

HCL Portal Express V 9.5

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Operating Systems

The operating systems section specifies the operating systems that HCL Portal Express 9.5 supports, organized by operating system family. Operating system families include Linux and Windows.

Component support: Full / Partial / None

Linux – Summary

Operating system	OS Min	Hardware	Bitness	Product minimum	Components
Red Hat Enterprise Linux (RHEL) Server 7	Base	IBM Z Systems	64-Exploit, 64-Tolerate	9.0	Full
Red Hat Enterprise Linux (RHEL) 7	7.1	Power System – Little Endian	64-Exploit, 64-Tolerate	9.0	Full
Red Hat Enterprise Linux (RHEL) 7	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
SUSE Linux Enterprise Server (SLES) 11	Base	x86-64 IBM z Systems	64-Exploit, 64-Tolerate	9.0	Full
SUSE Linux Enterprise Server (SLES) 12	Base	x86-64 IBM z Systems	64-Exploit, 64-Tolerate	9.0	Full
SUSE Linux Enterprise Server (SLES) 15	Base	x86-64	64-Tolerate	9.5	Full
Ubuntu 16.04 LTS	Base	Power System – Little Endian	64-Exploit, 64-Tolerate	9.0	Full
Ubuntu 16.04 LTS	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full

Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	7.1	7.2	7.3	7.4	7.5	7.6	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Red Hat Enterprise Linux (RHEL) Server 7 Power System – Little Endian

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	7.1	7.2	7.3	7.4	7.5	7.6	↗
Server	64-Exploit, 64-Tolerate	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Red Hat Enterprise Linux (RHEL) Server 7 X86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	7.1	7.2	7.3	7.4	7.5	7.6	↗
Server	64-Exploit, 64-Tolerate	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

SUSE Linux Enterprise Server (SLES) 11, x86-64, IBM z Systems

Product Support for the Operating System Technology Levels, current and future ↗

SUSE Linux Enterprise Server (SLES) 11 SP2 Required

Deployment unit	Bitness	Base	SP1	SP2	SP3	SP4	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes	Yes	Yes	Yes	Yes

SUSE Linux Enterprise Server (SLES) 12, x86-64, IBM z Systems

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	SP1	SP2	SP3	SP4	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes	Yes	Yes	Yes	Yes

SUSE Linux Enterprise Server (SLES) 15, x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	SP1	↗
Server	64-Tolerate	Yes	Yes	Yes

UBUNTU 16.04 LTS POWER System – Little Endian

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

UBUNTU 16.04 LTS POWER System – Little Endian

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows – Summary

As of Cumulative Fix 09 – Windows Server 2008 is no longer being supported. The operating system went out of mainstream support January 2015.

Operating system	OS Min	Hardware	Bitness	Product minimum	Components
Windows 8.1 Enterprise	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows 10 Enterprise	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows 10 Pro	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows 8.1 Professional	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows 8.1 Standard	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2012 Datacenter Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2012 R2 Datacenter Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2012 Standard Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2012 R2 Standard Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2016 Datacenter Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2016 Essentials Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2016 Standard Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.0	Full
Windows Server 2019 Datacenter Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.5	Full
Windows Server 2019 Essential Edition	Base	x86-64	64-Exploit, 64-Tolerate	9.5	Full

Windows 8.1 Enterprise x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes *	Yes

* Support for developer platform only.

Windows 10 Enterprise x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	Anniversa ry Update	Creators Update	Fall Creators Update	April 2018 Update	1809	1903	↗
Server	64-Exploit, 64-Tolerate	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes

* Support for developer platform only.

Windows 10 Pro x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	Anniversa ry Update	Creators Update	Fall Creators Update	April 2018 Update	1809	1903	↗
Server	64-Exploit, 64-Tolerate	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes

* Support for developer platform only.

Windows 8.1 Professional x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes *	Yes

* Support for developer platform only.

Windows 8.1 Standard x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes *	Yes

* Support for developer platform only.

Windows Server 2012 Datacenter Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2012 R2 Datacenter Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2012 Standard Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2012 R2 Standard Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2016 Datacenter Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2016 Essentials Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2016 Standard Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↗

Deployment unit	Bitness	Base	↗
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2019 Datacenter Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Windows Server 2019 Essentials Edition x86-64

Product Support for the Operating System Technology Levels, current and future ↪

Deployment unit	Bitness	Base	↪
Server	64-Exploit, 64-Tolerate	Yes	Yes

Hypervisors

The Hypervisors section specifies the hypervisors that HCL Portal Extend 9.5 supports.

