IBM Spectrum Archive product family supports LTO 8 tape drives and extends the offering to TS4300 tape libraries

At a glance

IBM Spectrum Archive™ enables direct, intuitive, and graphical access to data stored in IBM® tape drives and libraries by incorporating the Linear Tape File System™ (LTFS) format standard for reading, writing, and exchanging descriptive metadata on formatted tape cartridges. Spectrum Archive eliminates the need for additional tape management and software to access data.

The software family now supports LTO™ Generation 8 tape technology with following versions:

- IBM Spectrum Archive Enterprise Edition (EE) V1.2.5
- IBM Spectrum Archive Library Edition (LE) V2.4
- IBM Spectrum Archive Single Drive Edition (SDE) V2.4

In addition to LTO 8 tape drive support, LE V2.4 and IBM Spectrum Archive Single Drive Edition V2.4 deliver the new enhancements in the Storage Networking Industry Association (SNIA) LTFS Format Specification V2.4*, under public review.

*The work-in-progress draft version is now available for public review on the SNIA Public review website.

Overview

IBM Spectrum Archive LE and EE, extend their support to IBM LTO 8 tape drives. IBM Spectrum Archive is a member of the IBM Spectrum Storage™ software portfolio designed to address data storage inefficiencies by changing the economics of storage with a layer of intelligent software enabling the storage infrastructure with economical tape hardware in non-proprietary format, which is suitable for the long-term retention of archival data.

Spectrum Archive EE also releases a new base and SWMA license part numbers supporting exclusively orders of new TS4300 library in Passport Advantage® (PPA) channel.

The software family now supports the LTO Generation 8 tape technology with following new versions:

- IBM Spectrum Archive Enterprise Edition V1.2.5
Key prerequisites

Spectrum Archive EE V1.2.5

- Tape drives
  - IBM LTO Ultrium™ Generation 8 through 5
  - IBM Enterprise Tape TS1140, TS1150, and TS1155*
- Tape libraries
  - TS4500, TS4300, TS3500, and TS3310
- Server with following operating system and separately licensed software
  - RHEL 7 (64-bit, x86-64 platform)
  - IBM Spectrum Scale™ version 4.2.2 or 4.2.3

*Only Fibre Channel interface

Spectrum Archive LE V2.4

- Tape drives
  - IBM LTO Ultrium Generation 8 to 5
  - IBM Enterprise Tape TS1140, TS1150, and TS1155*
- Tape libraries
  - TS4500, TS4300, TS3500, TS3310, TS3200, TS3100, and TS2900
- Server with one of following operating system
  - RHEL 7 (64-bit, x86-64 or ppc64le platform)
  - Windows™ Server 2016 and Windows Server 2012 R2 (64-bit)

*Only Fibre Channel interface

For complete details about supported hardware and configurations, see the IBM Spectrum Archive SDE documentation, IBM Spectrum Archive LE documentation, and IBM Spectrum Archive EE documentation in IBM Knowledge Center.

Planned availability date

October 20, 2017: Spectrum Archive LE V2.4
November 10, 2017: Spectrum Archive EE V1.2.5 (PPA)
November 24, 2017: Spectrum Archive EE V1.2.5 (AAS)

See the Availability of national languages section for national language availability.

Description

IBM Spectrum Archive extends its support to IBM LTO 8 tape drives. IBM Spectrum Archive, a member of the IBM Spectrum Storage family, enables direct, intuitive, and graphical access to data stored in IBM tape drives and libraries by incorporating the LTFS format standard for reading, writing, and exchanging descriptive metadata on formatted tape cartridges. Spectrum Archive eliminates the need for additional tape management and software to access data.
Spectrum Archive EE also releases new base and software maintenance license part numbers to exclusively support orders of the new TS4300 library through Passport Advantage.

The software family now supports the LTO Generation 8 tape technology with following versions:
- IBM Spectrum Archive Enterprise Edition V1.2.5
- IBM Spectrum Archive Library Edition V2.4
- IBM Spectrum Archive Single Drive Edition V2.4

**IBM Spectrum Archive Enterprise Edition V1.2.5**
- Enhanced interoperability with support of LTO 8 tape drives
- Library replacement procedure to move all of the existing tapes to the new library by converting the stub

**IBM Spectrum Archive Library Edition 2.4**
- Interoperability enhancements:
  - Support for LTO 8 tape drives and the TS1155 Tape Drive (Fibre Channel only)
  - Support for Microsoft Windows Server 2016
  - Support for IBM Power Server in Little Endian Mode (POWER8, or later)
- Supports for the enhancements in LTFS Format Specification V2.4*, including the support of special characters in the file name
- New command-line interface command

* The work-in-progress draft version is now available for public review on the [SNIA Public review](https://www.snia.org) website.

