

**StorageTek Virtual Storage Manager System**  
VSM console Security Guide

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# Preface

This document describes the security features of Oracle's StorageTek Virtual Storage Manager VSM console.

## Audience

This guide is intended for anyone involved with using security features and secure installation and configuration of VSM console.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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# Overview

This section gives an overview of the product and explains the general principles of application security.

## Product Overview

The StorageTek Virtual Storage Manager (VSM) System 6 and 7, Virtual Storage Manager console (VSM console) provides a common platform for all VSM applications to reside where there is no zOS controller system. The VSM console consists of Oracle hardware and software stack. The VSM console is delivered on a T5-2 server as an appliance, running on Solaris 11.3, with applications consisting of customized Virtual Tape Control Software (VTCS), Automated Cartridge System Library Software (ACSL), and the VSM Graphical User Interface (GUI).

The VSM console appliance provides pre-installed, preconfigured applications, so that limited site-level configuration is required to integrate the product into the customer's managed tape environment. The appliance is designed to preclude the need for customer administration of the system.

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**Note:** Only qualified Oracle personnel are permitted to maintain the system and administer any configuration changes.

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The VSM console is just one component of the VSM solution.

Major subsystems include:

### **VTSS hardware and software**

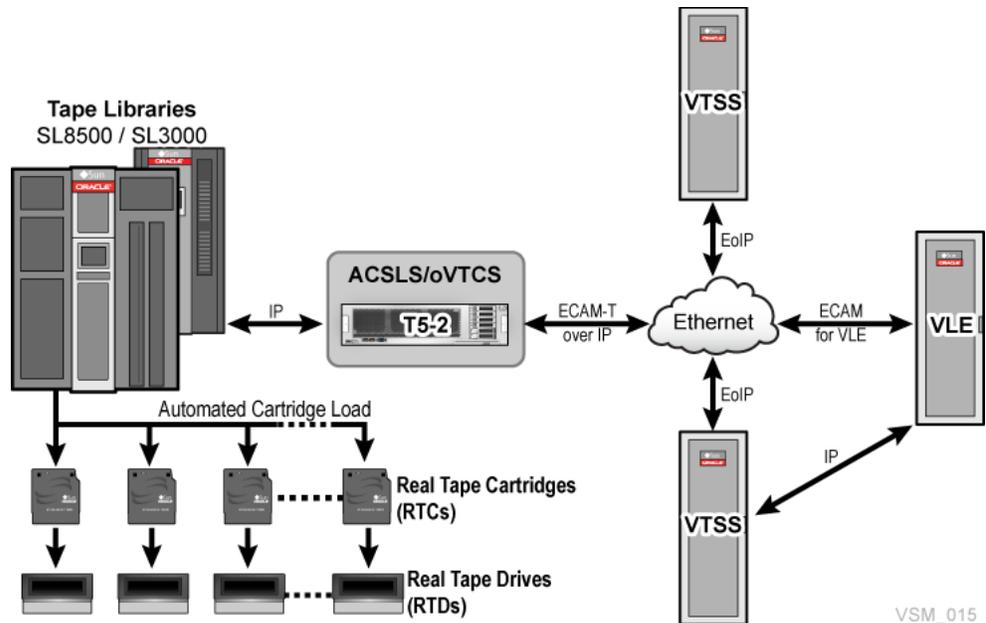
The VSM 6 and VSM 7 VTSS supports emulated tape connectivity over FICON interfaces to IBM MVS, VM and zLinux hosts and also FICON attachment to Real Tape Drives (RTDs) and TCP/IP attachment to other VTSSs and VLEs. FICON is an IBM-driven standard for channel protocol between CPU (zOS) and devices.

### **Enterprise Library Software (ELS) and Virtual Tape Control Software (VTCS)**

ELS is the consolidated suite of StorageTek mainframe software that enables and manages the VTSS. If an MVS system is used, the ELS base software consists of Host Software Component (HSC), Storage Management Component (SMC), HTTP Server, and Virtual Tape Control Software (VTCS).

VTCS is the ELS component that controls virtual tape creation, deletion, replication, migration and recall of virtual tape images on the VTSS subsystem, and also captures reporting information from the VTSS subsystem.





## General Security Principles

The following principles are fundamental to using any product securely.

### Keep Software Up To Date

Application software and system updates will be installed by qualified Oracle personnel.

### Restrict Network Access to Critical Services

Appliances should be installed in secure physical locations with access limited to authorized customer employees or agents and Oracle service personnel. The system should be networked behind a firewall.

### Authentication

Ensure that only authorized personnel can access system. Passwords should be changed when deployed at the customer site.

### Follow the Principle of Least Privilege

Non-VTSS user accounts are not permitted. Only pre-existing accounts are used for system maintenance and administration.

### Monitor System Activity

System security stands on three legs: good security protocols, proper system configuration, and system monitoring. Auditing and reviewing audit records address this third requirement.

## **Keep Up To Date on Latest Security Information**

Oracle continually improves its software and documentation. Check this note yearly release for revisions.

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## Secure Installation

All application code is pre-installed in the VSM console appliance.

All customer data is compressed and sent in a proprietary format including predominance of intercommunication with legacy systems that are currently installed in customer environments. IP communications should be on a private, dedicated network that provides encryption built into the IP infrastructure.



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## Security Features

There are no configurable security features offered in the VSM console appliance.

