Modio C# SDK 4.1.0

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Unity V1 Upgrade Guide

Where the Unity Plugin QuickStart Guide contains information to help you install and setup the new Unity Plugin in your project, this guide exists to assist with upgrading from mod.io Unity V1 to the new mod.io Unity Plugin by offering equivalent examples of the most common functions.

2.1 Why Upgrade to the New Plugin?

mod.io Unity Plugin V1 has been deprecated as structural and design decisions have made it impractical to continue maintaining and enhancing with new features and functionality.

Upgrading to the new mod.io Unity Plugin results in extended support, additional features, and improved user experience. It provides enhanced support for consoles and boasts a new UI, as well as numerous enhancements, enabling you to accomplish more with less code.

2.2 Core Differences

2.2.1 Interface

The new mod.io Unity Plugin has a simplified and clearer interface. All core functionality is accessible via Mod IOUnity.cs, or the asynchronous version ModIOUnityAsync.cs, located within the ModIO namespace. Additionally, the browser code is contained in Browser.cs in the ModIOBrowser namespace. No more calling functions from multiple static classes depending on the context!

2.2.2 Callbacks

All calls into async functions on the new mod.io Unity Plugin provide a single callback parameter with a Result or ResultAnd<T> parameter that will **always** be called at the conclusion of the operation. (Async methods return the result struct after an await instead.) This provides a much clearer calling convention and gives a guarantee of one operation completion - one callback invocation, rather than the two callbacks required by async functions in mod.io Unity V1.

Here is an example of the usage with a callback and an await:

```
{c#}
void CallbackExample()
```

```
ModIoUnity.GetMods(filter, (Result result, ModPage modPage)=>
{
    if (result.Succeeded())
    {
        // Success
    }
});
}
// OR
async void AsyncExample()
{
    ResultAnd<ModPage> getMods = await ModIoUnityAsync.GetMods(filter);
    if (getMods.result.Succeeded())
    {
        // Success
    }
}
```

2.3 Initializing the plugin

Initialization in mod.io Unity V1 was handled mostly statically, pulling the details from the Resources/modio_settings asset during static initialization. Optionally, a developer could set the user data directory by calling
UserDataStorage.SetActiveUser() as seen in the sample below.

```
{c#}
void modioUnityV1Example()
{
    // Optional (Sets the user data directory)
    string userProfileIdentifier = "local_game_user_id"; // Local User Account Identifier
    UserDataStorage.SetActiveUser(userProfileIdentifier, setActiveUserCallback);
}
```

Apart from this, there are no initialization possibilities in mod.io Unity V1.

For the new mod.io Unity Plugin, we have kept an automatic initialization option that pulls the data from the Resources/mod.io/config asset, similar to the function of mod.io Unity V1. However, there are also explicit initialization methods and shutdown methods that can be utilized if automatic initialization is disabled in the config asset.

```
{c#}
void InitializationExample()
{
    string userProfileIdentifier = "local_game_user_id"; // Local User Account Identifier
    Result result = ModIoUnity.InitializeForUser(userProfileIdentifier, initializationCallback);
    // Do work...
    ModIoUnity.Shutdown(shutdownCallback);
}
```

For further information, see the initialization documentation.

2.4 Getting and Synchronizing Subscription Data

mod.io Unity V1 built the synchronization of an authenticated user's subscription data into the UI code, meaning that a developer not using the sample browser would be responsible for ensuring that the user's subscriptions were kept in agreement with the server. This has not changed in the new mod.io Unity Plugin, but the process of keeping that data synchronized is much easier, along with fetching the data for the subscribed mods.

Adding, synchronizing, and retrieving subscription data in mod.io Unity V1 involves chaining multiple calls together.

```
void modioUnityVlExample()
{
   int newSubModId = 123;
   int newUnsubModId = 456;
   // This call adds the sub to the local cache and queues it for synchronization
   UserAccountManagement.SubscribeToMod(newSubModId);
   // This call adds the unsub to the local cache and queues it for synchronization
   UserAccountManagement.UnsubscribeFromMod(newUnsubModId);
   // Push local subscription changes to mod.io servers
   UserAccountManagement.PushSubscriptionChanges(
```

}

```
() => { /* chain callback into next section */ },
   (List<WebRequestError> unsortedErrorList) => { /* error callback code */ });
// Fetch remote subscription changes from mod.io servers
UserAccountManagement.PullSubscriptionChanges(
   (List<ModProfile> newRemoteSubscriptions) => { /* chain callback into next section */ },
   (WebRequestError error) => { /* error callback code */ });
// Get Mod Profiles for Subscribed Mods
List<int> subscribedModIds = LocalUser.subscribedModIds;
ModManager.GetModProfiles(modIds,
   (ModProfile[] modProfiles) => { /* success callback code */ },
   (WebRequestError error) => { /* error callback code */ });
```

The new mod.io Unity Plugin streamlines this process by reducing the need for callback chaining, synchronizing immediately for local changes, and removing the need to handle the mod ids. FetchUpdates () is the single synchronization function on the interface, handling all synchronization actions.

```
void Example()
{
   int newSubModId = 123;
   int newUnsubModId = 456;
   // Pushes a subscribe attempt directly to the server, returning an error on failure
   ModIoUnity.SubscribeToMod(newSubModId,
        (Result result) => { /* callback code */ });
   // Pushes an unsubscribe attempt directly to the server, returning an error on failure
   ModIoUnity.UnsubscribeFromMod(newUnsubModId,
        (Result result) => { /* callback code */ });
   // Synchronizes the local and server data
   ModIoUnity.FetchUpdates(
        (Result result) => { /* callback code */ };
   // Get Subscribed mod data
   SubscribedMod[] subscribedMods = ModIoUnity.GetSubscribedMods(out Result result);
}
```

Furthermore, the subscribe and unsubscribe operations automatically flag the mod as requiring installation/uninstallation, a responsibility placed on the consumer in mod.io Unity V1. (See below)

2.5 Listing the User's Installed Mods

Like in mod.io Unity V1, the new mod.io Unity Plugin allows the sharing of installed mods across multiple users to save network traffic and storage space.

