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• In the new process you add the Multicast Networking additional capability to your *App ID* and then create a provisioning profile based on that.



• In the old process you add this additional capability to your *provisioning profile* in an Additional Entitlements step.

If you have follow-up questions about this, please put them in a new thread here on DevForums and tag it with both *Network*

Change history:

- Reply to this question

IMPORTANT These instructions assume you're building a typical app using Xcode with automatic code signing. Additional

To use the multicast entitlement (com.apple.developer.networking.multicast) first ensure that you have an explicit App ID, then enable the Multicast Networking additional capability on that App ID, and finally enable the entitlement in your

Q

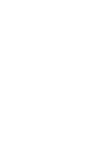
capabilities issued via the new process are compatible with manual code signing but I don't cover those details here. **Note** These instructions were written for Xcode 12.4, iOS 14.4, and the developer web site at the time of publication.

New Process

project. The following sections described each of those steps in detail.

2. Go to the Account page on the developer web site.

1. In Xcode, go to the Signing & Capabilities editor.



Adopt an Explicit App ID To determine whether your app already has an explicit App ID:

2. The Provision Profile field should say Xcode Managed Profile. Click the little info button next to that. In the popup

If you're using a wildcard App ID you must switch to using an explicit one. The easiest way to do this is to add the App

Once you have an explicit App ID, it's time to enable the Multicast Networking additional capability on it. To do this:

1. On the developer web site, edit your App ID's capabilities using the process described in Developer Account Help >

1. In your app's <code>.entitlements</code> file, add a <code>com.apple.developer.networking.multicast</code> entry with a Boolean

2. Xcode will then notice that you're using an entitlement that's not in the current provisioning profile's allowlist but is in

you'll see an App ID field whose value is * if you're using a wildcard App ID or your bundle ID if you're using an explicit

Groups capability. Xcode responds to this by creating an explicit App ID for your app. If you have no use for App Groups just remove the capability afterwards; the explicit App ID will 'stick'. **Configure Your App ID**

3. Pull down the menu at the top right and confirm that you're logged in to the right team.

Enable app capabilities. 2. On the Edit Your App ID Configuration page, scroll to the bottom to the Additional Capabilities section. 3. Enable the Multicast Networking additional capability. If you don't see that capability, see No Multicast Networking

Additional Capability below.

value of true.

The next step is to enable the entitlement in your project:

your App ID's allowlist. It responds to this by rebuilding the provisioning profile. Yay! 3. Build your app for the device (not the simulator!). In Terminal, run the first command below to confirm that your app was signed with the entitlement.

5. Still in Terminal, run the second command below to confirm that your profile allows use of the entitlement.

<key>com.apple.developer.networking.multicast</key> <true/> 5 ... 6 % security cms -D -i /path/to/your.app/embedded.mobileprovision | grep -A 1 "com.apple.developer.networking.multicast"

1% codesign -d --entitlements :- /path/to/your.app | grep -A 1 "com.apple.developer.networking.multicast"

• That you're logged in to the right team (step 3 of *Preparatory Work*). This is the most common cause of this problem. If this doesn't help, wait a day and try again. It can take time for this access to propagate through our systems.

the entitlement. The following sections described each of those steps in detail.

Before creating your profile, you must prepare the ground:

Old Process To use the multicast entitlement (com.apple.developer.networking.multicast) you must manually create a

provisioning profile that has this additional capability, then configure your app's target to use that profile, then actually enable

IMPORTANT These instructions assume you're building a typical app using Xcode. This will switch your app to use manual

code signing. Additional capabilities issued via the old process are not compatible with automatic code signing.

Note These instructions were written for Xcode 12.0, iOS 14.0, and the developer web site at the time of publication.

No Multicast Networking Additional Capability

instructions instead.

Preparatory Work

2. On the left, click Profiles.

9. Click Download.

Configure Your Target

To enable the entitlement in your app:

3. Click the add (+) button at the top.

Select your App ID and click Continue.

