

# Acronis



ACRONIS  
ANYDATA  
ENGINE

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Setting the Standard  
for **New Generation**  
**Data Protection**



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# Introduction

New cloud, virtualization, and mobility technologies have dramatically increased the daily challenges you face to protect your data. Modern IT now spans traditional data centers, physical and virtual servers, the cloud, and extends all the way to the edge of the internet and mobile devices. The volume, types, locations, and formats of data have exploded, along with the variety of platforms and devices requiring support. At the same time, in this Big Data era, organizations are more dependent on their business-critical data and systems than ever before. Naturally, we can expect that future technological advances will continue to expand and evolve the state of data even more quickly than it has in the past. For all of these reasons, technologies to support data protection must change as well.

**Acronis**  
delivers your  
**one-stop**  
**solution**  
to protect  
**any data** in  
**any environment**  
in **any location**

This white paper introduces Acronis' game-changing architecture for backup, disaster recovery, and secure access - the Acronis AnyData Engine - built to support this new generation of data protection in the easiest, most complete, and safest way. Acronis delivers your one-stop solution to protect any data in any environment in any location - with best-in-class solutions for each workload that use new generation disk imaging technology to easily, completely and safely capture and recover your critical business systems.

The Acronis AnyData Engine is the core suite of technology that powers all Acronis' new generation data protection products to capture, store, recover, control, and access data in virtual, physical, cloud, and mobile environments. Its modular architecture lets you use one or more Acronis products, designed and optimized for a specific workload, and lets you add on, blend, and easily manage additional products as your technology infrastructure evolves - without replacing any products. Whether your data resides on-premise, in the cloud, or in remote offices, the AnyData Engine combines backup, bare metal restore, migration, deployment, system recovery, and access to keep your data safe.

The Acronis AnyData Engine is different from any other backup and recovery product on the market today. It is not an old generation platform. Old generation platforms are complicated; they require a separate central server with centralized components and extra resources.

The Acronis AnyData Engine is a new architectural approach that provides a set of deep and powerful new generation data protection technologies to protect any data, across any environment, in any location. Critical capabilities reside with the workloads they are protecting and the centralized management server is used just for management and reporting of tasks. The initiation of backups and facilitation of data streams are performed by each workload. This approach eliminates a single point of failure, making the Acronis system more resilient. At the same time, the Acronis AnyData Engine supports multiple operating systems, hypervisors, applications, and data types without the complexity, compatibility issues, and expensive maintenance challenges associated with old generation platforms.

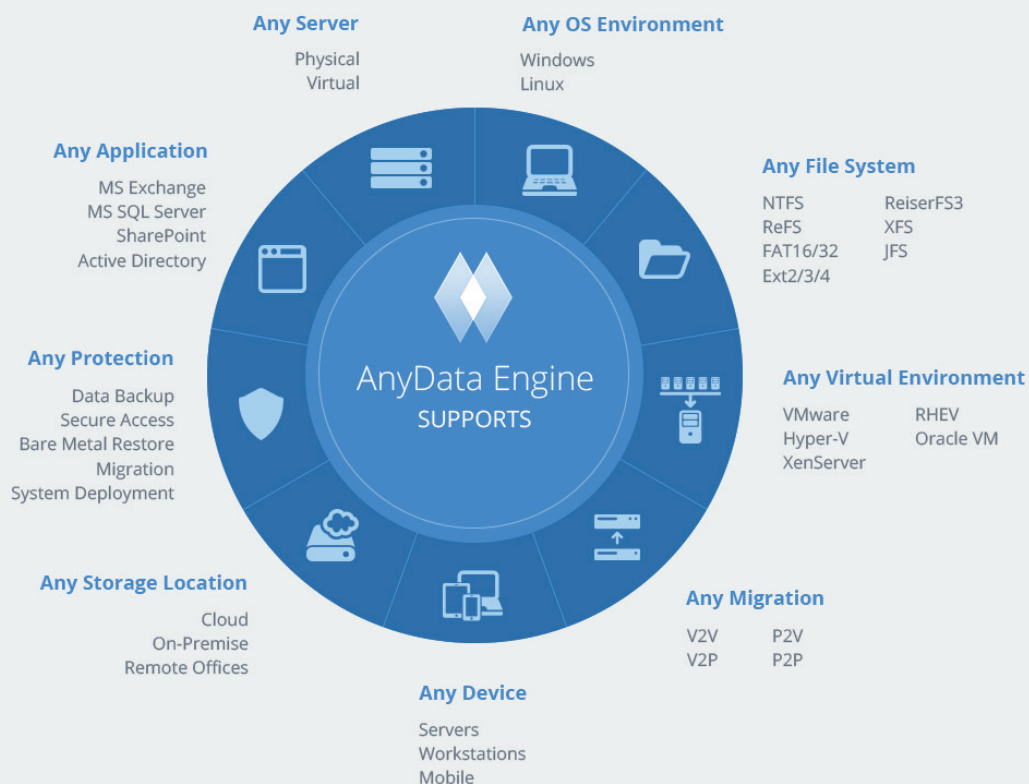
The Acronis AnyData Engine is not a combination of separate products, but an innovative architecture that allows all Acronis products to seamlessly blend together without the need to integrate the products. This means there is no chance that an upgrade to one product will impact another product.

The Acronis AnyData Engine powers over 100 critical top-level features, incorporates 100+ patents, is the most innovative and revolutionary backup and recovery architecture in the industry today, and sets the standard for new generation data protection. This whitepaper will help you understand the depth and breadth of this architecture and why it matters. Once you understand how our 300 engineers have designed and perfected the Acronis AnyData Engine over the last 14 years, we are confident that you will find that our products offer the safest, most robust, complete, flexible, easy to use, and scalable set of data protection products on the market.

# The Acronis AnyData Engine

The Acronis AnyData Engine is a new architectural approach that provides a set of deep and powerful new generation data protection technologies, allowing you to capture, store, recover, control, and access data in virtual, physical, cloud, and mobile environments. Fueled by over 100 patents, the AnyData Engine powers all Acronis products, including Acronis Backup, Acronis Backup Advanced, and Acronis Access. Each product is optimized for a specific workload but also seamlessly blends into a total solution. For data backup, you use the same unified console to configure, install, and maintain each product. If you have multiple systems, you can use the Acronis Management Server (AMS), a single dashboard that lets you easily manage the backup and recovery of all data across multiple Acronis products. For Acronis Access, the Acronis Access Server lets you manage file access and security. Whether your data resides on-premise, in the cloud, or in remote offices, the AnyData Engine combines backup, bare metal restore, migration, deployment, system recovery, and secure access to your corporate data.

