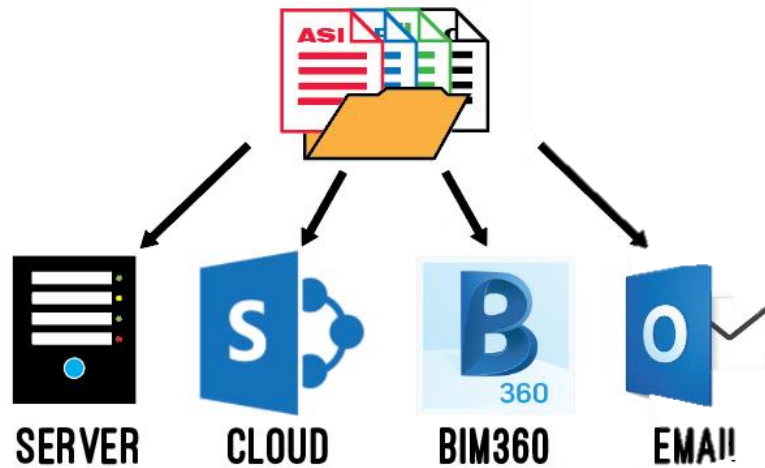


IT Requirements Doc:

1) **360 Sync Minimum Requirements**

We often get asked, “What are the minimum requirements for setting up 360 Sync?” In this blog we will discuss the minimum requirements & make suggestions for 360 Sync Setup Best Practices.

Suggested Workflow



360 Sync can be installed on any computer with Windows – whether that's a desktop, server or virtual machine. We suggest installing 360 Sync on a Virtual Machine (VM) because it will not affect the processing speed of your personal computer or server when it is transferring files between data sources.

We suggest you setup a VM with the computer requirements below.

Computer Requirements

Windows Version: Windows Server 2012 or later (or any more recent version of Windows)

Processor: Minimum: 1.4 GHz 64-bit Processor. **Suggested:** 2 GHz or faster

RAM: Minimum: 1 GB. **Suggested:** 4GB or greater

Disk Space: Minimum: 250 MB for application plus requirements for .Net installation + enough storage for the files you intend to synchronize.

Suggested: 40GB or greater

Things You'll need to install

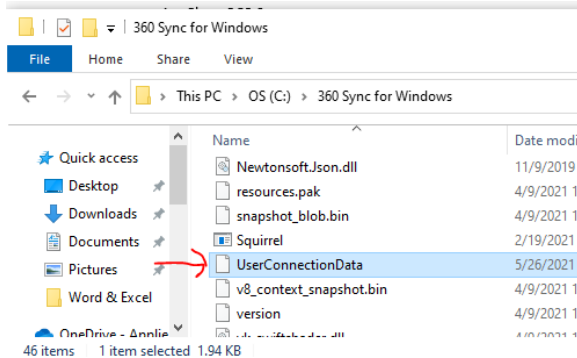
You will want to have a computer with Windows Server 2012 or later. You don't need to install 360 Sync on a server. You can install it on any computer, as long as the version of Windows is more recent than 2012. You will also need to install .NET Framework v 4.7, as well as a C++ redistributable You can download them using the links below:

- A) If you don't have .NET Framework of 4.7 or later, try installing it from here:
- B) <https://dotnet.microsoft.com/download/dotnet-framework/net472>
- C) Also download this C++ redistributable:
- D) https://aka.ms/vs/15/release/vc_redist.x64.exe

