

IBM Z Remote Development Program

OVERVIEW

The IBM Z Remote Development Program (RDP) offering is available to qualified IBM Z Independent Software Vendors (ISV). Membership in IBM PartnerWorld is a requirement for participation in the RDP offering.

The RDP offering provides IBM Z ISVs with low-cost remote access to virtual system environments for the purposes of developing, porting, and testing applications that run on IBM Z platforms. The virtual guest system environments include supported generally available versions of operating systems that run on the IBM Z platform, including z/OS, z/VM, z/VSE, and Linux on z Systems distributions (Red Hat, Inc., SUSE LLC, Canonical). Operating systems and IBM software products that have reached end of support (EOS) are generally not available.

The environments run as virtual guest systems in an IBM z/VM logical partition which provides a high level of system control and configuration independence within their environment. Each guest systems is dedicated to the use of the participating partner.

Each guest systems is configured to share the IBM Z system and devices that comprise the mainframe environment. Since the IBM Z system and devices are not dedicated to the guest system, the system cannot not be used for robust development workloads such as stress testing, performance testing, or benchmark testing.

The RDP offering is structured for the partner to be largely self-reliant with minimal assistance from IBM. Participants in the offering assume the role of system and security administrator for their chosen virtual guest system environment and are expected to have the necessary system skills to operate in the environment. Those skills include:

- System operations
- System and subsystem administration
- System security administration
- Application debugging
- Licensing and installation of software products not provided by IBM

Participating partners may use the offering only for development, testing, self-education, or demonstration of the partner's applications that run on the applicable virtual system. Therefore, use of the Remote Development Program resources in a production environment, any works for hire activity, any outsourcing workloads, or for commercial purposes is prohibited. As a development system environment, production level service attributes such as Service Level Agreements off-site backups are not provided in the IBM Z Remote Development Program.

Information concerning the default IBM software product is provided in the on-line registration and/or on the Remote Development Program website. Non-IBM and/or Open-source software products are not provided on the remote access systems. However, these products may be installed by the user of the system provided the appropriate licensing has been obtained.

Questions regarding the availability of IBM software products can be sent to zTech@us.ibm.com .

ENROLLMENT

Enrollment for the Remote Development Program offering is performed using an on-line enrollment application. The link to the enrollment application is available on the Remote Development Program information page (<http://dtsc.dfw.ibm.com/rdp/zosrdp.shtml>). An IBM ID and your PartnerWorld Enterprise ID are required to complete the enrollment application.

To view your PartnerWorld Profile information, sign-in to IBM PartnerWorld (<https://www.ibm.com/partnerworld/member>) and select "My PartnerWorld".

When the RDP system is ready for use, the login credentials for the virtual system will be emailed to you from zTech@us.ibm.com. Questions concerning the Remote Development Program offering or the status of a submitted enrollment can also be emailed to zTech@us.ibm.com.

PROGRAM FEES

z/OS, z/VM, z/VSE

The IBM Z Remote Development Program fees for z/OS, z/VM, and z/VSE systems are based on a minimum monthly fee and system resources used. The resources include CPU usage and allocated disk (DASD) space. The amount of CPU usage by the virtual guest system ID is reported in the z/VM accounting records. The reported CPU usage is then converted to billable units called "work units". Each month, the reported number of work units is used to determine whether more than base level of work units have been used. Also, since these are z/VM accounting records, they can only represent the usage of the entire z/VM guest system user ID and do not include the amount of usage by a specific process or task of the guest operating system.

The minimum monthly program fee for use of a z/OS, z/VM, or z/VSE guest system through the Remote Development Program is \$550 USD. That fee includes initial system set-up, environmental support, up to 30 work units of CPU usage each calendar month, and 10 Gigabytes of 'user' disk (DASD) space. Work units used and user disk requested in excess of those amounts will incur additional monthly charges. The user disk is configured as volumes separate from the system volumes for added flexibility.

Charge for additional monthly work units used in excess of 30: \$22 USD per work unit
Charge for additional DASD required in excess of 10 Gigabyte: \$10 USD per 5 Gigabyte unit

The maximum monthly workunit charge per guest system : \$12,000

Work Units - The purpose of the work unit is to maintain a level cost of the program offering even when the underlying mainframe environment is changed. Work units are not meant to convey any performance comparisons between IBM mainframes. A work unit is the roughly the equivalent of one (1) real, non-dedicated hour of total processor time on an IBM 2003-225 processor as recorded in the VM accounting records.