## The AnyData Engine supports



# Acronis AnyData Engine: New Generation Flexibility

**M**any data protection products on the market today provide a one-size-fits-all, heavy, traditional platform to protect all types of data on all types of devices and storage.

Unfortunately, due to the cost and complexity of these products, they are only appropriate for large organizations that have both the budget to purchase and the IT resources to maintain them. Traditional, old generation platforms require separate centralized components and extra resources, separate servers, storage and computing power. There is often a central server or system of servers involved. The platform's central servers are the workloads themselves, and if the central server goes down, there is no protection over the whole environment resulting in a single point of failure. Clustered failover central servers further increase the costs and complexity of the product as well.

While a traditional platform solution is scalable, one platform that manages all possible workloads makes for a 'heavy' and complicated product. Supporting multiple operating systems, hypervisors, applications, and data types with an old generation platform increases conflict and compatibility risks, complicates maintenance and updates, and inhibits mobility.

Let's take a look at an example. If one platform protects 10 types of operating systems and hypervisors, 15 types of databases, and supports 20 types of storage, this platform will require separate rack cabinets, running across a number of servers, expensive storage and a full-time IT administrator to manage it. Only enterprise companies that have a large IT staff managing one or more data centers can afford these solutions.

As new data, devices, hypervisors, and types of storage become available, these traditional platform products become even more expensive to buy and more complicated to maintain. In addition, because they try to be 'all things to all people', traditional platforms are not the best of breed for backing up any individual component or workload.

Traditional platforms are like a Swiss army knife, you can slice and dice everything but you cannot slice and dice everything well. More important to note is that the data center is a by-product of a centralized IT infrastructure. Today, virtualization, the cloud, mobile devices and BYOD, and Big Data are affecting the structure, roles, and accountability of IT organizations. For example, software products have become easier to use; cloud-based, software-as-a-service (SaaS) offerings, and BYOD are becoming more prevalent with demand driven by users. This consumerization of IT is forcing businesses, especially large enterprises, to rethink the way they procure and manage IT equipment and services. As a result, we are seeing a move from the centralized IT approach to an approach that allows employees to be self-sufficient in meeting their own IT needs.

We are also seeing a move from an environment of centralized IT workload generalists towards an environment of distributed IT workload specialists. The reason: a centralized IT environment is responsible for managing all systems across the enterprise. This can make for long decision-making and approval cycles and can cause IT to be late and / or slow to respond to departments' needs. With a decentralized structure, IT is more tightly aligned with the needs of the business and more tightly integrated with the business' specific goals and objectives - all making IT more agile and responsive.

The downside of IT consumerization and decentralization is the security of data and the inconsistent approaches to securing it. To address these challenges, IT will need to move away from complex, one-size-fits-all traditional platforms and look for a new architectural approach to secure departmental and consumerized device data.

The Acronis AnyData Engine was designed to provide a better way to protect data today. It is the alternative to a traditional system. Like a traditional platform, it supports multiple operating systems, hypervisors, applications, and data types but without the complexity, conflict / compatibility problems, and expensive maintenance. You can purchase a single Acronis product that leverages the Acronis AnyData Engine to provide the best data protection for a particular system and workload. Multiple Acronis products can be managed individually or blend together to be centrally managed eliminating complexity and single point of failure.

# Not a Combination of Separate Products

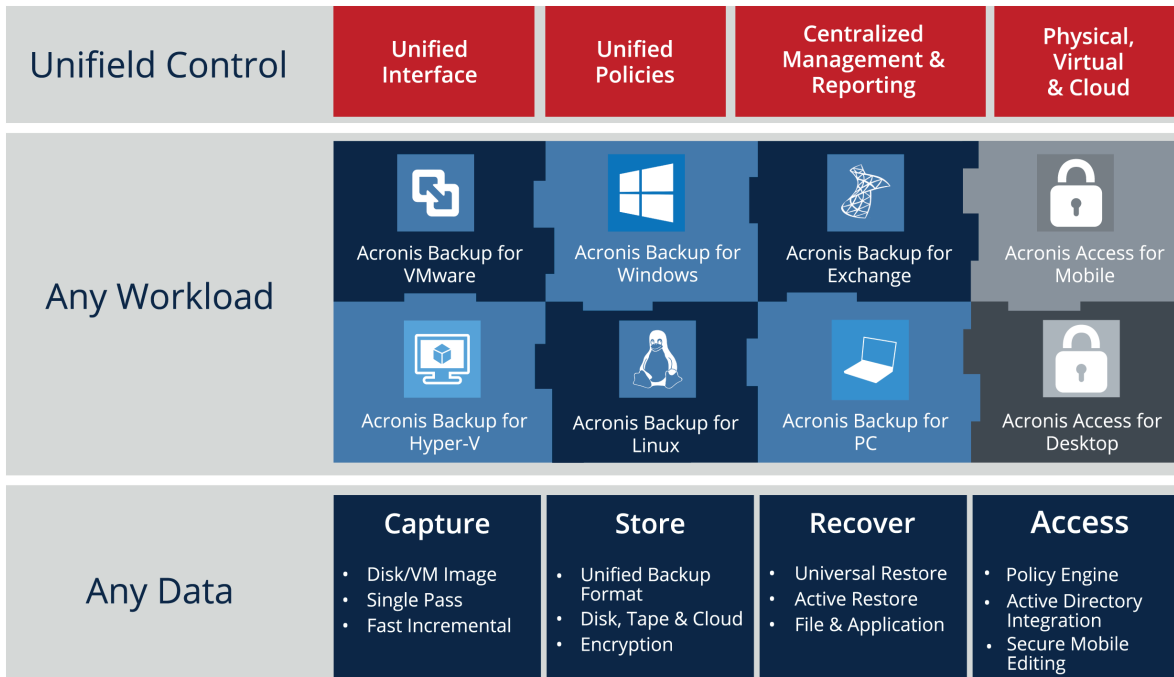
Alternatively, large corporations and small to medium size businesses (SMBs) can consider implementing separate products; that is, purchasing a backup tool for each of your different data types, operating system platforms, and applications. That means if your organization maintains three types of data from three different operating system platforms, you will need nine distinct products.

