

creative.space and Zero-Tier Integration Solves Storage Access Complexity for Remote Work Teams

Under routine post-production workflows, remote access to shared storage was challenging. Now with a pandemic, creatives require twenty-four-hour access and collaboration from any location. VPN, WAN, and Internet access to shared projects and files present technical challenges that can be difficult to overcome, especially for small production teams. creative.space has integrated ZeroTier's VPN and SD-WAN technology on its easy, reliable, and secure storage platform to empower the creative process.

Collaborative storage is the main hub connecting remote locations. Now, effortlessly control team and device access to your creative.space storage from anywhere and anytime. Create secure networks between on-premise, cloud, desktop, and mobile devices. Easily provision and deprovision remote access authorization for users, freelancers, and clients. We simplify your network stack by unifying VPNs, VLANs, and SD-WANs into one solution. The creative.space storage seamlessly interacts with ZeroTier's zero-trust networking software to provide scalable security, peer-to-peer (P2P) connections, and 256-bit end-to-end encryption.

What does this mean for your workflow? The bottom line is that you can quickly provide secure <u>SMB</u> (Network Share) and <u>FTP</u> remote access to folders and files on your shared storage. As an example, the SMB connection "smb://192.168.1.33/dailies", works the same as if you were onsite. Just be aware that you may need to adapt your projects to account for bandwidth speed and latency. We can assist you in implementing a proxy-based workflow. FTP is excellent for transferring multiple directories and files to and from your creative.space storage. Another advantage of FTP is the ability to continue transferring files even if the connection is lost. In case you accidentally lose your connection or have to reboot your computer, you don't have to worry about starting from the beginning again. You can pick up right from where you left off.

Securely authorize users and devices, and configure networks all within the creative.space web app. This integration saves multiple manual steps and needed IT security knowledge if only using the ZeroTier administration website. There are two levels of authorization for users to access the creative.space storage. The first is ZeroTier for encrypted network access. The second is the creative.space LDAP server to control user rights and folder/file permissions. Think of it as a locked gate and front door. You must have the right keys to both before you can get inside.

ZeroTier offers a free Basic account for up to 50 network members and 1 admin. Their Professional account increases the numbers to 500 network members and 10 admins for \$49 per month. You can always start with their free account and then upgrade as your requirements change.



Below are the step-by-step procedures for setting up creative.space storage with ZeroTier. After the initial requirement to have an API Access Token, all subsequent configuration and approvals are accomplished within the creative.space web application.

First Step – Obtain a ZeroTier API Access Token

1. Create a ZeroTier account and log in to your account at <u>my.zerotier.com</u>. Select "Account" from the top menu bar.

Download	Knowledge Base	Account	Networks	System	API	Community	Logout

2. Scroll down to the API Access Tokens section. Click on the "New Token" button

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	API Access Tokens Generate New Token			

3. Type in a "Token Label" and then click the "Generate" button.

API Access Tokens	Generate New Token	
	Token Label production-access	
	What is this token for?	
	Generate	Cancel

4. A new token is created, so copy this to a secure location. Make sure to copy this new API token now. You won't be able to see it again.

API Access Tokens	Generate New Token
	Make sure to copy this new API token now. You won't be able to see it again.
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5. This token is required to be entered on the "System" page of the creative.space web application. You only need to enter it one time. The API token allows an administrator to authorize users and devices securely, and configure networks all within the creative.space web app.

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Next Steps – Configure ZeroTier on the creative.space web app

1. On the "System" Page scroll down to the "ZeroTier" network panel on the far right of the page and click on the "Gear" icon.

ZeroTier	Node ID 2f dd
Active Networks	
No ZeroTi	er networks added
ZeroTier Network ID	Add

2. In the pop-up panel click on the "Add ZeroTier API Token" button.



3. Now you will need to enter the "ZeroTier API Token" you created on <u>my.zerotier.com</u> from the "Account" page. Type it into the "ZeroTier API Token" text box and click the "Enter a ZeroTier API Token" button.

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4. The "Manage ZeroTier Networks" panel will appear. It will be empty if there are no networks configured. If you have existing networks, you can manage them from this panel. It is divided by Active Networks, Disabled Networks, and Available Networks. This is based upon the current status of your creative.space storage within each network. It also displays the number of nodes authorized for each network. A "Node" is a device on the network. A user's name is automatically added to the node description field. A user can have multiple devices such as a desktop, laptop, and iPad authorized on multiple networks, each with a separate "Node ID".

