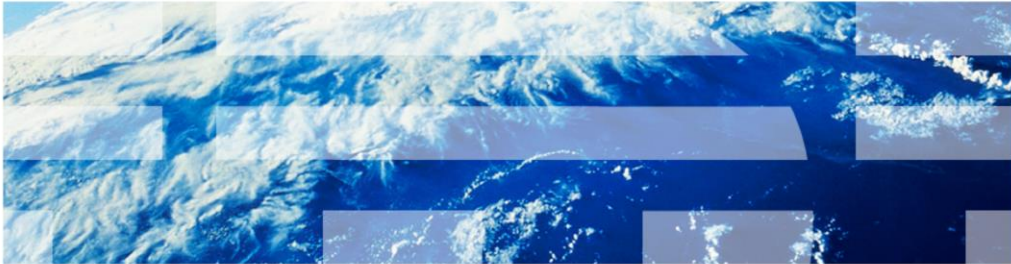


# Tivoli Storage Manager and Tivoli Storage Manager FastBack integration



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IBM Tivoli® Storage Manager and Tivoli Storage Manager FastBack® integration.

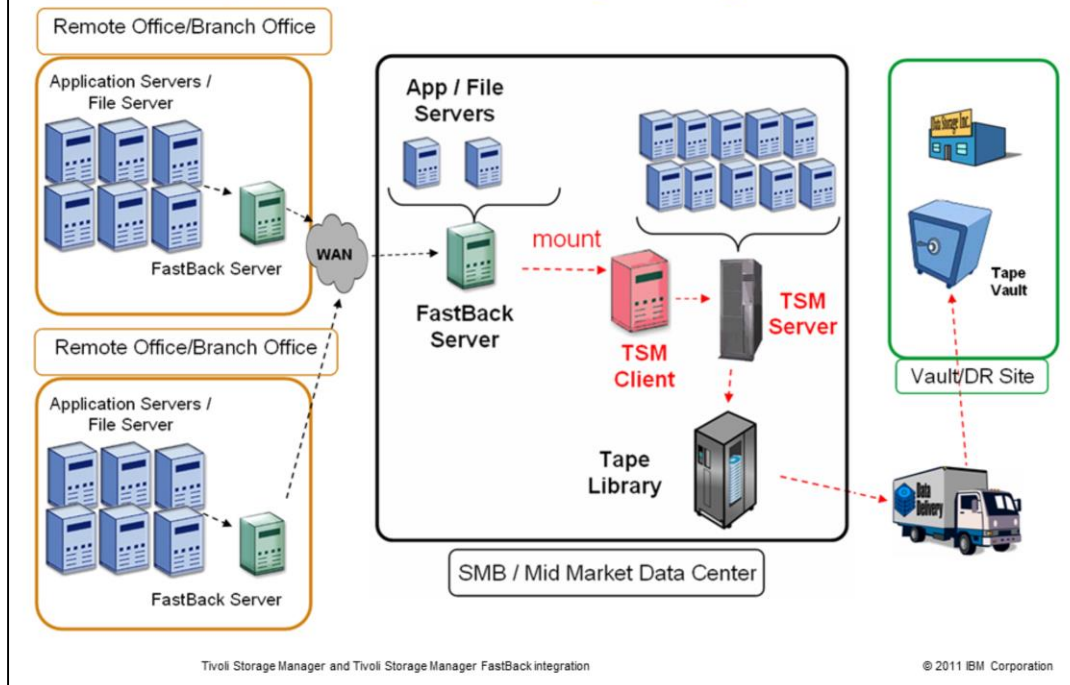
## Objectives

When you complete this module, you can perform these tasks:

- List the features of integrating FastBack and Tivoli Storage Manager Extended Edition
- Explain considerations for integration

When you complete this module, you can perform these tasks: List the features of integrating FastBack and Tivoli Storage Manager Extended Edition and explain considerations for integration.