Linux – Summary

Hypervisor	Product Minimum	Components	Guest operating system restriction?
IBM PR/SM any version	9.0	Full	Yes
IBM PowerVM Hypervisor (LPAR, DPAR, Micro-Partition) any supported version	9.0	Full	Yes
KVM in SUSE Linux Enterprise Server (SLES) 11	9.0	Full	Yes
Red Hat KVM as delivered with Red Hat Enterprise Linux (RHEL) and it's RHEV equivalent 7.0	9.0	Full	Yes
VMware ESXi 5.0	9.0	Full	Yes
VMware ESXi 5.5	9.0	Full	Yes
VMware ESXi 6.0	9.0	Full	Yes
VMware ESXi 6.1	9.0	Full	Yes
VMware ESXi 6.5	9.0	Full	Yes
z/VM 6.1	9.0	Full	Yes
z/VM 6.2	9.0	Full	Yes
z/VM 6.3	9.0	Full	Yes

IBM PR/SM

Product Support for the Hypervisor Maintenance Levels, current and future [↪](#)

Deployment unit	Any version	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	<ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM zSystems

IBM PowerVM Hypervisor (LPAR, DPAR, Micro Partition) any supported version

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	Any version	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • SUSE Linux Enterprise Server (SLES) 11 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 x86-64 • SUSE Linux Enterprise Server (SLES) 12 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 IBM zSystems • Ubuntu 16.04 LTS x86-64 • Ubuntu 16.04 LTS POWER System - Little Endian • Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

KVM in SUSE Linux Enterprise Server (SLES) 11

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	11	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

Red Hat KVM as delivered with Red Hat Enterprise Linux (RHEL) and its RHEV equivalent 7.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	7.0	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • SUSE Linux Enterprise Server (SLES) 11 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 x86-64 • SUSE Linux Enterprise Server (SLES) 12 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 IBM zSystems • Ubuntu 16.04 LTS x86-64 • Ubuntu 16.04 LTS POWER System - Little Endian • Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

VMware ESXi 5.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit
Server

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • SUSE Linux Enterprise Server (SLES) 11 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 x86-64 • SUSE Linux Enterprise Server (SLES) 12 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems • Ubuntu 16.04 LTS x86-64 • Ubuntu 16.04 LTS POWER System - Little Endian • Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

VMware ESXi 5.5

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	5.5	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

VMware ESXi 6.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.0	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

VMware ESXi 6.1

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.1	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • SUSE Linux Enterprise Server (SLES) 11 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 x86-64 • SUSE Linux Enterprise Server (SLES) 12 IBM z Systems • Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems • Ubuntu 16.04 LTS x86-64 • Ubuntu 16.04 LTS POWER System - Little Endian • Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

VMware ESXi 6.5

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.5	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

Z/VM 6.1

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.1	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

Z/VM 6.2

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.2	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> SUSE Linux Enterprise Server (SLES) 11 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 x86-64 SUSE Linux Enterprise Server (SLES) 12 IBM z Systems Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems Ubuntu 16.04 LTS x86-64 Ubuntu 16.04 LTS POWER System - Little Endian Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none">• Server	All supported operating systems <ul style="list-style-type: none">• SUSE Linux Enterprise Server (SLES) 11 IBM z Systems• Red Hat Enterprise Linux (RHEL) Server 7 x86-64• SUSE Linux Enterprise Server (SLES) 12 IBM z Systems• Red Hat Enterprise Linux (RHEL) Server 7 IBM z Systems• Ubuntu 16.04 LTS x86-64• Ubuntu 16.04 LTS POWER System - Little Endian• Red Hat Enterprise Linux (RHEL) Server 7 POWER System - Little Endian

Windows – Summary

Hypervisor	Product Minimum	Components	Guest operating system restriction?
KVM in SUSE Linux Enterprise Server (SLES) 11	9.0	Full	Yes
Red Hat KVM as delivered with Red Hat Enterprise Linux (RHEL) and it's RHEV equivalent 7.0	9.0	Full	Yes
VMware ESXi 5.0	9.0	Full	Yes
VMware ESXi 5.5	9.0	Full	Yes
VMware ESXi 6.0	9.0	Full	Yes
VMware ESXi 6.1	9.0	Full	Yes
VMware ESXi 6.5	9.0	Full	Yes

KVM in SUSE Linux Enterprise Server (SLES) 11

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	11	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

Red Hat KVM as delivered with Red Hat Enterprise Linux (RHEL) and its RHEV equivalent 7.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	7.0	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

