

Table 4-13 lists all of the extent sizes that are available in an IBM FlashSystem 9100.

*Table 4-13 Extent size and maximum clustered system capacities*

Extent size	Maximum clustered system capacity
16 MB	64 TB
32 MB	128 TB
64 MB	256 TB
128 MB	512 TB
256 MB	1 petabyte (PB)
512 MB	2 PB
1024 MB	4 PB
2048 MB	8 PB
4096 MB	16 PB
8192 MB	32 PB

This table only shows the maximum extent sizes versus the maximum cluster size when up to four IBM FlashSystem 9100s are clustered together.

For more information on the extents in regular, thin, and compressed pools, and the most up-to-date information on the IBM FlashSystem 9100 configuration limits, go to the configuration for the [IBM FlashSystem 9100 family](#).

When planning storage pool layout, consider the following aspects:

- ▶ Pool extent size:
  - Generally, use 1 GB or higher:
    - If using DRP, then it is essential to use 4 GB.
    - If not using DRP, then 1 GB is acceptable.
    - Note that 4 GB is the default now.
  - For all of the values and rules for extents, see the previous link.
  - Pick the extent size and then use that size for all storage pools.
  - You cannot migrate volumes between storage pools with different extent sizes. However, you can use volume mirroring to create copies between storage pools with different extent sizes.
- ▶ Storage pool reliability, availability, and serviceability (RAS) considerations:
  - The number and size of storage pools affects system availability.
  - Using a larger number of smaller pools reduces the failure domain in case one of the pools goes offline. However, an increased number of storage pools introduces management overhead, impacts storage space use efficiency, and is subject to the configuration maximum limit.
  - An alternative approach is to create a few large storage pools. All MDisks that constitute each of the pools should have the same performance characteristics.
  - The storage pool goes offline if an MDisk is unavailable, even if the MDisk has no data on it. Do not put MDisks into a storage pool until they are needed.
  - Put image mode volumes in a dedicated storage pool or pools.