Licensed Program Specifications

IBM

z/OS Version 2 Release 1 – Program Number 5650-ZOS

z/OS® is an advanced-technology, enterprise-wide server operating system.

Base Elements

z/OS Version 2 Release 1 contains the following base elements:

- Alternate Library for REXX
- Base Control Program (BCP)
- BookManager® READ
- Bulk Data Transfer (BDT)
- Common Information Model
- Communications Server
- Cryptographic Services
- DFSMSdfp
- Distributed File Service
- EREP
- ESCON Director Support
- FFST™
- GDDM
- Hardware Configuration Definition (HCD)
- High Level Assembler (HLASM)
- IBM® HTTP Server
- IBM Tivoli® Directory Server for z/OS
- ICKDSF
- Integrated Security Services
- ISPF
- JES2
- Language Environment®
- Library Server
- METAL C Runtime Library
- MICR/OCR
- Network File System (NFS)
- Open Systems Adapter Support Facility (OSA/SF)
- Runtime Library Extensions
- SMP/E
- TIOC
- TSO/E
- z/OS Font Collection
- z/OS UNIX System Services
- 3270 PC File Transfer Program.

Optional Features

z/OS Version 2 Release 1 contains the following optional features:

- BDT File-to-File
- BDT SNA NJE
- Communications Server Security Level 3[1]
- DFSMSdss
- DFSMShsm
- DFSMSrmm
- DFSMStvs
- DFSORT
- GDDM-PGF
- GDDM-REXX
- Hardware Configuration Manager (HCM)
- HLASM Toolkit
- Infoprint Server
- JES3
- RMF™
- SDSF
- Security Server
- XL C/C++
- zEnterprise® Data Compression (zEDC)
- z/OS Security Level 3[1]

Specified Operating Environment

Machine Requirements

z/OS Version 2 Release 1 runs on the following IBM processors:
- IBM z Systems (z13)
- IBM Enterprise System (zEnterprise) BC12 (zBC12)
- IBM Enterprise System (zEnterprise) EC12 (zEC12)
- IBM zEnterprise 114 (z114)
- IBM zEnterprise 196 (z196)
- IBM System z10™ Enterprise Class (z10 EC)
- IBM System z10 Business Class (z10 BC)
- IBM System z9® Enterprise Class (z9 EC)
- IBM System z9 Business Class (z9 BC)

z/OS requires z/Architecture® (64-bit), and runs on IBM z Systems, IBM zEnterprise, IBM System z9, and IBM System z10. For additional requirements of specific elements, see the topic about "Hardware requirements for z/OS elements and features" in *z/OS Planning for Installation* in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

Software Requirements

For z/OS, most of the software requirements of a specific element are satisfied by other elements in z/OS; however, some elements have optional functions with software dependencies beyond z/OS. These features are worldwide exportable, but subject to export tracking regulations.

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For additional requirements of specific elements and information about specific release service levels of other IBM products that run with z/OS, see the topic about "Software requirements for z/OS elements and features" in *z/OS Planning for Installation* in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

Licensed Program Materials Availability

Restricted materials - Yes.

This licensed program is available with source licensed program materials for some modules designated as "RESTRICTED MATERIALS OF IBM." The remaining licensed programming materials are available and are not designated as "RESTRICTED MATERIALS OF IBM."

Supplemental Terms

Designated Machine Identification

Designated Machine Identification Required - Yes.

Program Features Not Used on the Designated Machine

Some of the elements and optional features in z/OS have components that are designed for use on machines other than the Designated Machine on which z/OS is used. You may make copies of a component and corresponding documentation in support of your authorized use of z/OS. Persons using a machine outside of your enterprise may use the copy only to access your copy of z/OS licensed hereunder.

Installation/Location License

Not applicable.

A separate license is required for each machine on which the licensed program materials are used.