A multitude of products creates a multitude of problems because it multiplies training, management, installation, monitoring, and reporting activities. Eventually, this strategy requires you to hire more IT administrators as the number of products and technical expertise requirements increase. At the end of the day, your IT team is like the cook who has 500 knives, each designed only for a specific ingredient, specific dish, using a specific cutting board. This is not an acceptable alternative. Many vendors offer backup products that integrate with other products. This integration can be simply exposing command-line interfaces (CLI), up to allowing a product to modify the settings of another product in a centralized, mass, or automated manner. The problem with this approach is the maintenance of the intact link. An update of product A may make it incompatible with product B, or the new features of product A will not be accessible by product B.

The Acronis AnyData Engine is a common framework that allows all Acronis products to seamlessly become one solution. Its modular architecture lets you use one or more Acronis products, designed and optimized for a specific workload, and lets you add on and blend additional products as your technology infrastructure evolves - without replacing any products. Use the same unified console to configure, install, and maintain each product, and if you have more than one Acronis product, use the Acronis Management Server (AMS) - a single dashboard that lets you easily manage the backup and recovery of all data across multiple Acronis products. Whether your data resides on-premise, in the cloud, or in remote offices, the AnyData Engine combines backup, bare metal restore, migration, and system recovery of any virtual or physical server or PC in a Windows® or Linux® operating environment.



# How it Works



The Acronis AnyData Engine framework operates on three layers: unified control, critical workloads, and core capabilities. Unified control connects all the products together. You can manage the workloads and capabilities using standard APIs or the unified interface. Unified control also provides unified policies with centralized management and reporting for physical, virtual, and cloud environments. Workload offers specialized interfaces for specific operating systems, platforms, and applications. These interfaces use the Acronis AnyData Engine to backup, recover and access any type of data – from multiple types of databases, files, operating systems, and hypervisors.

Once the Acronis AnyData Engine establishes access to the workload, it offers broad and deep core capabilities to perform capture, store, recover, and access operations on any data set. For example, it can capture data to create a disk or virtual machine image, perform a single-pass backup of a database, store on disk, tape, and the cloud, and so on. Let's look into all three layers in more detail.

# Unified Control

## Unified Interface

In order to make it easy for a system administrator to install, configure, and deploy the Acronis family of products, the Acronis AnyData Engine offers multiple interfaces for interactive and programmatic access. The Acronis Management Console is one example. It is an application that you can install on any Windows or Linux machine and provides an intuitive interface for remote administration. Regardless of your domain and workgroup structure, the Management Console lets you access and manage all systems in your network from one location. Acronis also offers a set of programmatic APIs including CLI, which is interactively available and offers all the same extensive operations. An administrator can plan a backup or start a recovery from the console or from the CLI with equal ease.

## Unified Policies

With unified policies, system administrators have the ability to define and manage consistent data protection policies and still get highly efficient, granular control. Through the unified control API, the Acronis AnyData Engine lets you create, manage, and edit policies that perform operations. You can define a policy once and then leverage it across multiple workloads. For example, you can assign backup plans to one or more machines or by group. You can backup based on a specific schedule, or trigger a backup based on specific events (e.g., a user logging on / off, powering machines on / off, etc.). The policies can be either dynamic or static. 'Backup all Windows machines' is an example of dynamic policy. 'Backup only machines 1, 2, 3' is an example of a static policy.

## Management and Reporting

To make it easy for system administrators to manage the data protection operations of all local and remote physical and virtual machines, the Acronis AnyData Engine captures data across all workloads and provides centralized management and reporting with the Acronis Management Server (AMS). The AMS is a single dashboard that lets you manage all machines, making it easier to manage data across multiple Acronis backup products. Administrators can assign backup plans to one or more machines, review status updates, generate reports, and receive alerts – all from a single console.

**At the same time, the AMS performs only management tasks – it does not initiate backups or facilitate data streams during the process. This approach eliminates single point of failure.**

# Workloads

## Operating Systems

Combined, Windows and Linux own over 75% market share of operating systems and are the choice for most SMBs. Using dedicated modules developed for Windows Server® and Linux, the Acronis AnyData Engine accesses and backs up any type of data on these platforms using Acronis' patented, block-level, image-based backup capability. Image-based backups quickly capture and store all data in a universal backup format allowing recovery to any hardware or virtual machine. The Acronis AnyData Engine also lets you create a single-pass backup of the entire system including the operating systems, databases, applications, and data. The AnyData Engine can access files, whether locked or open, allowing for granular backup, recovery and secure access from end-points. In Windows, the Acronis AnyData Engine also integrates with the Microsoft® VSS framework for application-consistent data protection.

## Hypervisors

For organizations with virtual environments, the Acronis AnyData Engine includes hypervisor-specific functionality in separate modules, designed for each supported platform: VMware vSphere® ESX®/ESXi™, Microsoft Hyper-V®, Citrix® XenServer®, Red Hat® Enterprise Virtualization, Oracle® VM Server, and Parallels® Server 4 Bare. In addition to protecting your virtual machines, the Acronis AnyData Engine is also capable of protecting the hypervisor itself – a feature that many other backup solutions do not offer.

For VMware vSphere, the Acronis AnyData Engine works through VADP, providing agentless backup and disaster recovery of virtual machines without any installation on each VM. For Microsoft Hyper-V, the Acronis AnyData Engine operates through Microsoft's VSS framework for Hyper-V, also providing agentless backup. On any hypervisor, the Acronis AnyData Engine works with virtual machine data on the VM level. The abstract nature of the engine means that control, management, and reporting are identical, whether you back up the VM from a hypervisor or from within the VM itself. For example, VMware VADP cannot backup physical RDM drives, guest-initiated iSCSI, or fault tolerant machines, so any point products relying on VADP will not protect these systems. However, the Acronis AnyData Engine overcomes this limitation; the management, reporting, and monitoring does not change for the IT administrator.