mod.io Unity V1 didn't have a direct method of retrieving the mods installed for the current user. There are a variety of different methods that need to be chained together to retrieve a complete picture of the installed mod data.

```
void modioUnityV1Example()
    // Retrieves a de-identified list of mod directories for mods the user has "enabled"
    bool onlyEnabledMods = true;
    ModManager.QueryInstalledModDirectories(onlyEnabledMods,
        (List<string> installedModDirectories) => { /* callback code */ });
    // Retrieves a mapping of mod directories for mods the user has subscribed to
    List<int> subscriptions = LocalUser.subscribedModIds;
    ModManager.QueryInstalledMod(subscriptions,
        (IList<KeyValuePair<ModfileIdPair, string> modDirectoryMap) => { /* callback code */ });
    // Retrieves the data for the installed mods that the user has "enabled" with no directory
    bool onlyEnabledMods = true;
    ModManager.QueryInstalledModVersions(onlyEnabledMods,
        (List<ModfileIdPair> installedModVersions) =>
            // map the mod ids to a list
            List<int> modIds = installedModVersions.Select(x => x.modId).ToList();
            ModManager.GetModProfiles(modIds,
                 ({\tt ModProfile[] modProfiles}) \implies \{ \ /* \ {\tt success \ callback \ code} \ */ \ \},
                (WebRequestError error) => { /* error callback code */ });
        });
```

The new mod.io Unity Plugin makes this much simpler, giving you all the information in a single call, returning a <code>UserInstalledMod</code> array (and a <code>Result</code>).

```
{c#}
void Example()
{
    UserInstalledMod[] mods = ModIOUnity.GetInstalledModsForUser(out Result result);
}
```

2.6 Downloading, Updating and Uninstalling Mods

The new mod.io Unity Plugin has the business rules of "Subscription = install and update" built into it, such that the download, extract, and uninstall processes are managed automatically by the Mod Management Loop, a process that runs asynchronously to detect changes to the subscriptions and automate mod data management.

mod.io Unity V1 handled the installation and uninstallation of mods in the ModBrowser code, but any developer looking to exclude that code or understand the installation process had a more difficult time.

```
void modioUnityV1Example()
         /// === Add a new subscription and install ===
        int newSubModId = 123;
        // This call adds the sub to the local cache and queues it for synchronization UserAccountManagement.SubscribeToMod(newSubModId);
         // Push local subscription changes to mod.io servers
        {\tt UserAccountManagement.PushSubscriptionChanges(}
                  () => { /* chain callback into next section */ },
        (List<WebRequestError> unsortedErrorList) => { /* error callback code */ }); // Download and Install all mods (equivalent to new mod.io Unity Plugin)
        {\tt gameObject.StartCoroutine}~({\tt ModManager.DownloadAndUpdateMods\_Coroutine}~({\tt LocalUser.subscribedModIds, notations}) and {\tt ModManager.DownloadAndUpdateMods\_Coroutine}~({\tt ModManager.DownloadAndUpdateMods\_Coroutine}
                 () => { /* callback code */ }));
         /// === Remove a subscription and uninstall ===
        int newUnsubModId = 456;
        // This call adds the unsub to the local cache and queues it for synchronization
        UserAccountManagement.UnsubscribeFromMod(newUnsubModId);
        // Push local subscription changes to mod.io servers
        UserAccountManagement.PushSubscriptionChanges(
                 () => { /* chain callback into next section */ },
                  (List<WebRequestError> unsortedErrorList) => { /* error callback code */ });
        // Uninstall the mod
        ModManager.UninstallMod(newUnsubModId,
               (bool uninstallSuccess) => { /* callback code */ }); === Fetch remote data and fix installation state ===
         // Fetch remote subscription changes from mod.io servers
        UserAccountManagement.PullSubscriptionChanges(
                  (List<ModProfile> newRemoteSubscriptions) \Rightarrow { /* chain callback into next section */ },
        (WebRequestError error) => { /* error callback code */ }); // Download and Install all mods (equivalent to new mod.io Unity Plugin)
        gameObject.StartCoroutine(ModManager.DownloadAndUpdateMods_Coroutine(LocalUser.subscribedModIds,
                 () => { /* chain callback into next section */ }));
         // Calculate uninstall mods
        List<int> modsToUninstall = new List<int>();
List<int> subscribedModIds = LocalUser.subscribedModIds;
        ModManager.QueryInstalledModVersions(subscribedModIds,
                 (IList<KeyValuePair<ModfileIdPair, string» modDirectoryMap) =>
                                   if (!subscribedModIds.Contains (modDirectoryMap.Key.modId))
                                           modsToUninstall.Add (modDirectoryMap.Key.modId);
                          /* chain callback into next section */
        // uninstall mods
        foreach(int modId in modsToUninstall)
                 ModManager.UninstallMod((bool uninstallSuccess) => { /* callback code */ });
```

Of note, the uninstall process above, can't account for mods installed by other users on the system. This is one of the key processes that has been streamlined in the new mod.io Unity Plugin.

A call to <code>ModIOUnity.EnableModManagement</code> starts the background process of monitoring for subscription changes, and takes a (nullable) callback for mod management events. This can be disabled at any point with a call to <code>ModIOUnity.DisableModManagement</code>. Any changes invoked locally, and any changes retrieved with <code>ModIOUnity.FetchUpdates</code> are automatically queued and actioned.

```
/// === Remove a subscription and uninstall ===
int newUnsubModId = 456;
// Pushes the unsubcribe action to the server and flags it for uninstallation
ModIoUnity.UnsubscribeFromMod(newUnsubModId, (Result result) => /* callback code */);
// === Fetch remote data and fix installation state ===
// Synchronizes local and server data, flagging install/uninstall operations as required
ModIoUnity.FetchUpdates((Result result) => { /* callback code */ });
// Ends monitoring for changes and disables downloading/extracting/deleting of mod data
ModIoUnity.DisableModManagement();
}
```

Note: The Result returned from ModIOUnity.SubscribeToMod and ModIOUnity.Unsubscribe← FromMod indicate the outcome of the subscribe/unsubscribe attempt being sent to the server. For notification of the outcome of an installation/uninstallation operation, the delegate passed to ModIOUnity.EnableMod← Management will be invoked.

