBM Data Science Experience Enterprise Edition (DSX).

DSX runs on IBM Cloud Private, running multiple copies of each DSX service across several nodes, restarting services and nodes when it detects a problem has occurred. Each installation of DSX on IBM Cloud Private is completely self-contained and includes all the software needed to run Data Science Experience, including local installations of Apache Spark and Object Storage in addition to DSX services. Any time you need additional capacity, you can add nodes to your DSX local installation directly through the administration console without needing to perform a separate installation procedure.

For process the data, IBM Cloud Private for Data Science packages Db2 Warehouse in addition to Data Science Experience. IBM Db2 Warehouse is a software-defined data warehouse. It is optimized for fast and flexible deployment on IBM Cloud Private with automated scaling to meet agile analytic workloads. Fusing IBM Db2 and Netezza technologies, IBM Db2 Warehouse offers cloud elasticity combined with the simplicity of a software appliance running on a private cloud. The real power of IBM Db2 Warehouse is the high-performing analytics engine that combines in-memory processing with in-database analytics across a massively parallel processing (MPP) architecture.

By using a combination of a containers-based, scalable platform, in-memory and in-database analytical processing, and an integrated set of tools for data scientists, IBM Cloud Private for Data Science next-generation private cloud is the platform for developing data science and analytic workloads.

Deploy IBM Cloud Private with the right cloud foundation, IBM Spectrum Access with VersaStack

Every day, businesses perform a delicate balancing act: working to outperform competitors and drive new business outcomes with IT resources that complement, enhance, and support business direction. As you turn to cloud computing to enhance business agility, your IT infrastructure must be easy to integrate, automate, and orchestrate. IBM Spectrum Access delivers enterprise data management and protection in hybrid and multicloud environments with operational control and efficiency. Deployable with VersaStack converged systems from IBM and Cisco, it offers everything your business needs to deploy a private cloud solution designed to deliver the economics and simplicity of the cloud, with the accessibility, virtualization, security, and performance of an on-premises implementation.

IBM Spectrum Access for cloud deployments

IBM Cloud Private helps enterprises transform by enabling them to build new applications using modern processes and by modernizing legacy applications today as a competitive advantage. Many IT departments have large sets of hardware and software components and spend a lot of time integrating them into a workable solution. Unlike other solutions that simply overlay software, IBM Spectrum Access for IBM Cloud Private is a pretested and validated solution that pools your compute, network, and storage resources and enables you to easily deliver the economics of cloud in an on-premises environment. IBM Spectrum Access incorporates the latest enterprise software defined data center technology including network and storage virtualization as well as container integration, resulting in policy-based automation. In addition, IBM Spectrum Access scales and simplifies the containerized environment scaling to more containers with faster, automated provisioning of supporting volumes compared to native container scripting. The solution also enables the IBM Cloud Private adminstrator to self-provision external storage without being a storage expert, enabling storage administrators and architects to delegate storage provisioning safely via predefined storage classes.

IBM Spectrum Access combines VersaStack with IBM Spectrum Control™ Base Edition and IBM storage enabler for containers. This complete stack along with IBM Cloud Private is easy to deploy, automate, and manage, so that your IT staff can quickly deliver the infrastructure services your business needs to increase IT and business agility.

These features, coupled with high performance computing infrastructure along with the unique integration of IBM Cloud Private, layered on top of IBM Cognitive capabilities now provide quick and valuable insights and advantages that come from having a superior understanding of your data, resulting in quicker decisions about your client's data and improving overall business results.

Deliver easy, efficient, and versatile IT services

When compute and storage capacity is added in an ad hoc manner, your IT staff spends a lot of time selecting, connecting, integrating, testing, and managing components. IBM Spectrum Access enables you to react quickly and easily deploy the resources you need. Verified, lab-tested architecture provides detailed design and implementation guidance that helps reduce risk and guesswork by giving your architects and administrators guidebooks for implementation. By following the guidelines in these Cisco Validated Designs, you can create a complete IBM solution that helps protect against compromise while delivering a simplified, standardized, and trusted approach for the deployment, use, and management of your shared infrastructure resources and cloud environment.

As expected from a cloud deployment, Spectrum Access is designed to expand and shrink depending on the application necessity. In other words, scaling up or down the solution is a simple and easy procedure that can be done without impact.