## Applications

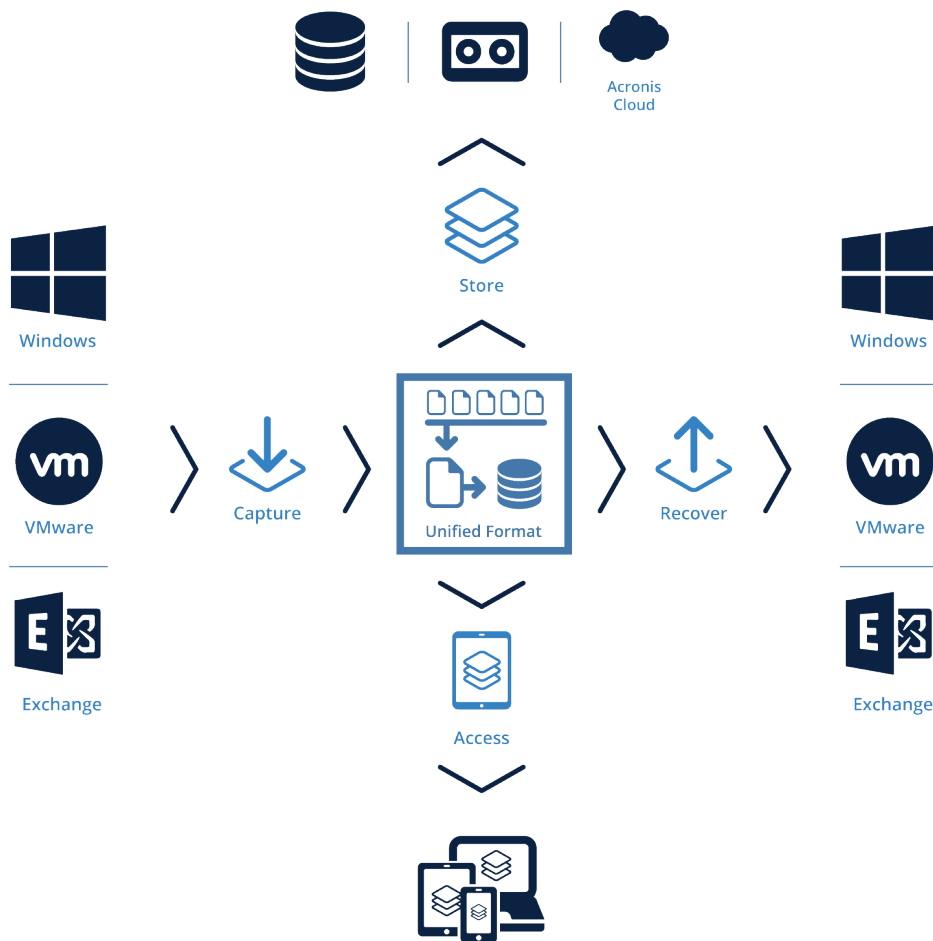
Acronis provides separate solutions for Microsoft Exchange, SQL Server®, SharePoint®, and Active Directory®. This provides the unique capability to capture and rebuild data from any workload, whether it is from an Exchange database, mailbox, SQL Server, SharePoint Farm, or Active Directory. All data is captured in a unified format, which is protected, backed up, restored, transferred, and securely accessed by the Acronis AnyData Engine. At the same time, administrators can still use application-specific features, such as restoring a single e-mail from Exchange, or mounting a SQL database from a backup. All common operations are not separate but can be part of single policy.

## End-Points

The Acronis AnyData Engine can protect data on any end-point platform, including Windows servers, PCs running Windows, and Linux servers. In addition, you can access and secure data on Mac® systems, and iOS® and Android™-based phones or tablets. For example, a user can securely access SharePoint documents on an on-premise central server using an iPad® through an encrypted channel.

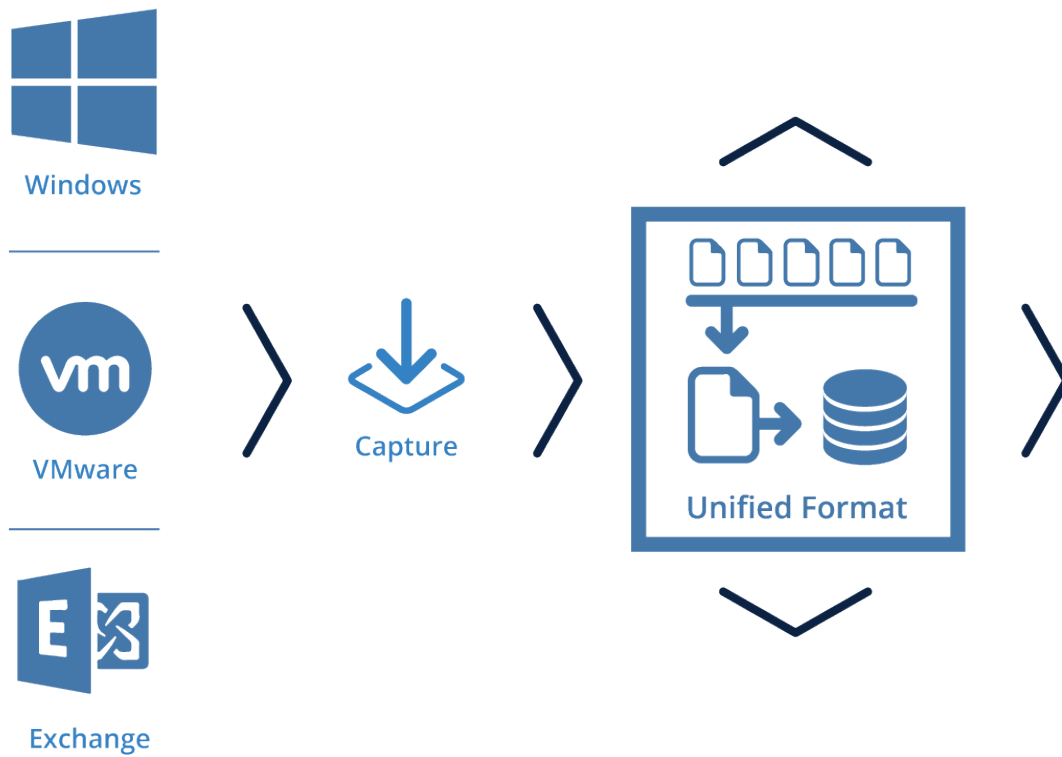
# Capabilities and Operations

## ACRONIS ANYDATA ENGINE



Capabilities are features of the Acronis AnyData Engine that allow it to perform operations on data. For example, backup consists of two capabilities: the ability to capture data from the source and the ability to store it.

# Capture



The Acronis AnyData Engine captures data via a set of unique processes that include creating a snapshot, capturing a complete image of the disk or volume, and abstracting the data to put it into a unified format. The AnyData Engine accesses the system disks and partitions directly, bypassing the operating system layer. This increases backup speed and reduces potential compatibility problems with software including eliminating any issues with open files.