2.7 Authenticating a user

The new Plugin requires a user to be authenticated in order to download, install and manage mods. The plugin offers email authentication or numerous third party methods, such as Steam or Xbox.

2.7.1 Email Authentication

```
In the V1 Plugin you can authenticate via email in the following way:
```

```
{c#}
// TODO: EXAMPLE OF EMAIL AUTH IN V1
```

```
In the new Plugin you can do it like so:
```

```
async void RequestEmailCode()
{
    Result result = await ModIOUnityAsync.RequestAuthenticationEmail("johndoe@gmail.com");
    if (result.Succeeded())
    {
        Debug.Log("Succeeded to send security code");
    }
    else
    {
        Debug.Log("Failed to send security code to that email address");
    }
}
async void SubmitCode(string userSecurityCode)
{
    Result result = await ModIOUnityAsync.SubmitEmailSecurityCode(userSecurityCode);
    if (result.Succeeded())
    {
        Debug.Log("You have successfully authenticated the user");
    }
    else
    {
        Debug.Log("Failed to authenticate the user");
    }
}
```

2.7.2 Third party Authentication

```
In the V1 Plugin you can authenticate a user with a third party service like Steam:
```

```
In the new Plugin you can use the following:
```

```
{c#}
ModIOUnity.AuthenticateUserViaSteam(token, email, termsHash, callback);
```

(Note you can use ModIOUnityAsync to await instead.)

Be advised that you will need to get the terms of use hash key in order to properly authenticate. This requires the use of ModIOUnity.GetTermsOfUse. This is to ensure users view and accept the terms of use.

Here is a complete example getting the TOS hash and Authenticating via Steam:

```
{c#}
// Use this to cache the TOS we receive
TermsOfUse termsOfUse;
// This needs to be displayed to the user before they can authenticate
async void DisplayTOS()
{
    ResultAnd<TermsOfUse> tos = await ModIoUnityAsync.GetTermsOfUse();
    if (tos.result.Succeeded())
    {
        // Display the terms of use via a text field
            TextField.text = tos.value.termsOfUse;

        // cache the Terms of Use
            termsOfUse = tos.value;
    }
}
// If they agree after viewing the TOS you can attempt to authenticate with the TOS hash
async void AgreeAndAuthenticate(string token, string email)
{
    Result result = await ModIoUnityAsync.AuthenticateUserViaSteam(token, email, termsOfUse.hash);
    if (result.Succeeded())
        // Succeeded to authenticate via Steam
    }
}
```

2.8 Need more help?

If you require additional assistance you're welcome to contact us directly via email or on our Discord channel. Our team can help answer specific questions about the plugin and provide support.

README

3.1 mod.io Unity Plugin v2023.6.1

Welcome to the mod.io Unity Engine plugin repository. It allows game developers to host and automatically install user-created mods in their games which use **Unity 2019.4** or newer. It provides a UI for mod discovery, installation and collection management, and a C# interface which connects to the mod.io REST API.

3.1.1 Watch the video tutorial

3.1.2 Platform Support

Platform	Support
Windows	Yes
Windows (GDK)	Yes Contact us
XBox (GDK)	Yes Contact us
PlayStation 4	Yes Contact us
PlayStation 5	Yes Contact us
Nintendo Switch	Yes Contact us
Linux	Yes
macOS	Yes

3.1.2.1 Git Repository or .unitypackage

You can import the plugin directly from the Unity Asset Store, or by downloading the package directly from the Releases page. If you have any previous versions of the plugin installed, it is highly recommended to delete them before importing a newer version.

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Alternatively, you can download an archive of the code using GitHub's download feature and place it in the Assets/← Plugins directory within your Unity project.

3.1.3 Getting started

- 1. Set up your game profile on mod.io (or our private test environment) to get your game ID and API key.
- 2. Add the plugin to your project using the installation instructions above.
- 3. Ensure you dont have any conflicting libraries by going to Assets/Plugins/mod.io/ThirdParty to remove any libraries you may already have in your project (such as JsonNet).
- 4. Restart unity to ensure it recognises the new assembly definitions.
- 5. Go to Tools > mod.io > Edit Settings to locate the config file.
- 6. Select the config file and use the inspector to assign your game ID and API key in server settings (Make sure to deselect the config file before using playmode in the editor. A known unity bug can cause the editor to crash in 2019-2021).
- 7. Setup complete! Join us on Discord if you have any questions or need help.

3.1.4 Setting up the Browser UI

If you do not wish to create your own UI implementation you can use our default UI that comes built in to the plugin. Examples of how the UI looks are provided below. (If you dont wish to use the UI it is safe to delete the UI folder located at Assets/Plugins/mod.io/UI)

- 1. Follow the steps above to setup the config.
- 2. Navigate to the ModIOBrowser prefab at Assets/Plugins/mod.io/UI/Examples and drag it into your scene.
- 3. Use the ModlOBrowser.Browser.OpenBrowser() method to open the browser in your scene. Mod← IOBrowser.Browser.OpenBrowser(null)
- 4. The Browser UI is now setup!

3.1.5 Authentication

In the current version of the plugin it is required that a user session is authenticated. Either via email or through another third party, such as Steam or Google. The process is fairly simply. Examples can be found below.

3.1.6 Usage

below are a couple examples for some of the common usages of the plugin. Such as initialising, authenticating, enabling automatic downloads and installs, and getting a few mods from the mod.io server.

All of the methods required to use the plugin can be found in ModIOUnity.cs. If you prefer using async methods over callbacks you can alternatively use ModIOUnityAsync.cs to use an async variation of the same methods.