**Accessibility by people with disabilities**

A US Section 508 Voluntary Product Accessibility Template (VPAT), containing details about accessibility compliance, can be found on the [IBM Accessibility](https://www.ibm.com) website.

---

**Product positioning**

IBM Spectrum Archive is a member of the IBM Spectrum Storage software portfolio and is designed to address data storage inefficiencies by changing the economics of storage with a layer of intelligent software. This software creates an efficient *data footprint* that dynamically stores every bit of data at the optimal cost, helping to maximize performance and ensure security.

IBM Spectrum Archive EE gives organizations an easy way to use cost-effective IBM tape drives and libraries within a tiered storage infrastructure. By using tape libraries instead of disks for Tier 2 and Tier 3 data storage, data that is stored for long-term retention, organizations can improve efficiency and reduce costs related to storing growing amounts of data. Spectrum Archive EE seamlessly integrates with the scalability, manageability, and performance of IBM Spectrum Scale, an IBM enterprise file management platform that enables organizations to move beyond simply adding storage, to optimizing data management.

- Enable cost-effective tape storage for cloud and analytics infrastructures with IBM Spectrum Archive combined with the scalability, manageability, and performance of IBM Spectrum Scale
- Help reduce IT costs by replacing tiered disk storage (Tier 2 and Tier 3) with IBM tape libraries
- Expand archive capacity in up to two libraries without impacting the availability of data in the pool
• Improve data availability and total capacity with support for up to two libraries in a single file system

With Spectrum Archive EE, accessing data stored on an IBM tape cartridge, instead of on disk, is transparent. IBM Spectrum Scale keeps a pointer to the data on tape and, if requested, retrieves the data without user or operator intervention. By leveraging the capabilities of Spectrum Scale, Spectrum Archive EE enables high performance and reliable access across the storage infrastructure. In turn, Spectrum Archive EE enables Spectrum Scale installations to add extensive capacity with lower media, floor space, and power costs. And with policy-based migration, archive capacity can be expanded without impacting data availability.

Spectrum Archive EE enables organizations to improve the cost-effectiveness of their cloud and analytics infrastructures by delivering:

• Operational storage tiers with tape, rather than storing cold data on costly disk storage
• Storage of digital assets for the long term, so that assets can be referenced and monetized for years to come
• Creation of copies of data on operational storage, improving the efficiency and cost effectiveness of a tiered storage infrastructure

Spectrum Archive LE represents a significant step in moving tape storage away from its reputation as complex and difficult to use. Unlike disk storage, tape has previously required device-specific software to read, write, and manage data stored on its cartridges in libraries. But Spectrum Archive sets a new standard for ease of use and portability for open-systems tape storage. Users can run any application designed for disk files against tape data without concern for the fact that the data is physically stored on tape.

Similar to using a USB drive or memory stick, Spectrum Archive enables users to share data across platforms by simply dragging and dropping files. Access to data is faster and easier, when a library loads a tape into the drive and mounts it into the file system, files become visible as if they were on a disk.

IBM Spectrum Archive LE can support data either on single tape cartridges or multiple cartridges in a tape library, automatically loading the cartridges per file access.

Reference information


Availability of national languages

English only

Translation information, if available, can be found at the Translation Reports website.