Additional Entitlements Page below.

8. Give the profile a name and click Continue.

Select the certificates and devices as you would for any other profile.

Replies

team who do. See App Store Connect Help > Role permissions for more information about roles and permissions. 2. Go to the Account page on the developer web site. 3. Pull down the menu at the top right and confirm that you're logged in to the right team. 4. If your app does not already have an explicit App ID, create one for it. See Developer Account Help > Register an App ID for instructions.

1. Make sure you have permission to create provisioning profiles. If not, you'll need to coordinate with the folks on your

To configure your app's target to use the profile: 1. Locate the dowloaded profile in the Finder. 2. Drop it on to Xcode.

> value of true. 2. Build your app for the device (not the simulator!). 3. In Terminal, run the following command to confirm that your app was signed with the entitlement:

"com.apple.developer.networking.multicast"

% codesign -d --entitlements :- /path/to/your.app | grep -A 1

4. Still in Terminal, run the following command to confirm that your profile allows use of the entitlement:

% security cms -D -i /path/to/your.app/embedded.mobileprovision | grep -A 1

<key>com.apple.developer.networking.multicast</key>

<key>com.apple.developer.networking.multicast</key>

3. In the project editor, select your target on the left.

No Additional Entitlements Page If, in step 7 of Create a Provisioning Profile, you don't see the Additional Entitlements page, check the following:

"com.apple.developer.networking.multicast"

response.

To use the multicast entitlement (com.apple.developer.networking.multicast) first ensure that you have an explicit

App ID, then enable the Multicast Networking additional capability on that App ID, and finally enable the entitlement in your

IMPORTANT These instructions assume you're building a typical app using Xcode with automatic code signing. Additional

team who do. See App Store Connect Help > Role permissions for more information about roles and permissions.

2. The Provision Profile field should say Xcode Managed Profile. Click the little info button next to that. In the popup

Groups capability. Xcode responds to this by creating an explicit App ID for your app. If you have no use for App Groups just

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Note These instructions were written for Xcode 12.4, iOS 14.4, and the developer web site at the time of publication.

Posted 5 days ago by eskimo (1)

If you still can't get it working, run through the process again taking a screen shot at each step. Then get back in touch with us by replying to the email that notified you of your request's approval, making sure to include your follow-up number in the

Adopt an Explicit App ID To determine whether your app already has an explicit App ID: 1. In Xcode, go to the Signing & Capabilities editor.

3. Pull down the menu at the top right and confirm that you're logged in to the right team.

- 3. Build your app for the device (not the simulator!). In Terminal, run the first command below to confirm that your app was signed with the entitlement. Still in Terminal, run the second command below to confirm that your profile allows use of the entitlement. 1% codesign -d --entitlements :- /path/to/your.app | grep -A 1 "com.apple.developer.networking.multicast"
- No Multicast Networking Additional Capability If, in step 3 of Configure Your App ID, you don't see the Multicast Networking additional capability, check the following:

<key>com.apple.developer.networking.multicast</key>

- That you're logged in to the right team (step 3 of *Preparatory Work*). This is the most common cause of this problem. If this doesn't help, wait a day and try again. It can take time for this access to propagate through our systems. If you still can't get it working, run through the process again taking a screen shot at each step. Then get back in touch with
- Posted 5 days ago by eskimo 🐧

- 11 May 2021 Renamed everything to better match the terms used by the developer web site for the new process.

Before getting started, you must prepare the ground: 1. Make sure you have permission to create App IDs and provisioning profiles. If not, coordinate with the folks on your team who do. See App Store Connect Help > Role permissions for more information about roles and permissions.

App ID.

Preparatory Work

4. Click Save. **Enable the Entitlement**

<key>com.apple.developer.networking.multicast</key> <true/> 10 ...