## FastBack deployment with Tivoli Storage Manager



You can integrate IBM Tivoli Storage Manager and Tivoli Storage Manager FastBack to provide greater flexibility for data retention. You can use FastBack at a remote or branch office location to back up data for short-term data recovery purposes. A Tivoli Storage Manager client can then back up that data and store it in a storage pool. Some key features of implementing FastBack:

1. Support for different long-term retention and recovery requirements.
2. Utilization of Tivoli Storage Manager FastBack incremental block-level snapshots.
3. Copying data to the Tivoli Storage Manager server for long-term data retention, offloaded from the production server.
4. The ability to use the current investment in your existing storage infrastructure and the Tivoli Storage Manager configuration.

## Installing the Tivoli Storage Manager backup-archive client

- The backup-archive client is installed in one of three locations for the integration, depending on your environment:
  - The same system as the FastBack server
  - A FastBack Disaster Recovery Hub server
  - A dedicated proxy system

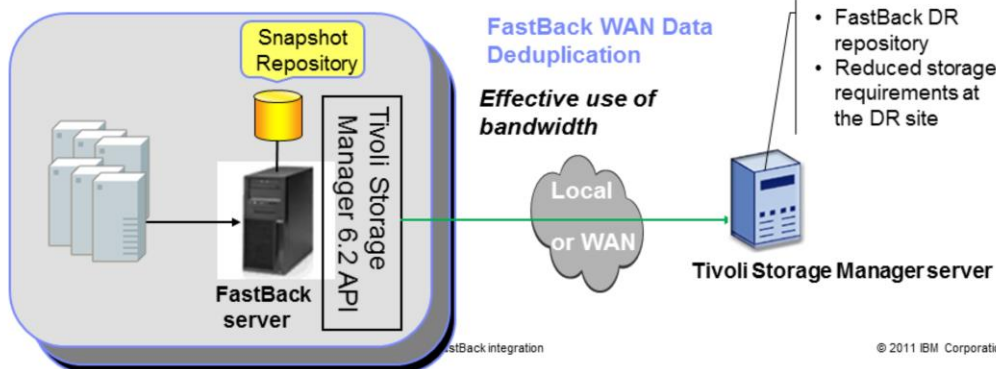
The Tivoli Storage Manager backup-archive client is an essential component of the integration that backs up Tivoli Storage Manager FastBack data to the Tivoli Storage Manager server for long-term retention. If you install a backup-archive client on the same system as the FastBack server, data is backed up from the FastBack repository to the Tivoli Storage Manager server. If a backup-archive client is installed on a FastBack Disaster Recovery Hub server, data is replicated from the FastBack repository to the FastBack Disaster Recovery Hub server. The data is then backed up from the FastBack Disaster Recovery Hub repository to the Tivoli Storage Manager server. If you install the backup-archive client on a dedicated proxy system, data is replicated from the FastBack repository to the proxy system, then backed up to the Tivoli Storage Manager server.

## Using the Tivoli Storage Manager API to send data to deduplicated storage

- FastBack server data goes directly to Tivoli Storage Manager 6.2 server storage when using the Tivoli Storage Manager Server API
  - Tivoli Storage Manager FastBack contains the DR repository. (The repository can be a deduplicated Tivoli Storage Manager server storage pool)
  - You can implement deduplication across multiple FastBack servers that target the same Tivoli Storage Manager server
- Recover FastBack data comes directly from a Tivoli Storage Manager server
  - You do not require a FastBack server for recoveries
  - You mount the snapshot directly from Tivoli Storage Manager server storage pool

### Features:

- Deep Tivoli Storage Manager Integration
- Effective use of bandwidth
- Reduced storage requirements at the DR site

