

# 2007 BROCADE CUSTOMER SURVEY RESULTS

The latest IT trends and priorities  
for shared storage environments  
and data management

**BROCADE**

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## **EXECUTIVE SUMMARY**

Brocade recently conducted its annual end-user survey to track the key IT priorities and concerns of its customers. The 2007 survey included 660 respondents from around the world describing IT trends in their enterprises as well as their expectations for the next 12 months. This document summarizes the results, including significant trends and other points of interest. The summaries include references to the related survey questions, and a complete list of questions appears in the Appendix.

## GENERAL TRENDS COMPARED TO PREVIOUS SURVEYS

Although the 2007 results closely reflected those of previous surveys Brocade has conducted, there were a few new developments and some interesting changes. This year's survey more equally reflected Storage Area Network (SAN) and File Area Network (FAN) solutions, whereas previous years' surveys were more heavily SAN-focused. The survey results clearly indicated that today's IT organizations continue to leverage networked storage solutions to connect and manage their critical data assets.

Topics that again stood out for generating strong interest among those responsible for managing data center infrastructures included the need to reduce the complexity/cost of storage management. It was still the leading priority by a large margin and has been for four years. Another sustained area of focus was business continuance/disaster recovery. This year's survey results also validated trends that emerged in the 2006 survey. As would be expected, the deployment rate of 4 Gbit/sec Fibre Channel solutions was much higher, as was interest in 10 Gbit/sec Fibre Channel. In addition, the results revealed growing interest in file data and the emerging FAN market as a whole.

## TOP IT PRIORITIES

The top IT priorities for storage networking and data center management (see Table 1) were similar to 2006 (Question 1):

- Reducing cost/complexity was still the top priority (cited by 59% of respondents) by a large margin and has been for four years in a row.
- Reducing cost/time for booting or provisioning servers was in second place at 43%.
- Re-architecting existing SANs rose from fourth to third place at 37%.
- Implementing distance replication was down 6 points, falling from third to fourth place at 34%.
- There was a virtual tie for fifth place between deploying remote connectivity for business continuance and security, at 31% and 30% respectively.

**Table 1. Top priorities for storage networking and data center management.**

**Task; Percentage of Respondents**

Reduce the complexity/cost of managing and maintaining storage:  
 59%

Reduce the cost and time required to provision, activate/allocate, and/or boot servers:  
 43%

Re-architect existing SANs or design next-generation SANs:  
 37%

Implement data replication or migrate data between data centers:  
 34%

Deploy remote connectivity for business continuance:  
 31%

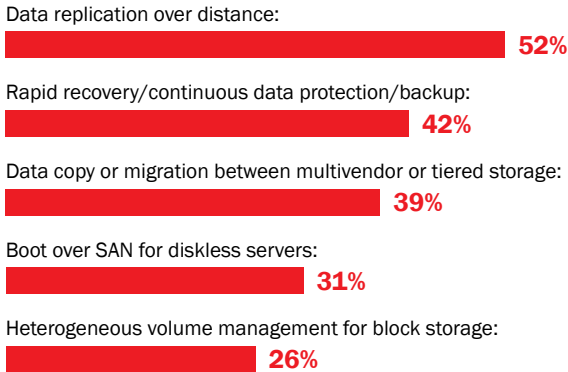
Security:  
 30%

## DATA CENTER SERVICE CHALLENGES

When it comes to data center services (Question 18), respondents again cited requirements related to business continuance/disaster recovery as the top challenges. For instance, data replication over distance and rapid recovery/continuous data protection were the most common responses (see Table 2). In fact, the top five responses were the same as 2006.

**Table 2. Top data center services to evaluate or enhance.**

**Data Center Service; Percentage of Respondents**



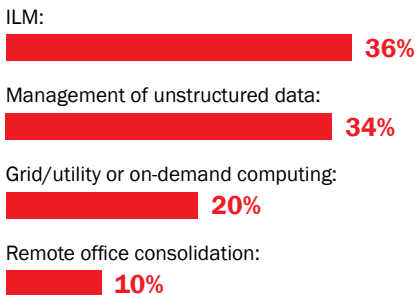
## MOST IMPORTANT IT TRENDS

The responses about the most important IT trends (Question 17) revealed that Information Lifecycle Management (ILM) is still the hottest IT trend, although the second place trend is gaining quickly (see Table 3):

- ILM came in first at 36%.
- Management of unstructured data jumped 10 points from the 2006 survey to 34%.
- Grid/utility or on-demand computing and remote office consolidation remained the same as 2006.