If, in step 3 of Configure Your App ID, you don't see the Multicast Networking additional capability, check the following:

• That you're not set up to use the old process, as described in the *Old Process* post below. If you are, follow those

If you still can't get it working, run through the process again taking a screen shot at each step. Then get back in touch with

us by replying to the email that notified you of your request's approval, making sure to include your follow-up number in the response. Posted 5 days ago by eskimo # 11

Create a Provisioning Profile To create a provisioning profile that includes the multicast additional capability:

Select iOS App Development and click Continue (you can repeat this process for a distribution profile later on).

7. You'll now find yourself on the Additional Entitlements page. Select Multicast Networking from the popup and click

Continue. If you don't see the Additional Entitlements page, or you don't see Multicast Networking listed there, see No

1. In the Account page on the developer web site, navigate to the Certificates, Identifiers & Profiles section.

4. Switch to the Signing & Capabilities tab. Disable "Automatically manage signing". 6. Select your profile from the Provisioning Profile popup. **Enable the Entitlement**

1. In your app's <u>entitlements</u> file, add a <u>com.apple.developer.networking.multicast</u> entry with a Boolean

<true/>

<true/>

instructions instead.

New Process

App ID.

4. Click Save.

value of true.

<true/>

<true/>

instructions instead.

2 ...

9

10 ...

response.

Games

Business

Education

WWDC

Configure Your App ID

Enable the Entitlement

• That you're logged in to the right team (step 3 of *Preparatory Work*). This is the most common cause of this problem. • That you chose to create an iOS App Development profile (step 4 of *Create a Provisioning Profile*). If this doesn't help, wait a day and try again. It can take time for this access to propagate through our systems.

• That you're not set up to use the new process, as described in the New Process post above. If you are, follow those

Preparatory Work Before getting started, you must prepare the ground: 1. Make sure you have permission to create App IDs and provisioning profiles. If not, coordinate with the folks on your

project. The following sections described each of those steps in detail.

2. Go to the Account page on the developer web site.

remove the capability afterwards; the explicit App ID will 'stick'.

The next step is to enable the entitlement in your project:

Enable app capabilities. 2. On the Edit Your App ID Configuration page, scroll to the bottom to the Additional Capabilities section. 3. Enable the Multicast Networking additional capability. If you don't see that capability, see No Multicast Networking Additional Capability below.

your App ID's allowlist. It responds to this by rebuilding the provisioning profile. Yay!

Once you have an explicit App ID, it's time to enable the Multicast Networking additional capability on it. To do this:

- 5 ... 6% security cms -D -i /path/to/your.app/embedded.mobileprovision | grep -A 1 "com.apple.developer.networking.multicast" 7 ... <key>com.apple.developer.networking.multicast</key>

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• That you're not set up to use the old process, as described in the Old Process post below. If you are, follow those

us by replying to the email that notified you of your request's approval, making sure to include your follow-up number in the

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Each process is covered in a follow-up post below. that require the old process. and Entitlements.

Share and Enjoy

Note Almost everyone should be using the new process, but I've left the old process post in place just in case there's still a few old process folks around. It also makes a good reference for folks who are using different additional capabilities, ones Quinn "The Eskimo!" @ Developer Technical Support @ Apple let myEmail = "eskimo" + "1" + "@" + "apple.com" • 30 Sep 2020 — First posted. 6 Oct 2020 — Made minor tweaks to the No Additional Entitlements Page section. 8 Oct 2020 — Expanded to cover the new process. • 17 Mar 2021 — Clarified why I've left the Old Process post in place. Rewrote the New Process post to use automatic code signing.

Entitlements Asked 7 months ago by eskimo 🕯 📫 Network **Apple Recommended Answer**

Greetings All I've received a number of requests for help from folks who've been granted access to the multicast entitlement (com.apple.developer.networking.multicast) but are having problems actually enabling it in their project. I wrote up some instructions for doing this and I'm sharing them here for the benefit of all. There are actually two processes involved here:

Using the Multicast Networking Additional Capability

This thread has been locked. Questions are automatically locked after two months of inactivity, or sooner if deemed necessary by a moderator.

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