VMware ESXi 5.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	5.0	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

VMware ESXi 5.5

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	5.5	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

VMware ESXi 6.0

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.0	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

VMware ESXi 6.1

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.1	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> Server 	All supported operating systems <ul style="list-style-type: none"> Windows Server 2012 Datacenter Edition x86-64 Windows Server 2012 Standard Edition x86-64 Windows 8.1 Enterprise x86-64 Windows 8.1 Professional x86-64 Windows 8.1 Standard x86-64 Windows Server 2012 R2 Datacenter Edition x86-64 Windows Server 2012 R2 Standard Edition x86-64 Windows 10 Pro x86-64 Windows 10 Enterprise x86-64 Windows Server 2016 Datacenter Edition x86-64 Windows Server 2016 Standard Edition x86-64 Windows Server 2016 Essentials Edition x86-64 Windows Server 2019 Datacenter Edition x86-64 Windows Server 2019 Datacenter Edition x86-64 Windows Server 2019 Essentials Edition x86-64

VMware ESXi 6.5

Product Support for the Hypervisor Maintenance Levels, current and future ↪

Deployment unit	6.5	↪
Server	Yes	Yes

Supported Guest Operating Systems

Deployment units	Supported operating systems
All deployment units that this hypervisor supports <ul style="list-style-type: none"> • Server 	All supported operating systems <ul style="list-style-type: none"> • Windows Server 2012 Datacenter Edition x86-64 • Windows Server 2012 Standard Edition x86-64 • Windows 8.1 Enterprise x86-64 • Windows 8.1 Professional x86-64 • Windows 8.1 Standard x86-64 • Windows Server 2012 R2 Datacenter Edition x86-64 • Windows Server 2012 R2 Standard Edition x86-64 • Windows 10 Pro x86-64 • Windows 10 Enterprise x86-64 • Windows Server 2016 Datacenter Edition x86-64 • Windows Server 2016 Standard Edition x86-64 • Windows Server 2016 Essentials Edition x86-64 • Windows Server 2019 Datacenter Edition x86-64 • Windows Server 2019 Standard Edition x86-64 • Windows Server 2019 Essentials Edition x86-64

Prerequisites

The Prerequisites section specifies the capabilities that HCL Portal Extend 9.5 requires and the prerequisite products that can be used to fulfill those capabilities.

Application Servers – Summary

Prerequisite	Version	Prerequisite minimum	Product Minimum	Components	Operating system restrictions?
WebSphere Application Server	8.5.5	8.5.5.12	9.0	Full	No
	9.0	9.0.0.2	9.0	Full	No
	9.0.5	9.0.5	9.5	Full	No
	9.0.5.1	9.0.5.1	9.5	Full	No
	9.0.5.2	9.0.5.2	9.0 CF17	Full	No
	9.0.5.3	9.0.5.3	9.0 CF17	Full	No
	9.0.5.4	9.0.5.4	9.0 CF17	Full	No
	9.0.5.5	9.0.5.5	9.0 CF18	Full	No

WebSphere Application Server Network Deployment 8.5.5

Deployment unit	8.5.5	8.5.5.12	8.5.5.13	8.5.5.14	8.5.5.15	8.5.5.16	8.5.5.17	8.5.5.18
WebSphere Application Server	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

WebSphere Application Server Network Deployment 9.0

Deployment unit	9.0	9.0.0.1	9.0.0.2	9.0.0.3	9.0.0.4	9.0.0.5	9.0.0.6	9.0.0.7	9.0.0.8	9.0.0.9	9.0.0.10	9.0.0.11	↳
WebSphere Application Server	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

WebSphere Application Server Network Deployment 9.0.5

Deployment unit	9.0.5	9.0.5.1	9.0.5.2	9.0.5.3	9.0.5.4	9.0.5.5	↳
WebSphere Application Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Installation – Summary

Prerequisite	Version	Prerequisite minimum	Product Minimum	Components	Operating system restrictions?
IBM Installation Manager	1.85	1.85	9.0	Full	No

IBM Installation Manager 1.8.5

Deployment unit	1.8.5	1.8.5.1	↳
WebSphere Application Server	Yes	Yes	Yes

Java SDK – Summary

HCL Portal Extend v8.5 requires JDK 7.0 for installation. JDK 7.1 can be added and configured for use after the initial installation with Cumulative Fix 05 or higher.