3.1.6.1 Initialise the plugin

```
{c#}
void Example()
{
    Result result ModIoUnity.InitializeForUser("ExampleUser");
    if (result.Succeeded())
    {
        Debug.Log("Initialised plugin");
    }
    else
    {
        Debug.Log("Failed to initialise plugin");
    {
}
```

3.1.6.2 Get the user's installed mods

```
{c#}
void Example()
{
    UserInstalledMod[] mods = ModIOUnity.GetInstalledModsForUser(out Result result);
    foreach(UserInstalledMod mod in mods)
    {
            // This is the location of the installed mod
            string directory = mod.directory;
    }
}
```

3.1.6.3 Enable automatic mod downloads and installs

```
{c#}
void Example()
{
    Result result = ModIoUnity.EnableModManagement(ModManagementDelegate);
    if (result.Succeeded())
    {
        Debug.Log("Enabled mod management");
    }
    else
    {
        Debug.Log("Failed to enable mod management");
    {
}
// The following method will get invoked whenever an event concerning mod management occurs void ModManagementDelegate(ModManagementEventType eventType, ModId modId, Result result)
{
        Debug.Log("a mod management event of type " + eventType.ToString() + " has been invoked");
}
```

3.1.6.4 Authenticate a user

In the current version of the plugin it is required that a user session is authenticated in order to subscribe and download mods. You can accomplish this with an email address or through another third party service, such as Steam or Google. Below is an example of how to do this from an email address provided by the user. A security code will be sent to their email account and can be used to authenticate (The plugin will cache the session token to avoid having to re-authenticate every time they run the application).

```
{c#}
async void RequestEmailCode()
{
    Result result = await ModIOUnityAsync.RequestAuthenticationEmail("johndoe@gmail.com");
    if (result.Succeeded())
    {
        Debug.Log("Succeeded to send security code");
    }
    else
    {
        Debug.Log("Failed to send security code to that email address");
    }
}
async void SubmitCode(string userSecurityCode)
{
    Result result = await ModIOUnityAsync.SubmitEmailSecurityCode(userSecurityCode);
    if (result.Succeeded())
```

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```
{
    Debug.Log("You have successfully authenticated the user");
}
else
{
    Debug.Log("Failed to authenticate the user");
}
```

3.1.6.5 Get Mod profiles from the mod.io server

```
{c#}
async void Example()
{
    // create a filter to retreive the first ten mods for your game
    SearchFilter filter = new SearchFilter();
    filter.SetPageIndex(0);
    filter.SetPageSize(10);

    ResultAnd<ModPage> response = await ModIoUnityAsync.GetMods(filter);
    if (response.result.Succeeded())
    {
        Debug.Log("ModPage has " + response.value.modProfiles.Length + " mods");
    }
    else
    {
        Debug.Log("failed to get mods");
    }
}
```

3.1.7 Submitting mods

You can also submit mods directly from the plugin. Refer to the documentation for methods such as Mod↔ IOUnity.CreateModProfile and ModIOUnity.UploadModfile.

Users can also submit mods directly from the mod.io website by going to your game profile page. Simply create an account and upload mods directly.

3.1.7.1 Adding a mod

Here we go through the mod addition flow. Generate Token, Create Mod Profile, and Upload Mod File

```
public async void CreateMod()
   //token used to create mod profile
   var token = ModIOUnity.GenerateCreationToken();
   //Mod profile specifics
   ModProfileDetails modDetails = new ModProfileDetails
       logo = GetTexture(),//the texture you will use for this mod's logo
       summary = "A brief summary of the mod.",
name = "Mod Name"
   //create the mod profile
   var createResultAnd = await ModIOUnityAsync.CreateModProfile(token, modDetails);
   if(!createResultAnd.result.Succeeded())
       return;//create mod unsuccessful
   //Points to a folder where all mod files are located (folder cannot be empty)
   ModfileDetails modFile = new ModfileDetails
       modId = createResultAnd.value,
       directory = "files/mods/mod_123"
   //upload the file to the mod profile
var result = await ModIOUnityAsync.UploadModfile(modFile);
   if(result.Succeeded())
       //Upload file successful!
```

3.1.7.2 Loading mods

Here is an example that grabs all mods installed for the current user, finds the png files in the mod's directory if they are tagged as a "Texture" and then loads them into a Texture2D asset.