The primary method of overall work unit management is through the use of the z/VM SLEEP command. The SLEEP command provides a way to manage system usage by putting it in "SLEEP" mode when it's not being used. This is similar to 'standby' but only affects the guest operating system. As such, there may still be a very small amount of usage observed generated by z/VM CP.

In addition, on-demand reports are available so that you may monitor your usage as often as you prefer.

Linux Distributions – Red Hat, SUSE, Ubuntu

The IBM Z Remote Development Program fees for all virtual guest system Linux distributions are based on the number of shared CPs defined to the system and the allocated disk space (DASD).

The base minimum monthly charge for each Linux virtual system is: \$125 Monthly Flat Rate

The base monthly charge includes:

1 vCPU

2G Virtual Memory

50GB disk

Monthly Charge for each additional vCPU = \$125 monthly flat rate

Monthly Charge for each additional 5GB disk in excess of 50GB = \$1.00 per 5 Gigabyte unit

Billing Period

The initial billing period for all program enrollments begins when the login information is provided to you and ends last day of the calendar month. All subsequent monthly billing periods will always end on the last day of each calendar month.

IMPLEMENTATION

The mainframe virtual system environments are made available, along with other software, on IBM mainframes which are accessible from the Internet any where in the world.

Partners are provided with z/VM hypervisor user IDs to perform virtual guest system management activities such as IPL and shutdown.

In order to connect to and logon the z/VM system, a TN3270 emulator that supports TLS 1.2 encrypted sessions is required. The TN3270 emulator is not provided by IBM and must be obtained by the partner.

Each virtual guest system is assigned an unique IP address. The IP address assigned can be either "public" (one reached directly from the internet) or "private" (reachable only by establishing a connection to our client VPN server). Developers who choose to have the system connected to the client VPN are provided with VPN sign-on IDs and instructions to download VPN client. The benefit of the VPN connection is that session traffic between the user and the VPN gateway is encrypted. For an additional one-time setup fee, a static site-to-site VPN can be configured.

If additional system resources or software products are required but not included on the Remote Development Program offering enrollment website or if you have questions concerning the offering, please contact the Remote Development Program offering support team at zTech@us.ibm.com, prior to completing your Remote Development Program offering enrollment. A response will be returned as to whether the resource(s) can be made available.

System Backups

IBM performs backups of the virtual guest systems on a regular (weekly) basis and the media used for the backups are stored on-site, only. Included in these backups are the data disks which together comprise the guest systems. The purpose of the backup is to provide a level of opportunity for the recovery of data in the event of a catastrophic disk failure. The backups may also be

used to recover data for a guest system though, due to unforeseen circumstances, there is no assurance that recovery of data for a guest system will be successful. IBM encourages all program participants to regularly save a copy of their data to a location of their choosing. The data stored at the IBM Center should never be the only copy of the data.

The techniques used for saving data will vary depending on the guest operating system in use and are discussed in the User's Guide and Reference applicable to your guest operating system under "Support Manuals" on the <http://dtsc.dfw.ibm.com/> website.

Note: Extended Address Volumes (EAV) are not included in the weekly backups due to the size of the volumes.

PROGRAM SUPPORT

The IBM Z Remote Development Program is provided and supported by IBM through the IBM Z Dallas ISV Center located in Coppell, TX.

Support for the program is provided through electronic means. The primary vehicle for support requests is via email to zTech@us.ibm.com.

IBM Z ISV Center User Group

In addition, the IBM Z ISV Center has launched the Secure Partner Community User Group. This is a closed, secure user group for all participants of our GA level programs (z/OS Validation, Linux Test Drive, and our Remote Development Programs).

The user group is a place for partners to collaborate, ask questions, and trade tips and tricks. This user group will also be used to announce events that will happen at the data center (i.e. recycle weekends). It is important to join the user group to understand the events as they happen. We will be adding tutorial videos, FAQ pages, User's Guides, complex announcements, and other tools to allow partners to quickly resolve common questions and help you use your system more easily.

Please note, however, that while this user group is a secure venue, it is not to be used for any form of confidential discussions or questions, including, but not limited to unannounced IBM products or anything that is confidential or proprietary to your company. If you need assistance with confidential matters, please continue to use the zTech@us.ibm.com email address to contact the Dallas staff. In addition, any requests that will require the direct involvement of Dallas staff, such as adding a product or adding disks may also be sent to the zTech@us.ibm.com email address.