Prerequisite	Version	Prerequisite minimum	Product Minimum	Components	Operating system restrictions?	
IBM Runtime Environment, Java Technology Edition	7.0	7.0	9.0	Full	No	
	7.1	7.1	9.0	Full	No	
	8.0	8.0	9.0	Full	No	

IBM Runtime Environment, Java Technology Edition 7.0

Deployment unit	7.0	7.0.7.1	↳
Server	Yes	Yes	Yes

IBM Runtime Environment, Java Technology Edition 7.1

Deployment unit	7.1	↳
Server	Yes	Yes

IBM Runtime Environment, Java Technology Edition 8

Deployment unit	8	↳
Server	Yes	Yes

Supported Software

The supported software section specifies the additional software that HCL Portal Express 9.5 supports.

Application Servers – Summary

Prerequisite	Version	Supported software minimum	Product Minimum	Components	Operating system restrictions?
WebSphere eXtreme Scale	8.6	8.6	9.0	Full	No

WebSphere eXtreme Scale 8.6

Deployment unit	8.6	8.6.0.1	8.6.0.2	8.6.0.3	8.6.0.4	8.6.0.5	8.6.0.6	8.6.0.7	8.6.0.8	↳
Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Cloud Platform – Summary

Prerequisite	Version	Supported software minimum	Product Minimum	Components	Operating system restrictions?
Docker	1.13 and future fix packs	1.13	9.0	Full	No
Red Hat Open Shift	4.1, 4.2 4.3 and future fix packs	4.1	9.5	Full	No
Amazon Elastic Kubernetes Service (EKS)	All fix packs		9.5 CF171	Full	No
Microsoft Azure Kubernetes Service (AKS)	All fix packs		9.5 CF182	Full	No
Google Kubernetes Engine (GKE)	All fix packs		9.5 CF19	Full	No

Docker 1.13 and Future Fix Packs *

* Note: HCL Digital Experience 9.5 Image deployment to Docker is supported for development, and not production operations.

Deployment unit	1.13	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Red Hat Open Shift

Deployment unit	4.1	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Amazon Elastic Kubernetes Service

Deployment unit		Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft Azure Kubernetes Service (AKS)

Deployment unit		Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Google Kubernetes Engine (GKE)

Deployment unit		Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Collaboration – Summary

Prerequisite	Version	Supported software minimum	Product Minimum	Components	Operating system restrictions?
HCL Connections	5.5	5.5	9.0	Full	No
	6.0	6.0	9.0	Full	No
HCL Forms Experience Builder	8.6.3	8.6.3	9.0	Full	No
HCL Leap	9.2	9.2	9.0	Full	No
HCL Sametime Communicate	9.0	9.0	9.0	Full	No
HCL Sametime Complete	9.0	9.0	9.0	Full	No

HCL Connections 5.5

Deployment unit	5.5	5.5 CR1	5.5 CR2	5.5 CR3	↳
Server	Yes	Yes	Yes	Yes	Yes

HCL Connections 6.0

Deployment unit	6.0	6.0.0.4	6.0.0.6	6.0 IFR1	6.0 CR1	6.0 CR2	6.0 CR3	6.0 CR4	6.0CR5	↳
Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

IBM Forms Experience Builder 8.6.3

Deployment unit	8.6.3	↳
Server	Yes	Yes

HCL Leap 9.2

Deployment unit	9.2	↳
Server	Yes	Yes

Sametime Communicate 9.0

Deployment unit	9.0	↳
Server	Yes	Yes

Sametime Complete 9.0

Deployment unit	9.0	↳
Server	Yes	Yes

Databases – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
Apache Derby	10.11 and future fix packs	10.11	9.0	Full	No
DB2 Standard and Advanced Edition	11.5	11.5	9.5	Full	No
DB2 Advanced Enterprise Server Edition	11.1.0	11.1.0	9.0	Full	No
DB2 Advanced Workgroup Server Edition	11.1.0	11.1.0	9.0	Full	No
DB2 Connect Application Server Advanced Edition	11.1.0	11.1.0	9.0	Full	No
DB2 Connect Enterprise Edition	11.1.0	Full	9.0	Full	No
DB2 Enterprise Server Edition	11.1	Full	9.0	Full	No
	11.1.0	11.1.0	9.0	Full	No
DB2 Express Edition	11.1	11.1	9.0	Full	No
DB2 for z/OS	11.1	11.1	9.0	Full	No
Microsoft SQL Server	2014 and future fix packs	2014	9.0	Full	No
	2016 and future fix packs	2016	9.0	Full	No
Microsoft SQL Server Enterprise and Standard Edition	2017 and 2019 and future fix packs	2017, 2019	9.5	Full	No
Oracle Database 12.2 Standard Edition	(12.2.0.0)	(12.2.0.0)	9.5	Full	No
Oracle Database 12.2 Enterprise Edition	(12.2.0.0)	(12.2.0.0)	9.5	Full	No
Oracle Database 12.2.0.1.0 Enterprise Edition	12.2.0.1.0	12.2.0.1.0	9.5	Full	No