```
{c#}
public void LoadModExample()
   UserInstalledMod[] mods = ModIOUnity.GetInstalledModsForUser(out Result result);
   if (result.Succeeded())
      foreach (var mod in mods)
          //Tags are USER defined strings for a game and are setup in the web portal.
          string textureTag = "Texture";
          string directoryWithInstalledMod = mod.directory;
          //Optionally, you may want to use tags to help you determine the files to look for in an installed
      mod folder
          if(!mod.modProfile.tags.Contains(textureTag))
              //Get all files in a directory
string[] filePaths = System.IO.Directory.GetFiles(directoryWithInstalledMod);
              foreach(var path in filePaths)
                   //Find .png files so that we can convert them into textures
                   if (path.EndsWith(".png"))
                      Texture2D tex = new Texture2D(1024, 1024);
                       //Load a texture from directory
                      tex.LoadImage(File.ReadAllBytes(path));
                       //Now you can replace the current texture in your game with the new one
                  }
        }
    }
```

3.1.8 Dependencies

The mod.io Unity Plugin requires the functionality of two other open-source Unity plugins to run. These are included as libraries in the UnityPackage in the Assets/Plugins/mod.io/ThirdParty directory:

- Json.Net for improved Json serialization. (GitHub Repo | Unity Asset Store Page)
- SharpZipLib to zip and unzip transmitted files. (GitHub Repo)

3.1.9 Benefits

mod.io offers the same core functionality as Steamworks Workshop (1 click mod installs in-game), plus mod hosting, moderation and all of the critical pieces needed. Where we differ is our approach to modding and the flexibility a REST API offers. For example:

- We make mods cross platform accessible. That means users can upload a mod on PC and someone else can play it on the Xbox, for example.
- Our API is not dependent on a client, platform or SDK, allowing you to run mod.io in many places such as your homepage and launchers.
- Designing a good mod browsing UI is hard, our plugin ships with a UI built in to save you a lot of effort and help your mods stand out.
- We don't apply rules globally, so if you want to enable patronage, sales or other experimental features, reach out to discuss.
- · Our platform is built by the super experienced ModDB.com team and is continually improving for your benefit.
- · Your community can consume the mod.io API to build modding fan sites or discord bots if they want.

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3.1.10 Game studios and Publishers

If you need assistance with 1st party approvals, or require a private, white-label UGC solution. Contact us to discuss.

3.1.11 Contributions Welcome

Our Unity plugin is public and open source. Game developers are welcome to utilize it directly, to add support for mods in their games, or fork it for their games customized use. Want to make changes to our plugin? Submit a pull request with your recommended changes to be reviewed.

3.1.12 Other Repositories

Our aim with mod.io, is to provide an open modding API. You are welcome to view, fork and contribute to our other codebases in use.

Namespace Index

4.1 Package List

Here are the packages with brief descriptions (if available):

IO	23
IO.Implementation	26
IO.Implementation.API	26
IIO.Implementation.API.Objects	26
10.Util	26
jins	27
ins.mod	27
jins.mod.io	27
jins.mod.io.Runtime	27
ins.mod.io.Runtime.Utility	27

16 Namespace Index

Hierarchical Index

5.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

ModIO.AuthenticationServiceProviderExtensions
ModIO.BuildSettings
CommentDetails
ModIO.CommentPage
ModIO.CreationToken
ModIO.DownloadReference
ModIO.IModIoWebRequest
ModIO.ModIoWebRequest
ModIO.InstalledMod
ModIO.Implementation.InstalledModExtensions
ModIO.Util.ISimpleMessage
ModIO.Util.ISimpleMonoSingleton
ModIO.Util.MonoSingleton < T >
${\sf ModIO.Util.SelfInstancingMonoSingleton} < T > \dots $
ModIO.ModComment
ModIO.Implementation.API.Objects.ModDependencies
ModIO.Implementation.API.Objects.ModDependenciesObject
ModIO.ModfileDetails
ModIO.ModId
ModIO.ModIOUnity
ModIO.ModIOUnityAsync
ModIO.ModPage
ModIO.ModProfile
ModIO.ModProfileDetails
ModIO.ModStats
MonoBehaviour
ModIO.Util.MonoSingleton < T >
ModIO.Util.SelfInstancingMonoSingleton < T >
ModIO.Util.Mutex
ModIO.ProgressHandle
ModIO.Implementation.API.Objects.Rating
ModIO.Implementation.API.Objects.RatingObject
ModIO.Report
ModIO.Result
$ModIO.ResultAnd < T > \dots $

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Class Index

6.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

ModIO.AuthenticationServiceProviderExtensions	29
ModIO.BuildSettings	
Build-specific configuration values. This can be setup directly from the inspector when editing	
the config settings file, or you can instantiate and use this at runtime with the Initialize method .	29
CommentDetails	30
ModIO.CommentPage	
A struct containing the ModComments and total number of remaining results that can be acquired	
with the SearchFilter used in the GetMods request	30
Plugins.mod.io.Runtime.Utility.CoroutineRunner	31
ModIO.CreationToken	
This is used with creating new mod profiles. Using a token ensures you dont create duplicate	
profiles	32
ModIO.DownloadReference	
Used in ModIOUnity.DownloadTexture() to get the Texture. (DownloadReference is serializable	
with Unity's JsonUtility)	32
ModIO.IModIoWebRequest	33
ModIO.InstalledMod	
Struct used to represent a mod that already exists on the current device. You can view the	
subscribed users to this mod as well as the directory and modprofile associated to it	34
ModIO.Implementation.InstalledModExtensions	35
ModIO.Util.ISimpleMessage	35
ModIO.Util.ISimpleMonoSingleton	35
ModIO.ModComment	36
ModIO.Implementation.API.Objects.ModDependencies	
A struct representing all of the information available for a Mod's Dependencies.	37
ModIO.Implementation.API.Objects.ModDependenciesObject	
A struct representing all of the information available for a ModDependenciesObject	37
ModIO.ModfileDetails	38
ModIO.ModId	
A struct representing the globally unique identifier for a specific mod profile.	38
ModIO.ModIOUnity	
Main interface for the mod.io Unity plugin. Every method within ModIOUnity.cs that has a callback	
can also be found in ModIOUnityAsync with an asynchronous alternative method (if you'd rather	
not use callbacks)	39

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ModIO.ModIOUnityAsync	
Main async interface for the mod.io Unity plugin. Every method within ModlOUnity.cs that has a callback can also be found in ModlOUnityAsync with an asynchronous alternative method (if	
you'd rather not use callbacks)	80
ModIO.ModIoWebRequest	109
A struct containing the ModProfiles and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.	111
ModIO.ModProfile	
	112
ModIO.ModProfileDetails	
Use this class to fill out the details of a Mod Profile that you'd like to create or edit. If you're submitting this via CreateModProfile you must assign values to logo, name and summary, otherwise the submission will be rejected (All fields except modId are optional if submitting this via EditModProfile)	114
ModIO.ModStats	