Program number

<table>
<thead>
<tr>
<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-LT1</td>
<td>2.4.0</td>
<td>IBM Spectrum Archive Library Edition</td>
</tr>
<tr>
<td>5639-LP1</td>
<td>1.2.5</td>
<td>IBM Spectrum Archive Enterprise Edition</td>
</tr>
</tbody>
</table>
Program number | VRM | Program name 
---|---|---
5725-X69 | 1.2.5 | IBM Spectrum Archive Enterprise Edition (for Passport Advantage)

<table>
<thead>
<tr>
<th>Program number</th>
<th>Maintenance 1 year PID number</th>
<th>Maintenance 2 year PID number</th>
<th>Maintenance 3 year PID number</th>
<th>Maintenance 4 year PID number</th>
<th>Maintenance 5 year PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-LP1</td>
<td>5639-LP2</td>
<td>5639-LP4</td>
<td>5639-LP5</td>
<td>5639-LP8</td>
<td>5639-LP9</td>
</tr>
<tr>
<td>5639-LP3</td>
<td></td>
<td></td>
<td>5639-LP6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5639-LP7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program number</th>
<th>Maintenance 1 year PID number</th>
<th>Maintenance 2 year PID number</th>
<th>Maintenance 3 year PID number</th>
<th>Maintenance 4 year PID number</th>
<th>Maintenance 5 year PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-LT1</td>
<td>5639-LT2</td>
<td>5639-LT4</td>
<td>5639-LT5</td>
<td>5639-LT8</td>
<td>5639-LT9</td>
</tr>
<tr>
<td>5639-LT3</td>
<td></td>
<td></td>
<td>5639-LT6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5639-LT7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 217-429

Offering Information

Product information is available on the IBM Offering Information website.

More information is also available on the Passport Advantage and Passport Advantage Express(R) website.

Publications

The IBM 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, and they can all be downloaded by all countries.

Services

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services, contact your Lab Services Sales or Delivery Leader.
Technical information

**Specified operating environment**

**Hardware requirements**

**Spectrum Archive Library Edition V2.4**

- One supported tape library
- One or more supported tape drives, supported HBAs (FC or SAS), and Switches
- One or more supported tape media
- One x86-64 Server or POWER® Server in Little Endian Mode

**Spectrum Archive Enterprise Edition V1.2.5**

- One or two supported tape library
- One or more supported tape drives, supported HBAs (FC or SAS), and Switches
- One or more supported tape media
- One or more x86-64 Servers (each server requires a per-node license)

**Software requirements**

**Spectrum Archive EE V1.2.5**

**Operating system prerequisites**

Red Hat Enterprise Linux® (RHEL) 7 (64-bit, x86-64 platform)

**Connectivity prerequisites**

For complete details about supported hardware and configurations, see the IBM Spectrum Archive EE documentation in IBM Knowledge Center.

**Spectrum Archive LE V2.4**

**Operating system prerequisites**

- RHEL 7 (64-bit, x86-64 or ppc64le platform)
- Windows Server 2016 and Windows Server 2012 R2 (64-bit)

**Connectivity prerequisites**

For complete details about supported hardware and configurations, see the IBM Spectrum Archive LE documentation in IBM Knowledge Center.

**Limitations**

**Spectrum Archive EE V1.2.5**

- For TS1155 tape drives, Spectrum Archive EE only supports Fibre Channel interface
- Tape media in different formats or generations need to be grouped and separated by tape pool
- The system has to have at least one tape drive which can both read and write the tape for each tape format and generation
- Write protected tapes are not supported

**Spectrum Archive LE V2.4**
WORM tapes are not supported

For additional information, see the license information document that is available on the IBM Software License Agreement website.

**Planning information**

**Packaging**

**IBM Spectrum Archive EE**
- For AAS orders: New orders of IBM Spectrum Archive EE Version 1.2.5 (5639-LP1) are shipped with media feature 5806: Spectrum Archive EE Version 1.2.5 (Part Number LCD7-5639)
- For PPA orders: Only electronic software delivery is supported for IBM Spectrum Archive EE Version 1.2.5 (5725-X69)

**IBM Spectrum Archive LE:** For new orders of IBM Spectrum Archive LE (5639-LT1), the Spectrum Archive LE Version 2.4.0 (CD-ROM Part number LCD7-5224) media is shipped with feature 5806.

This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, which will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

**Security, auditability, and control**

IBM Spectrum Archive EE and IBM Spectrum Archive LE use the security and auditability features of host hardware, host software, or application software to which it is attached.