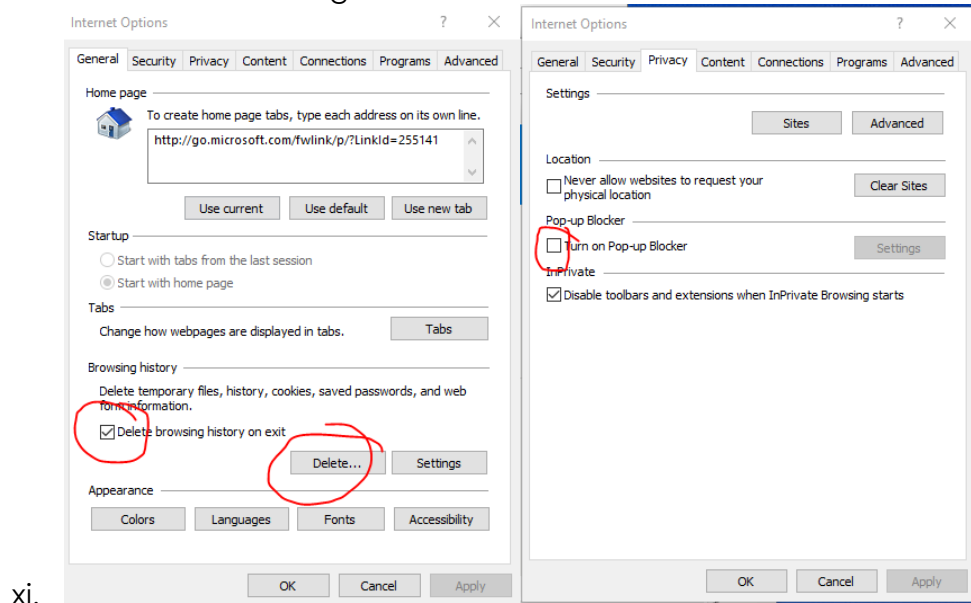
Obviously, you'll also have to install 360 Sync as well. You can always get the most recent version of 360 Sync by following this link: <http://www.asti.com/support/download>, and make sure that you have your Enterprise License code or Trial License code available – we email that to you upon purchase or upon trial request.

2) Internet Explorer Internet Options:

- a. Make sure Popup Blocker is unchecked in "Privacy" tab in Internet Options in Internet Explorer
- b. Make sure TLS 1.2 is checked in "Advanced" tab in Internet Options in Internet Explorer
- c. Here's how:
 - i. Close 360 Sync.
 - ii. Open a folder & navigate to the C: drive
 - iii. Find the 360 Sync with Windows folder & open it
 - iv. Next, find the "User Connection Data.xml" file & delete it



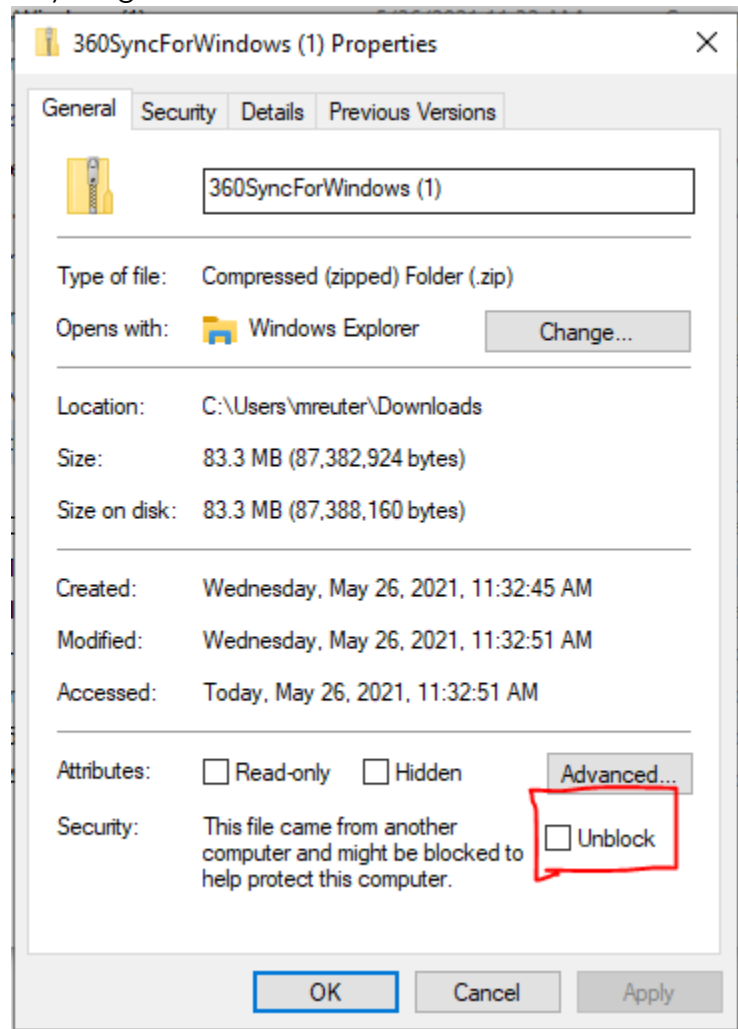
- v. Next, open Microsoft Internet Explorer
- vi. In the top right corner, click the gear & then select "Internet Options."
- vii. In the General Tab, click "Delete browsing history on exit"
- viii. Then hit the Delete... button & check all boxes
- ix. Then click the Privacy Tab & make sure that "Turn off Pop-up Blocker" is unchecked.
- x. Reference the images below:



xi.

