

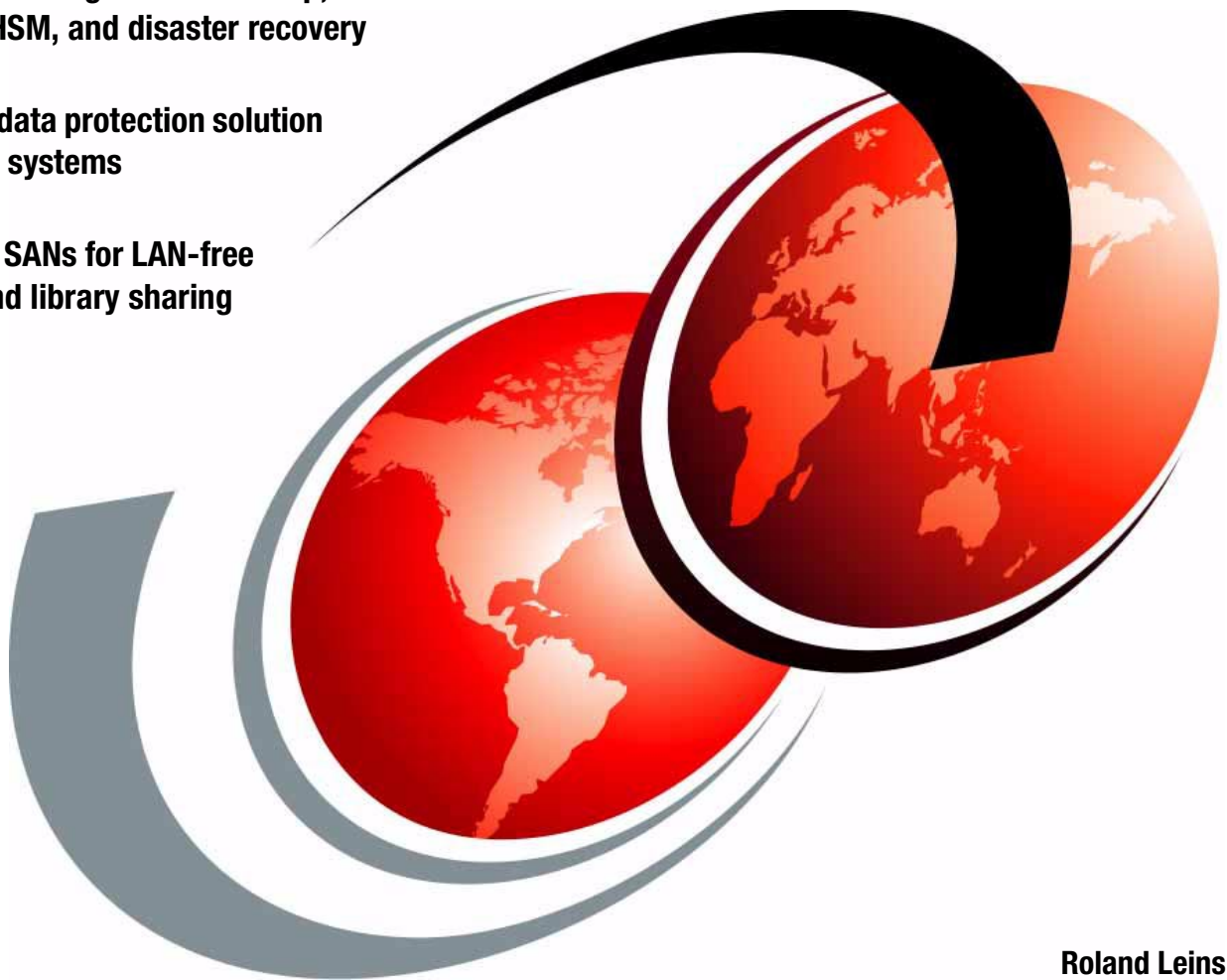
Tivoli Storage Manager

A Technical Introduction

Total data management - backup,
archival, HSM, and disaster recovery

Complete data protection solution
for mobile systems

Exploiting SANs for LAN-free
backup and library sharing



Roland Leins

ibm.com/redbooks

Redpaper

Take Note!

Before using this information and the product it supports, be sure to read the general information in "Special Notices" on page 29.

Second Edition (May 2001)

This edition applies to Version 4, Release 1 of Tivoli Storage Manager, Program Number 5698-TSM for use with the Microsoft Windows NT and Windows 2000, IBM AIX, Sun Solaris, HP-UX, and IBM OS/390, to Version 4, Release 1 of Tivoli Disaster Recovery Manager, Program Number 5698-DRM for use with Microsoft Windows NT and Windows 2000, IBM AIX, Sun Solaris, HP-UX, and IBM OS/390, to Version 4, Release 1 of Tivoli Space Manager, Program Number 5698-SPM for use with Microsoft Windows NT and Windows 2000, IBM AIX, Sun Solaris, HP-UX, and IBM OS/390, and to Version 2, Release 1 of Tivoli Decision Support, Program Number 5698-TDS for use with Microsoft Windows NT.

The document was created or updated on June 15, 2001.

Comments may be addressed to:
IBM Corporation, International Technical Support Organization
Dept. 471F Building 80-E2
650 Harry Road
San Jose, California 95120-6099

When you send information to IBM, you grant IBM a non-exclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 2000. All rights reserved.