Please keep all discussions kind, curious, and professional.

In order to join our user group, you will need to join the IBM Z and LinuxONE Community. You can use the following invite link to do so: <https://ibm.com/community/z/join>

You will need to sign-in with an IBMid. If you do not have one, you may create one simply by clicking on the link below the login box that says "Don't have an account? Create an IBMid".

Once you've logged in, you will be presented with a dialog to join the IBM Z and LinuxONE - IBM Z Group. Select your preference for discussion notifications, and then click the button that says "Yes join the group".

Once you have joined the Community, please use the form in the link below to request access to our user group.

<https://www.ibm.com/community/z/ibm-z-dallas-isv-center-request-membership/>

Once you are approved, you will receive an email containing a unique link to join our group.

Additional support information and documentation pertaining to the program offerings is available on the IBM Z ISV Center website: <http://dtsc.dfw.ibm.com/>

IBM Software maintenance

IBM software product maintenance is provided by IBM either routinely or at the request of the ISV. Routine hardware and software maintenance for the systems is performed by IBM on an on-going basis. As such, the ability to retain a system at a particular maintenance level is generally not available. Requests for specific additional software maintenance are managed on a best effort basis. Please contact us at zTech@us.ibm.com to request or inquire about specific IBM software maintenance.

NOTE: Each Sunday, a maintenance-window is reserved between 9:00 AM and 3:00 PM US CT for hardware maintenance purposes. During this window, system access may not be available. At your option, IBM will send notifications concerning upcoming maintenance windows or changes to support schedules. To be added to the notification list, send a request to zTech@us.ibm.com.

PROGRAM SECURITY

The protection of confidential and proprietary information is of the utmost importance to IBM and the Dallas ISV Center. The Remote Development Program offering is certified annually by IBM Corporate Headquarters as an Inter-Enterprise System (IES) environment, which provides extensive security for isolation of virtual guest systems.

SYSTEM ENVIRONMENT

The systems provided by the IBM Z Remote Development Program are defined as z/VM guest systems on an IBM Z mainframe.

Specialty processors such as zIIP, CryptoExpress, and zEDC can be configured for use by the guest systems as well as additional general purpose CPs. **Please note that use of these processors may increase your level of workunit usage.** Usage reported by specialty processors is charged at the same rate as general purpose processors.

Extended Address Volumes (EAV) are also available for an additional monthly fee.

A virtual z/OS Parallel Sysplex environment may also be available through the Remote Development Program. If you need this type of access, please contact us at zTech@us.ibm.com so that we may understand your requirements.

IBM 3592 mainframe tape drives may be available for use with this offering as shared devices. When tape processing has been completed, the tape drive should be detached from the system for the next partner to use.

All tapes to be used by partners participating in the program offering must be supplied by the partners, including 'scratch' tapes. The process for using and mounting tapes is described in the "User's Guide and Reference" located on the program support website (<http://dtsc.dfw.ibm.com/>).

PRIVACY STATEMENT

IBM is a global organization with business processes, management structures and technical systems that cross borders. As such, we may share information about you within IBM and transfer it to countries in the world where we do business in connection with your request to enroll or participate in an IBM Z program offering. The information supplied by you with a request to enroll or participate in an IBM Z program offering, will be used to provide information, support, deliverables, and for invoicing purposes as appropriate.

In some cases, IBM uses suppliers located in various countries to collect, use, analyze, and otherwise process information on its behalf. It is IBM's practice to require such suppliers to handle information in a manner consistent with IBM's policies.

We will use the information you provide to fulfill your request. To help us do this, we may share information with others, for instance, a third-party data processor, financial institutions, shipping companies, or postal or government authorities, such as Customs authorities, involved in fulfillment. In connection with a transaction, we may also contact you as part of our customer satisfaction surveys.

We will retain your registration information for as long as your account is active or as needed to provide you services. If you wish to request that we no longer use your registration information to provide you services contact us at zTech@us.ibm.com. We will retain and use your registration information as necessary to comply with our legal obligations, resolve disputes, and enforce our agreements.

The information to be provided to IBM includes information commonly known by privacy guidelines as 'Personal Information'. Please contact IBM if you have any questions concerning the use or processing of the 'Personal Information' collected in regards to your transaction. IBM may be contacted at www.ibm.com/privacy/contact/us-en/ or at :

IBM's Corporate Privacy Office
1 New Orchard Road
Armonk, NY 10540
U.S.A.