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5. In the "Name for Your ZeroTier Network" text box, enter a name for your network. Select an IP range to assign for the network. Click on the "Create a New Network" button. The system automatically opens firewall ports to the storage, but it restricts access between user's devices for security purposes. The storage can be accessed from multiple networks. You can segregate user/device access into different networks for easier management.

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6. The next panel will appear and display the information for the newly created network. Your creative.space storage is automatically entered and approved.

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Client (Node) Setup – Install ZeroTier and creative.space Desktop Application

- 1. Download and install the <u>ZeroTier application</u> based upon your device. Make sure the creative.space application is also installed on either your Windows or Mac OS computer.
- 2. Open the creative.space desktop app and click on your name then select "Settings" from the menu.

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3. The device's "ZeroTier Node ID" is displayed in the top left of the panel. Copy the ID number or have your users email it to you. This is required in the next step to add the node to the ZeroTier Network.

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4. From the creative.space web app "System" page, click on the "Gear" in the ZeroTier Network panel. Select the network that you want to add and authorize a new device with its "ZeroTier Node ID". Click the "Invite User to Network" button. You can also click on the "Mail" icon within the network panel.



5. In the "Send Network Invitation" panel, select a user and enter their "ZeroTier Node ID" and a "Device Description". Click the "Send Invitation" button. A Network Invitation email is automatically sent to the user, which includes a network configuration file.



6. Below is a screenshot of the Network Invitation email. The user should click to download the configuration file.



7. Once downloaded, click to open the configuration file in the browser, Finder, or Explorer. The file can also be directly drag-and-dropped onto the creative.space desktop app.

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8. The configuration file will open in the desktop app and automatically fill in the IP address of the storage, system nickname, and ZeroTier Network ID. Click the "Connect" button.

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9. The user will need to enter their Username and Password. This has been assigned to them through the creative.space web app on the "Team" page.

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10. You will be logged into the storage and can now access Spaces and Folders.

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11. In the desktop app click on the three dots (...) next to the Space or Folder name to open in Finder or Explorer.

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12. In Finder or Explorer, you will be able to see the IP address of the storage under the Network Connections or Locations tree. The Spaces you are authorized to access with be visible and accessible.

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13. You can also access the storage with an <u>FTP</u> application. Enter the IP address of the storage in the "Host" text box and fill out your "User" Name and "Password".

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14. Once connected, you will be able to upload and download folders and files. For large or multiple files, this is a better method than with SMB through Finder or Explorer.



Additional Configuration and Monitoring – "System" Page

• Click the "View Connected Users" button in the Connected Users Panel. It will display connected users, and you can monitor what Spaces, Folders, and Files are being accessed. This is great for troubleshooting or looking for detecting suspicious activity. If a user's credentials are being used from multiple IP locations, then they may be compromised or shared.

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• In the ZeroTier Network panel, you can view Active and Disabled networks. For "Active Networks," you have a graphical chart displaying network bandwidth speed and activity. The "Connection Type" Private or Public, "Network ID", and IP address of the storage is shown.



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• "Disabled Networks" display networks that the storage has been disabled on. Click the "Reconnect Network" button to make live and reachable again.

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• Through the creative.space web app, you can only create "Private" networks. If you wish to create a "Public" network not requiring node authorization, it must be done on the ZeroTier administration website. If a network is configured for "Public", the panel will display it with a red border and warning message.

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IP					172.3	30.189.45

• At the bottom of the ZeroTier panel is a section to add a ZeroTier Network ID that is not on your ZeroTier account. It will automatically add the network, but you will need to add the storage Node ID and approve it manually on the ZeroTier administration website.

	_
ZeroTier Network ID	Add

• Add the ZeroTier Network ID and click the "Add" button.

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• On the "Manage ZeroTier Networks" panel, there is a "Change ZeroTier API Token" button. Click this to change the API token if needed.

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• In the "Services" panel, you can Start and Stop the ZeroTier service if needed. Click on the "Change" button and select "Start ZeroTier" or "Stop ZeroTier".



Hopefully, this creative.space integration with ZeroTier provides your team with a cost-effective and frictionless solution to access remote storage. If you have any questions or comments, please email support@creative.space.