

# z/VSE Status

## IBM partnership with 21<sup>st</sup> Century Software

IBM has licensed the source code of IBM z/VSE V6.2 and most of the stack components to 21<sup>st</sup> Century Software.

## What IBM z/VSE customers should consider

IBM strongly suggests that customers who need a serviceable environment plan to move to an alternative solution. For customers wishing to remain on a supported VSE platform, 21<sup>st</sup> Century Software offers derivative VSE products.

z/VSE 6.2 End-Of-Service effective date is 2023/09/30, see [announcement letter](#) from 2022/08/02.

Please also see the [z/VSE 6.2 End-of-Service Information](#).

## Unsupported releases may run on these servers at user's risk

IBM z Systems, IBM System z, zSeries and S/390 Server	z/VSE V6.2 (1)	z/VSE V6.1 (1)	z/VSE V5.2, V5.1 (1)	z/VSE V4.1, V4.2, V4.3 (1)	z/VSE V3.1 (1, 4)	VSE/ESA V2.7, V2.6 (1)	VSE/ESA V2.5 (1)	VSE/ESA V2.4 (1)	VSE/ESA V2.3 (1)
IBM z16 A02 (6)	As announced in <a href="#">Hardware announcement 123-002</a> , dated April 4, 2023: - <b>IBM z/VSE 6.2 does not support the IBM z16 A02</b> (machine type 3932), as previously announced in <a href="#">Software announcement 222-208</a> , dated June 7, 2022. - <b>21<sup>st</sup> Century Software VSE<sup>n</sup> 6.3 does support the IBM z16 A02</b> (machine type 3932). Otherwise, the same as for IBM z16 A01 applies.								
IBM z16 A01 (6)	Yes	Yes	Yes (7)	LPAR: No z/VM: Yes (5, 8)	No	No	No	No	No
IBM z15 T02 (6)	Yes	Yes	Yes (7)	LPAR: No z/VM: Yes (5, 8)	No	No	No	No	No
IBM z15 T01 (6)	Yes	Yes	Yes (7)	LPAR: No z/VM: Yes (5, 8)	No	No	No	No	No
IBM z14 ZR1 (6)	Yes	Yes	Yes (7)	LPAR: No z/VM: Yes (5, 8)	No	No	No	No	No
IBM z14 (6)	Yes	Yes	Yes (7)	LPAR: No z/VM: Yes (5, 8)	No	No	No	No	No
IBM z13s (6)	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No
IBM z13 (6)	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No
IBM zEnterprise BC12 (6)	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No

IBM z Systems, IBM System z, zSeries and S/390 Server	z/VSE V6.2 (1)	z/VSE V6.1 (1)	z/VSE V5.2, V5.1 (1)	z/VSE V4.1, V4.2, V4.3 (1)	z/VSE V3.1 (1, 4)	VSE/ESA V2.7, V2.6 (1)	VSE/ESA V2.5 (1)	VSE/ESA V2.4 (1)	VSE/ESA V2.3 (1)
IBM zEnterprise EC12 (6)	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No
IBM zEnterprise 114	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No
IBM zEnterprise 196	Yes	Yes	Yes	Yes (5)	Yes (3)	Yes (3)	No	No	No
IBM System z10 EC (2)	No	Yes	Yes	Yes	Yes (3)	Yes (3)	No	No	No
IBM System z10 BC (2)	No	Yes	Yes	Yes	Yes (3)	Yes (3)	No	No	No
IBM System z9 EC (formerly z9- 109) (2)	No	No	Yes	Yes	Yes (3)	Yes (3)	No	No	No
IBM System z9 BC (2)	No	No	Yes	Yes	Yes (3)	Yes (3)	No	No	No
zSeries 990/890 (2)	No	No	No	Yes	Yes (3)	Yes (3)	Yes (3)	No	No
zSeries 900/800 (2)	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
S/390 Parallel Enterprise Server G5/G6 (2)	No	No	No	No	Yes	Yes	Yes	Yes	Yes
S/390 Multiprise 3000 (2)	No	No	No	No	Yes	Yes	Yes	Yes	Yes
S/390 Parallel Enterprise Server G4 (2)	No	No	No	No	No	No	Yes	Yes	Yes
S/390 Multiprise 2000 (2)	No	No	No	No	No	No	Yes	Yes	Yes

