

IBM Elastic Storage Server V5.3.2 offers new models and upgrades

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Overview

IBM Elastic Storage™ Server, the scalable, high-performance data and file management solution, is expanding its models, introducing nondisruptive capacity upgrade capabilities, and adding networking options.

Elastic Storage Server V5.3.2 offers:

- New high-capacity models with 106 drive enclosures
- Nondisruptive storage upgrades between select existing models
- 100 Gb Ethernet as an available switch option

Providing reliability, performance, and scalability, Elastic Storage Servers can be implemented for a range of diverse requirements.

Feature exchange

None

Key prerequisites

- Red Hat Enterprise Linux^(R) 7 for Power^(R) (le)
- IBM Spectrum Scale™ for IBM Elastic Storage Server
- IBM^(R) Select Support for xCAT V2

Planned availability date

November 2, 2018

Description

New models

The new Elastic Storage Server higher-density models take advantage of the newly announced 4U106 model storage drawer, offering 106 drives in 4U of rack space. This new storage drawer is supported by new higher-performance SAS adapters.

Model	4U drawers	Drives	Raw capacity (PB)
GL1C	1	104	1.04
GL2C	2	210	2.10
GL4C	4	422	4.22
GL6C	6	634	6.34

Model upgrades

For clients with existing Power Systems™ servers, nondisruptive upgrades are introduced with Elastic Storage Server V5.3.2. With nondisruptive upgrades, the original data is preserved and accessible in place, while the added capacity of the new storage drawers is integrated into the original capacity without interruption. The existing data is rebalanced across both the new and old storage drawers, again without interruption to the Elastic Storage Server cluster. The new storage capacity is immediately available for use.

Nondisruptive upgrades are now supported between the following models:

From	To	Conversion requirements
GS1S	GS2S	Feature EFDP - ESS Model Upgrade Specify; GS1S to GS2S
GS2S	GS4S	Feature EFDQ - ESS Model Upgrade Specify; GS2S to GS4S
GL1S	GL2S	Feature EFDR - ESS Model Upgrade Specify; GL1S to GL2S
GL2S	GL4S	Feature EFDS - ESS Model Upgrade Specify; GL2S to GL4S
GL4S	GL6S	Feature EFDT - ESS Model Upgrade Specify; GL4S to GL6S

In addition, to support faster workloads using industry standard interconnects, a new Mellanox 100 Gb Ethernet switch is added as an available networking option. This offers the highest performance for Ethernet-connected Elastic Storage Server systems.

For more information on the High Capacity 4U106 Storage Drawer, see Hardware Announcement [118-057](#), dated October 9, 2018.

For more information on the IBM Ethernet Switch 8831-00M (32 x 100 GbE), see Hardware Announcement [118-078](#), dated October 9, 2018.

Section 508 of the US Rehabilitation Act

Elastic Storage Server V5.3.2 models are capable as of November 2, 2018, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A US Section 508 Accessibility Conformance Statement can be requested on the [Product accessibility information](#) website.

Reference information

For more information on the High Capacity 4U106 Storage Drawer, see Hardware Announcement [118-057](#), dated October 9, 2018.

For more information on the IBM Ethernet Switch 8831-00M (32 x 100 GbE), see Hardware Announcement [118-078](#), dated October 9, 2018.

Product number

The following are newly announced features on the specific models of the IBM Power Systems™ 5148, 7014, and 7965 machine type:

New features available October 19, 2018

Description	Machine type	Model	Feature number
ESS GH12 Solution Specify (3.84TB SSD & 4TB HDD) - 756TB raw disk capacity	5148	22L	EST1
	7014	T42	
	7965	S42	
ESS GH12 Solution Specify (3.84TB SSD & 8TB HDD) - 1420TB raw disk capacity	5148	22L	EST2
	7014	T42	
	7965	S42	
ESS GH12 Solution Specify (3.84TB SSD & 10TB HDD) - 1752TB raw disk capacity	5148	22L	EST3
	7014	T42	
	7965	S42	
ESS GH12 Solution Specify (15.36TB SSD & 4TB HDD) - 1033TB raw disk capacity	5148	22L	EST4
	7014	T42	
	7965	S42	
ESS GH12 Solution Specify (15.36TB SSD & 8TB HDD) - 1697TB raw disk capacity	5148	22L	EST5
	7014	T42	
	7965	S42	
ESS GH12 Solution Specify (15.36TB SSD & 10TB HDD) - 2029TB raw disk capacity	5148	22L	EST6
	7014	T42	
	7965	S42	

