

3.2

*z/OS 3.2 Licensed Program
Specifications*



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Chapter 1. Licensed Program Specifications

z/OS® is an advanced-technology, enterprise-wide server operating system. For a list of z/OS base elements and optional features, see [z/OS elements and features \(www.ibm.com/docs/en/zos/3.2.0?topic=guide-zos-elements-features\)](http://www.ibm.com/docs/en/zos/3.2.0?topic=guide-zos-elements-features).

Note: Most topics and deliverables that are referenced in this LPS document reside in [z/OS 3.2.0 - IBM Documentation \(www.ibm.com/docs/zos/3.2.0\)](http://www.ibm.com/docs/zos/3.2.0).

Specified Operating Environment

Note:

The prerequisites and requirements identified in this document, whether provided by a third party or IBM, may change during the lifecycle of z/OS 3.2. For example, the version of the IBM Semeru Runtime® Certified Edition for z/OS available as of the date z/OS 3.2 is made generally available will no longer be supported prior to the end of marketing and end of support of z/OS 3.2. Client will be responsible for ensuring all prerequisites and other requirements, including without limitation the IBM Semeru Runtime Certified Edition for z/OS, are current throughout Client's use of z/OS 3.2.

Machine Requirements

z/OS 3.2 requires z/Architecture® (64-bit) and runs on the following IBM processors:

- IBM z17® (all models)
- IBM z16® (all models)
- IBM z15® (all models)

For requirements about hardware and minimum storage, see [Identifying hardware requirements for the target system \(www.ibm.com/docs/en/zos/3.2.0?topic=system-identifying-hardware-requirements-target\)](http://www.ibm.com/docs/en/zos/3.2.0?topic=system-identifying-hardware-requirements-target). For requirements about specific elements, see [Additional hardware requirements for running z/OS 3.2 \(www.ibm.com/docs/en/zos/3.2.0?topic=installation-additional-hardware-requirements-running-zos\)](http://www.ibm.com/docs/en/zos/3.2.0?topic=installation-additional-hardware-requirements-running-zos).

Programming 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.

For additional, current requirements of specific elements and information about specific release service levels of other IBM products, see [Software requirements for running z/OS 3.2 \(www.ibm.com/docs/en/zos/3.2.0?topic=installation-software-requirements-running-zos-32\)](http://www.ibm.com/docs/en/zos/3.2.0?topic=installation-software-requirements-running-zos-32).

Note: The information available via the preceding link is subject to change based upon the availability of IBM product, or version thereof. Client is responsible for ensuring the prerequisites for z/OS 3.2 are current throughout Client's use of z/OS 3.2.

Licensed Program Materials Availability

Restricted materials - Yes.

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

All New Function delivered through D-Type APARs is considered part of the "Program" with which it is associated. Its use is subject to the license terms that govern the Program, as set forth in the ICA, CRA, or equivalent agreement between you and 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 can make copies of such a component and corresponding documentation in support of your authorized use of z/OS. Persons that use a machine outside of your enterprise can use the copy only to access your copy of z/OS licensed hereunder.

Location License

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

Use-Based 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 Documentation (www.ibm.com/docs/en/zos).

z/OS licensees are authorized to use only z/OS base elements, features that are licensed with the base, or optional features that they ordered and received enabled from IBM. Other optional features of z/OS are initially disabled. Customers must notify IBM when they enable optional features that were initially disabled. Optional features that are then enabled are subject to the payment terms of the license for z/OS. For more information about enabling or disabling z/OS features, see *Using dynamic enablement* (www.ibm.com/docs/en/zos/3.2.0?topic=test-using-dynamic-enablement).

Your current z/OS license entitles you to use the Interactive Problem Control System (IPCS) from any versions of z/OS 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 was withdrawn. For information about how to use prior levels of IPCS on your current system, see *z/OS MVS IPCS Customization*.

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The Integrated Cryptographic Service Facility (ICSF) component includes VISA Format Preserving Encryption (VFPE) technology, which forms part of Visa Inc.'s Data Secure Platform (DSP). The use of this function requires a service agreement with Visa Inc. You must maintain a valid, binding, and enforceable service agreement with Visa when you use DSP/FPE. For more information, see "Integrated Cryptographic Service Facility" on page 3 or contact your Visa Account Manager or inquire at P2PE@visa.com.

Data Use

This section discusses Data Use, referring to System Operational Information.

System Operational Information

"System Operational Information" is technical information related to the configuration and operation of z/OS, and may include, without limitation, configuration settings, system definitions, component and feature usage, software versions, and service levels. System Operational Information is not diagnostic information.

z/OS is configured to send System Operational Information to IBM. The information sent to IBM is anonymized by IBM and cannot be identified to the Client. System Operational Information contains no user or application data. Client has the ability to view and save any information sent to IBM, and may use this information for Client's own purposes. At any time, Client may disable this feature.

