

# SkyPilot Networks Accessory Guide

## Parts List

Adjustable tilt mount

Hardware:

- 10-32 x .5" metal screws (4)
- 3/8-16 x 1" hex head bolts (2)
- 3/8-16 x 6" hex head bolts (4)
- 3/8" flat washers (6)
- 3/8" lock washers (4)
- Pole brackets (2)

MetroPole Power supply with photocell adapter (ANSI 136.10-compliant) on a 3-foot or 20-foot cable (optional)

## Tools Required

Socket wrench with 3/8" socket

Phillips screwdriver

Strapping tool \*

1/2" stainless steel strapping \*

\* for strap mount

## SkyPilot MetroPole Jr. Mount Kit

### A universal mounting solution for SkyAccess DualBand

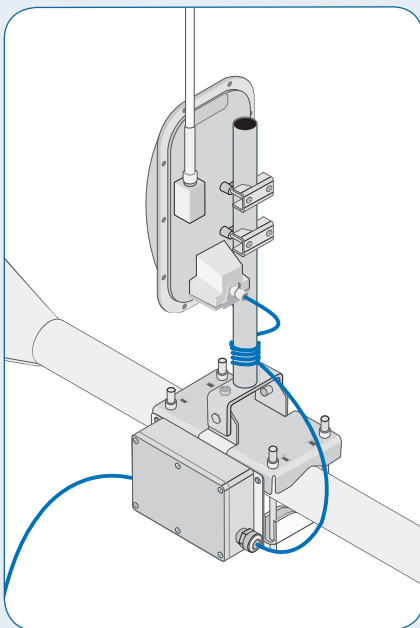
SkyPilot MetroPole Jr. is a versatile mounting kit for installing a SkyAccess DualBand in a variety of environments. Supporting installation on poles (1.5 inches and greater in diameter), beams, and walls, MetroPole Jr. includes a built-in level for ensuring that the device is mounted plumb.

### Multiple mount options

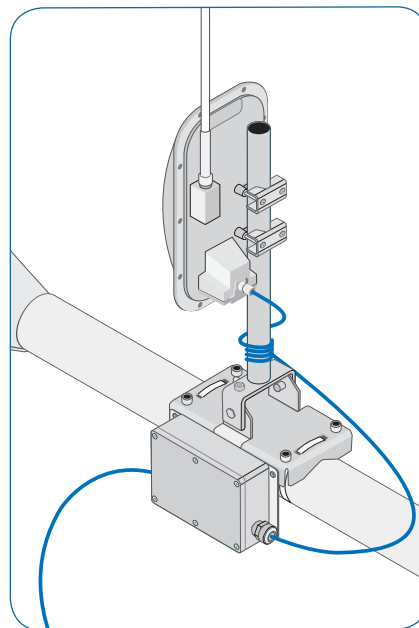
SkyPilot MetroPole Jr. supports three different kinds of mount: a clamp mount for light poles between 1.5 and 3 inches in diameter, a strap mount for poles larger than 3 inches in diameter, and a flush mount for installation on exterior walls.

The mount kit easily adapts to vertical or horizontal base installations.