To preserve the consistency of data, the Acronis AnyData Engine leverages a snapshot engine, such as Microsoft VSS, Linux LVM, or the Acronis' Drive Snapshot, to freeze data at a specific point in time.

Acronis' disk-image technology backs up and maintains a complete image of a disk or volume without involving the operating system, even when the system is live. Invented by Acronis in 2002, this technology is a revolutionary breakthrough that ensures every piece of data on any system is protected and preserved, guaranteeing very fast recovery.

Most file-based backup solutions recover each file individually, rebuilding the file system from scratch during the process. Acronis' disk imaging technology does not perform this extra processing, but instead restores the whole content of the disk in one step, significantly speeding up the recovery process.

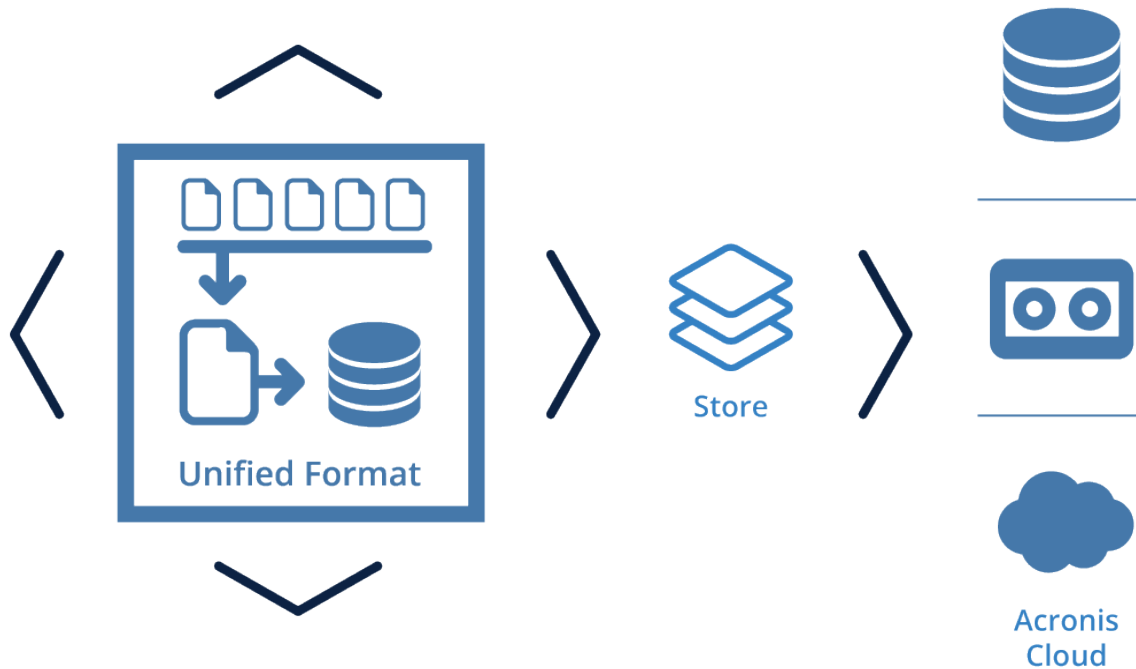
The Acronis AnyData Engine also provides a single-pass backup. When the snapshot is taken, applications are quiesced so the backup data is consistent. The data is then abstracted - a process of removing platform specifics from the data elements in order to reduce it to a set of essential characteristics and put it into a general, unified format that can be read by all the capabilities of the AnyData Engine.

This process enables browsing and recovery of the backed up data, which may be a single file, selected SQL database, selected disk or volume, or the entire computer. With single-pass backup, you can perform any type of recovery from just a single backup, such as restoring single files and folders from disk or tape backups, improving data protection and disaster recovery. When backing up, advanced algorithms determine data changes and only copy the changes to provide fast, incremental backups and accelerate the backup process. Incremental backups back up only the changed data since the last backup - be it a full or incremental backups.

For example, if you run an incremental backup on Tuesday, you only backup the data that has changed since the incremental backup on Monday. The result is a much smaller, faster backup. While incremental backups give much greater flexibility and granularity, they have the reputation for taking longer to restore because the backups must be reconstituted from the last full backup and all the incremental backups. Acronis' snapshot technology rebuilds the full image quickly, making incremental backups much more practical.



Store



Acronis stores data in a unified backup format so that you can easily recover to any platform regardless of the source system. You can store your data to your choice of destinations – disk, tape, or the cloud – including Acronis Cloud. You can store data on local disks or network attached storage over a variety of protocols, such as a common internet file system (CIFS) or network file system (NFS).

You can also store the data on tape devices, including autoloaders and libraries. Acronis' unique way of abstracting and indexing data lets you recover files from disk images saved on tapes. You can also store your data in the cloud including the Acronis Cloud, which uses Acronis' own Software-Defined Storage Platform with data centers around the globe. Leveraging the power of the Acronis AnyData Engine, you can store all or part of your data in the cloud, on-premise, and in remote offices – any mix – and it is transparent to the end user.