Charges/Usage Restriction

Charges for this program are eligible for a pricing method referred to as Subcapacity Pricing, subject to the applicable terms. For information about Subcapacity Pricing, see *z/OS Planning for Sub-Capacity Pricing* in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

z/OS licensees are authorized to use only z/OS base elements, features licensed with the base, or optional features that they have ordered and received enabled from IBM. Other optional features of z/OS are shipped disabled. Customers must notify IBM when they enable optional features that were shipped disabled. Optional features that are subsequently enabled are subject to the payment terms of the license for z/OS. For more information about enabling or disabling z/OS features, see the topic "Using dynamic enablement" in *z/OS Planning for Installation* in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

Your current z/OS license entitles you to use the Interactive Problem Control System (IPCS) from any versions of z/OS or OS/390® for which you held valid licenses ("Prior Versions") on your current validly licensed level of z/OS for the sole purpose of processing dumps taken on those Prior Versions. You are allowed to make copies of the data sets containing the necessary IPCS programs and other IPCS parts from your Prior Versions, and use them to run those levels of IPCS on your current validly licensed level of z/OS. Nothing herein extends support of the IPCS components for Prior Versions for which IBM service has been withdrawn. For information about how to use prior levels of IPCS on your current system, see *z/OS MVS™ IPCS Customization* in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

Licensee agrees to comply with the "IBM License Agreement for Machine Code" ("MCL") and the "Authorized Use Table for IBM Machines" ("AUT"), which are provided at www.ibm.com/systems/support/machine_warranties/machine_code.html and www.ibm.com/systems/support/machine_warranties/machine_code/aut.html respectively, and each of which is incorporated by reference into this Licensed Program Specification and your IBM license to the Program.

z/OS V2.1 with the Enhanced Cryptographic Support for z/OS V1.13 - z/OS V2.1 web deliverable for the Integrated Cryptographic Service Facility (ICSF) component installed includes VISA Format Preserving Encryption (VFPE) technology, which forms part of Visa U.S.A., Inc.'s Data Secure Platform (DSP). The use of this function requires a service agreement with Visa U.S.A., Inc. You must maintain a valid, binding and enforceable service agreement with Visa when you use DSP/FPE. Please contact your Visa Account Manager or inquire at P2PE@visa.com for more information.

Software Cryptographic Service Providers

Portions of the IBM Weak Software Cryptographic Service Provider and the IBM Software Cryptographic Service Provider in the z/OS Security Level 3 feature contain software code provided by RSA Data Security, Inc.

You are only authorized to use the RSA software contained in the Product to issue Certificates solely for the purpose of directly certifying other users within your Enterprise with whom you exchange data. You may not use the RSA software to issue Certificates to third parties, act as a Certification authority or provide Certificate-issuing services or any fee-generating service associated with the issuance of Certificates.

Prior to using the RSA API for development or testing, you must contact RSA, The Security Division of EMC. Use the website www.emc.com/domains/rsa/index.htm, or send your name, company name, address, and telephone number to:

RSA World Headquarters
The Security Division of EMC
174 Middlesex Turnpike
Bedford, MA 01730 US

Prior to marketing, selling, or distributing applications that have been developed by using the RSA API, you must first obtain a license from RSA for that purpose.

Note: Other methods of creating certificates using cryptographic service providers provided by IBM do not carry these restrictions.

Cryptographic Services Open Cryptographic Services Facility

Any application that you create, export, or re-export from the US utilizing the Open Cryptographic Services Facility Cryptographic Services or System SSL Services may be subject to special export licensing requirements by the Bureau of Export Administration of the U.S. Department of Commerce.

Integrated Cryptographic Service Facility

The implementation of the VISA Format Preserving Encryption (VFPE) algorithm contained within this IBM machine hardware, software, and program(s) is licensed by Visa U.S.A. Inc.

You are only authorized to use VFPE contained in the Product for payment purposes, and Customer agrees to restrict the use of such implementation to such payment purposes. You may not use VFPE for any non-Data Secure Platform (DSP) activities.

Prior to using VFPE you must contact Visa U.S.A. Inc. to procure a license. Please contact Visa U.S.A. Inc. as follows:

* Contact: Shahzad Khan (415) 805-4232
* Address: P.O. Box 8999, San Francisco, CA 94128 USA

- Website: www.visa.com

Type/Duration of Program Services

Program Services, including the IBM Support Center, will be available until discontinued by IBM upon twelve month's written notice.

Softcopy Publications

z/OS Version 2 Release 1 includes publications in displayable form. Except as provided in this section, the terms and conditions of the license agreement with IBM apply to these publications and to any copies that are made from them.