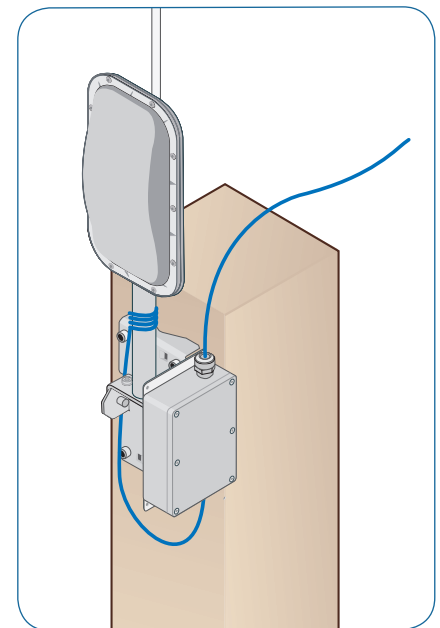
### Clamp mount



### Strap mount



### Flush mount



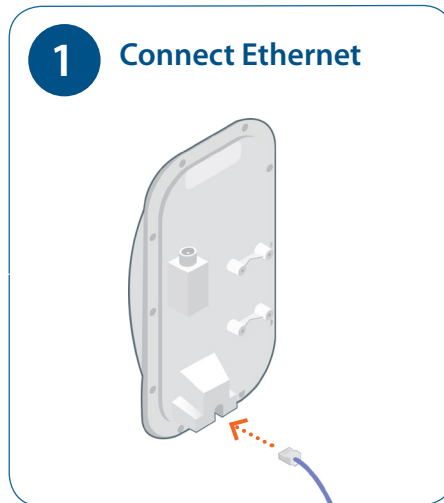
## Preparing the SkyAccess DualBand

Before mounting the SkyAccess DualBand, you must prepare the device for installation by connecting it to the MetroPole power supply and attaching the 2.4 GHz antenna.

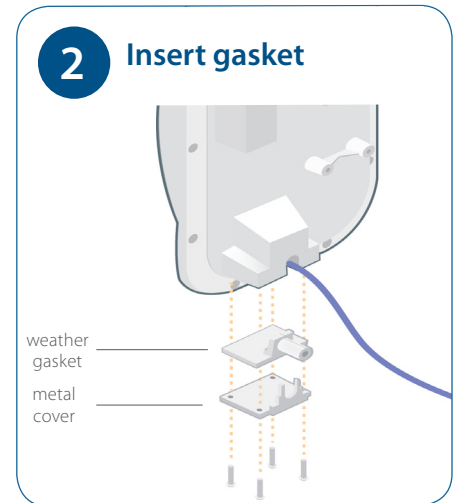
For more detailed information on installing a SkyAccess DualBand, see the *SkyPilot SkyAccess DualBand Installation* guide, available for download at [www.skypilot.com/support](http://www.skypilot.com/support).

## What's next?

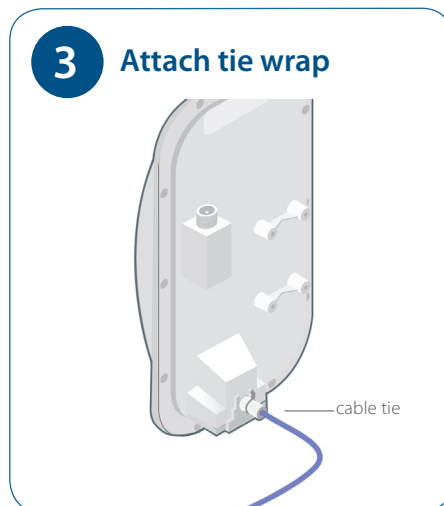
With the SkyAccess DualBand ready for installation, go to the section corresponding to the mounting option you will use and follow the instructions for installing the device with the SkyPilot MetroPole Jr. mount kit.



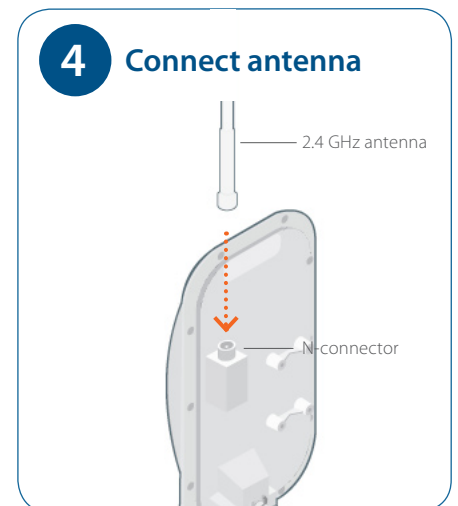
From the power supply, take the cable terminating in an RJ-45 connector and plug it into the RJ-45 port on the back of the SkyAccess DualBand.



Press the cable into the gasket and insert the gasket into the housing, taking care not to twist or place unnecessary force on the RJ-45 connector. Fit the metal cover over the weather gasket and secure it with the supplied machine screws.



Attach a tie wrap to the neck of the weather gasket and tighten it so that it slightly depresses the neck.