Deliver cloud optimization

In a cloud compute environment, there is increased complexity due to the volume of objects and components that make up the solution. Management of thousands of individual containers can be challenging. The inefficient storage allocation along with the lack of overall performance poses a real threat to the scalability of the cloud environment. IBM Spectrum Access solves these issues by delivering the right storage while streamlining your storage provisioning, saving days or weeks of a cloud administrator's time.

IBM Cloud Private integrates a variety of microservices and middleware capabilities that in combination with IBM Spectrum Access form a robust and responsive infrastructure, maximizing the overall integration and continued deployment of applications, while minimizing risks associated with performance bottlenecks and unpredictable scalability. On this new agile framework of development, the IBM expertise on delivering Analytics and Cognitive solutions sets this solution apart from other cloud implementations, future-proofing not only the development process but also the decisions made using the data generated by them.

Deliver self-service IT

Your users expect continuous operation and easy access to resources, so IT cannot take a long time to add new servers and capacities or repurpose idle ones. IBM Spectrum Access lets you move from technology silos to a cloud model that transforms your data center infrastructure into pools of resources that can be easily allocated and repurposed. Your applications can now run more efficiently within, between, and beyond your data center boundaries, and your IT department can evolve into IT as a service (ITaaS) to accelerate service delivery and increase revenue.

IBM Spectrum Access abstracts the complexity of individual devices, hypervisors, and virtual machines into a simplified model that makes them easy to manipulate and incorporate into automated processes. Users simply request the resources they need through an easy-to-use, secure, self-service portal, and the system provisions the underlying infrastructure resources. Your cloud infrastructure layers are synchronized and optimized, helping ensure that IT resources are available on demand. Because this intelligent system knows how objects fit together and can apply service profiles in a consistent manner, you can have the confidence that the right equipment is quickly and easily provisioned for the workload that you need it to support.

Optimize storage footprint, capacity, and performance

IBM Spectrum Access utilizes the Storwize$^{(R)}$ family, a virtualized, flash-memory-optimized, enterprise-class storage system that provides efficient storage infrastructure for cloud data. The system includes technologies that enhance virtual and cloud environments, with built-in functions such as data virtualization and real-time compression. Embedded within IBM Storwize is IBM Spectrum Virtualize^{TM}, the industry-leading storage virtualization software that provides array virtualization capabilities to help your staff improve efficiency and utilization while reducing complexity and cost. All IBM and external third-party storage can be virtualized to improve overall efficiencies and capacity utilization. As a result, your IT organization can tap into new and previously unused disk storage capacity and further optimize available capacities to drive new cost efficiencies. In addition, your IT staff can centrally manage storage volumes from a single point, migrate data from existing arrays without disruption to applications, and avoid downtime for backup, maintenance, and upgrade operations.

Measure, monitor, and charge for use

IBM Spectrum Access helps you monitor and manage applications and provide resource consumption reports. With at-a-glance status panels, resource utilization tracking, and predefined reports, your IT department can monitor cloud infrastructure status. In addition, the capability to replace time-consuming, manual provisioning and deprovisioning of data center resources with automated workflows helps your IT staff reduce delivery time from weeks to minutes, improving consistency, efficiency, and speed within your organization.

Why IBM Spectrum Access?

IBM Spectrum Access is built upon IBM and Cisco technologies, global IT industry leaders with a 15-year history of demonstrated joint success, with more than 25,000 shared customers. We have experience in guiding emerging technology transitions and have the breadth and ability to deliver innovative, validated solutions while helping your organization reduce risk.

IBM and Cisco together provide global delivery capabilities and deep industry expertise along with current technology offerings in data center computing, networking, mobility, collaboration, analytics, and the Internet of Things (IoT). Our solution portfolio is based on client-specific needs and strategies across industries and segments, including healthcare, banking, public safety, energy, utilities, and retail. As a result, we can offer you what you need to achieve the vision of a modern cloud environment that delivers IT and business agility. IBM Spectrum Access as the foundation for IBM Cloud Private results in a complete solution designed to deliver the economics and simplicity of the cloud, with the accessibility, virtualization, security, and performance of an on-premises implementation.

Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT), containing details about accessibility compliance, can be found on the IBM Accessibility website.

Reference information

For additional information, see Software Announcement 217-356, dated June 27, 2017.

Program number

Program name	VRM	Program number
IBM Cloud Private	2.1.0	5737-E67

Offering Information

Product information is available on the IBM Offering Information website.