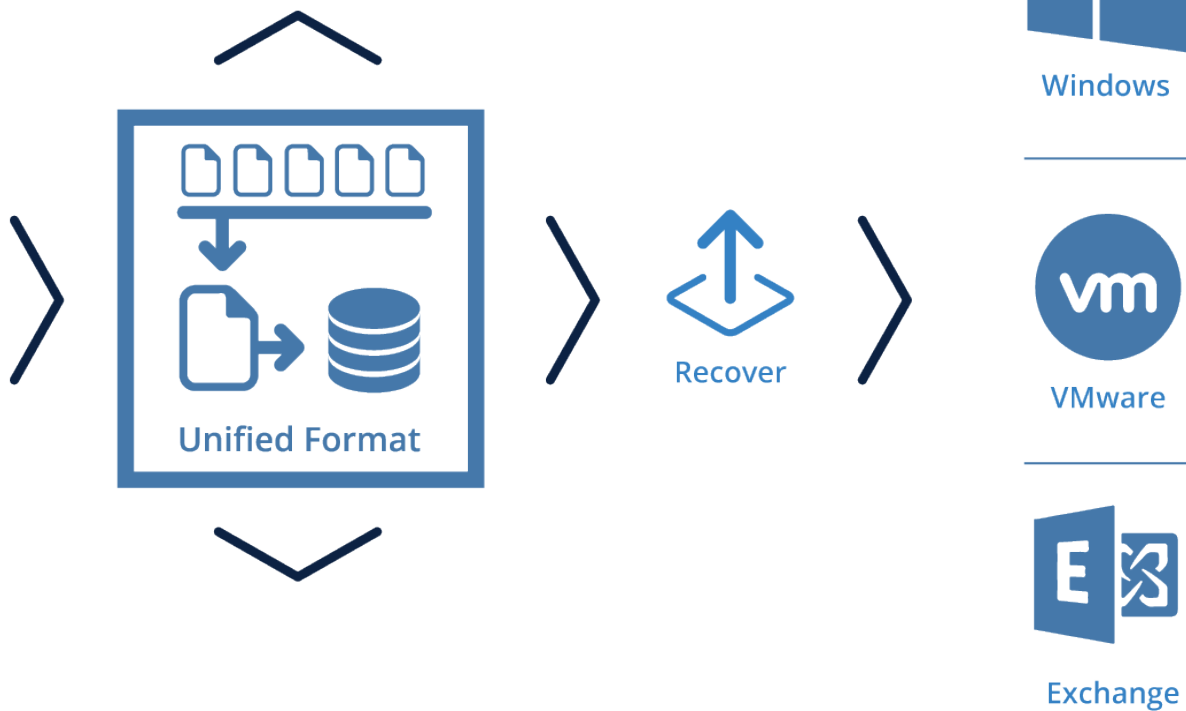


Acronis recommends that you backup your data to multiple targets for hybrid protection. More specifically, we recommend the '3 - 2 - 1' approach: create 3 copies of your backup, store 2 copies locally, and store 1 copy in the cloud. Acronis lets you store backup copies in up to 5 different locations across local disks, network storage, and cloud locations - including Acronis Cloud. This approach helps optimize your storage costs and maximize your recovery options in the event of a disaster, even when your hardware is lost, stolen, or destroyed.

Your organization should also develop retention policies for your backups. For example, you should develop multiple retention policies with a shorter retention period for the data stored on your local disks and longer retention periods for that same data stored on tape or in the cloud. Upon completion of each backup, the Acronis AnyData Engine can automatically replicate and stage the backup data between the various storage locations and move the backup data to a new storage location when the retention period for the current storage media expires. Acronis also deletes older backups at the end of the retention period to save space for newly created backups.

Acronis has built-in, block-level deduplication and compression, reducing backup data volumes by up to 90 percent. This optimizes backup speed, reduces storage requirements, and minimizes network loads. Deduplication occurs on the source and target side, transferring and storing only unique pieces of data. The Acronis AnyData Engine also encrypts data, in transit and in rest, using military grade AES-256 encryption, helping to protect your data from unauthorized access.

The Acronis AnyData Engine has advanced capabilities to operate with Acronis Cloud. Whether installed in Acronis' global data centers or with local service providers through Acronis' Backup-As-A-Service program (BaaS), the Acronis Cloud offers viable options for storing backups off-site. With at-source AES-256 encryption, the data is safe during upload, store and downloads.



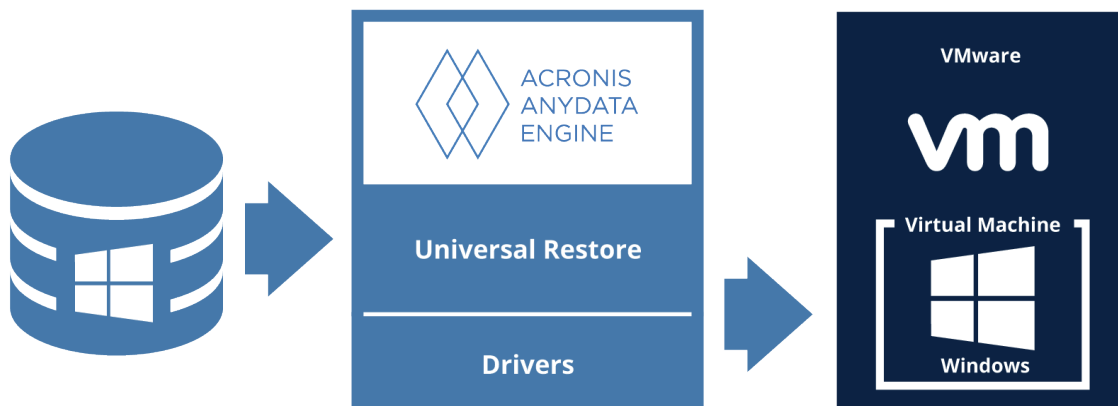
The workload elements of the Acronis AnyData Engine can reconstruct data from the unified format in storage and put it back to the original platform during recovery.

Because the abstraction process works on multiple layers, Acronis products can either restore everything, including the operating system, or restore only the necessary pieces of data – what we call granular recovery.

The recovery will work from any location in the same way – even from Acronis Cloud. For example, you can easily restore the image backup of the system disk from Acronis Cloud directly to bare-metal machines, without any intermediate staging or copying.



## Universal Restore



Another important outcome of a unified backup format is Acronis' Universal Restore. Since the data is detached or disassociated from the underlying architecture, the workload elements let you restore your systems to different physical or virtual hardware or quickly recover your entire server onto bare-metal. Acronis Universal Restore tunes the operating system contents to match to the new platform architecture by injecting drivers suitable for the specific hardware platform, or amending the data storage format to suit a specific hypervisor.

In this way, you can restore your operating system backup to dissimilar hardware for disaster recovery purposes (P2P, V2P), or recover to any hypervisor (P2V, V2V). It also works at the file and application level; an administrator can easily restore a Linux file to a Windows machine for example. Acronis' file, application and system restore lets you quickly restore only what you need be it data, files, folders, applications, settings, configurations, disks, or an entire server – all from the same image backup.