**Table 3. Most important IT trends.**

**Trend; Percentage of Respondents (Equals 100%)**



## ADDITIONAL IT TRENDS

The survey results also indicated some interesting IT trends in the area of:

- ILM
- Business continuance and disaster recovery
- Servers
- Fabric-based applications
- SAN connectivity
- Storage growth
- Storage administrators

### ILM

Although it has been trending downward, ILM remained one of the most important trends:

- 64% of respondents indicated they were planning to evaluate or execute a strategy to migrate data between tiers of storage for ILM (Question 6).
- 57% of respondents indicated they were planning to evaluate, test, or deploy a tiered storage architecture for ILM (file data), and 8% already had a solution in place (Question 13).
- 42% of respondents selected ILM as a top priority for file data management (Question 16).

### Business Continuance and Disaster Recovery

Business continuance and disaster recovery were again top concerns and areas of focus for the survey respondents:

- This year's top priorities (Question 1) included two that were related to business continuance and replication (see Table 1).
- Approximately 80% of respondents planned to implement new or enhanced block-level data replication over distance for disaster recovery in the next 12 months (Question 8).
- When asked about implementing a business continuance/disaster recovery strategy for file data (Question 11), 57% of respondents indicated they were planning to evaluate, test, or deploy a business continuance solution for file data, and 26% had already deployed a solution.
- 42% of respondents selected "business continuance/disaster recovery" as a top priority in regard to file data management (Question 16).
- Over 60% of respondents indicated that they replicated as much as 60% of their data at an offsite location for business continuance. Another 31% noted that they replicated more than 60% of their data offsite (Question 29).

### Servers

Compared to 2006, bladed server deployments were up 5 points to 38% (Question 2). Overall, 71% of respondents either had deployed or planned to deploy bladed servers.

In a new question regarding how many virtual servers they were planning to install in the next 12 months (Question 32), 54% of respondents indicated less than 25 servers and 83% indicated less than 100 servers. Only 2% of respondents indicated more than 1000 servers.

### Fabric-based Applications

In another new question for 2006 (Question 9), fabric-based storage management applications appeared to be approaching their original interest levels of 2003. 81% of respondents indicated they were focused on fabric applications, with "Planning to study and evaluate" as the most common response at 35%.

### SAN Connectivity

In terms of the protocols used for SAN connectivity, the results validated the increased maturity of the 4 Gbit/sec market but generally followed the patterns of previous years (Questions 20 through 26):

- The use of 4 Gbit/sec Fibre Channel more than doubled from 2006, up 31 points to 59%.
- 18% of respondents (up 6 points from 2006) noted that they had already deployed or were planning to deploy 10 Gbit/sec Fibre Channel.
- Deployment percentages for FICON, ESCON, FCIP, and iSCSI were similar—ranging from 13% to 22%.
- Only 4% of respondents were using or planning to use InfiniBand.

### Storage Growth

The growth of storage volumes (Question 30) was basically in line with what was reported in 2006:

- 77% of respondents cited growth expectations of 60% or less.
- Only 5% expected more than 100% storage growth.

### Storage Administrators

Although the average number of storage administrators per environment grew slightly from 2005 to 2006, the 2007 results were essentially the same as 2006 (Question 31):

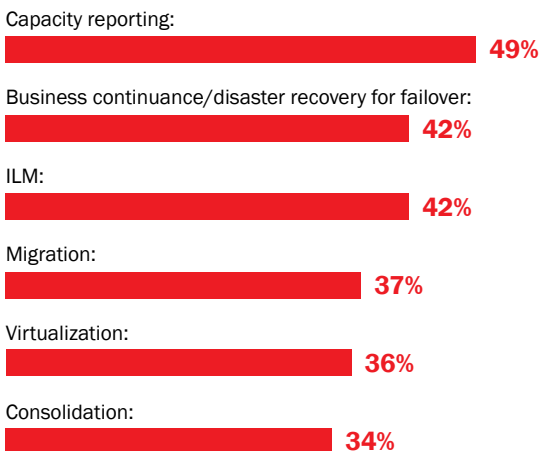
- 18% of respondents cited having six or more administrators (down slightly from 2006).
- Conversely, 82% respondents noted having five or fewer administrators.

### EMERGING FAN MARKET

One of the new areas of the survey focused on the key priorities and challenges involved with managing file data (Question 16). As shown in Table 4, the most common responses included capacity reporting, business continuance, and ILM. However, business continuance was down 13 points from 55% to 42%, overtaken in first place by capacity reporting at 49%. ILM tied with business continuance for second place, followed by migration, virtualization, and consolidation.

