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# NST Animator v5 Add-on Documentation

This is an Add-on for the free [Network Sync Transform asset found on the Unity Asset Store](#).

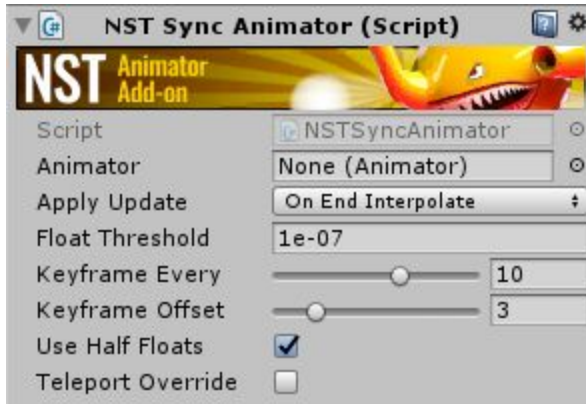
The core is included in this asset, so there is no need to download it, but you may want to keep an eye on it for any fixes that get made over time.

[Click here for the most current version of this documentation](#)

The NST Sync Animator is a very simple component. Currently it serializes Animator parameter values and attaches them to the outgoing frame updates of a networked object (any networked object that uses the NetworkSyncTransform component for syncing), and those values are applied to the animator on receiving clients. This is the NST equivalent of the Unet HLAPI **NetworkAnimator**.

Currently it only syncs parameters, but I may expand on that to include states triggers and such as I get a sense of how this is being used and what requests I get. Feel free to contact me if you have feature requests ([davincarten@yahoo.com](mailto:davincarten@yahoo.com) or gmail.com).

# NST Sync Animator component



## Animator

The Animator component we are syncing. It should (must) be on the same object as the NetworkSyncTransform.

## Apply Update (leave this set to On End Interpolate)

When the parameters will be applied on receiving server/clients. Normally you will want this to be set to 'On End Interpolate', as that is when the object's position and rotation will match how they were on the owner at the time of this Animator snapshot. The options of *On Receive* (the moment that update arrives) and *On Start Interpolate* are offered just to make odd use cases easy to accommodate.

## Float Threshold

A very small number that determines how small a change in float parameters may as well be considered no change. Only play with this if you are either seeing SyncAnimator traffic when there should be none, or if it seems to be dropping animator updates.

## Keyframe Every

Keyframes can be sent every X frames to force all parameters to be sent out with the next update. Currently the main function of this is to ensure that any players joining a game after it has started don't go exceptionally long without getting a complete correct picture of the animator. (NST does not initialize all values at spawn, and entirely relies on the stream of updates to self correct things over time). As more compression options are added later, Keyframes will become more critical as they will ensure errors don't start to accumulate.

## Keyframe Offset

Offsetting the keyframe to an arbitrary number helps keep ALL of the keyframes used by NST from firing on the same updates. This is not an important value, its is just part of a future plan to make it easier to even out the data from update to update.

## Use Half Floats

Convert any float parameters into Half Floats (16bit) to reduce network traffic. This reduces float point precision by a huge amount, so there may be cases where you don't want this compression. For most things though, you'll want to keep this enabled - as the bandwidth savings is significant.

## **Teleport Override**

Indicates whether the server should force its values for the animator when a teleport occurs, or if they should be left alone and remain as the owner indicated them. Teleport Override generally is used for things like respawn, where the server may want to 'reset' aspects of an object to their starting state. Anything marked as Teleport Override, you will want to set on the server prior to initiating the teleport - as it will replicate the state on the server to all clients.