IBM z Systems, IBM System z, zSeries and S/390 Server	z/VSE V6.2 (1)	z/VSE V6.1 (1)	z/VSE V5.2, V5.1 (1)	z/VSE V4.1, V4.2, V4.3 (1)	z/VSE V3.1 (1, 4)	VSE/ESA V2.7, V2.6 (1)	VSE/ESA V2.5 (1)	VSE/ESA V2.4 (1)	VSE/ESA V2.3 (1)
S/390 Integrated Server (2)	No	No	No	No	No	No	Yes	Yes	Yes
S/390 Parallel Enterprise Server G3/G2/G1 (2)	No	No	No	No	No	No	Yes	Yes	Yes
P/390 and R/390 (2)	No	No	No	No	No	No	Yes	Yes	Yes
ES/9000 – 9221 (2)	No	No	No	No	No	No	Yes	Yes	Yes
ES/9000 – 9121, 9021 (2)	No	No	No	No	No	No	Yes	Yes	Yes

**Note 1:** Although we know of no reason why these older, unsupported releases can't run on these servers, unsupported environments are always **at the user's risk**. For example, we recognize some customers may want to install a new server running an old, unsupported release of z/VSE or VSE/ESA, then (once the installation of the new server is complete) migrate to a newer, supported release. Customers should be aware that some risk is always involved in running unsupported environments. Therefore, running unsupported releases should be done on a transitional basis only. The goal should always be to minimize the length of time needed to complete the migration. We strongly recommend applying all available PTFs on the unsupported release. A list of available PTFs can be found in the PSPs and RSLs.

**Note 2:** Servers shown in red are no longer supported by IBM, or an end of support date has been announced. Please also see: [IBM Mainframe Life Cycle History](#).

**Note 3:** Additional PTFs are required to run z/VSE V3.1, VSE/ESA V2.7, V2.6 and V2.5 on zSeries 990, 890, z9 EC/BC, z10 EC/BC, z114, z196, zEC12, zBC12, z13 or z13s. For VSE/ESA 2.6 and 2.7 it is absolutely necessary to install the following APARs prior to switching to the new hardware in order to ensure proper IPL:

VSE/ESA 2.6: APAR [DY45944](#) and APAR [DY45958](#)

VSE/ESA 2.7: APAR [DY45958](#)

**Note 4:** z/VSE V3 executes in 31-bit mode only. z/VSE V3 does not implement z/Architecture, and specifically does not implement 64-bit mode capabilities. z/VSE V3 is designed to exploit selected features of IBM z Systems hardware.

**Note 5:** To use SCRT/QVS on a z196, z114, zEC12, zBC12, z13, z13s, z14, z14 ZR1, z15 T01, z15 T02, or z16 A02, z16 A01 APAR [DY47111](#) (z/VSE 4.2), or [DY47110](#) (z/VSE 4.1) is required. If you configure OSA-Express3 or later using OSA/SF, APAR [PK97277](#) (z/VSE 4.1), or [PM55313](#) (z/VSE 4.2 and z/VSE 4.3), or [PM57552](#) (z/VSE 5.1) is required.

**Note 6:** The z16 A02, z16 A01, z15 T02, z15 T01, z14 ZR1, z14, z13, z13s, zEC12 and zBC12 allow to configure OSA-Express with OSA/SF in HMC.

**Note 7:**

- On z/VSE 5.1 the PTF [UD54170](#) for APAR [DY47654](#) "IPL ENHANCEMENT FOR D/T3906 IBM Z14" must be applied before IPL on a z14 / z14 ZR1 or higher can be performed in LPAR or z/VM guest with SET MACHINE Z. On z/VSE 5.1 the patch described in the temporary fix section of APAR [DY47722](#) "REIPL ENHANCEMENT FOR D/T3906 IBM Z14" must be applied before AR REIPL can be performed on a z14 / z14 ZR1 or higher in LPAR on ECKD.
- On z/VSE 5.2 the PTFs UD54239 and optionally [UD54240](#) for APAR [DY47722](#) "REIPL ENHANCEMENT FOR D/T3906 IBM Z14" (or the patch described in its temporary fix section) must be applied before AR REIPL can be performed on a z14 / z14 ZR1 or higher in LPAR on ECKD.
- On z/VSE 5.1 and z/VSE 5.2 both IPL and AR REIPL can be performed on a z14 / z14 ZR1 or higher in a z/VM guest with SET MACHINE ESA without the above mentioned PTFs and/or patch applied.
- Initial installation of z/VSE 5.1 is not possible on a z14 / z14 ZR1 or higher in LPAR. Initial installation of z/VSE 5.1 is possible on z14 / z14 ZR1 or higher in a z/VM guest with SET MACHINE ESA.
- To complete automatic initial installation of z/VSE 5.2 on z14 / z14 ZR1 or higher in LPAR on ECKD, IPL the new DOSRES device manually, after restore of IJSYSR1 completed (message on the console) and the system entered hardwait FFD (because REIPL failed).

