

Technical FAQ – Remote Shared Workspaces



▶ What are “Remote Shared Workspaces”?

Remote Shared Workspaces (or just shared workspaces) is a multi-site, cloud cached (versus point to point) synchronization technology.

▶ What makes shared workspaces special?

Shared workspaces are designed to not only sync media across multiple systems but also enables project and bin sharing across remote users. Shared workspaces seamlessly lock bins and projects allowing users to view each other’s work in progress without over-writing another user’s work.

▶ What are the key components of shared workspaces and what operating systems are supported?



DNAfabric Controller

DNAfabric controller software is compatible with bare metal servers or virtual machines. It can be deployed on-premise or in the cloud.

OS Support: Linux (Bare metal, Virtual machine – VMware, Vbox, AWS, Azure, Google)



Private or Public Cloud Cache

DNAfabric uses an end-user provided cloud cache as the central sync storage. Examples include AWS S3, Google Cloud, Google Drive, Azure Blob, Wasabi and Backblaze.

NOTE: On-premise object stores (S3 compatible) and SFTP caches are also supported.



Data Manager for Central Storage (e.g. Avid Nexis, Isilon, SNS, Scale Logic)

DNAfabric data managers can be installed and connected to any central storage at one or more locations. This provides sync connectivity to NAS, SAN storage.

OS Support: Linux (Bare metal, Virtual machine – VMware, Vbox, AWS, Azure, Google)



Remote Data Manager for End User Systems

DNAfabric data managers can be installed on end user desktop and laptop systems. This provides sync connectivity to an end user.

OS Support: Mac OSx 10.12+, Virtual machine – VMware, Vbox, AWS, Azure, Google)