# Active Restore



Data



Operating System



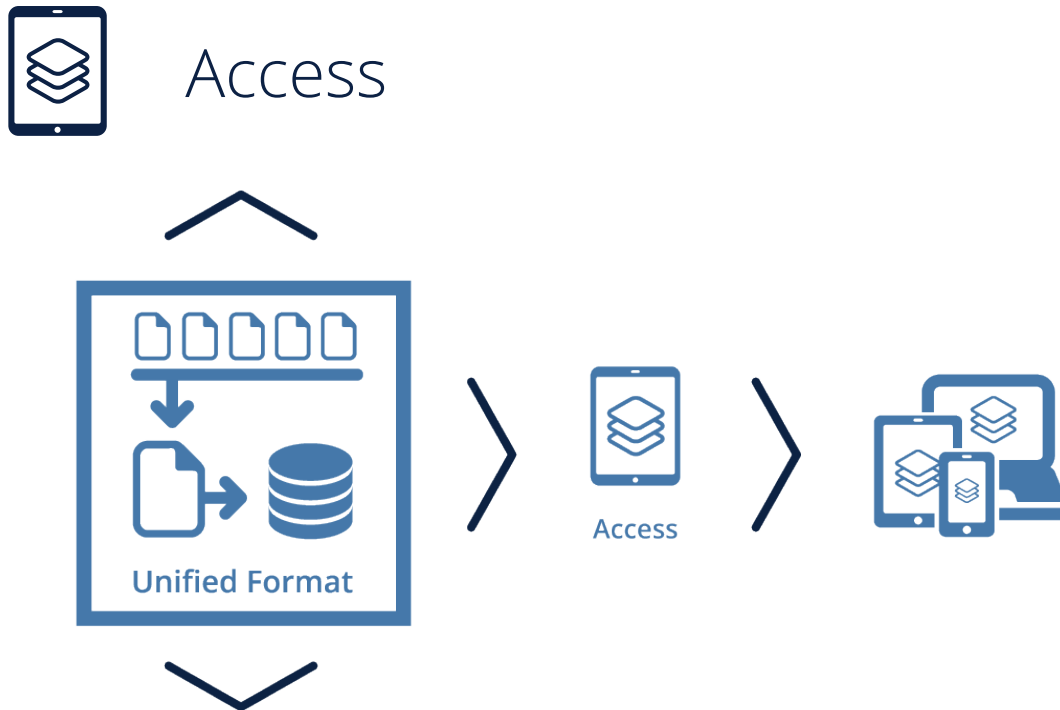
Application



Disk

In order to allow users to get back to work fast, the Acronis AnyData Engine also lets you start a server or application while restoring the data in the background. With Acronis Active Restore, the workload agent substitutes data from storage whenever an application or operating system makes a request to read or access data that is not yet recovered, allowing the application or operating system to continue to operate. You can run an application or operating system within seconds of restart regardless of the completeness of the recovery. In product environments, we have seen a one-terabyte database come up in 30 to 40 seconds while recovery completes in the background.

The Acronis AnyData Engine also provides application-aware restore for Microsoft SQL Server, SharePoint, and Active Directory. Acronis also provides Exchange backup with support for clustered Exchange configurations, enabling granular recovery of individual Exchange items like emails or mailboxes.



The Acronis AnyData Engine also facilitates secure access to content by transferring and presenting data to remote users on desktops, laptops, secured web browsers, or mobile devices. With mobile applications, users can edit and create Microsoft Office documents and annotate PDFs within the Acronis Access application, eliminating third-party applications, data leakage, security issues, and improving user productivity. Integration with Active Directory makes authentication and user management seamless and extends control of information to mobile devices. This same technology lets employees Bring Their Own Devices (BYOD), without risking data breach or loss. Moreover, the data never hits public clouds, remaining secure at the source, on the wire, and on target devices.

Encryption and compression still apply so data is secure during transfer and when stored on the remote device. Since the data is in a unified format, users can access files, folders or even SharePoint data remotely, without installing application or environment-specific tools. From a remote location, IT can wipe all files that are locally stored or cached on a mobile device.

The Acronis AnyData Engine also provides an advanced policy engine with granular management capabilities that lets you create security policies and ensure control and compliance for content, users, and devices.

# Acronis AnyData Engine Benefits

## Easy, Complete, Safe

Whether you need a backup solution for a specific business system or a hybrid, multi-system environment, the Acronis AnyData Engine's modular architecture offers an easy, complete, and safe solution. For example, all backup products include the Acronis Management Console, an intuitive interface that makes it easy to install, configure, and deploy any of the Acronis family of products. With Acronis' unified policies, system administrators have the ability to define and manage consistent policies across multiple workloads and still get highly efficient, granular control. For multi-system organizations, Acronis makes it easy for system administrators to manage the data protection operations of all local and remote physical and virtual machines using a single dashboard. Using the Acronis Management Server (AMS), your administrators can manage all machines and makes it easier to manage data across multiple Acronis products.

SMBs cannot always afford to hire senior level IT professional and in many cases, larger organizations need a disaster recovery solution that is easy and efficient and quickly restores the whole system. The Acronis AnyData Engine is specifically designed to meet the needs of both SMB and enterprise organizations. With the same features incorporated into all Acronis backup products, your system administrators will use the same skills, regardless of the workload.

## Robust, Yet Flexible

The Acronis AnyData Engine is fueled by over 100+ patents and includes over 100 high impact features to let you backup and restore individual files, folders, volumes, disks, or complete systems - and offers granular recovery capabilities for Microsoft Exchange, SQL Server, SharePoint, and Active Directory.

## Affordable Yet Scalable

The Acronis AnyData Engine delivers best-in-class individual products optimized for your most important workloads. Buy only what you need today, get everything you want, and as your business grows and your workload requirements expand, you can seamlessly blend the individual products into a total solution for any combination of workload and data.

## Protects Any Data, In Any Environment, Across All Locations, Using Any Device

Disk-image technology, coupled with Acronis' unified data format, captures and stores all data in a universal backup format. Capture any workload data, store it on any storage device, recover it to any platform, hypervisor, or operating system, and provide access from any remote device, reducing downtimes and delivering improved recovery time objectives (RTO) and recovery point objectives (RPO).

## Best-in-Class Individual Products Optimized for Your Most Important Workloads and Devices

Acronis' lean architecture and modular approach ensures that only important, yet relevant workloads and capabilities are present in each product. This lets your IT department protect and manage backup and recovery without needing to select features from the long list of options.