**Note 8:** Running z/VSE V4.3, V4.2, or V4.1 on a z15 T02, z15 T01, z14, or z14 ZR1 is only possible under z/VM with SET MACHINE ESA. z/VSE V4.3, V4.2, or V4.1 will not run on a z15 T02, z15 T01, z14, or z14 ZR1 in an LPAR.

## Unsupported releases may use these storage systems at user's risk

IBM Disk Storage Systems	Attachment	z/VSE	z/VSE	z/VSE	z/VSE	z/VSE	z/VSE
		V6.2	V6.1	V5.2, V5.1	V4.3	V4.2	V4.1
IBM TotalStorage Enterprise Storage Server model 750, 800 and 800 Turbo	ECKD	Yes	Yes	Yes	Yes	Yes	Yes
	SCSI (FCP)	Yes	Yes	Yes	Yes	Yes	Yes
IBM System Storage DS6000 series	ECKD (1)	Yes	Yes	Yes	Yes	Yes	Yes
	SCSI (FCP)	Yes	Yes	Yes	Yes	Yes	Yes
IBM System Storage DS8000 series. This includes the DS8880 family (models DS8884, DS8886 and DS8888) (2,3)	ECKD	Yes	Yes	Yes	Yes	Yes	Yes
	SCSI (FCP)	Yes	Yes	Yes	Yes	Yes	Yes
IBM System Storage SAN Volume Controller (SVC), IBM Storwize V7000, IBM Storwize V5000, IBM Storwize V3500, IBM Storwize V3700, IBM FlashSystem V840, IBM FlashSystem V9000	SCSI (FCP)	Yes	Yes	Yes	Yes	Yes	No
IBM XIV Storage System	SCSI (FCP)	Yes	Yes	Yes	Yes	Yes	No
Parallel Access Volume Feature (PAV)	ECKD	Yes	Yes	Yes	Yes	Yes	No

**Note (1):** IBM System Storage DS6000 does not offer ESCON connectivity.

**Note (2):** Full Disk Encryption is supported by z/VSE 4.1 and later.

**Note (3):** SSD (Solid State Disk) is supported by z/VSE 4.1 and later. For performance considerations refer to the [IBM System Storage](#) home page.

<b>IBM Tape Systems</b>	<b>Controllers</b>	<b>z/VSE V6.2</b>	<b>z/VSE V6.1</b>	<b>z/VSE V5.2, V5.1</b>	<b>z/VSE V4.3</b>	<b>z/VSE V4.2</b>	<b>z/VSE V4.1</b>
TS1140 (3592 Model E07) Encryption capable	C07, C06	Yes	Yes	Yes	No	No	No
TS1130 (3592 Model E06) Encryption capable	C07, C06	Yes	Yes	Yes	Yes	Yes	No
TS1120 (3592 Model E05) Encryption capable	C07, C06, J70	Yes	Yes	Yes	Yes	Yes	Yes
3592 Model J1A	C06, J70	Yes	Yes	Yes	Yes	Yes	Yes
TS3400 Tape Library (Autoloader) containing up to two TS1120 tape drives	C06	Yes	Yes	Yes	Yes	Yes	Yes
3590 Model H, E and B	A50, A60	Yes	Yes	Yes	Yes	Yes	Yes
3490E	A10, A20	Yes	Yes	Yes	Yes	Yes	Yes
3490	A01, A02	Yes	Yes	Yes	Yes	Yes	Yes
3480	A22	Yes	Yes	Yes	Yes	Yes	Yes

**Note (4):** Additional PTFs are required.

<b>IBM Tape Library Systems</b>	<b>Controllers</b>	<b>z/VSE 6.2</b>	<b>z/VSE 6.1</b>	<b>z/VSE V5.2, V5.1</b>	<b>z/VSE V4.3</b>	<b>z/VSE V4.2</b>	<b>z/VSE V4.1</b>
TS7680 ProtecTIER Deduplication Gateway	C06, tape drives: virtual 3592 J1A	Yes	Yes	Yes	Yes	No	No