Note to U.S Government Users - Documentation related to restricted rights - Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

Contents

Preface	4
1. The Tivoli Storage Management solution	5
2. Tivoli Storage Manager	7
2.1 Tivoli Storage Manager architecture	7
2.1.1 Tivoli Storage Manager server	8
2.1.2 Tivoli Storage Manager storage agent	9
2.1.3 Tivoli Storage Manager backup/archive client	10
2.1.4 Tivoli Storage Manager administration	12
2.1.5 Tivoli Storage Manager externalized interfaces	13
2.1.6 Tivoli Storage Manager supported environments	14
2.2 Base concepts	16
2.2.1 Backup, and archival concepts	16
2.2.2 Storage and device concepts	18
2.2.3 Policy concepts	20
2.2.4 Security concepts	21
3. Tivoli Storage Manager complementary products	22
3.1 Tivoli Space Manager	22
3.2 Space Management for Windows platforms	23
3.3 Tivoli Disaster Recovery Manager	23
3.4 Bare metal recovery	23
3.5 Tivoli Decision Support for Storage Management Analysis	24
4. TDP for Applications and hardware integration	26
Special Notices	29

Preface

Tivoli Storage Manager is the core product of the Tivoli Storage Management product set. It provides a solution for distributed data and storage management in an enterprise network environment. Tivoli Storage Manager supports a wide variety of platforms for mobile, small and large systems, and delivers together with complementary products, many data management functions, such as data protection for file and application data, record retention, space management, and disaster recovery.

This paper gives a high-level technical introduction to Tivoli Storage Manager. It positions Tivoli Storage Manager within the Tivoli Storage Management solution, provides an overview of its architecture, the base concepts, the interfaces, and supported environments, and shows Tivoli Storage Manager's interaction with other products of the Tivoli Storage Management product set.

The author of this redpaper

Roland Leins is a Project Manager at the International Technical Support Organization, San Jose Center. He writes extensively and teaches IBM classes worldwide on all areas of distributed storage management with a focus on Tivoli Storage Manager and Storage Area Networks. Before joining the ITSO in 1999, Roland worked in EMEA Systems Marketing department as EMEA Marketing Manager for ADSM.

Thanks to the following people for their invaluable contributions to this project:

Charlotte Brooks
International Technical Support Organization, San Jose Center

Freddy Saldana
Tivoli Systems, San Jose

1. The Tivoli Storage Management solution

In today's connected world, data has become the key asset of companies and one of its most important competitive differentiating factors. Temporary inaccessibility or the complete loss of data has a huge financial impact, and can drive companies out of business. The inability to manage data can have a negative impact on a company's profitability and limit their ability to grow. Storing, protecting, and managing data growth has become one of the major challenges of today's businesses.

Based on this requirement, Tivoli defined its Information Integrity Initiative (in http://www.tivoli.com/news/press/pressreleases/en/1999/adsm_stormgt.html): "The Tivoli Storage Management Initiative provides an end-to-end software management solution with proven methodologies to help customers link storage management policies with key business practices, to enable them to use information to DRIVE business, rather than simply support it."

Figure 1 shows the structure of the Tivoli Storage Management Solution and how it fits into the Tivoli Enterprise.

Tivoli Storage Management consists of four major solution components:

- Enterprise protection
- Application protection
- SAN management
- Workgroup protection

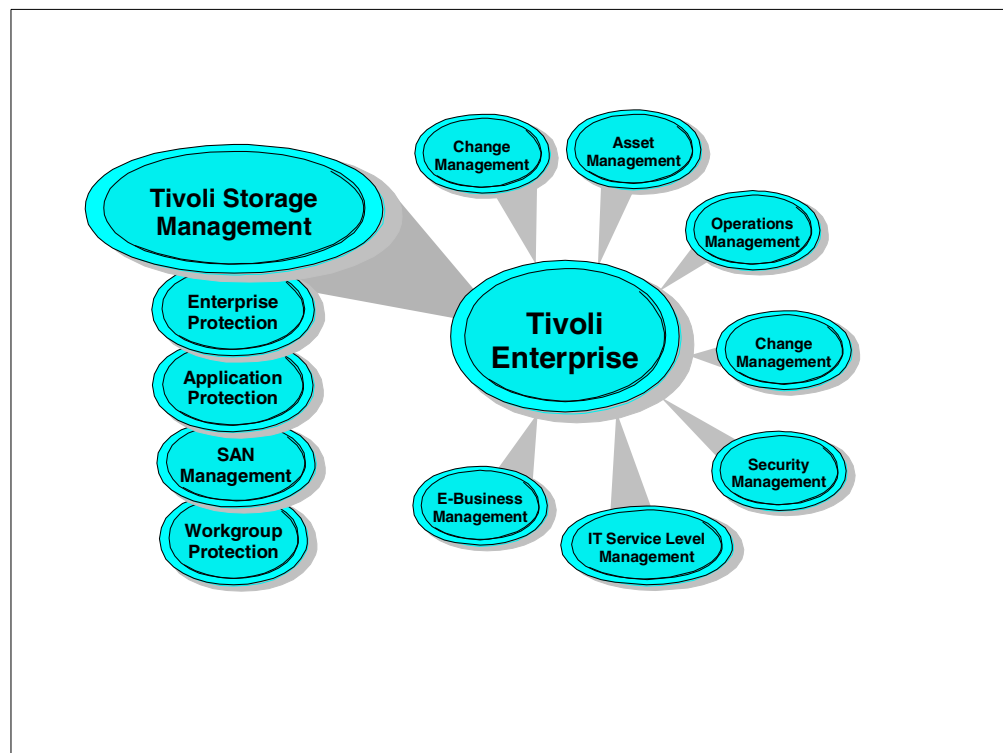


Figure 1. Tivoli Storage Management and Tivoli Enterprise

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.