More information is also available on the Passport Advantage(R) and Passport Advantage Express(R) website.

Publications

Technical documentation can be found in IBM Knowledge Center.

Services

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based Software Services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services, contact your Lab Services Sales or Delivery Leader.

Technical information

Specified operating environment

Software requirements

For Software requirements, see System requirements.

Planning information

Packaging

This offering is delivered through the internet as an electronic download. There is no physical media.

Ordering information

Product: IBM Cloud Private (5737-E67)

Passport Advantage

Part description	Part number
IBM Cloud Private Virtual Processor Core License + SW Subscription & Support 12 Months	D1URTLL
IBM Cloud Private Virtual Processor Core Monthly License	D1US3LL
IBM Cloud Private Virtual Processor Core Annual SW Subscription & Support Renewal	E0NT7LL

Part description	Part number
IBM Cloud Private Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1URULL
IBM Cloud Private Virtual Processor Core for Linux$^{(R)}$ on z System Virtual Processor Core License + SW Subscription & Support 12 Months	D1VS3LL
IBM Cloud Private Virtual Processor Core for Linux on z System Virtual Processor Core Monthly License	D1VSLLL
IBM Cloud Private for Linux on z System Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P0FLL
IBM Cloud Private for Linux on z System Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VS4LL
Cloud Foundry for IBM Cloud Private Virtual Processor Core License + SW Subscription & Support 12 Months	D1VS5LL
Cloud Foundry for IBM Cloud Private Virtual Processor Core Monthly License	D1VSMLL
Cloud Foundry for IBM Cloud Private Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P0GLL
Cloud Foundry for IBM Cloud Private Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VS6LL
Cloud Foundry for IBM Cloud Private for Linux on z System Virtual Processor Core License + SW Subscription & Support 12 Months	D1VS7LL
Cloud Foundry for IBM Cloud Private for Linux on z System Virtual Processor Core Monthly License	D1VSNLL
Cloud Foundry for IBM Cloud Private for Linux on z System Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P0HLL
Cloud Foundry for IBM Cloud Private for Linux on z System Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VS8LL
IBM Cloud Private Automation Manager Virtual Processor Core License + SW Subscription & Support 12 Months	D1VS9LL
IBM Cloud Private Automation Manager Virtual Processor Core Monthly License	D1VSPLL
IBM Cloud Private Automation Manager Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P0ILL
IBM Cloud Private Automation Manager Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VSALL
IBM Cloud Private for Data Science Virtual Processor Core License + SW Subscription & Support 12 Months	D1VSDLL
IBM Cloud Private for Data Science Virtual Processor Core Monthly License	D1VSRLL
IBM Cloud Private for Data Science Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P0KLL

Part description	Part number
IBM Cloud Private for Data Science Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VSELL
IBM Cloud Private for Application Modernization Virtual Processor Core License + SW Subscription & Support 12 Months	D1VXCLL
IBM Cloud Private for Application Modernization Virtual Processor Core Monthly License	D1VXSLL
IBM Cloud Private for Application Modernization Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P1MLL
IBM Cloud Private for Application Modernization Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VXDLL
IBM Cloud Private for Application Modernization for Linux on z System Virtual Processor Core License + SW Subscription & Support 12 Months	D1VXJLL
IBM Cloud Private for Application Modernization for Linux on z System Virtual Processor Core Monthly License	D1VXTLL
IBM Cloud Private for Application Modernization for Linux on z System Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P1QLL
IBM Cloud Private for Application Modernization for Linux on z System Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VXKLL
UrbanCode Deploy for IBM Cloud Private for Application Modernization Virtual Processor Core License + SW Subscription & Support 12 Months	D1VXQLL
UrbanCode Deploy for IBM Cloud Private for Application Modernization Virtual Processor Core Monthly License	D1VYPLL
UrbanCode Deploy for IBM Cloud Private for Application Modernization Virtual Processor Core Annual SW Subscription & Support Renewal 12 Months	E0P1TLL
UrbanCode Deploy for IBM Cloud Private for Application Modernization Virtual Processor Core SW Subscription & Support Reinstatement 12 Months	D1VXRLL
Data Science Experience for IBM Cloud Private for Data Science Authorized User License + SW Subscription & Support 12 Months	D1VSHLL
Data Science Experience for IBM Cloud Private for Data Science Authorized User Monthly License	D1VSTLL
Data Science Experience for IBM Cloud Private for Data Science Authorized User Annual SW Subscription & Support Renewal 12 Months	E0P0MLL
Data Science Experience for IBM Cloud Private for Data Science Authorized User SW Subscription & Support Reinstatement 12 Months	D1VSILL
DB2 for Cloud Private Application Modernization Virtual Processor Core Monthly License	D1VYMLL