IBM Tape Library Systems	Controllers	z/VSE 6.2	z/VSE 6.1	z/VSE V5.2, V5.1	z/VSE V4.3	z/VSE V4.2	z/VSE V4.1
TS7700 Virtualization Engine (5)	See info for tape drives.	Yes	Yes	Yes	Yes	Yes	Yes
Copy Export Function		Yes	Yes	Yes	No	No	No
Multi-Cluster Grid Support		Yes	Yes	Yes	No	No	No
3494 Virtual Tape Server (VTS)	See info for tape drives.	Yes	Yes	Yes	Yes	Yes	Yes
TS3500/3584 UltraScalable Tape Library	J70, C06	Yes	Yes	Yes	Yes	Yes	Yes
3494 TotalStorage Tape Library	J70, C06, A60	Yes	Yes	Yes	Yes	Yes	Yes

**Note (5):** When using the TS7700 R1.5 tape library with z/VM's VGS (VSE Guest Support) you need to install z/VM APAR [VM64657](#)/PTF UM32727 (DFSMS/VM).

**Note:** For more information about supported devices please see the [z/VSE Planning](#) manual.



## Unsupported z/VSE Version 6 releases

Version.Release	Date available	Withdrawal from Marketing effective	Withdrawal from Service effective	Minimum z/VM level <b>(1)</b>
<a href="#">z/VSE V6.2</a>	12/01/2017 <a href="#">Announcement</a>	05/09/2022 <a href="#">Announcement</a>	30/09/2023 <a href="#">Announcement</a>	z/VM V5.4
<a href="#">z/VSE V6.1</a>	11/27/2015 <a href="#">Announcement</a>	12/01/2017 <a href="#">Announcement</a>	06/30/2019 <a href="#">Announcement</a>	z/VM V5.4

**Note (1):** The minimum z/VM level applies when z/VSE is running as a guest under z/VM. In some cases, the minimum level of z/VM may not be supported. For information on the service status of z/VM, please refer to the [z/VM web site](#).

## Unsupported z/VSE Version 5 releases

Version.Release	Date available	Withdrawal from Marketing effective	Withdrawal from Service effective	Minimum z/VM level <b>(1)</b>
<a href="#">z/VSE V5.2</a>	04/25/2014 <a href="#">Announcement</a>	03/13/2017 <a href="#">Announcement</a>	10/31/2018 <a href="#">Announcement</a>	z/VM V5.4
<a href="#">z/VSE V5.1</a>	11/25/2011 <a href="#">Announcement</a>	05/23/2014 <a href="#">Announcement</a>	06/30/2016 <a href="#">Announcement</a>	z/VM V5.4

**Note (1):** The minimum z/VM level applies when z/VSE is running as a guest under z/VM. In some cases, the minimum level of z/VM may not be supported. For information on the service status of z/VM, please refer to the [z/VM web site](#).

## Unsupported z/VSE Version 4 releases

Version.Release	Date available	Withdrawal from Marketing effective	Withdrawal from Service effective	Minimum z/VM level <b>(1)</b>
<a href="#">z/VSE V4.3</a>	11/26/2010 <a href="#">Announcement</a>	06/25/2012 <a href="#">Announcement</a>	10/31/2014 <a href="#">Announcement</a>	z/VM V5.2
<a href="#">z/VSE V4.2</a>	10/17/2008 <a href="#">Announcement</a>	11/26/2010	10/31/2012 <b>(2)</b> <a href="#">Announcement</a>	z/VM V5.2
<a href="#">z/VSE V4.1</a>	03/16/2007 <a href="#">Announcement</a>	10/17/2008 <a href="#">Announcement</a>	04/30/2011 <a href="#">Announcement</a>	z/VM V5.2

**Note (1):** The minimum z/VM level applies when z/VSE is running as a guest under z/VM. In some cases, the minimum level of z/VM may not be supported. For information on the service status of z/VM, please refer to the [z/VM web site](#).