The following are newly announced features on the specific models of the IBM Power Systems 5148, 7014, and 7965 machine type:

New features available November 2, 2018

Description	Machine type	Model	Feature number
4.5M, 12Gb/s MINI SAS HD ACTIVE OPTICAL CABLE	5148	22L	AJGB
4.3M, 12Gb/s MINI SAS HD ACTIVE OPTICAL CABLE	5148	22L	AJGC
4M 12Gb/s MINI SAS HD to MINI SAS HD COPPER CABLE	5148	22L	ECE6
5M 12Gb/s MINI SAS HD to MINI SAS HD COPPER CABLE	5148	22L	ECE7
Rack Content Specify for 8831-00M 1EIA	7014	T42	ER2L
	7965	S42	
ESS GL1C Solution Specify (10TB HDD) - 1040TB raw disk capacity	5148	22L	ESTS
	7965	S42	
ESS GL2C Solution Specify (10TB HDD) - 2100TB raw disk capacity	5148	22L	ESTT
	7965	S42	
ESS GL4C Solution Specify (10TB HDD) - 4220TB raw disk capacity	5148	22L	ESTU
	7965	S42	
ESS GL6C Solution Specify (10TB HDD) - 6340TB raw disk capacity	5148	22L	ESTW
	7965	S42	
ESS GL4C with copper SAS cables solution specify (10TB HDD) - 4220TB raw disk capacity	5148	22L	ESTX
	7965	S42	

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld^(R) ID and password are required (use IBMid).

[BP Attachment for Announcement Letter 118-080](#)

Publications

No publications are shipped with the announced products.

IBM Knowledge Center provides you with a single point of reference where you can access product documentation for IBM systems hardware, operating systems, and server software. Through a consistent framework, you can efficiently find information and personalize your access by going to [IBM Knowledge Center](#) for all your product information needs.

To access the IBM Publications Center Portal, go to the [IBM Publications Center](#) website.

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. A large number of publications are available online in various file formats, which can currently be downloaded.

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IBM Systems Lab Services offers a wide array of services available for your enterprise. It brings expertise on the latest technologies from the IBM development community and can help with your most difficult technical challenges.

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For details on available services, contact your IBM representative or go to the [IBM Global Technology Services^{\(R\)}](#) website.

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or go to the [Resiliency Services](#) website.

Details on education offerings related to specific products can be found on the [IBM authorized training](#) website.

Technical information

Specified operating environment

Hardware requirements

All required hardware ships with the Elastic Storage Server solution.

Software requirements

All required software ships with the Elastic Storage Server solution, including:

- IBM Spectrum Scale for IBM Elastic Storage Server
- Red Hat Enterprise Linux 7 (le)
- IBM Select Support for xCAT V2

Planning information

Cable orders

No cable orders required.

Security, auditability, and control

This product uses the security and auditability features of host hardware and application software.

The client is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

IBM Systems Lab Services

For details on available services, contact your IBM representative or go to the [IBM Systems Lab Services](#) website.

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is

made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, go to the [IBM Electronic Service Agent](#) website.

Terms and conditions

MES discount applicable

No

Field-installable feature

Yes

Warranty period

Elastic Storage Server comes with three years of hardware support.

To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or IBM. An IBM part or feature installed during the initial installation of an IBM machine is subject to the full warranty period specified by IBM. An IBM part or feature that replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature are the same as those for the machine in which it is installed.

Client setup

No.

Machine code

No license terms apply.

Optional features warranty period

- Not applicable

Prices

For additional information and current prices, contact your local IBM representative.