► **What are the networking requirements of shared workspaces?**

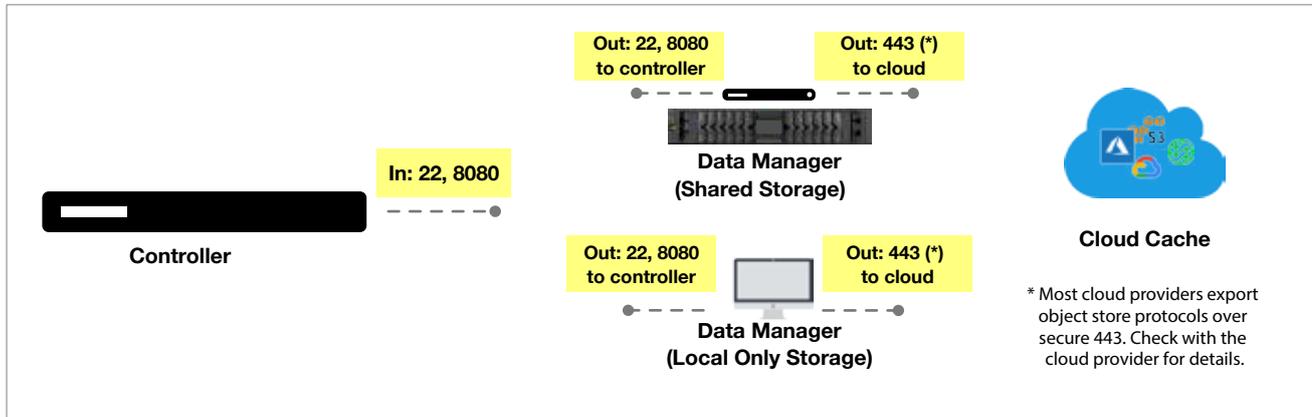


Figure: Port requirements for shared workspaces

► **Describe admin and metadata flow in a shared space environment**

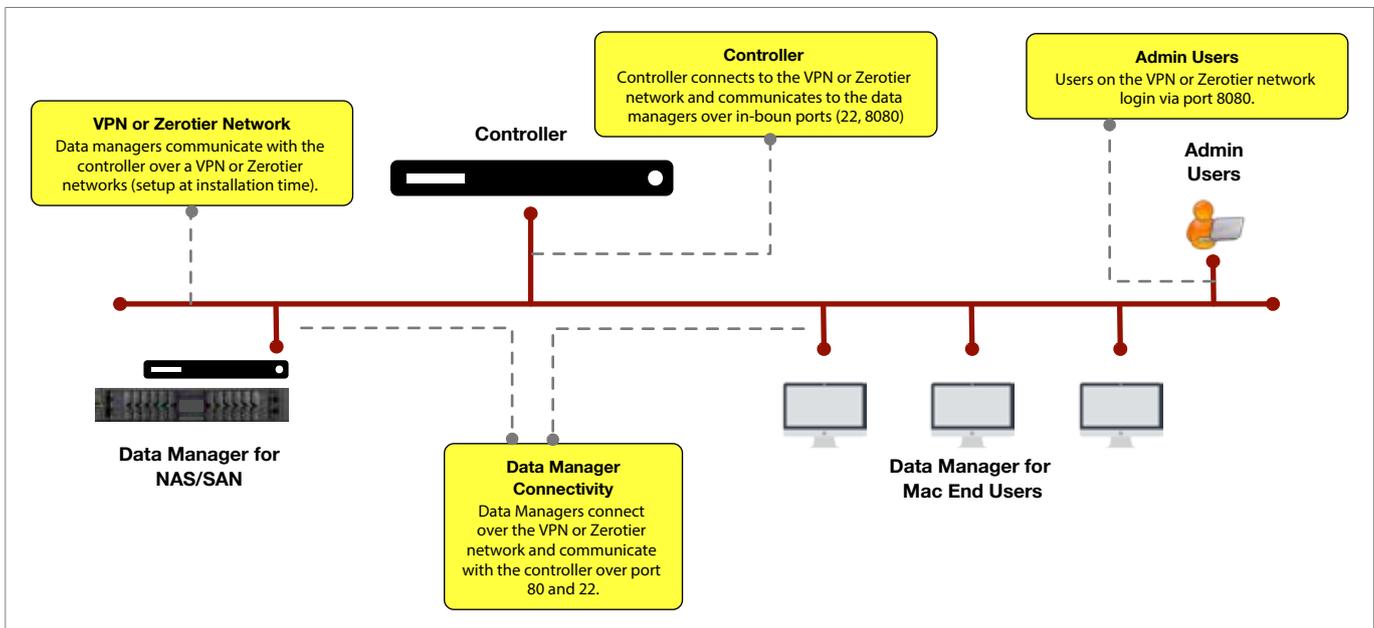


Figure: Administration and metadata communication flow

Shared workspaces require management and metadata communication between the data managers and central controller. Additionally, users and admin need to access the web interface. If a client has a VPN, then user systems are already part of this virtual network. In the absence of a client VPN, shared workspaces connect to a Zerotier VPN during installation making the setup process simpler.

► **Do I need to open inbound ports at the remote site?**

A key differentiator of shared workspaces is networking simplicity. At the remote site, no inbound ports need to be opened. End user systems need only outbound access to the management ports on the controller and to the data transfer ports to the cloud cache. Access to the management ports can be enabled via the customer’s VPN or via Zerotier integration.