**Note (2):** z/VSE V4.2, CICS/VSE V2.3, DL/I V1.10 and DL/I V1.11 have been withdrawn from service effective at 10/31/2012. z/VSE V4.2 is the last release that offers CICS/VSE V2.3 and DL/I V1.10. CICS/VSE V2.3 and DL/I V1.10 are not included in any future version or release of z/VSE.

## Unsupported z/VSE Version 3 releases

Version.Release	Date available	Withdrawal from Marketing effective	Withdrawal from Service effective	Minimum z/VM level <b>(1)</b>
<a href="#">z/VSE V3.1</a>	03/04/2005 <a href="#">Announcement</a>	05/31/2008 <a href="#">Announcement</a>	07/31/2009 <a href="#">Announcement</a>	z/VM V4

**Note (1):** The minimum z/VM level applies when z/VSE is running as a guest under z/VM. In some cases, the minimum level of z/VM may not be supported. For information on the service status of z/VM, please refer to the [z/VM web site](#).

**Note:** z/VSE V3 executes in 31-bit mode only. z/VSE V3 does not implement z/Architecture, and specifically does not implement 64-bit mode capabilities. z/VSE V3 is designed to exploit selected features of IBM z Systems hardware.

## Unsupported VSE/ESA Version 2 releases

Version.Release	Date available	Withdrawal from Marketing effective	Withdrawal from Service effective	Minimum z/VM level <b>(1)</b>
VSE/ESA V2.7	03/14/2003 <a href="#">Announcement</a>	09/30/2005 <a href="#">Announcement</a>	02/28/2007 <a href="#">Announcement</a>	z/VM V3
VSE/ESA V2.6	12/14/2001 <a href="#">Announcement</a>	03/14/2003 <a href="#">Announcement</a>	03/31/2006 <a href="#">Announcement</a>	z/VM V3
VSE/ESA V2.5	09/29/2000 <a href="#">Announcement</a>	12/14/2001 <a href="#">Announcement</a>	12/31/2003 <a href="#">Announcement</a>	VM/ESA V2.2
VSE/ESA V2.4	06/25/1999 <a href="#">Announcement</a>	09/29/2000	06/30/2002 <a href="#">Announcement</a>	
VSE/ESA V2.3	07/12/1997 <a href="#">Announcement</a>	06/30/2000 <a href="#">Announcement</a>	12/31/2001 <a href="#">Announcement</a>	
VSE/ESA V2.2	12/13/1996 <a href="#">Announcement</a>	07/12/1997	01/31/2001 <a href="#">Announcement</a>	
VSE/ESA V2.1	04/21/1995 <a href="#">Announcement</a>	12/13/1996	01/31/2001 <a href="#">Announcement</a>	

**Note (1):** The minimum z/VM level applies when VSE/ESA is running as a guest under z/VM or VM/ESA. In some cases, the minimum level of z/VM or VM/ESA may not be supported. For information on the service status of z/VM, please refer to the [z/VM web site](#).

## Unsupported VSE/ESA Version 1 releases

<b>Version.Release</b>	<b>Date available</b>	<b>Withdrawal from Marketing effective</b>	<b>Withdrawal from Service effective</b>
VSE/ESA V1.4	06/16/1995 <a href="#">Announcement</a>	12/31/1999 <a href="#">Announcement</a>	01/31/2000 <a href="#">Announcement</a>
VSE/ESA V1.3	03/12/1993 <a href="#">Announcement</a>	06/16/1995	12/31/1998 <a href="#">Announcement</a>
VSE/ESA V1.2	09/27/1991 <a href="#">Announcement</a>	03/26/1993	12/31/1996 <a href="#">Announcement</a>
VSE/ESA V1.1	12/28/1990 <a href="#">Announcement</a>	09/27/1991	12/31/1996 <a href="#">Announcement</a>

## Unsupported VSE/SP releases

<b>Version.Release</b>	<b>Date available</b>	<b>Withdrawal from Marketing effective</b>	<b>Withdrawal from Service effective</b>
VSE/SP V4.1	07/07/1989 <a href="#">Announcement</a>	12/18/1992	09/30/1994
VSE/SP V3.1	06/30/1987 <a href="#">Announcement</a>	06/29/1991	09/30/1993
VSE/SP V2.1	06/15/1985 <a href="#">Announcement</a>	07/31/1989	03/31/1991

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## Comments and Questions

Comments or questions on this documentation are welcome. Please send your comments to: [zvse@de.ibm.com](mailto:zvse@de.ibm.com)