### **The Acronis AnyData Engine supports a multitude of different workloads:**

#### Operating Systems

- Windows Server 2000 all the way to Windows 2012R2 and Windows 8.1
- Linux – almost any distribution, as long as it runs up-to-date kernel and core libraries
- For Acronis Access: Windows PCs, Mac systems, and iOS and Android-based phones or tablets

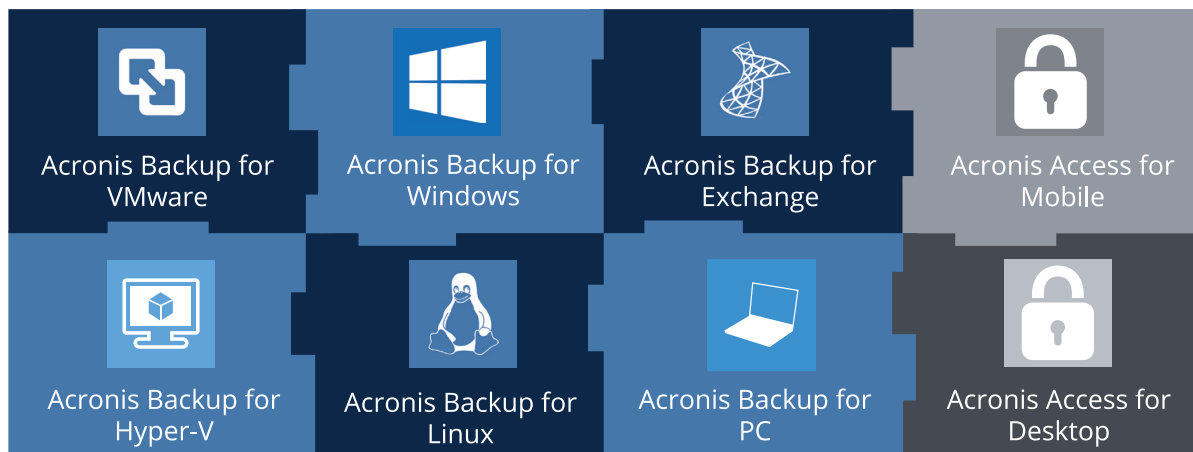
#### Hypervisors

- VMware vSphere, with full support of VADP for Agentless Backup, change block tracking (CBT), and vCenter™ integration
- Microsoft Hyper-V, including the capture of VM and host data
- Red Hat Enterprise Virtualization, with RHEV manager integration
- Citrix XenServer, Parallels Bare-Metal Server, Linux KVM, Oracle VM Server

## Applications

- Microsoft Exchange with Exchange API integration, capture of databases and mailboxes, continuous data protection (CDP), express full backups (incremental on storage, full on Exchange), transaction log truncation, etc.
- Microsoft SQL Server with single-pass backup of the operating system, application, and SQL databases
- Microsoft SharePoint Server with the ability to abstract and recover single documents from storage
- Microsoft Active Directory with authoritative and non-authoritative recoveries

## Protects Any Data, In Any Environment, Across All Locations, Using Any Device



Each individual workload product is optimized to handle a specific workload and the Acronis AnyData Engine allows all workload products to blend into one total solution to meet all of your virtual, physical, cloud, and mobile needs. This approach eliminates the need for multiple solutions and eliminates the single point of failure associated with traditional platforms. With Acronis, if the console or any workload is not available, the backup and recovery on all other machines is still fully functional. Acronis' unified control enables each product to interact with every other product and provides centralized management, monitoring, and reporting. Central management operations easily scale providing a unified view of the whole infrastructure and a uniformed view of individual workloads.



## Requires Minimal Training and a Zero Learning Curve

Acronis' unified interface provides a consistent look and feel when installing and configuring individual products even if it involves different operating systems or hypervisors. Any differences are specific only to that platform or application, minimizing administrator training.

## Designed for the Future

The universal and extensible architecture of the Acronis AnyData Engine allows Acronis to develop and easily bolt on, or unbolt future functionality to continually enhance our set of backup, disaster recovery and secure access solutions as changing business conditions and technology require.

As an Acronis customer, your organization will benefit from future technology advances that will make data protection easier, faster, more efficient, and more secure. It will take advantage of new capabilities as your environment changes and you require new techniques, greater security, and more resilience. This capability also ensures your investment in Acronis will continue to serve you as your needs evolve.

For example, we can easily add additional workloads to support new or different operating systems, hardware platforms, hypervisors, and applications.

We can also extend the support of additional storage options, end-user devices, and extra capabilities such as archiving and DRaaS. These additions will not affect the core nature of the Acronis AnyData Engine; we will retain unified control, management, policies, monitoring and reporting.

# Summary

The Acronis AnyData Engine is a new generation architecture that powers all Acronis products to capture, store, recover, control, and access data. The modular architecture lets you use one or more Acronis products, designed and optimized for a specific workload, and lets you add on additional products as your technology infrastructure evolves - without replacing any products. Your system administrator uses the same unified console to configure, install, and maintain each backup product.

You can compare the Acronis AnyData Engine to a car engine. The car manufacturer can easily modify the original engine by replacing the carburetor with fuel injection. This allows for more careful, precise measuring of fuel, which means either more power or more fuel economy or a little of both. Alternatively, the manufacturer can bolt on a turbo charger for further increased performance. With the AnyData engine's modular architecture, Acronis can 'bolt on' newer technologies to improve ease of use, performance, storage options, recovery capabilities, and so on.

With the Acronis AnyData Engine, you eliminate both the single point of failure that traditional platforms with a central service experience, and the need for multiple, separate backup products. As the underlying technology powering all Acronis products - including Acronis Backup, Acronis Backup Advanced, and Acronis Access - the AnyData Engine combines backup, bare metal restore, migration, system deployment, recovery, and access to protect your data whether it resides on premise, in the cloud, or in remote offices.

Acronis products are developed for small and medium size business environments, and Acronis solutions solve specific data protection problems for the enterprise, including disaster recovery, migration, deployment, disk management, and data protection for remote and branch offices (ROBO). The Acronis AnyData Engine simplifies backup, disaster recovery, and secure access / syncing / sharing of your critical data, improves your users' and IT team's productivity, and reduces the time it takes to recover data. You can count on Acronis to deliver new generation data protection technologies that protect your modern data center environment and provide you with full flexibility to protect new platforms, locations, and environments and support your business growth.

# Acronis

## About Acronis

Acronis sets the standard for New Generation Data Protection through its backup, disaster recovery, and secure access solutions. Powered by the AnyData Engine and set apart by its image technology, Acronis delivers easy, complete and safe backups of all files, applications and OS across any environment—virtual, physical, cloud and mobile.

Founded in 2002, Acronis protects the data of over 5 million consumers and 300,000 businesses in over 130 countries. With its more than 100 patents, Acronis' products have been named best product of the year by Network Computing, TechTarget and IT Professional and cover a range of features, including migration, cloning and replication.

For additional information, please visit [www.acronis.com](http://www.acronis.com).

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