3) Pre-Installation & Setup

- a. Download 360 Sync from here: <http://www.asti.com/support/download>
- b. Get your license code from Applied Software
- c. Prior to unzipping the file, unblock it. Here's how:
 - i. Prior to unzipping the file, right-click on the zip file & select Properties at the bottom
 - ii. When the window pops up, check the "Unblock" button in the bottom right corner & click Apply & OK.
 - iii. If the Unblock button doesn't show up, then you don't need to do anything!

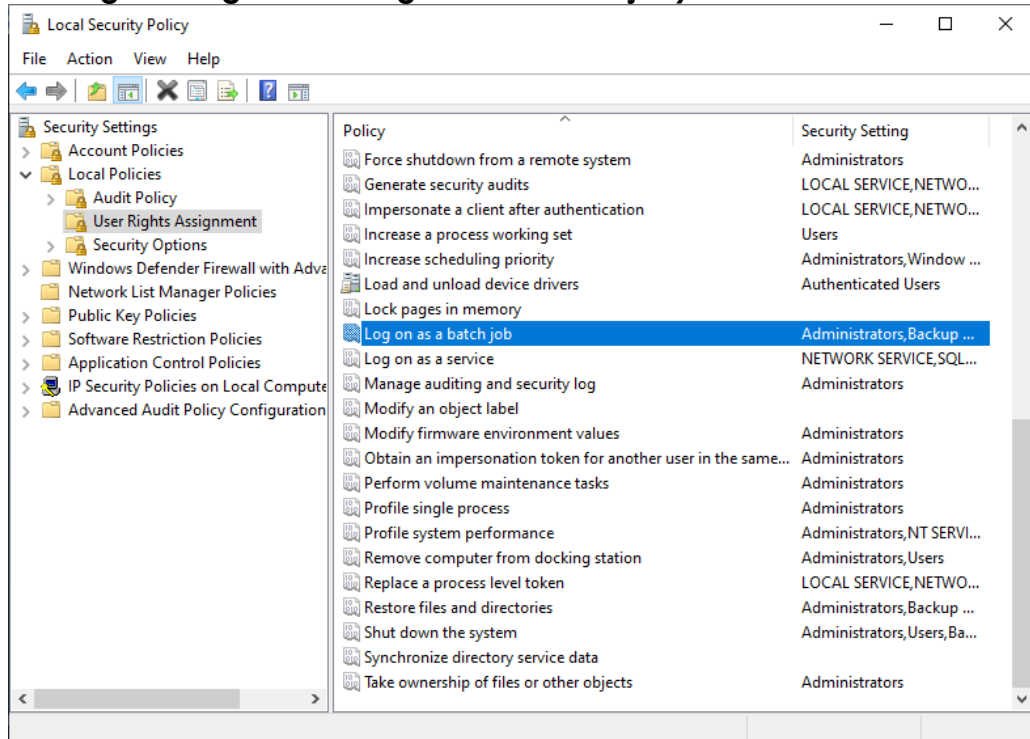


- d. Install 360 Sync on your C:Drive, as shown

4) Suggested System Requirements

5) Scheduled Tasks Requirements

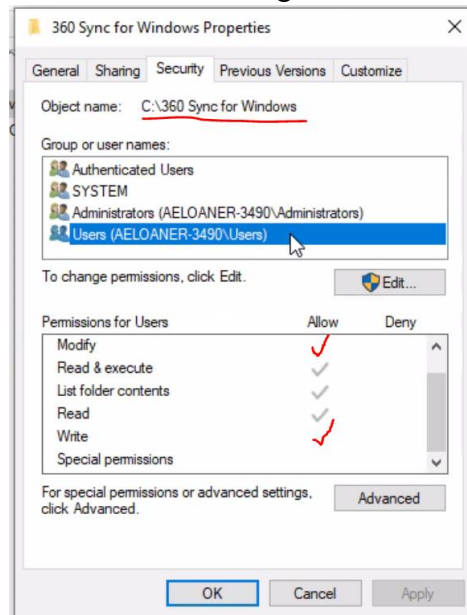
- a. User will need admin / read/write/edit permissions for folders & files on the computer/server or virtual machine that 360 Sync is installed on
- b. User will need admin or read/write/edit/run permissions for Scheduled Tasks with the Windows Task Scheduler
- c. User will need to be a member of the Local Security Group Policy, “Log on as a batch job” – located here (**Local Security Policy > Local Policies > User Rights Assignment > Log on as a batch job**) as shown below:



6) User Profile Requirements

a. User needs to have Modify, Read & Execute, List folder contents, Read & Write permissions for the following folders:

- i. C:\360 Sync for Windows
- ii. Reference the image below:



b. Here's how to check or modify:

- i. Click on 360 Sync for Windows folder
- ii. Right-click & select Properties at the bottom
- iii. Click on the Security Tab
- iv. Choose the group or user name that you want to modify

c. You may need to get help from your **IT professional** to do this.

d. User will need read/write/modify access to any other folders on the computer or server that they want to sync

7) User Group Policy Requirements

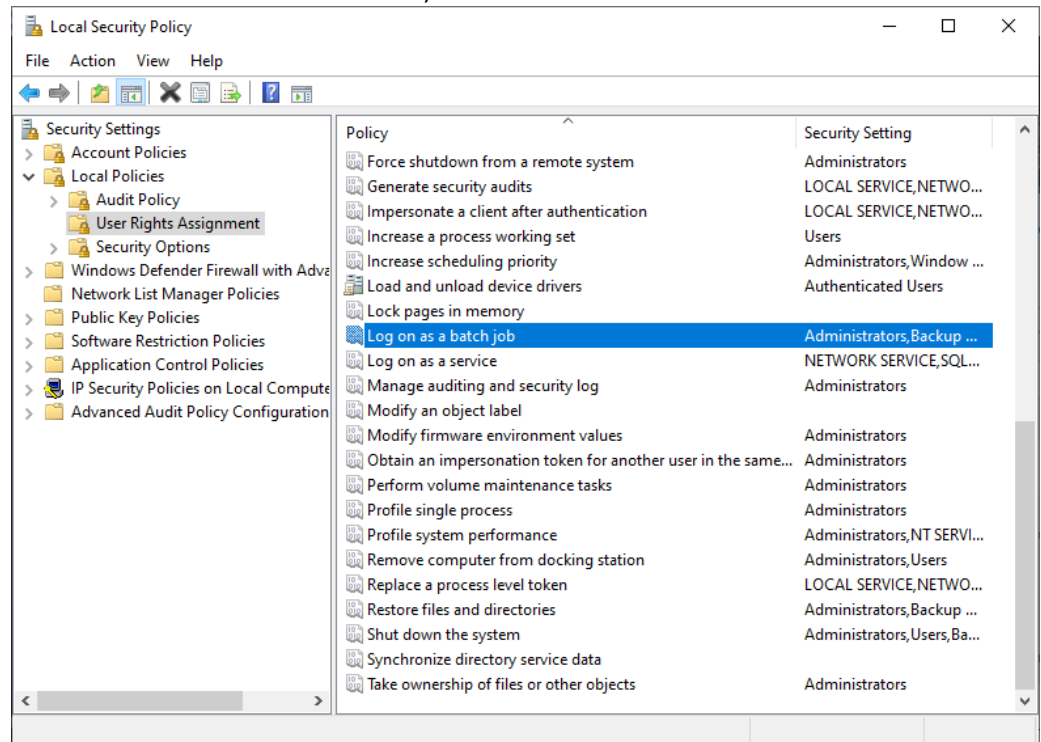
a. User that is utilizing 360 Sync may need to have their IT Group Policy settings changed to allow the following:

i. Run Batch Jobs

1. Make sure **Log on as a batch job** is added to the user or the user is added to a Group Policy that can do that. Reference the image below.