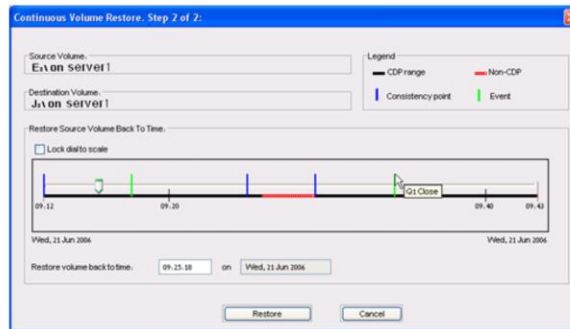


Tivoli Storage Manager FastBack version 6.1.1 introduces deduplication for replicated data that is sent between the FastBack server and the FastBack Disaster Recovery Hub server. The deduplicated data goes to the FastBack Disaster Recovery Hub server repository, using wide area network (WAN) connections. The Tivoli Storage Manager server becomes the storage target for the replicated data.

## Tivoli Continuous Data Protection for Files

Tivoli Continuous Data Protection for Files is a feature of FastBack

- True Block level Tivoli Continuous Data Protection for Files (I/O-based)
- Ability to achieve a zero Recovery Point Objective (RPO)
- Delta from (incremental) snapshots
- Settable RPO per application
- Configurable protection periods
- Enabled per volume
- GUI



Protects Windows® file system and Windows applications



Tivoli Storage Manager and Tivoli Storage Manager FastBack integration

**Single backup solution offerings:**

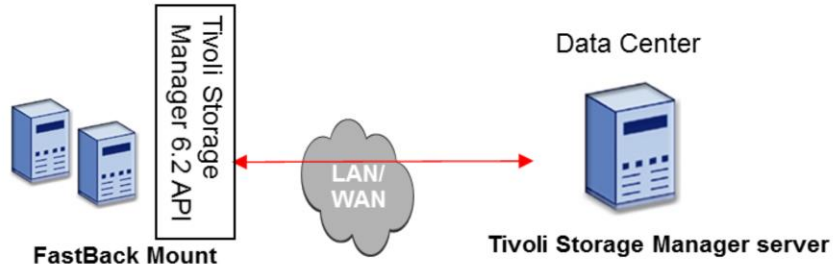
- Tivoli Continuous Data Protection for Files
- Frequent Snapshots
- Scheduled Protection

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A key feature of FastBack is continuous data protection. As files change throughout the day, data is protected by true block-level backups. With this feature, you can achieve a zero-recovery-point objective, using a GUI to restore data.

## Using FastBack Mount

- You mount volume directly from Tivoli Storage Manager server storage
- You restore individual files from volume level backup
- Tivoli Storage Manager 6.2 API is now part of FastBack Mount
- You do not require FastBack server for File Restore
- File Restore now has support for Windows and Linux®
- The backup that you restore from can be a deduplicated Tivoli Storage Manager storage pool



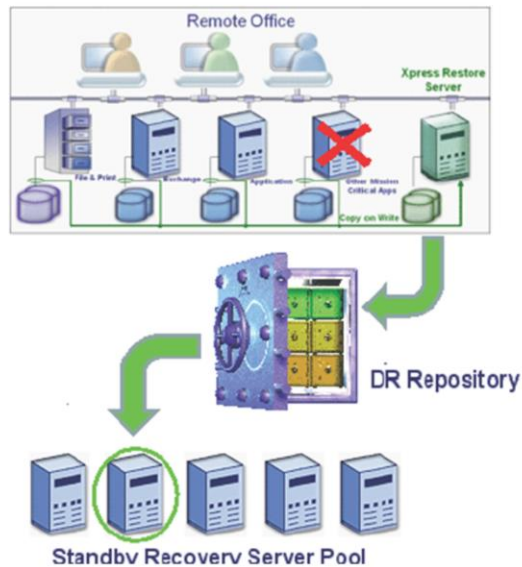
Tivoli Storage Manager and Tivoli Storage Manager FastBack integration

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Using FastBack, you can mount a volume directly from Tivoli Storage Manager storage, making it available as if it were a drive on the system. From here, you can restore individual files from backup. You do not need the FastBack server for performing a file restore.