Oracle Database 12.2.0.2 Enterprise Edition	12.2.0.2	12.2.0.2	9.5	Full	No
Oracle Database 19c	19c	19c	9.5	Full	No
Oracle on Amazon Relational Database Service	12.2.0.1.0 and higher	12.2.0.1.0 and higher	9.5	Full	No

Apache Derby 10.11 and Future Fix Packs

Deployment unit	10.11	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	Yes

* Apache Derby is not supported in a product environment.

DB2 Advanced Enterprise Server Edition 11.1.0

Deployment unit	11.1.0	↳
Server	Yes *	Yes

Includes support for DB2 pureScale component.

DB2 Advanced Workgroup Server Edition 11.1.0

Deployment unit	11.1.0	↳
Server	Yes *	Yes

* Includes support for DB2 pureScale component.

DB2 Advanced Workgroup Server Edition 11.5.0

Deployment unit	11.5.0	↳
Server	Yes *	Yes

* Includes support for DB2 pureScale component.

DB2 Connect Application Server Advanced Edition 11.1.0

Deployment unit	11.1.0	↳
Server	Yes	Yes

DB2 Connect Enterprise Edition 11.1.0

Deployment unit	11.1.0	↳
Server	Yes	Yes

DB2 Enterprise Server Edition 11.1.0

Deployment unit	11.1.0	↳
Server	Yes	Yes

DB2 for z/OS 11.1.0

Deployment unit	11.1.0	↳
Server	Yes	Yes

Microsoft SQL Server 2014 and Future Fix Packs

Deployment unit	2014	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft SQL Server 2016 and Future Fix Packs

Deployment unit	2016	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft SQL Server Enterprise and Standard Edition 2017 and 2019 and Future Fix Packs

Deployment unit	2017, 2019	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Oracle Database 12.2 (12.2.0.0.0) Standard Edition

Deployment unit	(12.2.0.0.0) Standard Edition	Future Fix Packs
Server	Yes	Yes

Oracle Database 12.2 (12.2.0.0.0) Enterprise Edition

Deployment unit	(12.2.0.0.0) Enterprise Edition	Future Fix Packs
Server	Yes	Yes

Oracle Database 12.2 (12.2.0.1.0) Enterprise Edition

Deployment unit	(12.2.0.1.0) Enterprise Edition	Future Fix Packs
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Server	Yes	Yes
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Oracle Database 12.2 (12.2.0.2.0) Enterprise Edition

Deployment unit	(12.2.0.2.0) Enterprise Edition	Future Fix Packs
Server	Yes	Yes

Oracle on Amazon Relational Database Service 12.2 (12.2.0.1.0)

Deployment unit	(12.2.0.1.0) Enterprise Edition	Future Fix Packs
Server	Yes	Yes

Development Tools – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
HCL Web Experience Factory	8.5	8.5	9.0	Full	No
Rational Application Developer for WebSphere	9.7	9.7	9.5	Full	No

HCL Web Experience Factory

Deployment unit	8.5	L→
Server	Yes	Yes

Rational Application Developer for WebSphere

Deployment unit	9.7	L→
Server	Yes	Yes

JDBC Drivers – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
IBM Application Connectivity for DB2 for z/OS Feature	All Versions	All Versions	9.0	Full	No
IBM DB2 Universal JDBC Provider (XA) from DB2 z/OS (type 2)	All Versions and future fix packs	All Versions	9.0	Full	No
IBM DB2 Universal JDBC Provider (XA) from DB2 z/OS (type 4)	All Versions	All Versions	9.0	Full	No
IBM Data Server Driver for JDBC and SQLJ	4.21 (11.1)	4.21 (11.1)	9.0	Full	No
Microsoft SQL Server JDBC Driver	4.2 and future fix packs	4.2	9.0	Full	No
	6.2 and future fix packs	6.2	9.0	Full	No
Oracle JDBC Driver 12.c	12.2 and Future fix packs	12.2	9.5	Full	No

IBM Application Connectivity to DB2 for z/OS Feature All Versions

Deployment unit	All Versions	Future Versions, Releases	Future Fix Packs
Server	Yes	No	No

IBM DB2 Universal JDBC Provider (XA) from DB2 z/OS (type 2) All Versions

Deployment unit	All Versions	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	Yes

* JDBC drivers are shipped as DB2 for z/OS APARs. You can check for the appropriate APAR/PTF numbers in the DB2 for z/OS Infocenter, 'Programming for DB2 > Programming for Java > Supported drivers for JDBC and SQLJ'. Obtain the PTFs from DB2 on z/OS support or IBMLINK. Version 3.58 and later are supported.