Detailed stats about a Mod's ratings, downloads, subscribers, popularity etc	
$\label{local_decomposition} \begin{split} & ModIO.Util.MonoDispatcher & \ldots & $	
ModIO.Util.Mutex	119
This serves only as an abstract handle for using lock(mutex) to synchronize IO operations	120
ModIO.ProgressHandle	0
A ProgressHandle can only be used to monitor the progress of an operation and cannot be used to cancel or suspend ongoing operations. The OperationType enum field specifies what type of	
operation this handle is for. The Progress field can be used to get the percentage (0.0 - 1.0)	
of the progress. The Completed and Failed fields can be used to determine if the operation is	101
complete and whether or not it failed	121
A struct representing all of the information available for a Rating.	122
ModIO.Implementation.API.Objects.RatingObject A struct representing all of the information available for a ModDependenciesObject	122
ModIO.Report	122
Used in conjunction with ModIOUnity.Report() to send a report to the mod.io server for a specific	
mod	123
ModIO.Result	
Struct returned from ModIO callbacks to inform the caller if the operation succeeded	124
${\sf ModIO.ResultAnd} < {\sf T}>$	
Convenience wrapper for essentially a Tuple	125
Used to build a filter that is sent with requests for retrieving mods.	125
$ModIO. Util. SelfInstancing Mono Singleton < T > \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	129
ModIO.ServerSettings	
Describes the server settings to use for the ModIO Plugin. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with	
the Initialize method	131
ModIO.Util.SimpleMessageHub	131
ModIO.Util.SimpleMessageUnsubscribeToken	133
$\label{eq:modIO.Util.SimpleSingleton} \mbox{ModIO.Util.SimpleSingleton} < \mbox{T} > \ \dots \$	134
ModIO.SubscribedMod	
Represents the ModProfile of a mod the current user has subscribed to. Contains the status and a directory (if installed) and the associated ModProfile.	134
ModIO.Tag	
Represents a Tag that can be assigned to a mod	135
Represents a particular category of tags.	135
ModIO.TermsHash	
This is the hash that identifies the TOS. Used to validate the TOS requirement when attempting to authenticate a user.	136
to autherthoate a user.	130

6.1 Class List 21

ModIO.TermsOfUse	
TOS object received from a successful use of ModIOUnity.GetTermsOfUse This is used when attempting to authenticate via a third party. You must retrieve the TOS and input it along with an authentication request.	136
ModIO.TermsOfUseLink	
Represents a url as part of the TOS. The 'required' field can be used to determine whether or not it is a TOS requirement to be displayed to the end user when viewing the TOS text	137
ModIO.UserInstalledMod	
Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it	137
ModIO.UserProfile	
Represents a particular mod.io user with their username, DownloadReferences for getting their	
avatar, as well as their language and timezone.	138
ModIO.Util.Utility	139

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Namespace Documentation

7.1 ModIO Namespace Reference

Classes

- · class AuthenticationServiceProviderExtensions
- · class BuildSettings

Build-specific configuration values. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

struct CommentPage

A struct containing the ModComments and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

class CreationToken

This is used with creating new mod profiles. Using a token ensures you dont create duplicate profiles.

struct DownloadReference

Used in ModIOUnity.DownloadTexture() to get the Texture. (DownloadReference is serializable with Unity's Json← I Itility)

- interface IModloWebRequest
- struct InstalledMod

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

- struct ModComment
- class ModfileDetails
- struct ModId

A struct representing the globally unique identifier for a specific mod profile.

class ModIOUnity

Main interface for the mod.io Unity plugin. Every method within ModlOUnity.cs that has a callback can also be found in ModlOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks)

· class ModIOUnityAsync

Main async interface for the mod.io Unity plugin. Every method within ModlOUnity.cs that has a callback can also be found in ModlOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks).

- class ModloWebRequest
- struct ModPage

A struct containing the ModProfiles and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

struct ModProfile

A struct representing all of the information available for a ModProfile.

· class ModProfileDetails

Use this class to fill out the details of a Mod Profile that you'd like to create or edit. If you're submitting this via CreateModProfile you must assign values to logo, name and summary, otherwise the submission will be rejected (All fields except modId are optional if submitting this via EditModProfile)

struct ModStats

Detailed stats about a Mod's ratings, downloads, subscribers, popularity etc

· class ProgressHandle

A ProgressHandle can only be used to monitor the progress of an operation and cannot be used to cancel or suspend ongoing operations. The OperationType enum field specifies what type of operation this handle is for. The Progress field can be used to get the percentage (0.0 - 1.0) of the progress. The Completed and Failed fields can be used to determine if the operation is complete and whether or not it failed.

class Report

Used in conjunction with ModIOUnity.Report() to send a report to the mod.io server for a specific mod.

struct Result

Struct returned from ModIO callbacks to inform the caller if the operation succeeded.

class ResultAnd

Convenience wrapper for essentially a Tuple.

· class SearchFilter

Used to build a filter that is sent with requests for retrieving mods.

struct ServerSettings

Describes the server settings to use for the ModIO Plugin. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

struct SubscribedMod

Represents the ModProfile of a mod the current user has subscribed to. Contains the status and a directory (if installed) and the associated ModProfile.

struct Tag

Represents a Tag that can be assigned to a mod.

struct TagCategory

Represents a particular category of tags.

struct TermsHash

This is the hash that identifies the TOS. Used to validate the TOS requirement when attempting to authenticate a user.

struct TermsOfUse

TOS object received from a successful use of ModlOUnity. GetTermsOfUse This is used when attempting to authenticate via a third party. You must retrieve the TOS and input it along with an authentication request.

• struct TermsOfUseLink

Represents a url as part of the TOS. The 'required' field can be used to determine whether or not it is a TOS requirement to be displayed to the end user when viewing the TOS text.

· struct UserInstalledMod

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

struct UserProfile

Represents a particular mod.io user with their username, DownloadReferences for getting their avatar, as well as their language and timezone.

Enumerations

- · enum AuthenticationServiceProvider
- · enum AvatarSize
- · enum CommunityOptions
- enum ContentWarnings
- · enum LogLevel

The logging level of the plugin. Used in BuildSettings to determine which log messages to ignore or display.

- enum ModManagementEventType