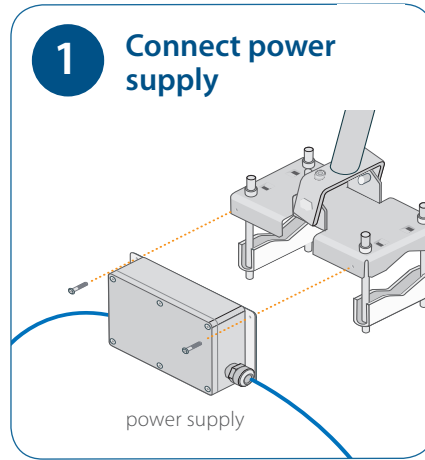


Screw the SkyAccess DualBand antenna onto the standard N-connector on the back of the device (*Tighten by hand only.*)

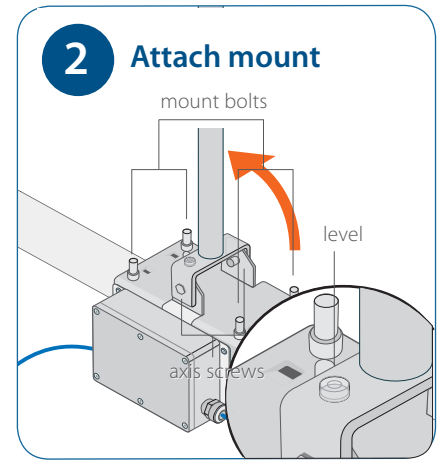
## Clamp mount

Use the clamp mount for installing a SkyAccess DualBand on poles between 1.5 and 3 inches in diameter. This option is ideal for mounting a SkyAccess DualBand on light poles providing power via a photocell.

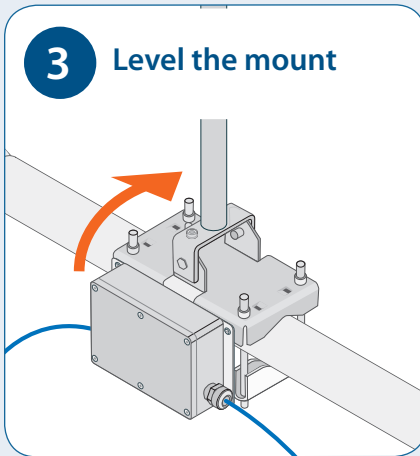
**Note** This procedure assumes installation with a MetroPole power supply, available for use with the MetroPole Jr. mount.



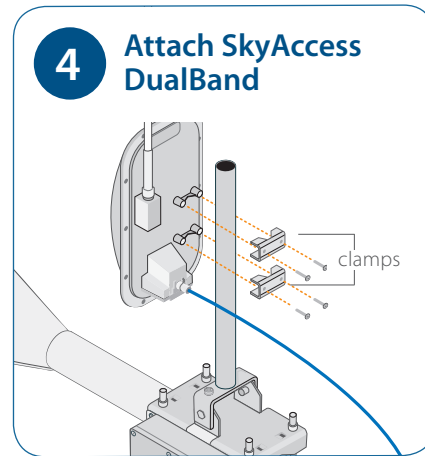
Use the provided screws to attach the MetroPole power supply to the mount. *(Make sure the cable with the photocell adapter is on the side closer to the photocell.)*



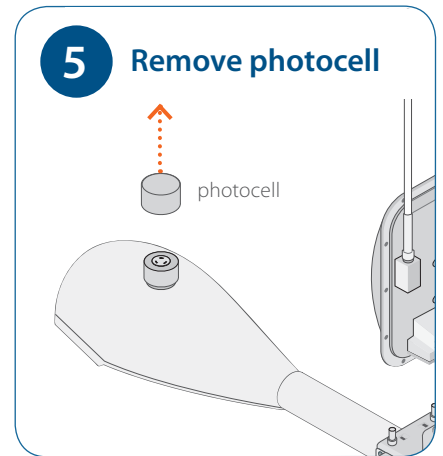
Use the mount bolts to attach the bracket to the pole, leaving some play. With the built-in level as a guide, rotate the mount stand into a plumb position and tighten the axis screws to lock the stand.



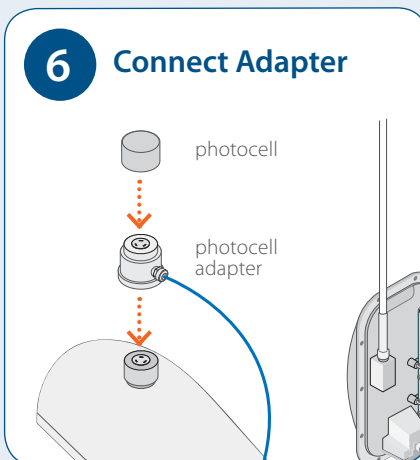
If necessary, rotate the bracket into a plumb position and finish tightening the mount bolts to lock the bracket into place.