**Table 4. Top priorities/challenges for managing file data.**

**Priority/Challenge; Percentage of Respondents**



Additional file-focused questions included topics such as:

- Branch office environments
- Data migration and consolidation
- File virtualization
- Auditing file access permissions

### **Branch Office Environments**

In terms of aligning remote data with the data center, 42% of respondents indicated that they planned to evaluate, test, or deploy solutions for consolidating remote office data to the data center. Actual deployment was up 4 points to 13% (Question 3).

Moreover, 56% of respondents indicated they were planning to test, study, or evaluate a solution for remote office file data management (Question 12).

### **Data Migration and Consolidation**

The need to migrate and/or consolidate file data was also a hot topic:

- 50% of respondents (up 6 points from 2006) indicated that they were planning to evaluate, test, or deploy a solution for consolidating file data, and 15% had already implemented a solution (Question 4).
- 59% of respondents indicated that they were planning to evaluate, test, or deploy a file migration/consolidation solution, and 14% had already deployed a solution (Question 10).
- 37% of respondents selected “migrating file data,” and 34% selected “consolidate file data” as top priorities for file data management (Question 16).

### **File Virtualization**

File virtualization is another top priority among survey respondents, with half planning to identify/implement a file virtualization solution:

- Similar to 2006, 50% of respondents indicated that they were planning to evaluate, test, or deploy a file data virtualization solution (Question 15), and 12% had already deployed a solution.
- 36% of respondents selected “file virtualization” as a top priority (up 6 points) for file data management (Question 16).

### **Auditing File Access Permissions**

In response to a new question focused on compliance and reporting, 55% of respondents indicated plans to evaluate, test, or deploy a solution for auditing file data access permissions (Question 14), and 8% had already deployed a solution.

## **CONCLUSION**

The 2007 survey revealed a continued need for solutions that simplify or reduce the cost of data management. Other key requirements included support for disaster recovery/business continuance, as well as the growing need for simplified file management solutions that increase productivity and efficiency. The survey also validated that shared storage solutions—for both block-based and file-based data—continue to be strategic priorities for IT leaders.

Today, Brocade offers the industry's widest range of technologies, products, and services to provide comprehensive data management solutions for organizations around the world. For more information about Brocade and its solutions, visit [www.brocade.com](http://www.brocade.com).

## APPENDIX: 2007 BROCADE SURVEY QUESTIONS

1. What are your top priorities for storage networking and data center management over the next 12 months?

Over the next 12 months, does your company have plans to:

2. Deploy bladed servers?
3. Consolidate remote office data to the data center?
4. Consolidate unstructured data (file servers and PCs) in your enterprise?
5. Migrate data between tiers of storage or different vendors for ILM?

Over the next year, does your company have plans to:

6. Migrate data between different tiers of storage or different vendors for ILM?
7. Augment your staff's technical skills with third-party Professional Services?
8. Implement new or enhanced block-level data replication over distance for disaster recovery?
9. Deploy new fabric-based storage management applications (virtualization, volume management, data replication, etc.)?

As it pertains to file data, over the next 12 months does your company have plans to:

10. Implement a solution for migrating/consolidating file data?
11. Implement a business continuity/disaster recovery strategy for file data?
12. Implement a solution for remote site file data management (replication, failover, and/or WAFS)?
13. Implement a tiered storage architecture for file data (ILM)?
14. Implement a solution for auditing file data access permissions in your environment?
15. Implement a file storage virtualization solution?

16. What are your top priorities and challenges with regards to managing your file data (i.e., home directories, file shares on servers) over the next 12 months?
17. Which of these four IT trends is most important to you:
  - Grid/Utility computing or on-demand computing?
  - Information lifecycle management?
  - Remote office optimization?
  - Management of unstructured data?
18. Which data center services do you plan to evaluate or enhance over the next 12 months?
19. For the question above, please elaborate or explain what is most interesting to you.

Which types of SAN technologies are in place or planned for use in the next 12 months:

20. 4 Gbit/sec Fibre Channel?
21. 10 Gbit/sec Fibre Channel?
22. FICON?
23. ESCON?
24. FCIP?
25. InfiniBand?
26. iSCSI?

27. From which supplier(s) do you purchase your Brocade products?
28. From which route to market do you directly purchase your Brocade products?
29. What percentage of your data do you either replicate or vault offsite for business continuance and/or disaster recovery?
30. By what percentage do you expect your storage volume to grow over the next 12 months?
31. How many administrators contribute to the management and maintenance of the storage environment?
32. How many virtual servers are you planning to deploy in the next 12 months?

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