

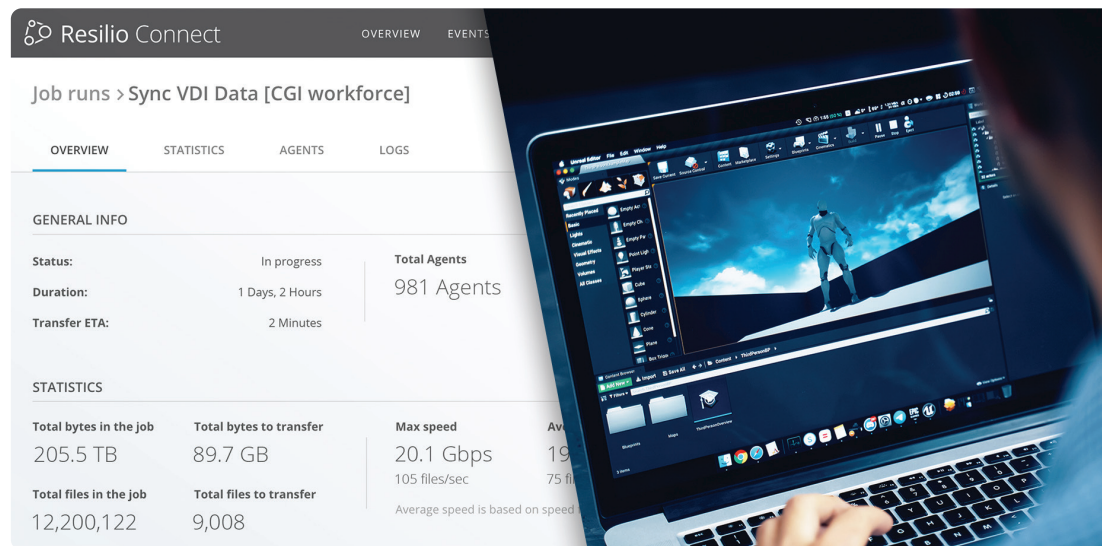


# Real-time VDI Profile Synchronization

Reduce time-to-desktop by up to 5x and deliver active-active HA and simplified management for multi-site VDI environments

## Introduction

Virtual Desktop Infrastructure (VDI) and more recently Desktop as a Service (DaaS) are rapidly becoming the new standards for delivering non-persistent desktops to an increasingly remote and mobile workforce. For enterprises deploying VDI across two or more sites—on-prem, cloud, or hybrid—Resilio has you covered.



Resilio's [real-time Virtual Desktop Infrastructure \(VDI\) profile sync solution](#) enables remote workers to stay connected from any location, across any network, using any storage and cloud infrastructure.

Resilio's true active-active high availability (HA) speeds up site-to-site synchronization and improves virtual desktop load time—or time-to-desktop—by up to 5x over the competition. For Disaster Recovery (DR), Resilio reduces recovery times from days to minutes—and keeps files in sync within seconds. User profiles are rapidly and concurrently updated across any number of sites—in jobs you centrally control, monitor, and visualize.

## Use Cases

Resilio's solution for VDI addresses use cases such as:



### Remote Work

Sync VDI profiles and other user files for remote workers at home, in branch offices, and other remote locations.



### Cross-Region Replication (CRR) & Cross-Zone Replication

Replicate and sync files within and across any number of cloud regions and availability zones.



### Omni-directional VDI Profile Sync

Sync files at full speed in any direction—one- and two-way, many-to-one (fan-in), one-to-many (fan-out), and many-to-many (N-way).



### Disaster Recovery

Meet and exceed recovery time objectives (RTOs) and recovery point objectives (RPOs) for DR using any IT or cloud infrastructure.



### WAN Optimization

Detects bandwidth and network congestion to overcome latency and packet loss to move data fast and predictably across any network, over any distance.



### Hybrid and Multi-cloud

No vendor lock-in - sync files from edge to core on-prem to cloud, using your cloud provider of choice.



### Server Virtualization

Reliably replicate and sync all files including virtual machines running on hypervisors within and across locations.

## VDI Challenges

Multi-site VDI environments pose challenges for enterprises requiring active-active high availability, predictable performance, and fast and easy recovery for DR. Conventional VDI profile sync solutions force customers to make trade-offs between availability and performance.

