Figure 3-8   Storwize V7000 iSCSI overview

Both onboard Ethernet ports of a Storwize V7000 node can be configured for iSCSI. For each instance of an iSCSI target node (that is, each Storwize V7000 node), you can define two IPv4 and two IPv6 addresses or iSCSI network portals:

► If the optional 10 Gbps Ethernet feature is installed, you can use them for iSCSI traffic.

► Generally, enable jumbo frames in your iSCSI storage network.

► iSCSI IP addresses can be configured for one or more nodes.

► Decide whether you implement authentication for the host to Storwize V7000 iSCSI communication. The Storwize V7000 supports the Challenge Handshake Authentication Protocol (CHAP) authentication methods for iSCSI.

3.7.1 iSCSI protocol

The iSCSI connectivity is a software feature that is provided by the Storwize V7000 code. The iSCSI protocol is a block-level protocol that encapsulates SCSI commands into Transmission Control Protocol/Internet Protocol (TCP/IP) packets. Therefore, iSCSI uses IP network rather than requiring the Fibre Channel infrastructure. The iSCSI standard is defined by Request For Comments (RFC) 3720.

For more information about iSCSI protocol, see *iSCSI Implementation and Best Practices on IBM Storwize Storage Systems*, SG24-8327.

3.7.2 Topology and IP addressing

For more information about examples of topology and addressing schemes that can be used for iSCSI connectivity, see 3.5, "Planning IP connectivity" on page 48.

If you plan to use node's 1 Gbps Ethernet ports for iSCSI host attachment, dedicate Ethernet port one for the Storwize V7000 management and port two for iSCSI use. This way, port two can be connected to a separate network segment or virtual local area network (VLAN) dedicated to iSCSI traffic.