The following are newly announced features on the specific models of the IBM Power Systems 5148, 7014, and 7965 machine type:

Description	Model	Feature	Purchase	Minimum Initial/ Monthly MES/ Maint. Charge	Both/ Support	RP CSU MES
4.5M 12Gbs OPTICAL CABLE	22L	AJGB			Both	Yes No
4.3M 12Gbs OPTICAL CABLE	22L	AJGC			Both	Yes No
4M 12Gbs SAS HD COPPER CABLE	22L	ECE6			Both	Yes No
5M 12Gbs SAS HD COPPER CABLE	22L	ECE7			Both	Yes
ESS GH12 3.84TB SSD 4TB HDD	22L	EST1			Initial	N/A No
ESS GH12 3.84TB SSD 8TB HDD	22L	EST2			Initial	N/A No

ESS GH12 3.84TB SSD 10TB HDD									
		22L	EST3			Initial	N/A	No	
ESS GH12 15.36TB SSD 4TB HDD									
		22L	EST4			Initial	N/A	No	
ESS GH12 15.36TB SSD 8TB HDD									
		22L	EST5			Initial	N/A	No	
ESSGH12 15.36TB SSD 10TB HDD									
		22L	EST6			Initial	N/A	No	
ESS GL1C 10TB HDD									
		22L	ESTS			Initial	N/A	No	
ESS GL2C 10TB HDD									
		22L	ESTT			Initial	N/A	No	
ESS GL4C 10TB HDD									
		22L	ESTU			Initial	N/A	No	
ESS GL6C 10TB HDD									
		22L	ESTW			Initial	N/A	No	
ESS GL4C W/SAS 10TB HDD									
		22L	ESTX			Initial	N/A	No	

Description	Model	Feature	Purchase	Minimum	Initial/	RP
Machine type 7014	number	number	price	Monthly	MES/	CSU MES
				Maint.	Both/	
				Charge	Support	
Rack Content Sp 8831-00M						
	T42	ER2L			Initial	N/A
ESS GH12 3.84TB SSD 4TB HDD						
	T42	EST1			Initial	N/A
ESS GH12 3.84TB SSD 8TB HDD						
	T42	EST2			Initial	N/A
ESS GH12 3.84TB SSD 10TB HDD						
	T42	EST3			Initial	N/A
ESS GH12 15.36TB SSD 4TB HDD						
	T42	EST4			Initial	N/A
ESS GH12 15.36TB SSD 8TB HDD						
	T42	EST5			Initial	N/A
ESSGH12 15.36TB SSD 10TB HDD						
	T42	EST6			Initial	N/A

Description	Model	Feature	Purchase	Minimum	Initial/	RP
Machine type 7965	number	number	price	Monthly	MES/	CSU MES
				Maint.	Both/	
				Charge	Support	
Rack Content Sp 8831-00M						
	S42	ER2L			Initial	N/A No
ESS GH12 3.84TB SSD 4TB HDD						
	S42	EST1			Initial	N/A No
ESS GH12 3.84TB SSD 8TB HDD						
	S42	EST2			Initial	N/A No
ESS GH12 3.84TB SSD 10TB HDD						
	S42	EST3			Initial	N/A No
ESS GH12 15.36TB SSD 4TB HDD						
	S42	EST4			Initial	N/A No
ESS GH12 15.36TB SSD 8TB HDD						
	S42	EST5			Initial	N/A No
ESSGH12 15.36TB SSD 10TB HDD						
	S42	EST6			Initial	N/A No
ESS GL1C 10TB HDD						
	S42	ESTS			Initial	N/A No
ESS GL2C 10TB HDD						
	S42	ESTT			Initial	N/A No
ESS GL4C 10TB HDD						
	S42	ESTU			Initial	N/A No
ESS GL6C 10TB HDD						
	S42	ESTW			Initial	N/A No
ESS GL4C W/SAS 10TB HDD						
	S42	ESTX			Initial	N/A No

CSU = Client setup

RP MES = Return parts, miscellaneous equipment specifications

Pricing terms

Prices in the following PDF prices link are suggested list prices on day of announcement for the U.S. only. They are provided for your information only. Dealer prices may vary, and prices may also vary by country. IBM list price does not include tax or shipping and is subject to change without notice.

[ENUS-118-080-LIST_PRICES_2018_10_09.PDF](#)

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