Client agrees that IBM may use and share System Operational Information for technical evaluation purposes, and development and improvement of, as well as quality control activities related to, IBM's products and services, within IBM, with IBM Business Partners, and with third parties such as subcontractors or assignees under IBM direction. Client agrees that the anonymized System Operational Information may be consolidated with other Clients' anonymized System Operational Information and provided publicly. At any time, Client may disable this feature in z/OS by referring to the Feedback tab in z/OSMF General Settings in [Feedback - IBM Documentation \(www.ibm.com/docs/en/zos/3.2.0?topic=settings-feedback\)](http://www.ibm.com/docs/en/zos/3.2.0?topic=settings-feedback).

Cryptographic Services

Any application that you create, export, or reexport from the US with System SSL Services might be subject to special export licensing requirements by the Bureau of Export Administration of the US Department of Commerce.

Integrated Cryptographic Service Facility

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

You are only authorized to use VFPE that is 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 Inc. as follows to procure a license:

- Contact: Adam Clark 1 (571) 439-7580
- Use email: visaCRF@visa.com
- Website: [VISA \(www.visa.com\)](http://www.visa.com)

Type/Duration of Program Services

Program Services, including the IBM Support Center, are available until discontinued by IBM upon 12 months written notice.

Authorization for Copy and Use on Home/Portable Computer

Not Applicable for this Program.

Documentation

z/OS includes documentation in displayable form. Except as provided here, the terms and conditions of the license agreement with IBM apply to this documentation and to any copies that are made from it.

Additional Supplemental Terms

Excluded Components

The components listed in the README.TXT file that accompanies the Program are considered "Excluded Components" unless identified as Separately Licensed Code or IBM Supporting Programs.

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Excluded Components in the Program are those components that are referenced in the EXCLUDED_COMPONENTS section of the README.TXT file that is located in data set SYS1.SAMPLIB in member IEARDME that is included with the Program or a fix pack or update to the Program.

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Redistribution of Code

Routines

This document includes information about certain callable service stub and linkage-assist (stub) routines and other routines that are 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. With your authorized use of z/OS, you can include these routines into your modules and distribute your modules with the included routines for the purposes of developing, using, marketing, and distributing programs that conform to the documented programming interfaces for z/OS, provided that each routine is included in its entirety, including any IBM copyright statements. These routines were not thoroughly tested under all conditions. Therefore, IBM cannot guarantee or imply the reliability, serviceability, or function of these programs.

The referenced routines are contained in the following data sets and in z/OS UNIX System Services files.

- CBC.SCCNOBJ
- CBC.SCCNM10
- CBC.SCCNM11
- CBC.SCCNM12
- CBC.SCCNM13
- CBC.SCCNM14
- CBC.SCCNN10
- CBC.SCCNN11
- CBC.SCCNN12
- CBC.SCCNN13
- CBC.SCCNN14
- CBC.SCLBCPP
- The OpenBLAS library files in the /usr/lpp/cbclib/lib directory.
- The MASS library files in the /usr/lpp/cbclib/lib directory.
- The ATLAS library files in the /usr/lpp/cbclib/lib/atlas directory.
- CEE.SAFHFORT
- CEE.SCEEBIND
- CEE.SCEEBND2
- CEE.SCEECPP
- CEE.SCEELKED

- CEE.SCEELKEX
- CEE.SCEE OBJ
- CEE.SCEESPC
- CEE.SIBMAM24
- CEE.SIBM CALL
- CEE.SIBM CAL2
- CEE.SIBMMATH
- CEE.SIBMTASK
- CSF.SCSFSTUB
- SYS1.CSSLIB
- SYS1.SCCR3BND
- SYS1.SCCR6BND
- 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
- From the SEZATCP data set: EZACICAL, EZACICSO, EZACIC06, EZACIC04, EZACIC05
- Redistribution of SYS1.AOSB3 member IEFTB724
- 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.

Dinkum C++ Library

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A "Supporting Program" is an original and whole or partial copy of any of the following items that is provided with z/OS but is part of another IBM offering.

- Machine-readable instructions and data
- Components, files, and modules
- Audio-visual content, such as images, text, recordings or pictures
- Related licensed materials, such as keys and documentation

z/OS is licensed as a multi-product package and includes the following identified Supporting Programs.

- IBM WebSphere® Application Server for z/OS

Supporting Program Details

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Priced Feature Terms

IBM z/OS Authorized Code Scanner - Additional Terms

The dynamic scanner, the z/OS Authorized Code Scanner (zACS), and the associated monitor, z/OS Authorized Code Monitor (zACM), both part of the one optional priced feature also named z/OS Authorized Code Scanner, must run on IBM Z hardware; emulators are not supported. The dynamic scanner zACS is licensed for use only in development/test environments to minimize possible adverse effects on production workloads. zACM is licensed for use in production and development/test environments. The reports generated through use of dynamic scanner zACS and zACM may not be disclosed publicly; providers of the respective z/OS offerings are to be contacted through normal service channels to initiate an investigation of a possible false positive or need for a fix. The client

may engage service providers to assist with the scanner's usage and output diagnosis under non-disclosure terms substantially similar to the terms of this paragraph.

Warranty

This program is warranted as specified in the IBM license.

Licensed Program Specifications can be updated from time to time and such updates can constitute a change in specifications.

For Distributed Systems License Option (DSLO) Licenses, warranty service, if any, is provided only through the Basic License location.

Following the discontinuance of all program services, this program is provided "As Is" as specified in the IBM license.

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