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

**Ordering information**

Product Group: IBM Storage

Product: Spectrum Archive Enterprise Edition (5725-X69)

Product Category: Spectrum Archive EE

**Ordering information for Passport Advantage**

Passport Advantage (PPA) allows greater flexibility to help customers manage their software licenses and Subscription and Support renewals. Customers can now have a common anniversary date for Subscription and Support renewals for all IBM software, under a PPA agreement, including IBM Storage software. The anniversary date, established at the order ship date for the initial product acquisition, will remain unchanged while their Passport Advantage or Passport Advantage Express agreement remains in effect.

IBM Spectrum Archive EE can be ordered as follows:

- Per base install
- Per additional node
- Per multiple libraries
For the installation of the first node, purchase one base install license. For the installation of additional nodes for meeting the scale-out requirement, purchase one additional node install license for each additional node in the same Spectrum Archive EE cluster.

To order for Passport Advantage, specify the desired part number and quantity.

**Passport Advantage**

Program name: **IBM Spectrum Archive Enterprise Edition (5725-X69)**

<table>
<thead>
<tr>
<th>Program name/Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Spectrum Archive Enterprise Edition TS4300 Tape library per Install License + SW Subscription &amp; Support 12 Months</td>
<td>D1VEVLL</td>
</tr>
<tr>
<td>IBM Spectrum Archive Enterprise Edition TS4300 Tape library per Install SW Subscription &amp; Support Reinstatement 12 Months</td>
<td>D1VEWLL</td>
</tr>
<tr>
<td>IBM Spectrum Archive Enterprise Edition TS4300 Tape library per Install Annual SW Subscription &amp; Support Renewal</td>
<td>E0NXYLL</td>
</tr>
</tbody>
</table>

**Advanced Administration System (AAS)**

**5639-LP1 -IBM Spectrum Archive Enterprise Edition**


**5639-LT1 -IBM Spectrum Archive Library Edition**


This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

Extending coverage for a total of five years from the date of acquisition may be selected. Order the program number, feature number, and quantity to extend coverage for your software licenses. If maintenance has expired, specify the after license feature number.

**Spectrum Archive Enterprise Edition**

**Maintenance PID Description**

<table>
<thead>
<tr>
<th>Maintenance PID number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-LP2</td>
<td>IBM Spectrum Archive Enterprise Edition 1 year Registration and Renewal</td>
</tr>
<tr>
<td>5639-LP3</td>
<td>IBM Spectrum Archive Enterprise Edition 1 year After License</td>
</tr>
<tr>
<td>5639-LP4</td>
<td>IBM Spectrum Archive Enterprise Edition 2 year Registration</td>
</tr>
<tr>
<td>5639-LP5</td>
<td>IBM Spectrum Archive Enterprise Edition 3 year Registration</td>
</tr>
<tr>
<td>5639-LP6</td>
<td>IBM Spectrum Archive Enterprise Edition 3 year Renewal</td>
</tr>
<tr>
<td>5639-LP7</td>
<td>IBM Spectrum Archive Enterprise Edition 3 year After License</td>
</tr>
<tr>
<td>5639-LP8</td>
<td>IBM Spectrum Archive Enterprise Edition 4 year Registration</td>
</tr>
<tr>
<td>5639-LP9</td>
<td>IBM Spectrum Archive Enterprise Edition 5 year Registration</td>
</tr>
</tbody>
</table>
Ordering information for Software Maintenance licenses, as previously announced in Software Announcement 215-160, dated May 5, 2015, remains unchanged.

**Spectrum Archive Library Edition**

**Maintenance PID Description**

<table>
<thead>
<tr>
<th>Maintenance PID number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5639-LT2</td>
<td>IBM Spectrum Archive Library Edition 1 year Registration and Renewal</td>
</tr>
<tr>
<td>5639-LT3</td>
<td>IBM Spectrum Archive Library Edition 1 year After License</td>
</tr>
<tr>
<td>5639-LT4</td>
<td>IBM Spectrum Archive Library Edition 2 year Registration</td>
</tr>
<tr>
<td>5639-LT5</td>
<td>IBM Spectrum Archive Library Edition 3 year Registration</td>
</tr>
<tr>
<td>5639-LT6</td>
<td>IBM Spectrum Archive Library Edition 3 year Renewal</td>
</tr>
<tr>
<td>5639-LT7</td>
<td>IBM Spectrum Archive Library Edition 3 year After License</td>
</tr>
<tr>
<td>5639-LT8</td>
<td>IBM Spectrum Archive Library Edition 4 year Registration</td>
</tr>
<tr>
<td>5639-LT9</td>
<td>IBM Spectrum Archive Library Edition 5 year Registration</td>
</tr>
</tbody>
</table>