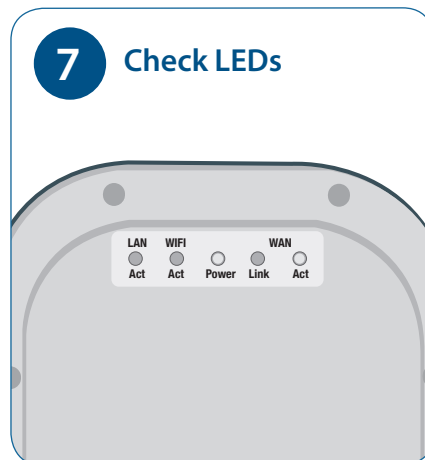
Use the supplied clamps to secure the SkyAccess DualBand to the pole. When tightening the clamps, leave some play for final adjustment.



Loop the Ethernet cable around the mounting pole and secure it with cable ties. Unplug the photocell from the socket on the light pole and keep it close at hand.



Replace the photocell with the adapter connected to the MetroPole power supply. Plug the original photocell into the receptacle on top of the adapter. *(Make sure excess adapter cable is routed and dressed to minimize visibility from below.)*



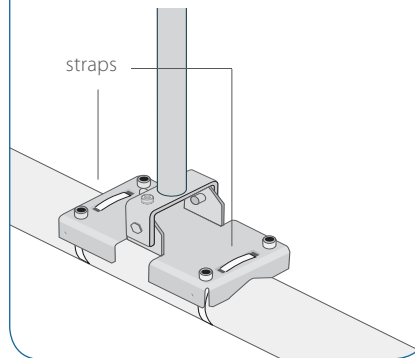
At power-up, the Power LED and the WAN Act LED illuminate and the WAN Act begins blinking. When you confirm a network connection, tighten the clamps to complete attachment of the SkyAccess DualBand to the mount.

## Strap mount

Use the strapping option for installing the SkyAccess DualBand on poles that exceed 3 inches in diameter. (Always use stainless steel strapping.)

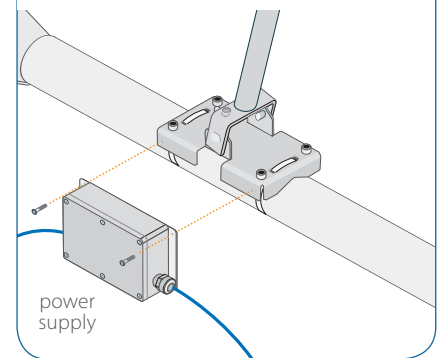
**Note** This procedure assumes installation with a MetroPole power supply, available for use with the MetroPole Jr. mount.

### 1 Strap mount to pole



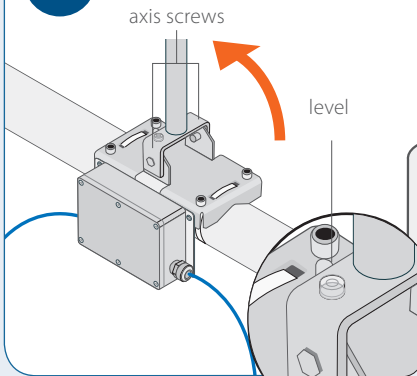
Use a strapping tool to fix the mount to the pole with metal strapping. Make sure you have the mount oriented properly before tensioning the straps.

### 2 Attach power supply



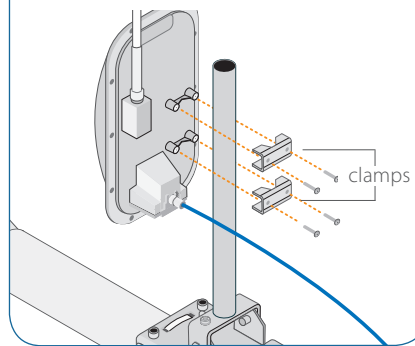
Use the provided screws to attach the MetroPole power supply to the mount. Orient the power supply so that the photocell adapter cable is on the side closer to the photocell.