► **Describe data flow in a shared space environment**

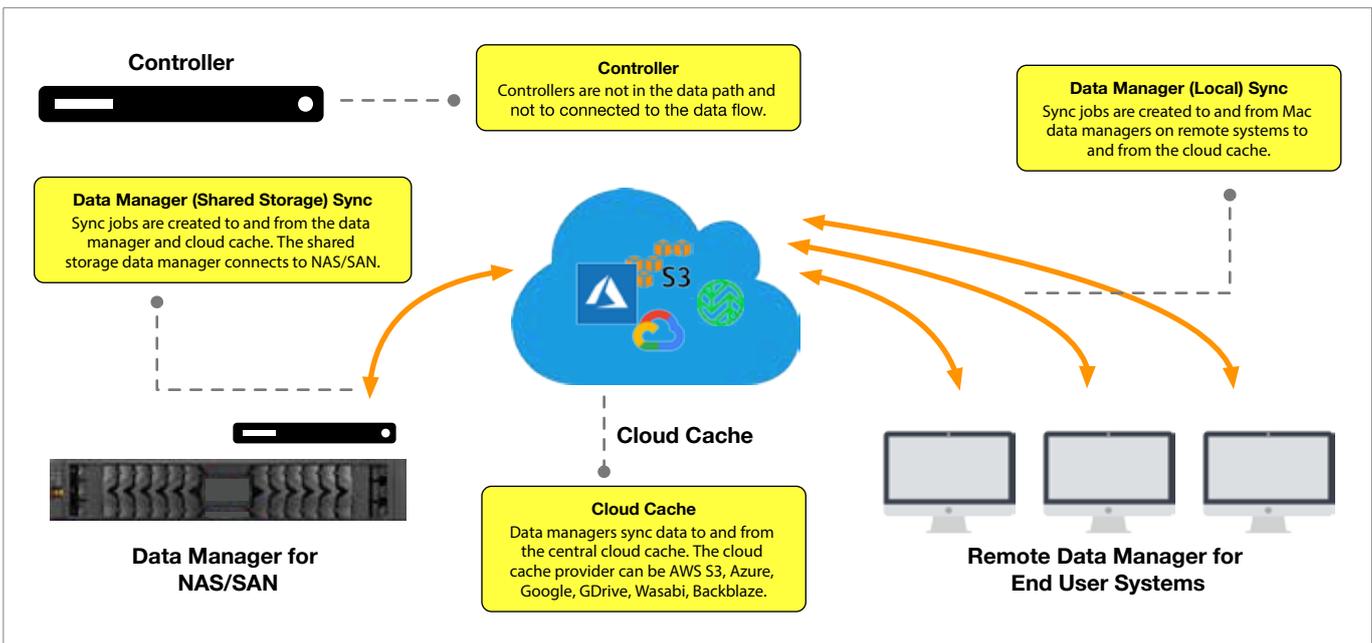


Figure: Data transfer flow

In a shared workspace, data flows via upload and download sync jobs through a central cloud cache.

► **Describe the folder structure of a shared workspace on a system**



A local folder is selected as the location of a shared workspace on a local system. Once a shared workspace is created on a system, a folder structure is auto created. Refer to the above diagram for a description of the folder structure of a shared workspace.

► Can one select an existing folder for a sync in a shared workspace?

In many cases, users have existing folders and files that need to be uploaded or an existing folder where files need to be downloaded. This is often the case with “AvidMediafiles” folders. To accommodate this, an advanced mode of shared workspaces allows for pre-existing folders to be selected.

► Describe project locking in a shared space

As described above, project and bin files should be saved in the “/Uploads/Projects/” folder structure. Files saved here are synced to every other system. However, every file shared in this “Projects/” folder is locked (Refer to screenshot). These files cannot be changed. However, they can be opened in an application (read only mode) and elements can be copied to another active, read/write project. Alternatively, these files can be re-saved with read/write access.



Figure: Locked file example.

► Describe versioning in a shared space

Project and bin files in the “/Uploads/Projects” folder are synced, locked (described above) and versioned. As a file in the “/Uploads/Projects” folder is updated (e.g. as a bin is worked on), the update is synced to all other systems. If a remote user has this file open, it can result in that copy being over-written. To prevent that, files versions are maintained. Versioned files are not updated and are guaranteed to not change from under a user. Versions also allow for previous point in time copies to be viewed.

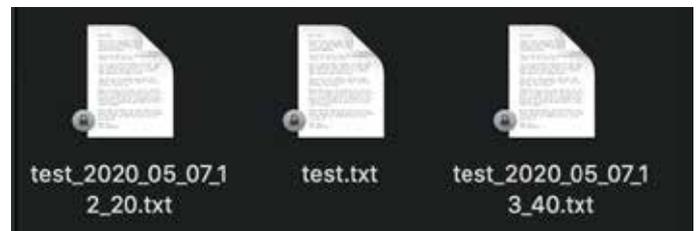


Figure: File versions example.

► Which applications are supported for file sharing, collaboration, versioning and locking?

Shared workspaces are application and file-type agnostic. This allows sharing and collaboration workflows across all Avid applications (e.g. Media Composer, Pro-tools etc.), Adobe applications (Premiere, Illustrator etc.), Davinci Resolve, FCPX and more.

► Are other workflows (e.g. backup, archive, tiering, etc.) beyond shared workspaces supported?

All DNAfabric installations support multiple workflows in addition to shared workspaces. A detailed list of workflows can be seen in our workflow guide.