IBM DB2 Universal JDBC Provider (XA) from DB2 z/OS (type 4) All Versions

Deployment unit	All Versions	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	No

* Requires APAR PK93123 for DB2 on z/OS V9.1. You can obtain the fix from DB2 on z/OS support or IBMLINK.

IBM Data Server Driver for JDBC and SQL 4.21 (11.1)

Deployment unit	4.21 (11.1)	↳
Server	Yes	No

Microsoft SQL Server JDBC Driver 4.2 and Future Fix Packs

Deployment unit	4.2	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft SQL Server JDBC Driver 6.2 and Future Fix Packs

Deployment unit	6.2	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Oracle JDBC Driver 12.2 Future Fix Pak

Deployment unit	12.2	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	Yes

* Oracle JDBC Driver Thin (type 4) Oracle JDBC Driver Thick, TAF (type 2) - Supported on Linux operating systems only.

LDAP Servers – Summary

All LDAP Servers that support the LDAP V3 Specification are supported.

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
IBM Security Directory Suite	8.0.1	8.0.1	9.0	Full	No

IBM Security Directory Suite 8.0.1

Deployment unit	8.0.1	8.0.1.9	↳
Server	Yes	Yes	Yes

Product Specific or Mixed Content – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
Dojo Toolkit	1.9 and future fix packs	1.9	9.0	Full	No
IBM License Metric Tool	9.2	9.2	9.0	Full	No

Dojo Toolkit 1.9 and Future Fix Packs

Deployment unit	1.9	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	Yes

IBM License Metric Tool 9.2

Deployment unit	9.2	9.2.0.2	↳
Server	Yes	Yes	Yes

Security Management – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
CA Siteminder	12.0 and future fix packs	12.0	9.0	Full	No
IBM Security Access Manager	9.0	9.0	9.0	Full	No
IBM Security Access Manager for Web	7.0	7.0	9.0	Full	No
Tivoli Directory Integrator	7.1.1	7.1.1	9.0	Full	No

CA Siteminder 12.0 and Future Fix Packs

Deployment unit	12.0	Future Versions, Releases	Future Fix Packs
Server	Yes *	No	Yes

* For AIX customers, AIX 7.1 or higher is required. Please note this product does not support JDK 8.

IBM Security Access Manager 9.0

Deployment unit	9.0	9.0.0.1	↳
Server	Yes	Yes	Yes

IBM Security Access Manager for Web 7.0

Deployment unit	7.0	7.0.0.1	7.0.0.2	7.0.0.5	7.0.0.8	7.0.0.10	7.0.0.12	↳
Server	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes *	Yes

* Please note this product does not support JDK 8.

IBM Tivoli Directory Integrator 7.1.1

Deployment unit	7.1	7.1.1.1	↳
Server	Yes	Yes	Yes

Web Browsers – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
Android default browser	10.0 and future versions, releases and fix packs	10	9.0	Full	No
Apple Safari	13 and future fix packs	13	9.0	Full	No
Google Chrome	84 and future versions, releases and fix packs	84	9.0	Full	No
Microsoft Edge	44 and future versions, releases and fix packs	44	9.0	Full	No
Microsoft Edge Chromium-Based	79 and future versions	79	9.0	Full	Full
Microsoft Internet Explorer	11 and future fix packs	11	9.0	Full	No
Mozilla Firefox	79 and future versions, releases and fix packs	79	9.0	Full	No
Mozilla Firefox ESR	68 and future versions, releases and fix packs	68	9.5	Full	No

Android default browser 10.0 and Future Fix Packs

Deployment unit	10.0	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Apple Safari 13 and Future Fix Packs

Deployment unit	13.0	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Google Chrome 84 and Future Fix Packs

Deployment unit	84	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft Edge 44 and Future Fix Packs

Deployment unit	44	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Microsoft Internet Explorer 11 and Future Fix Packs

