Table 2. The main features and benefits of the IBM Storage Networking SAN192C-6 (part 4 of 4)

Feature	Benefit
Management	
Ease of management	The IBM Storage Networking c-type family includes built-in storage network management with all features available through a command-line interface (CLI) or DCNM, which is a centralized management tool that simplifies the management of unified fabrics. DCNM supports integration with third-party storage management applications to allow transparent interaction with existing management tools.
	Adhering to the syntax of the widely known IOS Software CLI, the IBM Storage Networking c-type family CLI is easy to learn and delivers broad management capabilities. This highly efficient direct interface optimizes management. You can enable debugging modes for each switch feature and view a real-time updated activity log of control protocol exchanges. Each log entry is timestamped and listed in chronological order.
	Through the use of the intuitive GUI, DCNM simplifies day-to-day operations of unified fabrics in highly virtualized data center environments. DCNM SAN Advanced Edition supports the following features:
	 Event and performance monitoring historically and at scale Wizard- and template-based provisioning of NX-OS technologies and services VMpath analytics with dynamic topology views for extended visibility into virtual infrastructure Resource management through trend analysis of inventory and performance Rule-based event notification and filtering RBAC to provide separation between the network and storage teams
	DCNM can federate up to 10 DCNM servers to manage up to 150,000 devices by using a single management window. The solution can scale to large enterprise deployments through a scale-out server architecture with automated failover capability. You gain a resilient management system that centralizes infrastructure and path monitoring across geographically dispersed data centers. The DCNM base management function is available at no charge, and advanced features are unlocked with a license. DCNM can be installed on Linux and Microsoft Windows operating systems and supports PostgreSQL and Oracle databases.

Licensing

Table 3 summarizes the optional licenses that can be purchased to enable the extra features and capabilities of the IBM Storage Networking SAN192C-6.

Table 3. Optional licenses

License	Description
Enterprise Package (FC AJJ9)	Includes advanced traffic-engineering and network security features, such as IVR, QoS, and zone-based QoS, FC-SP, port security, VSAN-based access control, and fabric binding for open systems. Licensed per switch for all the ports on the switch.
DCNM SAN Advanced Edition (FC AJJA)	Includes advanced management capabilities, such as VMware vCenter integration, performance trending, advanced provisioning, backup, and dashboards. Licensed per switch for all the ports on the switch.
Mainframe Package (FC AJJB)	Includes FICON protocol support and allows IBM CUP management for in-band management from IBM S/390® and z/900 processors. Licensed per switch for all the ports on the switch.
SAN Insights (FC AJKV)	This feature provides SAN Insights for DCNM. It enables the director to provide on-board and outbound access to the telemetry data provided by the 32 Gbps modules with the added functions of DCNM visualization.