### 3 Level stand



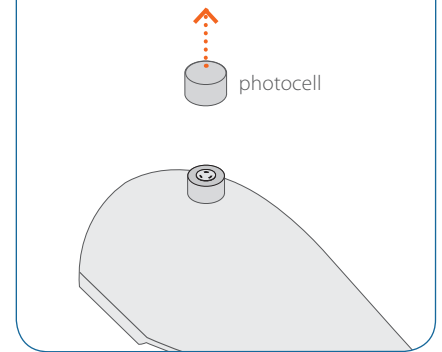
Using the built-in level as a guide, rotate the mount stand into a plumb position and tighten the axis screws to lock the stand into place.

### 4 Attach SkyAccess DualBand



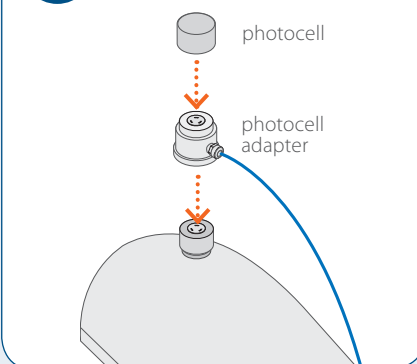
Use the supplied clamps to secure the SkyAccess DualBand to the pole. Tighten the clamps, leaving some play for final adjustment.

### 5 Remove photocell



Loop the Ethernet cable around the mounting pole and secure it with cable ties. Remove the photocell from the socket on the light pole and keep it close at hand.

### 6 Connect adapter



Replace the photocell with the adapter connected to the MetroPole power supply. Plug the original photocell into the receptacle on top of the adapter. (Make sure excess adapter cable is routed and dressed to minimize visibility from below.)

### 7 Check LED panel



At power-up, the Power LED and the WAN Act LED illuminate and the WAN Act begins blinking. When you confirm a network connection, tighten the clamps to complete attachment of the SkyAccess DualBand to the mount.

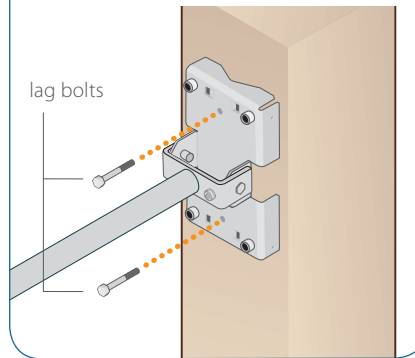
## Flush mount

MetroPole Jr. supports flush installation on walls or other surfaces that can support the weight of the node and mount.

A flush mount supports up to 25 degrees of rotation.

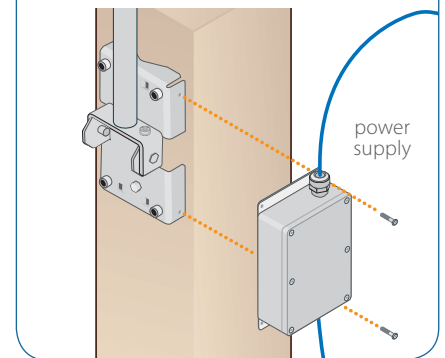
**Note** This procedure assumes installation with a MetroPole power supply, available for use with the MetroPole Jr. mount.

### 1 Attach mount



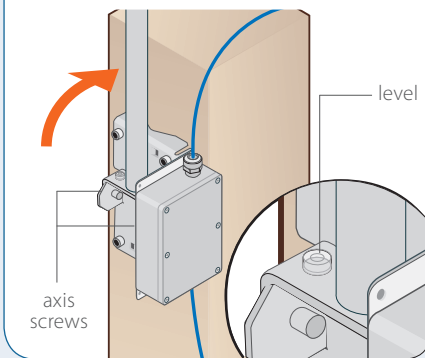
Remove the bracket and bolts from the mount and attach it to the surface with two 1/4" lag bolts.

### 2 Attach power supply



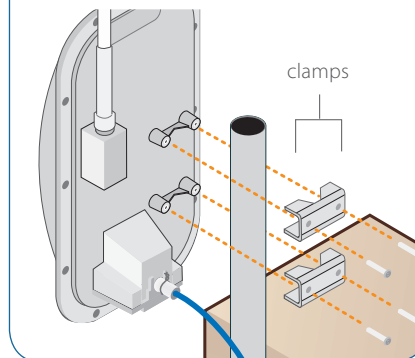
Use the provided screws to attach the MetroPole power supply to the mount.