Deployment unit	11	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Mozilla Firefox 79 Future Fix Packs

Deployment unit	79	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Mozilla Firefox ESR 68 Future Fix Packs

Deployment unit	68	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Web Servers – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
Apache Server	2.4 and future fix packs	2.4	9.0	Full	No
HCL Domino	9.0	9.0	9.0	Full	No
IBM HTTP Server	8.5.5	8.5.5	9.0	Full	No
	9.0	9.0	9.0	Full	No
	9.0.5	9.0.5	9.5	Full	No
Microsoft Internet Information Services	10.0 and future fix packs	10.0	9.0	Full	No

Apache Server 2.4 and Future Fix Packs

Deployment unit	2.4	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

HCL Domino 9.0

Deployment unit	9.0	9.0.0.1	↳
Server	Yes	Yes	Yes

IBM HTTP Server 8.5.5

Deployment unit	8.5.5	↳
Server	Yes *	Yes

* IBM HTTP Server 8.5.5 is only supported with HCL Digital Experience Server V8.5.5.x.

IBM HTTP Server 9.0

Deployment unit	9.0	↳
Server	Yes	Yes

IBM HTTP Server 9.0.5

Deployment unit	9.0.5	↳
Server	Yes	Yes

Microsoft Internet Information Services 10.0 and Future Fix Packs

Deployment unit	10.0	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

WebDAV Client – Summary

Supported Software	Version	Supported software minimum	Product minimum	Components	Operating System Restrictions?
JSCAPE AnyClient	6.0 and future fixpacks	6.0	9.0	Full	No
SRT WebDrive	2016 and future fix packs	2016	9.0	Full	No
davfs2	1.5 and future fix packs	1.5	9.0	Full	No

JSCAPE AnyClient 6.0 and Future Fix Packs

Deployment unit	6.0	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

SRT WebDrive 2016 and Future Fix Packs

Deployment unit	2016	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

davfs2 1.5 and Future Fix Packs

Deployment unit	1.5	Future Versions, Releases	Future Fix Packs
Server	Yes	No	Yes

Hardware

HCL Portal Express requires the following hardware, organized by type of hardware, deployment units or components.

Installable software: Linux

Hardware	Deployment units	Requirement	Applicable operating systems
Disk Space	Server	<p>Minimum 3 GB free disk space for installation of DX Portal</p> <p>Minimum 2 GB free disk space for installation of WebSphere Application Server</p> <p>Minimum 3 GB free disk space for installation of IBM Installation Manager and the Installation Manager shared directory</p> <p>Minimum 8 GB total free disk space recommended for installation</p>	All supported Linux operating systems
Memory	Server	<p>Physical memory requirements and recommendations for DX Portal or HCL Web Content Manager (or WCM):</p> <p>Under minimal load, DX Portal can function with 4GB of RAM and a remote database. In a production environment, 8GB is an optimal starting point for RAM. Production environments and environments featuring multiple profiles will require more memory. Note: The amount of memory assigned to the *INTERACT pool should be set at a minimum of well over 1 GB and a maximum of 100%. If the *INTERACT pool cannot be given enough memory, then the database tasks have to be started with SBMJOB so that they run in</p>	All supported Linux operating systems

		the *BASE pool.	
Other Hardware	Server	Minimum 2 CPUs required for installations of DX Portal and HCL WCM	All supported Linux operating systems
Processor	Server	X86-64 IBM POWER Family of processors System z Processors	All supported Linux operating systems
	Server	Minimum 2 CPUs for installation of Portal or WCM	All supported Linux operating systems

Installable software: Windows

Hardware	Deployment units	Requirement	Applicable operating systems
Disk Space	Server	<p>Minimum 3 GB free disk space for installation of DX Portal</p> <p>Minimum 2 GB free disk space for installation of WebSphere Application Server</p> <p>Minimum 3 GB free disk space for installation of IBM Installation Manager and the Installation Manager shared directory</p> <p>Minimum 8 GB total free disk space recommended for installation</p>	All supported Windows operating systems
Memory	Server	<p>Physical memory requirements and recommendations for DX Portal or HCL Web Content Manager (or WCM):</p> <p>Under minimal load, DX Portal can function with 4GB of RAM and a remote database. In a production environment, 8GB is an optimal starting point for RAM. Production environments and environments featuring multiple profiles will require</p>	All supported Windows operating systems

		more memory. Note: The amount of memory assigned to the *INTERACT pool should be set at a minimum of well over 1 GB and a maximum of 100%. If the *INTERACT pool cannot be given enough memory, then the database tasks have to be started with SBMJOB so that they run in the *BASE pool.	
Other Hardware	Server	Minimum 2 CPUs required for installations of DX Portal and HCL WCM	All supported Windows operating systems
Processor	Server	X86-64 IBM POWER Family of processors System z Processors	All supported Windows operating systems
	Server	Minimum 2 CPUs for installation of Portal or WCM	All supported Windows operating systems

Installable software: Docker *

*** Note:** HCL Digital Experience 9.5 image deployments to Docker are supported for development, and not production operations.