ii. Edit files & folders on the C: Drive

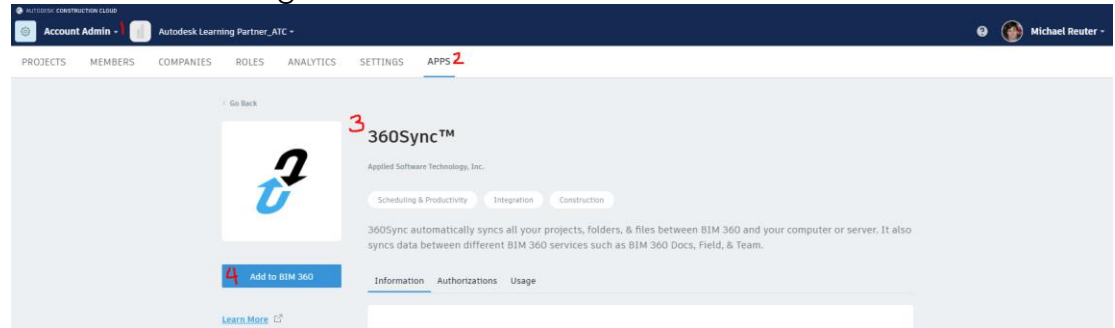
iii. Edit files & folders in the 360 Sync for Windows folder



iv.

8) BIM 360 Requirements

- a. User will need Project Admin permissions for the projects they wish to connect to
- b. the 360 Sync app will need to be activated on the Account. Here's how:
 - i. Open BIM 360 & navigate to the Account Admin portal
 - ii. Click on the Apps button at the top
 - iii. Choose 360 Sync
 - iv. Click the "Add to BIM 360" button
 - v. Reference the image below:

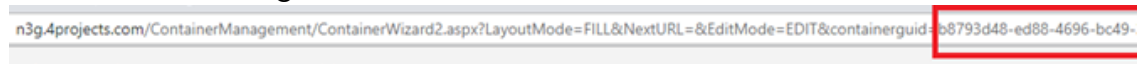


9) Procore Requirements

- a. The user will need to have at least Standard Access.
- b. The company needs to allow **Implicit Oauth Connections** in Procore Admin
 - i. Contact ASTI for more help procuring this – forgedev@asti.com

10) Viewpoint 4 Projects

- a. User will need to procure an **App ID** from Viewpoint 4 Projects
 - i. Contact ASTI for more help – forgedev@asti.com
- b. User will need to find it's Enterprise ID from Viewpoint 4 Projects. Here's how to find it:
 - i. Open Viewpoint 4 Projects & login
 - ii. Review the URL & navigate to the spot that says, ""EDIT&containerguid=""
 - iii. The Enterprise ID will be a 32-digit alphanumeric code with 4 dashes.
 - iv. Reference the image below:



11) Vault

- a. User will need to have **Vault Professional Client** 2019 installed on the computer that 360 Sync is installed
- b. User must know Server Name, Vault name, & username & password.
 - i. Ask your Vault Admin & they can help you find this information
- c. Can only connect to Vault 2019, 2020, 2021
 - i. If there is another version that you would like to connect to, please contact forgedev@asti.com
- d. Ask Jason Miles about Vault permissions