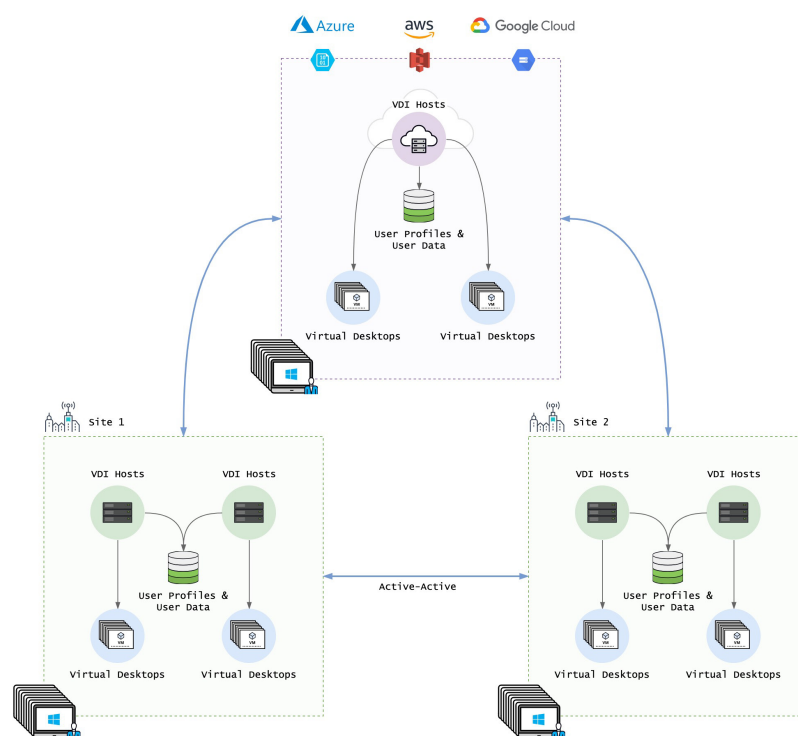
These challenges include but are not limited to:

- **Active-passive high availability (HA)** solutions fail to meet enterprise service level requirements for uptime. Users and applications may be offline for extended periods.
- **DR tools fail to meet desired RTOs and RPOs.** Recovery times may take days. Files are not current. At best, older versions of files can be restored. At worst, data corruption or data loss occur.
- **Global file systems perform poorly over distance.** Global or cloud file systems that rely on centralized storage trickle updates from cloud storage to remote site caches. In distributed scenarios, VDI profiles may become stale or out-of-sync.
- **Degraded end-user experience** leads to an increase in the number of support tickets, decreased productivity, and thwarts VDI adoption.

## Solution

Resilio Connect's highly resilient, peer-to-peer (P2P) solution syncs VDI profiles in any direction, from edge to on-prem to cloud. It is well suited to organizations with two or more sites requiring bidirectional or N-way profile synchronization across sites.

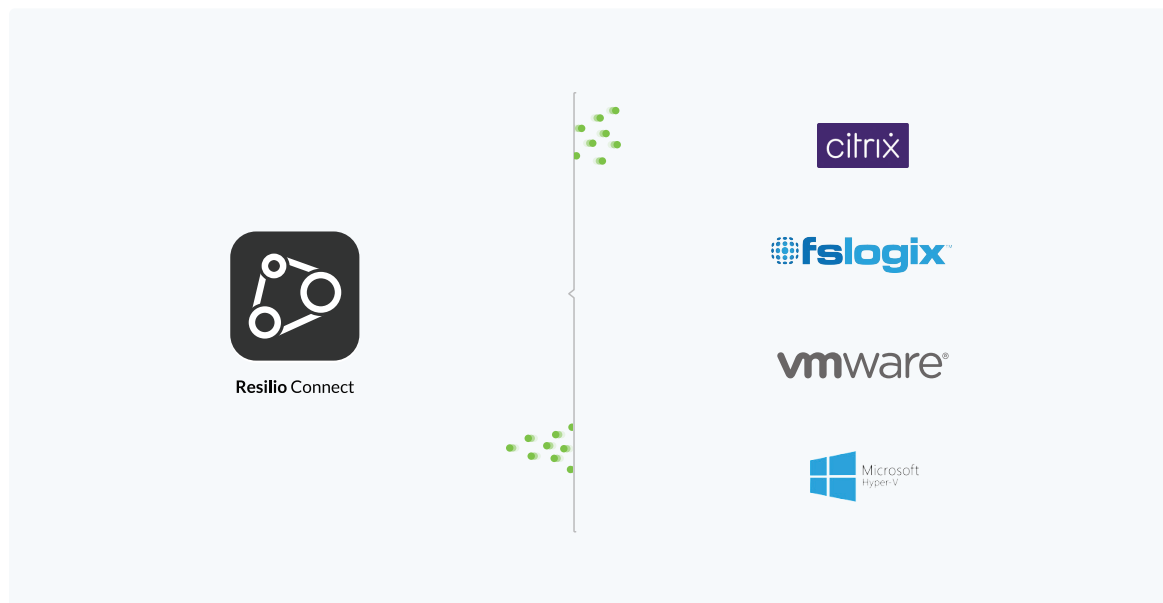
Resilio is software-only, using agents installed on VDI host servers (physical, virtual, or containerized). Resilio agents support popular operating systems, virtualization platforms, and cloud services.