**Charge metric**

<table>
<thead>
<tr>
<th>Program name</th>
<th>Part number or PID number</th>
<th>Charge metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Spectrum Archive Library Edition</td>
<td>5639-LT1</td>
<td>Per Install and Per 250 Install</td>
</tr>
<tr>
<td>IBM Spectrum Archive Enterprise Edition</td>
<td>5639-LP1</td>
<td>Per Install and Per Secondary Node</td>
</tr>
<tr>
<td>IBM Spectrum Archive Enterprise Edition (for Passport Advantage)</td>
<td>5725-X69</td>
<td>Per Install and Per Secondary Node</td>
</tr>
</tbody>
</table>

**Install**

Install is a unit of measure by which the program can be licensed. An install is an installed copy of the program on a physical or virtual disk made available to be executed on a computer. Licensee must obtain an entitlement for each install of the program.

**Terms and conditions**


The terms and conditions for IBM Spectrum Archive Enterprise Edition (PPA), as previously announced in Software Announcement 215-486, dated December 8, 2015, remain unchanged.


**Statement of good security practices**
IT system security involves protecting systems and information through intrusion prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a regulatory compliant, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective.

**Important:** IBM does not warrant that any systems, products, or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.

---

**Prices**

**Business Partner information**

If you are an IBM Business Partner -- Distributor for Workstation Software acquiring products from IBM, you may link to Passport Advantage Online for resellers where you can obtain Business Partner pricing information. An IBMid and password are required to access the IBM Passport Advantage website.

Information on charges is available at IBM Support website. In the Electronic tools category, select the option for Purchase/upgrade tools.

**Passport Advantage**

For Passport Advantage information and charges, contact your IBM representative. Additional information is also available on the Passport Advantage and Passport Advantage Express website.

**Advanced Administration System (AAS)**

For all local charges, contact your IBM representative or your authorized IBM Business Partner.

**Program name: IBM Spectrum Archive Enterprise Edition**

Charges for Spectrum Archive EE Base license and Software Maintenance licenses, as previously announced in Software Announcement 215-160, dated May 5, 2015, remain unchanged.

**Program name: IBM Spectrum Archive Library Edition**

Charges for Spectrum Archive LE Base license and Software Maintenance licenses, as previously announced in Software Announcement 215-160, dated May 5, 2015, remain unchanged.

**IBM Global Financing**

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or go to the IBM Global Financing website for more information.

IBM Global Financing offerings are provided through IBM Credit LLC in the United States, and other IBM subsidiaries and divisions worldwide to qualified commercial
and government customers. Rates are based on a customer’s credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing from IBM Global Financing helps you preserve cash and credit lines, enables more technology acquisition within current budget limits, can help accelerate implementation of economically attractive new technologies, offers payment and term flexibility, and can help match project costs to projected benefits. Financing is available worldwide for credit-qualified customers.

**Order now**

To order, contact the IBM Digital Sales Center, your local IBM representative, or your IBM Business Partner. To identify your local IBM representative or IBM Business Partner, call 800-IBM-4YOU (426-4968). For more information, contact the IBM Digital Sales Center.

Phone: 800-IBM-CALL (426-2255)

Fax: 800-2IBM-FAX (242-6329)

For IBM representative: askibm@ca.ibm.com

For IBM Business Partner: pwcs@us.ibm.com

IBM Digital Sales Offices 1177 S Belt Line Rd Coppell, TX 75019-4642, US

The IBM Digital Sales Center, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

**Trademarks**

IBM Spectrum Archive, Linear Tape File System, IBM Spectrum Storage and IBM Spectrum Scale are trademarks of IBM Corporation in the United States, other countries, or both.

IBM, Passport Advantage, PartnerWorld, Express, Power, POWER8 and POWER are registered trademarks of IBM Corporation in the United States, other countries, or both.

LTO and Ultrium are trademarks of HP IBM Corp. and Quantum in the U.S. and other countries.

Windows and Microsoft are trademarks of Microsoft Corporation in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

**Terms of use**

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Additional terms of use are located at:

**Terms of use**

For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page

**IBM United States**