12) Asite

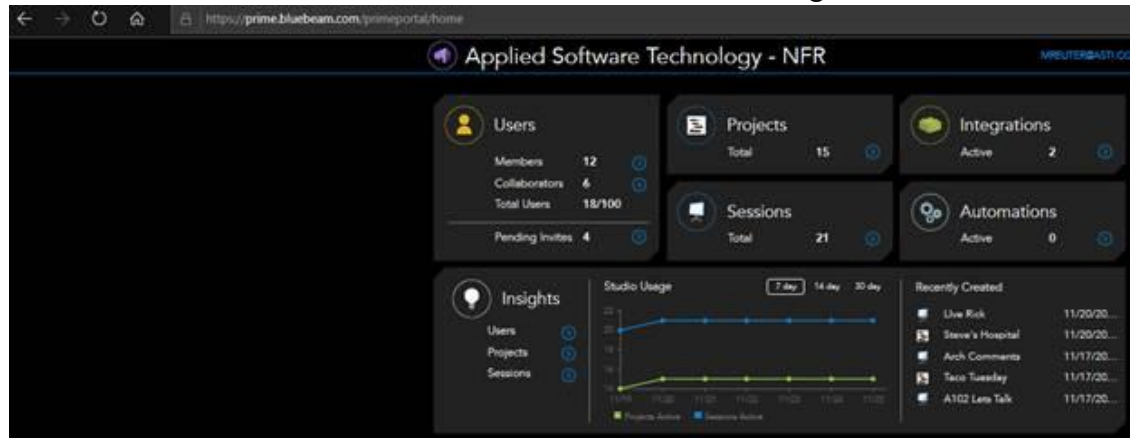
- a. User will need to have API access turned on at Account level
 - i. Reach out to: support@asite.com
 - ii. Request access to API in the email for their specific account(s)
 - 1. Include account admin email, your company name
 - 2. Account that is syncing the data needs to be included in the request

13) SharePoint

- a. If your company utilizes Multi-Factor Authentication or Modern Authentication with SharePoint:
 - i. Need a Development Account placed outside of Modern Authentication or MFA
 - ii. After August 2021, this will not be required
- b. SharePoint 2012 or earlier not supported

14) Bluebeam Studio Projects

- a. Requires a **Bluebeam Studio Prime** account
- b. Requires Member level access in order to sync files to/from Bluebeam Studio Prime
- c. Suggested workflow: Use Bluebeam Studio Projects as your single source of truth – update files in Bluebeam, then use 360 Sync to transfer files from Bluebeam to your other data sources
- d. Must activate our app on your Prime account dashboard.
- e. Here's how to setup 360 Sync on your Bluebeam Studio Prime account:
 - i. Make sure that you are a Bluebeam Studio Prime (BBSP) Admin – only BBSP Admins can add integrations to your Bluebeam account.
 - ii. Login to <https://prime.bluebeam.com/>
 - iii. You should see a dashboard that looks similar to the image below:



- iv. Select Integrations
- v. On the new page, hit the green "Add New" button. Reference the image below:



- vi. Enter the code below into the field & hit "Lookup."
cdf86c93-1574-4400-afcb-81e56f2b6d32
- vii. Hit Done. That's it! 360 Sync can now connect to your Bluebeam Studio Projects & transfer files to/from.

15) Desktop Client Requirements

Computer will need Egnyte / Box / Dropbox / Google Drive / ShareFile/etc. desktop client installed on machine.

Additional requirements:

- a. Box - none
- b. Dropbox - none
- c. Citrix ShareFile
 - i. If using Citrix Files, use the Citrix Files Connection point. Citrix Files does not work when connecting through Windows
 - ii. ShareFile – needs desktop client installed on machine
- d. Google Drive - none
- e. Egnyte – must be at least a Power User
- f. Kenesto – none
- g. OneDrive - none
- h. Panzura - none

360 Sync Security:

While security for 360 Sync is mandated by the solution we are connecting to, keeping our clients files & data safe & secure is of utmost importance to us.

Here are some notes regarding security within 360 Sync:

- TLS 1.2 is enabled for all of our vendors.
- However, not all of our vendors support TLS 1.2 (they still use TLS 1.1).
- 360 negotiates the highest allowed version by the solution you're connecting to, with the goal being TLS 1.2
- All files are encrypted. We encrypt everything going to the cloud (including SharePoint). SharePoint encryption depends on SharePoint cloud hosted vs On Premise (On Premise is subject to the individual company's setup)
- 360 Sync doesn't require elevated permissions to run, but it does require elevated permissions to install.
- If you're syncing to a File Share / Azure, there must be a domain account that has appropriate permissions to access that file server.
- All usernames & passwords saved in 360 Sync are encrypted.

Encryption Info: Data never leaves the client's firewall.

Data at Rest: AES/Rijndael symmetric encryption

Data in Transit: Transport Layer Security (TLS) 1.2 when supported by the remote connection; Fallback to 1.1 and 1.0 may occur depending on what the remote end (Procore, Viewpoint, etc) supports.