Part description	Part number
Data Science Experience for IBM Cloud Private for Data Science for Linux on z System Authorized User Annual SW Subscription & Support Renewal 12 Months	E0P0NLL
Data Science Experience for IBM Cloud Private for Data Science for Linux on z System Authorized User License + SW Subscription & Support 12 Months	D1VSJLL
Data Science Experience for IBM Cloud Private for Data Science for Linux on z System Authorized User Monthly License	D1VSULL
Data Science Experience for IBM Cloud Private for Data Science for Linux on z System Authorized User SW Subscription & Support Reinstatement 12 Months	D1VSKLL

Charge metric

Program name	PID number	Charge metric
IBM Cloud Private	5737-E67	Virtual Processor Core
IBM Cloud Private	5737-E67	Authorized User

Virtual Processor Core

Virtual Processor Core is a unit of measure by which the Program can be licensed. A Physical Server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate Physical Server. A Virtual Server is either a virtual computer created by partitioning the resources available to a Physical Server or an unpartitioned Physical Server. A Processor Core (commonly called a processor or CPU) is a functional unit within a computing device that interprets and executes instructions. A Processor Core consists of at least an instruction control unit, and one or more arithmetic or logic unit. A Virtual Processor Core is a Processor Core in an unpartitioned Physical Server, or a virtual core assigned to a Virtual Server. Licensee must obtain entitlement for each Virtual Processor Core made available to the Program.

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Authorized User

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Note: *Some programs may be licensed where devices are considered users. In that case the following applies. Any computing device that requests the execution of or receives for execution a set of commands, procedures, or applications from the Program or that is otherwise managed by the Program is considered a separate User of the Program and requires an entitlement as if that device were a person.*

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage Agreement, and IBM Agreement for Acquisition of Software Maintenance.

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use. Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

Agreement for Acquisition of Software Maintenance

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. IBM includes one year of Software Subscription and Support (also referred to as Software Maintenance) with the initial license acquisition of each program acquired. The initial period of Software Subscription and Support (also referred to as Software Maintenance) can be extended by the purchase of a renewal option, if available. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

License Information number

L-CAQY-AR4R4K

See the License Information documents page on the IBM Software License Agreement website for more information.

Limited warranty applies

Yes

Limited warranty

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, see the IBM Software Support Handbook.

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

Program technical support

Technical support of a program product version or release will be available for a minimum of one year from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect.

This technical support allows you to obtain assistance (by telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Subscription and Support (Software Maintenance) also provides you with access to versions, releases, and updates (CD releases, Long Term Support Releases, or fixes) of the program. You will be notified, through an announcement letter, of discontinuance of support with six months' notice. If you require additional technical support from IBM contact your IBM representative. There will be no extended support offered.

For additional information on the IBM Software Support Lifecycle Policy, see the IBM Software Support Lifecycle Policy website.

Money-back guarantee

If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that (1) for programs acquired under the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program and (2) for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

Volume orders (IVO)

No

Passport Advantage applies

Yes, information is available on the Passport Advantage and Passport Advantage Express website.

Software Subscription and Support applies

Yes. Software Subscription and Support, also referred to as Software Maintenance, is included with licenses purchased through Passport Advantage and Passport Advantage Express. Product upgrades and Technical Support are provided by the Software Subscription and Support offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software, and Technical Support provides voice and electronic access to IBM support organizations, worldwide.

IBM includes one year of Software Subscription and Support with each program license acquired. The initial period of Software Subscription and Support can be extended by the purchase of a renewal option, if available.

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the IBM Software Support Handbook. Software Subscription and Support does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under the applicable agreements.

Unless specified otherwise in a written agreement with you, IBM does not provide support for third-party products that were not provided by IBM. Ensure that when contacting IBM for covered support, you follow problem determination and other instructions that IBM provides, including in the IBM Software Support Handbook.

For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, go to the Passport Advantage and Passport Advantage Express website.

Variable charges apply

No

Educational allowance available

Not applicable

Statement of good security practices

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