Hardware	Deployment units	Requirement	Applicable operating systems
Disk Space	Server	Minimum 40 GB for Volume size of HCL DX 9.5 and higher Docker image deployment	Docker 1.13 and higher
Memory	Server	Physical memory requirements and recommendations for DX 9.5 and higher Docker image deployment 7GB of RAM set as default, can be modified.	
CPU	Server	2 CPUs requested for installations of DX 9.5 Docker image	

Packaging list

HCL Portal Express 9.5 includes the following products.

Product name	Capability	Applicable Operating System Families
DB2 Advanced Workgroup Server Edition 11.1.0	Databases	Linux, Windows
DB2 Standard Edition 11.5	Databases	Linux, Windows
WebSphere Application Server Network Deployment 9.0.5	Application Servers	Linux, Windows

Glossary

Bitness	<p>Compatibility of the product with the bit version support that is provided by an operating system. Different parts of a product might run on the same operating system but support different application bitness. For example, one part of the product might run only in 32-bit mode, whereas another might support 64-bit tolerate mode.</p> <p>31: The product or part of the product runs as a 31-bit application in a 31-bit operating environment.</p> <p>32: The product or part of the product runs as a 32-bit application in a 32-bit operating environment.</p> <p>64-tolerate: The product or part of the product runs as a 32-bit application in a 64-bit operating environment.</p> <p>64-exploit: The product or part of the product runs natively as a 64-bit application in a 64-bit operating environment.</p>
Co-packaged	Additional products that are included in the product package
Co-installed	Additional products that are included in the product package and installed when the product is installed.
Deployment unit	<p>Deployment Structure identifies pieces of a product that can be independently deployed onto one or more machines in a distributed infrastructure.</p> <ul style="list-style-type: none"> The top level of the deployment structure consists of one or more deployment units. There are four possible deployment units that a product might support: Desktop, Server, Agent or client, Mobile. Deployment units may be further divided into deployable components <p>Desktop deployment unit: Part of the deployment structure intended for use by a single user, typically installed on the user desktops. Examples of desktop deployment units include development tools, administrative tools, stand-alone business applications.</p> <p>Server deployment unit: Part of the deployment structure that can provide services to multiple clients, providing the server in a client-server architecture. Examples of server deployment units include application servers, management servers, database servers and server-based business applications.</p>

	<p>Agent or client deployment unit: Part of the deployment structure that allows remote connection between software. Examples of agent or client deployment units include agents in management system that are installed in the same tier as the managed resources, a remote application, or database clients that are installed with the software accessing the remote services.</p> <p>Mobile deployment unit: Part of the deployment structure intended for use by a single user, typically installed on a mobile device. An example of a mobile deployment unit is a mobile application.</p>
Hypervisor	A virtual machine in which a product can run on a guest operating system.
Limited operating system support	By default, the supported guest operating systems for a product and a hypervisor are the operating systems that are supported by both the product and the hypervisor. If a product restricts support to a subset of these operating systems, this restriction will be indicated by specifying that there is Limited Operating System Support.
Operating system minimum	The minimum operating system maintenance level that is required to run on the product.
Prerequisite minimum	The minimum maintenance level that is required for the prerequisite to work with the product.
Product minimum	The minimum maintenance level that is required for the product to run on the operating system, on an hypervisor, or work with a prerequisite product or supported software.
Supported software minimum	The minimum maintenance level that is required for the supported software to work with the product.
Long Term Support Release	A Long Term Support Release is a recommended product level for which support, including defect and security updates, will be provided over a specified period of time.
Continuous Delivery Product	A Continuous Delivery Product delivers new function to clients more frequently.
Continuous Delivery Product – Long Term Support Release	A Continuous Delivery Product delivers new function to clients more frequently. Since frequent releases may not be suitable for all client environments, Long Term Support Releases provide a package that will be supported for a longer period of time.

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