[Diag. 1: Cross-platform and multi-cloud server synchronization, for choice and flexibility]

Resilio Connect is also compatible with popular profile management tools such as Microsoft FSLogix, Citrix Profile Management, as well as VMware Horizon and Dynamic Environment Manager.

The Resilio Connect management console gives administrators an easy to use, centralized system to visualize, monitor, and automate all file delivery operations. Administrators manage agents, create and run jobs, control bandwidth allocations, and deploy job instructions across the organization. It's easy to automate jobs through scripting and an API set.



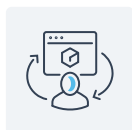
## Advantages and Benefits



### Deliver active-active HA at full speed

Active-active high availability enables fast failover across sites—while also speeding up time-to-desktop. Sites can be located anywhere globally, and utilize multiple cloud regions and availability zones. All sites are always active and enabled for fast failover.

Resilio's non-disruptive, highly available architecture eliminates single point of failures (SPOFs) to give you peace of mind. Sync jobs reliably just work in predictable, measureable timeframes.



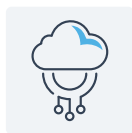
### Reduce time-to-desktop by up to 5x

Resilio improves the overall end user experience to boost remote work productivity and your company's adoption of VDI. Compared to conventional replication solutions, Resilio speeds up site-to-site replication while also [reducing time-to-desktop](#).

**Customers report a 2-5x speed up in time-to-desktop compared to conventional caching tools like FSLogix Cloud Cache.**

Our goal is 30 seconds for user login and load times," said the company's VDI project lead. "Prior to Resilio, we were seeing 45 to 90 seconds using FSLogix Cloud Cache and it was taking up a lot of storage IO. [Moving to Resilio's solution for Microsoft FSLogix VHDLocations and Citrix](#), we were able to both achieve all-active HA and get our user login times down to 15-30 seconds."

— Head of IT, large US-based construction company (name withheld for privacy)



### Improve site-to-site replication performance by 3x

Concurrently synchronize profiles, user files, and application files to improve replication performance—in any direction.

Resilio's [WAN optimization](#) capabilities offer end-to-end predictability for replication and sync using unreliable and high latency networks. Customers obtain full-utilization of bandwidth across any distance, using any IP network. Administrators simply allocate bandwidth policies based on available network capacity; increase bandwidth to increase performance.



### Meet and exceed your goals for DR

Resilio simplifies DR—using your choice of IT and cloud infrastructure. Unlike storage replication tools, Resilio has no dependencies on storage platforms or replication schedules. File changes are synchronized in parallel across all sites, in real-time. Through capabilities like cross-region replication, Resilio helps customers meet their objectives for warm and live DR.

Resilio helped [one VDI customer save \\$8.6 million in DR costs](#). The customer also used Resilio Connect for smart cloud routing to keep replication traffic within their cloud provider's network to minimize data egress fees.



### Reduce recovery times from days to minutes

With all user profiles concurrently synchronized across all sites, file recovery times are greatly reduced. Profiles are stored as files—and kept in sync within seconds, once changes are propagated. Files are continuously accessible from any site.

One joint VMware and Resilio customer reported [reducing recovery times from days to minutes](#). **"Using Resilio Connect, we can restore a single file—in some cases in less than a minute—using the exact same IT infrastructure (servers, storage, and DFS namespace)."**



### Secure and protect files globally

Resilio's solution secures and protects files, end-to-end. Encryption protects files at rest and in flight. There's no reliance on 3rd-party software, VPNs, or cloud services. The solution can be air gapped as needed.

An optional [Proxy Server](#) also simplifies security for remote work and other VDI use cases.



## For More Information

For more information about Resilio Connect, please visit <https://www.resilio.com> or contact [sales@resilio.com](mailto:sales@resilio.com)

## About Resilio Connect

Resilio Connect is a software-only, agent-based server synchronization solution. Agents are installed on all servers participating in jobs. Job types include Distribution, Consolidation, Scripting, and Synchronization. Resilio Connect agents support popular operating systems, virtualization platforms, servers, storage, NAS devices, networks, and cloud providers. Server agents are available for Windows Server, Linux, macOS Server, and FreeBSD.

The Resilio Connect management console offers a centralized, web-based UI to manage and monitor all agents and job functions. Control agents, manage users, create and run jobs, control bandwidth allocations, and deploy job instructions across the organization. Once jobs are running, Administrators can monitor and collect statistical data globally. Events and notifications are tracked and collected in reports and sent via email.

Resilio's complete API set automates all functions. The management console runs on Windows and Linux servers. Please see [Resilio.com](https://www.resilio.com) for the latest System Requirements.