## FastBack Bare Machine Recovery (BMR)

- Process takes less than an hour
- Full access occurs within minutes  
With Instant Restore, data volumes are available when recovery starts
- Support is available for dissimilar hardware  
Recover on a similar server, to a different server, or to a virtual machine
- The standby server ratio is N-to-1:
  - One standby server can provide cover for many production servers
  - Is cost-effective, high-availability alternative



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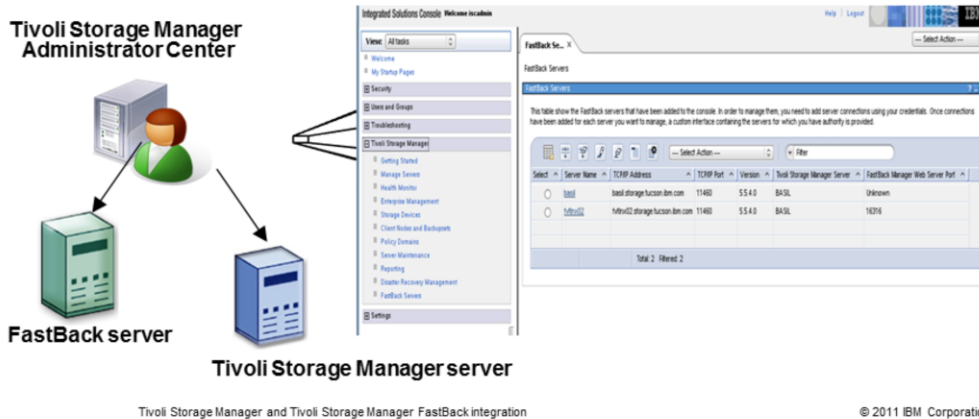
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FastBack Bare Machine Recovery can provide a way to recover an entire system to similar hardware, different hardware, or to a virtual machine. Recovery takes less than an hour, and volumes are accessible during the restore. One standby server can provide cover for many production servers. It is a cost-effective high-availability alternative to other methods.



## Using the Administration Center

You start FastBack Manager from the Tivoli Integrated Portal. FastBack Manager is a unified approach to managing data protection that extends from the data center to the remote office



With an integrated environment, you can manage Tivoli Storage Manager FastBack tasks by using the Tivoli Storage Manager Administration Center. You can launch the FastBack Manager user interface to work with any FastBack server in your environment. You can also use wizards, notebooks, and portlets that are available in the Administration Center to set up policies for protecting Tivoli Storage Manager FastBack data.

## Starting FastBack from the Administration Center

Integrated Solutions Console Welcome issadmin

View: All tasks

- Home
- My Startup Pages
- Security
- Users and Groups
- Troubleshooting
- Tivoli Storage Manager
  - Getting Started
  - Manage Servers
  - Health Monitor
  - Enterprise Management
  - Storage Devices
  - Client Nodes and Backups
  - Policy Domains
  - Server Maintenance
  - Reporting
  - Server Resource Management
- Settings

FastBack Servers

FastBack Servers

This table shows the FastBack servers that have been added to the console. In order to manage them, you need to add server connections using your credentials. Once connections have been added for each server you want to manage, a custom interface containing the servers for which you have authority is provided.

Select	Server Name	TCP/IP Address	TCP/IP Port	Tivoli Storage Manager Server	FastBack Manager Web Server Port	
<input type="radio"/>	basil	basil.storage.fucson.ibm.com	11460	5.5.4	BASIL	Unknown
<input type="radio"/>	tstvr02	tstvr02.storage.fucson.ibm.com	11460	5.5.4	BASIL	16316

Total: 2 Filtered: 2

--- Select Action ---

- Select Action ---
- Launch FastBack Manager...
- Add Server Connection...
- Modify Server Connection...
- Remove Server Connection
- Create a FastBack Policy Schedule...
- View Server Properties...