### 3 Level the stand



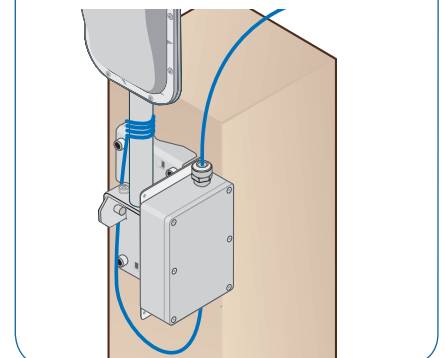
Using the built-in level as a guide, rotate the mount stand into a plumb position and tighten the axis screws to lock the stand into place.

### 4 Attach SkyAccess DualBand



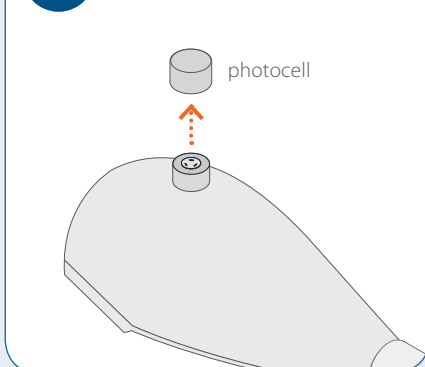
Use the supplied clamps to secure the SkyAccess DualBand to the pole. Tighten the clamps, leaving some play for final adjustment.

### 5 Secure cable



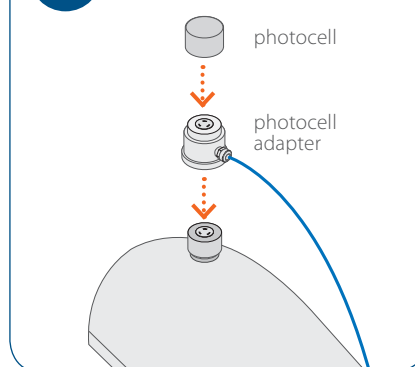
Loop the Ethernet cable around the mounting pole and secure it with cable ties.

### 6 Remove photocell



If you're drawing power from a photocell, remove the photocell from the socket on the light pole and keep it close at hand.

### 7 Connect adapter



Replace the photocell with the adapter connected to the MetroPole power supply. Plug the original photocell into the receptacle on top of the adapter. (Make sure excess adapter cable is routed and dressed to minimize visibility from below.)

### 8 Check LEDs



At power-up, the Power LED and the WAN Act LED illuminate and the WAN Act begins blinking. When you confirm a network connection, tighten the clamps to complete attachment of the SkyAccess DualBand to the mount.

# Grounding guidelines

Proper grounding protects both your SkyAccess DualBand and equipment connected to it. For the surge protection circuitry built into the SkyPilot equipment to be effective, proper grounding of the unit is necessary. This is especially true if you are installing devices on tall structures, or in areas subject to lightning.

## General grounding strategy

For light pole installations, a photocell adapter does not provide grounding. To ensure reliable service, you must properly ground the metal base of the SkyAccess DualBand. The most efficient way to ground the device is to clamp it to a steel or aluminum streetlight or signal arm providing a ground path between the SkyPilot device and a properly grounded arm. The table below provides guidelines for grounding different types of SkyAccess DualBand installations.

Installation type	Grounding guideline
Metal arm mounted to a metal pole	Verify that the pole is properly grounded.
Metal arm mounted to a wooden pole	Verify that the arm is properly connected to an appropriately sized, properly grounded down lead.
MetroPole Jr. mounted on an ungrounded pole or other structure	Verify that the SkyAccess DualBand is grounded with an appropriately sized down lead connected to the ground.

## Making connections “gas tight”

Regardless of the grounding method you choose, make sure the connections are “gas tight;” capable of retaining low resistance and integrity over time and with exposure to the elements.

Use of an anti-oxide compound and proper sealing is essential. For protection against corrosion, wrap all connections with Scotch® 130C tape.

## Notes

All SkyPilot devices must be configured to operate on wireless mesh network. For information on configuring and troubleshooting a SkyAccess DualBand, see the SkyAccess DualBand documentation available from the SkyPilot website.



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