- enum ModManagementOperationType
- · enum ModRating
- · enum ModStatus
- · enum OculusDevice
- enum PlayStationEnvironment
- enum ReportType
- enum SortModsBy

Category to be used in the SearchFilter for determining how mods should be filtered in a request.

• enum SubscribedModStatus

The current state of a subscribed mod. Useful for checking whether or not a mod has been installed yet or if there was a problem trying to download/install it.

· enum UserPortal

Values representing the valid User Portals that mod.io works with. Used when setting up BuildSettings.

Functions

• delegate void LogMessageDelegate (LogLevel logLevel, string logMessage)

Logging delegate that can be assigned via ModIOUnity.SetLogMessageDelegate.

 delegate void ModManagementEventDelegate (ModManagementEventType eventType, ModId modId, Result eventResult)

A delegate that gets invoked each time a new ModManagement event happens (download, install, subscribe, etc)

7.1.1 Enumeration Type Documentation

7.1.1.1 SortModsBy

enum ModIO.SortModsBy

Category to be used in the SearchFilter for determining how mods should be filtered in a request.

See also

SearchFilter, ModIOUnity.GetMods, ModIOUnityAsync.GetMods

7.1.1.2 SubscribedModStatus

enum ModIO.SubscribedModStatus

The current state of a subscribed mod. Useful for checking whether or not a mod has been installed yet or if there was a problem trying to download/install it.

See also

SubscribedMod

7.1.1.3 UserPortal

enum ModIO.UserPortal

Values representing the valid User Portals that mod.io works with. Used when setting up BuildSettings.

See also

BuildSettings

7.2 ModIO.Implementation Namespace Reference

Classes

class InstalledModExtensions

7.3 ModIO.Implementation.API Namespace Reference

7.4 ModIO.Implementation.API.Objects Namespace Reference

Classes

struct ModDependencies

A struct representing all of the information available for a Mod's Dependencies.

struct ModDependenciesObject

A struct representing all of the information available for a ModDependenciesObject.

struct Rating

A struct representing all of the information available for a Rating.

struct RatingObject

A struct representing all of the information available for a ModDependenciesObject.

7.5 ModIO.Util Namespace Reference

Classes

- · interface ISimpleMessage
- interface ISimpleMonoSingleton
- · class MessagePoke
- · class MonoDispatcher
- class MonoSingleton
- · class Mutex

This serves only as an abstract handle for using lock(mutex) to synchronize IO operations

- · class PrefabPool
- class SelfInstancingMonoSingleton
- · class SimpleMessageHub
- · class SimpleMessageHubTester
- class SimpleMessageUnsubscribeToken
- class SimpleSingleton
- · class Utility

- 7.6 Plugins Namespace Reference
- 7.7 Plugins.mod Namespace Reference
- 7.8 Plugins.mod.io Namespace Reference
- 7.9 Plugins.mod.io.Runtime Namespace Reference
- 7.10 Plugins.mod.io.Runtime.Utility Namespace Reference

Classes

• class CoroutineRunner

Chapter 8

Class Documentation

8.1 ModIO.AuthenticationServiceProviderExtensions Class Reference

Static Public Member Functions

- static string **GetProviderName** (this AuthenticationServiceProvider provider)
- static string GetTokenFieldName (this AuthenticationServiceProvider provider)

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Enums/AuthenticationServiceProvider.cs

8.2 ModIO.BuildSettings Class Reference

Build-specific configuration values. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

Public Member Functions

• BuildSettings (BuildSettings buildSettings)

Public Attributes

LogLevel logLevel

Level to log at.

UserPortal userPortal

Portal the game will be launched through.

uint requestCacheLimitKB

Size limit for the request cache.

8.2.1 Detailed Description

Build-specific configuration values. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

See also

ServerSettings, ModIOUnity.InitializeForUser, ModIOUnityAsync.InitializeForUser

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/BuildSettings.cs

8.3 CommentDetails Class Reference

Public Member Functions

· CommentDetails (long replyId, string content)

Public Attributes

· long replyId

Id of the parent comment this comment is replying to (can be 0 if the comment is not a reply).

· string content

Contents of the comment.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/CommentDetails.cs

8.4 ModIO.CommentPage Struct Reference

A struct containing the ModComments and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

Public Attributes

• ModComment[] CommentObjects

The mod profiles retrieved from this pagination request

· long totalSearchResultsFound

the total results that could be found. eg there may be a total of 1,000 comments but this CommentPage may only contain the first 100, depending on the SearchFilter pagination settings.

8.4.1 Detailed Description

A struct containing the ModComments and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

See also

ModIOUnity.GetModComments, ModIOUnityAsync.GetModComments

8.4.2 Member Data Documentation

8.4.2.1 CommentObjects

ModComment [] ModIO.CommentPage.CommentObjects

The mod profiles retrieved from this pagination request

See also

ModIOUnity.GetModComments, ModIOUnityAsync.GetModComments

8.4.2.2 totalSearchResultsFound

long ModIO.CommentPage.totalSearchResultsFound

the total results that could be found. eg there may be a total of 1,000 comments but this CommentPage may only contain the first 100, depending on the SearchFilter pagination settings.

See also

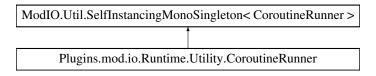
SearchFilter, SearchFilter.SetPageIndex, SearchFilter.SetPageSize, ModIOUnity.GetModComments, ModIOUnityAsync.GetModComments

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/CommentPage.cs

8.5 Plugins.mod.io.Runtime.Utility.CoroutineRunner Class Reference

Inheritance diagram for Plugins.mod.io.Runtime.Utility.CoroutineRunner:



Public Member Functions

• Coroutine Run (IEnumerator coroutine)

Additional Inherited Members

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/CoroutineRunner.cs

8.6 ModIO.CreationToken Class Reference

This is used with creating new mod profiles. Using a token ensures you dont create duplicate profiles.

Private Attributes

string creationTokenFileHash

8.6.1 Detailed Description

This is used with creating new mod profiles. Using a token ensures you dont create duplicate profiles.

See also

ModIOUnity.GenerateCreationToken, ModIOUnityAsync.CreateModProfile, ModIOUnity.CreateModProfile

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Classes/CreationToken.cs

8.7 ModIO.DownloadReference Struct Reference

Used in ModIOUnity.DownloadTexture() to get the Texture. (DownloadReference is serializable with Unity's Json ← Utility)

Public Member Functions

bool IsValid ()

Check if there is a valid url for this image. You may want to check this before using the ModIOUnity.DownloadTexture method.

Public Attributes

- ModId modId
- string url
- · string filename

8.7.1 Detailed Description

Used in ModIOUnity.DownloadTexture() to get the Texture. (DownloadReference is serializable with Unity's Json ← Utility)

See also

 $ModIOUnity. Download Texture, \, ModIOUnity A sync. Download Texture \,$

8.7.2 Member Function Documentation

8.7.2.1 IsValid()

