



NetApp™
Go further, faster



Software

FlexClone

Improve time to market, speed provisioning, and reduce cost for virtual and traditional infrastructure

KEY BENEFITS

Speed time to market

Develop and test applications faster by creating instant, space-efficient data replicas that shorten design cycles and improve service levels.

Rapid, efficient provisioning

Achieve dramatic reduction in server provisioning time for both physical and virtual environments. Scale to thousands of virtual desktops with zero footprint impact.

Lower infrastructure and operational costs

Reduce space, power, and cooling costs through highly efficient storage utilization. Manage many data copies with a small team.

THE CHALLENGE

The cost and complexity of architecting, implementing, and managing storage infrastructures can be substantial. You are asked to respond to the needs of both development and production environments while maintaining a critical balance of scalability, performance, and efficiency. In many cases, you need to provide technical and business users with many copies of production-level data sets without disrupting ongoing operations. Emerging technologies such as server virtualization have added a new dimension of complexity to the task of managing storage since it is now necessary to optimize data management around both traditional and new approaches to application deployment. Additionally, the time to add new users and provision new infrastructure can stress service levels to the limit. To meet these challenges, you need productivity tools that allow your company to be more competitive and responsive to your business users without exceeding the boundaries of your IT budget.

THE SOLUTION

NetApp® FlexClone® software enables true cloning, instant replication of data files, LUNs and volumes without requiring additional storage space at the time of

creation. Each cloned file, LUN or volume is a transparent, virtual copy of your data that can be used for essential enterprise operations such as testing and bug fixing, platform and upgrade checks, multiple simulations against large data sets, remote office testing and staging, and provisioning of server and desktop images. NetApp FlexClone provides substantial storage space savings, which means you can manage many more data set variations in less time and with less risk.

NetApp FlexClone allows you to create data set replicas of entire Data ONTAP® volumes as well as replicas at the individual file or LUN level. For volume-level cloning, a FlexClone replica is a writable Snapshot™ copy with all of the capabilities of a NetApp FlexVol® volume. It is a truly virtual data container that can be provisioned, sized, and resized dynamically to simplify operations and increase the responsiveness of your organization. For those applications in which more granularity is needed, file- and LUN-level cloning leverages NetApp block sharing technology, resulting in maximum storage utilization since incremental capacity is needed only for clone-specific metadata and nonredundant data blocks.

Microsoft
GOLD CERTIFIED
Partner

SPEED TIME TO MARKET

Your ability to bring new products and services to market quickly is critical to your competitive advantage. Success in achieving faster time to market depends highly on your ability to accelerate the process of software development and test activities. While traditional approaches to development and test activities require physical copies of database and test software, FlexClone allows you to create multiple virtual copies of your data sets in minutes without incremental infrastructure cost. For enterprise environments such as Oracle® and SAP®, the result is that you can enable entire software development environments in a fraction of the time and for a fraction of the cost, thereby increasing development speed, improving developer service levels, and lowering costs. The bottom line is that FlexClone can increase your staff's productivity and help get you ahead of your competition by cutting weeks or months from your time to market.

RAPID, EFFICIENT PROVISIONING

Server and desktop virtualization provides you with opportunities to add new applications and users rapidly and at lower cost. The ability to effectively deploy many virtual images, however, is directly related to the type of storage provisioning available. NetApp FlexClone allows you to deploy new applications and desktops in a fraction of the time typically required, since cloning operations do not require copying of any physical data. You will have the ability to create "gold images" of system

boot files, user data, and virtual desktops and then use FlexClone to scale to many virtual instances—all without copying or moving any redundant data blocks. For VMware® environments, FlexClone can clone entire data stores or individual VMDK files, resulting in the ability to create thousands of virtual machines in minutes, at the cost of a single virtual machine. Cloned images are available for use immediately and require zero incremental physical storage. Additionally, FlexClone has the flexibility to provision cloned images using FCP, iSCSI, and NFS protocols.

LOWER INFRASTRUCTURE AND OPERATIONAL COSTS

NetApp FlexClone will allow you to increase productivity with far less disk storage, since cloned data copies are virtual images. The result is that your requirements for data center space, power, and cooling will be dramatically reduced. Additionally, your staff will be far more productive, since they will be able to manage many virtual data clones, virtual machines, and virtual desktops with ease. The result is lower TCO and higher service levels throughout your organization.

CHOOSE YOUR DEPLOYMENT CONFIGURATION

NetApp FlexClone software addresses several problematic data management concerns, including, but not limited to, new product development and deployment of virtual server infrastructure. You can deploy FlexClone software with NetApp FAS storage systems as well as with NetApp

V-Series systems to extend its benefits to your heterogeneous storage running Data ONTAP. Since FlexClone has the ability to create data replicas at either the file, LUN, or volume level, you have the flexibility to deploy this software in a wide variety of application and server environments.

PARTNER FOR SUCCESS

When you partner with NetApp, you get the benefits of a fully tested solution, the expertise of our Professional Services and Global Support teams, access to our innovative technologies, and the assurance of best practices. You can accelerate the return on your infrastructure investments and get the most business benefit from them. We respond quickly to your problems, no matter where in the world they occur, and, with one of the most flexible support programs in the industry, you always get exactly the support you need for your unique IT and business requirements.

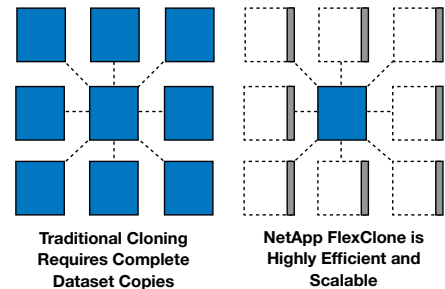


Figure 1

FlexClone provides dramatic savings in storage capacity and is highly scalable.



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NetApp creates innovative storage and data management solutions that accelerate business breakthroughs and deliver outstanding cost efficiency. Discover our passion for helping companies around the world go further, faster at netapp.com.

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