Planning for deployment

When you plan a deployment of IBM StoredIQ, evaluate several infrastructure considerations.

In addition to the information in this section, review the requirements detailed in the IBM Software Product Compatibility Reports (SPCR) tool at: Software Product Compatibility Reports: StoredIQ 7.6

If you plan to use IBM StoredIQ for Legal)identification and Collection to create and manage data boxes and data requests that are to be ful³lled by IBM StoredIQ, also check the system requirements for StoredIQ for Legal at: Software Product Compatibility Reports: StoredIQ for Legal 2.0.3

Generate customized reports with the SPCR tool

Go to the page at Software Product Compatibility Reports to create a high-level report for supported operating systems, related software, hypervisors, and supported translations for any product. You can also create an in-depth report to get detailed system requirements, hardware requirements, and end of service information for each product. You can search for a product in all of the report types and reports are generated based on your query values.

The following report types are the most commonly generated reports from software product compatibility reports:

Detailed system requirements

When you select your product version for the detailed system requirements report, you can set a report filter for **Operating system platforms, Product components,** and **Capabilities,** including prerequisites and support software. After you view the report, you can save it as a URL to generate anytime or download it as a PDF.

Hardware requirements

When you select your product version for the hardware requirements report, you can set a report ³lter by the **Operating system families** option. Set the operating system ³lter by selecting some or all of the operating systems that are supported by your product. After you view the report, you can save it as a URL to generate anytime or download it as a PDF.

End of service

The end of service report shows the service window of the products that you specify over an eight- year span. For example, you can find out when your product is scheduled to go out of service.

Open Virtual Appliance (OVA) configuration requirements

IBM StoredIQ is deployed as virtual appliances and is supported in VMware ESXi 5.0 (all ³x pack levels) or VMware ESXi 6.0 (all ³x pack levels) environments. You must have a virtual infrastructure that meets the IBM StoredIQ hardware requirements.

Application stack

-
- vCPU: 2
- Memory: 4 GB
- Storage
  - Primary disk (vmdisk1): 21GB
  - Data disk (vmdisk2): 10 GB

DataServer - Classic

- vCPU: 4 Even though increasing the number of vCPUs increases performance, the actual bene³ts depend on whether the speci³c host is oversubscribed or not.
- Memory: 16 GB While the minimum value works under light-load condition, as the load increases, the data server quickly starts using swap space. For high load situations, increasing RAM beyond 16 GB can bene³t performance. Monitoring swap usage can provide insight.
- Storage:

– Primary disk (vmdisk1, SCSI 0:0): Default is 150 GB This virtual disk has an associated VMDK that contains the IBM StoredIQ operating code. Do not change its size.

Atteon: If you delete the primary disk, you delete the operating system, and the IBM StoredIQ software; the virtual machine might need to be scrapped.

– Data disk (vmdisk2, SCSI 0:1): Default is 2 TB

This virtual disk can be resized according to expectations on the amount of harvest data to be stored. For purposes of estimation, the index storage requirement for metadata is about 30 GB per TB of managed source data. Full-text indexing requires an extra 170 GB per TB. Therefore, the default data disk size is targeted for managing 10 TB of source information.

– Swap disk (vmdisk3, SCSI 0:2): Default is 40 GB

When under load, the data server can use much RAM; therefore, having ample swap space is prudent. The minimum swap size is equal to the amount of RAM con³gured for the virtual machine. For best performance under load, place this disk on the highest speed data store available to the host.

The general size limits for a data server are 150 million objects or 500 de³ned volumes, whichever limit is reached ³rstN Assuming an average object size of 200 KB equals about 30 TB of managed storage across 30 volumes of 5 million objects each, the index storage requirement for metadata on ~30 TB of storage that contains uncompressed general of³ce documents is ~330 GB (11 GB per TB). Add 100 GB per TB of managed storage for full-text or snippet index. For example, to support 30 TB of storage that is indexed for metadata, you need 8 TB indexed for full-text search and extracted text (snippet cache) of 8 TB for auto-classification. A total of 1.9 TB of storage is required (metadata: 330 GB, full-text: 800 GB, snippet cache: 800 GB).

Data-server performance is impacted by the IOPS available from the storage subsystem. For each data server under maximum workload, at least 650 IOPS generally delivers acceptable performance. In the situations where there is a high load on the system, the IOPS that is used can reach up to 7000 with main write operations.

DataServer - Distributed

- vCPU: 4
- Memory: 16 GB
- Storage:

Primary disk (vmdisk1, SCSI 0:0): Default is 150 GB

– Data disk (vmdisk2, SCSI 0:1): Default is 2 TB

– Swap disk (vmdisk3, SCSI 0:2): Default is 40 GB