Additional Supplemental Terms

Excluded Components

The components listed below shall be considered "Excluded Components". Notices and important information IBM is required to provide You with respect to the Excluded Components may be found in the README.TXT file that accompanies the Program. The license terms contained in this IBM Agreement, and not the license terms that may be contained in the README.TXT file, shall govern Your use of the Excluded Components. Notwithstanding any of the terms in this IBM Agreement, or any other agreement you may have with IBM: (a) all Excluded Components are provided on an "AS IS" basis; (b) IBM AND ITS SUPPLIERS DISCLAIM ANY AND ALL EXPRESS AND IMPLIED WARRANTIES AND CONDITIONS INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF TITLE, NON-INFRINGEMENT OR INTERFERENCE AND THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE EXCLUDED COMPONENTS; (c) IBM and its suppliers will not be liable to You, or defend or indemnify You for any claims related to the Excluded Components; and (d) IBM and its suppliers will not be liable for any direct, indirect, incidental, special, exemplary, punitive or consequential damages, including but not limited to lost data, lost savings, and lost profits, with respect to the Excluded Components. Future Program updates or fixpacks may contain additional Excluded Components. Such additional Excluded Components, and related notices and information, will be listed in another "README.TXT" file that accompanies the Program update or fixpack. By using the Program, future updates or fixpacks after the initial installation (thereby giving you access to the applicable README.TXT file), You acknowledge that You have read the README.TXT file.

Excluded Components in the Program are those components referenced in any README file located in data set SYS1.SAMPLIB in member IEARDME that is included with the Program or a fixpack or update to the Program.

The Excluded Components are:
- Automatically Tuned Linear Algebra Software (ATLAS)
- Berkeley UNIX C Shell in UNIX System Services Application Services
- Commons-Collections
- ICU
- log4javascript
- OpenPegasus CIM Client Header Files
- Unicode common locale data repository (CLDR)
- sendmail
- Velocity
- X Window System
- zlib

Redistribution of Code

This document includes information about certain callable service stub and linkage-assist (stub) routines and other routines contained in specific data sets and file system directories that are intended to be bound, link-edited, or otherwise included with code and run on z/OS systems. In connection with your authorized use of z/OS, you may include these routines into your modules and distribute your modules with the included routines for the purposes of developing, using, marketing and distributing programs conforming to the documented programming interfaces for z/OS, provided that each routine is included in its entirety, including any IBM copyright statements. These routines have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply the reliability, serviceability, or function of these programs. The routines referred to here are contained in the following data sets and in z/OS UNIX System Services files:

- CBC.SCCNOBJ
- CEE.SAFHFORT
- CEE.SCEEBIND
- CEE.SCEEBND2
- CEE.SCEECPP
- CEE.SCEELKED
- CEE.SCEELKEX
- CEE.SCEEOBJ
- CEE.SCEESPC
- CEE.SIBMAM24
- CEE.SIBMCALL
- CEE.SIBMCAL2
- CEE.SIBMMATH
- CEE.SIBMTASK
- CSF.SCSFSTUB
- SYS1.CSSLIB
- TCPIP.SEZACMTX
- TCPIP.SEZADPIL
- TCPIP.SEZALIBN
- TCPIP.SEZAOLDX
- TCPIP.SEZARNT1
- TCPIP.SEZARNT2
- TCPIP.SEZARNT3
- TCPIP.SEZARNT4
- TCPIP.SEZARPCL
- TCPIP.SEZAXAWL
- TCPIP.SEZAXMLB
- TCPIP.SEZAXTLB
- TCPIP.SEZAX11L
- TCPIP.SEZAROE3
- TCPIP.SEZAROE1
- TCPIP.SEZAROE2
- The libzz.a file in the `/usr/lpp/hzc/lib/` directory.
- The zconf.h, zlib.h, and zlibz.h files in the `/usr/lpp/hzc/include/` directory.
- The aopapi.h file in the `/usr/lpp/Printsrv/samples` directory.
- The libaopapi.a file in the `/usr/lpp/Printsrv/lib` directory.

Warranty

This program is warranted as specified in the IBM license. These Licensed Program Specifications may be updated from time to time and such updates may constitute a change in warranty specifications. Warranty service, if any, will be provided only through the Basic License location.

Following the discontinuance of program services, this program will be provided "AS IS", as specified in the IBM license.

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