--- Table Actions ---

- Export Data
- Show Filter Row
- Clear All Filters
- Edit Sort
- Clear All Sorts
- Collapse Table
- Configure Columns
- Restore Defaults

Click to start FastBack Manager interface

Tivoli Storage Manager and Tivoli Storage Manager FastBack integration

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Select FastBack servers from the **Tivoli Storage Manager** menu. Use the **Select Action** menu to add a FastBack server connection. With a FastBack server in the table, you can launch the FastBack Manager interface.

## Setting up FastBack policies in Tivoli Storage Manager Administration Center

basil Properties

Associated Tivoli Storage Manager Server  
BASIL

### FastBack Clients and Volumes

Select	Client Machine	Volume Name	FastBack Policy	Tivoli Storage Manager Domain
<input type="radio"/>	drevil	C:\	Policy 0, Policy 1, Policy 2, Policy 3, Policy 4, Policy 5, all c drives	STANDARD
<input type="radio"/>	mirime	C:\	Policy 1, Policy 3, Policy 5, all c drives	STANDARD
<input type="radio"/>	mirime	E:\	Policy 0, Policy 1, Policy 5	STANDARD

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### Schedules Protecting FastBack Policies

Select	Schedule Name	FastBack Policy	Management Class
<input type="radio"/>	52	Policy 0	FB-SHORT
<input type="radio"/>	51	all c drives	STANDARD

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A wizard that helps you create FastBack policy schedules is available in the Administration Center. 1. You define a Tivoli Storage Manager policy domain and management classes for data to be backed up from a FastBack server. 2. You launch the wizard to integrate Tivoli Storage Manager and Tivoli Storage Manager FastBack policies.

## Tivoli Storage Manager and FastBack integration

- Follow the steps in the guides carefully
  - *Tivoli Storage Manager FastBack Installation and User's Guide*
  - *Integration Guide for Tivoli Storage Manager FastBack 6.1.3*  
[http://www-01.ibm.com/support/knowledgecenter/SS9NU9\\_6.1.9/com.ibm.tsm.fstbk.doc\\_6.1.9/welcome/fb\\_welcome.html](http://www-01.ibm.com/support/knowledgecenter/SS9NU9_6.1.9/com.ibm.tsm.fstbk.doc_6.1.9/welcome/fb_welcome.html)
- Configure the DR hub, Tivoli Storage Manager server, and FastBack server
- Configure Tivoli Storage Manager with parameters that are high enough for maxsessions (300), maxnummp (256), mountlimit (256), maxscratch (256)
- Confirm that the Administration Center is at Version 6.1.3 or higher for the integration

Follow the steps in the Integration Guide for Tivoli Storage Manager FastBack 6.1.3 precisely. You can obtain more information from the IBM Tivoli Storage Manager FastBack 6.1.3.0 Information Center. Configure the DR hub, the Tivoli Storage Manager server and the FastBack server. The FastBack DR hub must be configured even if data is not being stored there. Only one backup-archive client is required to be installed on a FastBack Disaster Recovery Hub server to move data to the Tivoli Storage Manager server. This might cause backups to take longer, and only data that is replicated to the DR hub can be backed up. If you choose the FastBack server system as the location for the backup-archive client installation, you must install a client on each FastBack server that is sending data to the Tivoli Storage Manager server from a FastBack server. On the Tivoli Storage Manager server, ensure you have configured options to provide enough sessions, mount points and scratch volumes for processing. Also remember the Administration Center must be at version 6.1.3 or higher for the integration.

## Summary

Now that you completed this module, you can perform these tasks:

- List the features of integrating FastBack and Tivoli Storage Manager Extended Edition
- Explain considerations for integration

You can perform these tasks: List the features of integrating FastBack and Tivoli Storage Manager Extended Edition and explain considerations for integration.

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