```
bool ModIO.DownloadReference.IsValid ( )
```

Check if there is a valid url for this image. You may want to check this before using the ModIOUnity.DownloadTexture method.

See also

ModIOUnity.DownloadTexture, ModIOUnityAsync.DownloadTexture

Returns

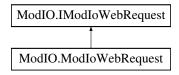
true if the url isn't null

The documentation for this struct was generated from the following file:

 $\bullet \ \ Assets/Plugins/mod.io/Runtime/Structs/DownloadReference.cs$

8.8 ModIO.IModIoWebRequest Interface Reference

Inheritance diagram for ModIO.IModIoWebRequest:



Public Member Functions

· string GetResponseHeader (string name)

Properties

- boolisDone [get]
- ulong downloadedBytes [get]
- ulong uploadedBytes [get]
- float downloadProgress [get]
- float uploadProgress [get]

The documentation for this interface was generated from the following file:

Assets/Plugins/mod.io/Runtime/Interfaces/IModIoWebRequest.cs

8.9 ModIO.InstalledMod Struct Reference

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

Public Attributes

List< long > subscribedUsers

The usernames of all the known users on this device that are subscribed to this mod

bool updatePending

Whether or not the mod has been marked for an update

· string directory

the directory of where this mod is installed

· string metadata

The metadata for the version of the mod that is currently installed (Not to be mistaken with the metadata located inside of ModProfile.cs)

string version

the version of this installed mod

string changeLog

the change log for this version of the installed mod

DateTime dateAdded

The date that this version of the mod was submitted to mod.io

ModProfile modProfile

The profile of this mod, including the summary and name

• bool enabled

Whether the mod has been marked as enabled or disabled by the user

8.9.1 Detailed Description

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

See also

ModIOUnity.GetSystemInstalledMods, ModProfile

8.9.2 Member Data Documentation

8.9.2.1 enabled

bool ModIO.InstalledMod.enabled

Whether the mod has been marked as enabled or disabled by the user

See also

ModIOUnity.EnableMod, ModIOUnity.DisableMod

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/InstalledMod.cs

8.10 ModIO.Implementation.InstalledModExtensions Class Reference

Static Public Member Functions

• static UserInstalledMod AsInstalledModsUser (this InstalledMod mod, long userId)

The documentation for this class was generated from the following file:

 $\bullet \ \, Assets/Plugins/mod.io/Runtime/Structs/InstalledModExtensions.cs$

8.11 ModIO.Util.ISimpleMessage Interface Reference

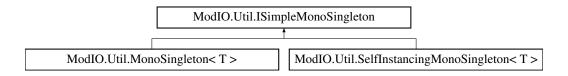
Inherited by ModIO.Util.MessagePoke.

The documentation for this interface was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/SimpleMessageHub.cs

8.12 ModIO.Util.ISimpleMonoSingleton Interface Reference

Inheritance diagram for ModIO.Util.ISimpleMonoSingleton:



Public Member Functions

• void SetupSingleton ()

The documentation for this interface was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Utility/SelfInstancingMonoSingleton.cs

8.13 ModIO.ModComment Struct Reference

Public Attributes

• long id

Unique id of the comment.

ModId modId

Unique id of the parent mod. This is now deprecated and will be removed in future API versions, please use resource_id instead.

· long resourceld

Unique id of the resource.

long submittedBy

Unique id of the user who posted the comment.

· long dateAdded

Unix timestamp of date comment was posted.

string threadPosition

Levels of nesting in a comment thread. You should order by this field, to maintain comment grouping. How it works:

· long karma

Karma received for the comment (can be positive or negative).

· CommentDetails commentDetails

8.13.1 Member Data Documentation

8.13.1.1 threadPosition

string ModIO.ModComment.threadPosition

Levels of nesting in a comment thread. You should order by this field, to maintain comment grouping. How it works:

- The first comment will have the position '01'.
- The second comment will have the position '02'.

If someone responds to the second comment the position will be '02.01'.

A maximum of 3 levels is supported.

The documentation for this struct was generated from the following file:

Assets/Plugins/mod.io/Runtime/Structs/ModComment.cs

8.14 ModIO.Implementation.API.Objects.ModDependencies Struct Reference

A struct representing all of the information available for a Mod's Dependencies.

Public Attributes

- ModId modId
- · string modName
- · DateTime dateAdded

8.14.1 Detailed Description

A struct representing all of the information available for a Mod's Dependencies.

See also

ModIOUnity.GetModDependencies, ModIOUnityAsync.GetModDependencies, ModDependenciesObject

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/ModDependencies.cs

8.15 ModIO.Implementation.API.Objects.ModDependenciesObject Struct Reference

A struct representing all of the information available for a ModDependenciesObject.

Public Attributes

- int mod_id
- string mod_name
- · int date added

8.15.1 Detailed Description

A struct representing all of the information available for a ModDependenciesObject.

See also

ModIOUnity.GetModDependencies, ModIOUnityAsync.GetModDependencies

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/ModDependenciesObject.cs

8.16 ModIO.ModfileDetails Class Reference

Public Attributes

· Modld? modld

Modld of the mod that you wish to upload the modfile to. (Must be assigned)

· string directory

The directory containing all of the files that makeup the mod. The directory and all of its contents will be compressed and uploaded when submitted via ModIOUnity. UploadModfile.

· string changelog

the changelog for this file version of the mod.

· string version

The version number of this modfile as a string (eg 0.2.11)

string metadata

Your own custom metadata that can be uploaded with the modfile.

8.16.1 Member Data Documentation

8.16.1.1 metadata

string ModIO.ModfileDetails.metadata

Your own custom metadata that can be uploaded with the modfile.

the metadata has a maximum size of 50,000 characters.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Classes/ModfileDetails.cs

8.17 ModIO.ModId Struct Reference

A struct representing the globally unique identifier for a specific mod profile.

Public Member Functions

· ModId (long id)

Static Public Member Functions

- static implicit operator long (ModId id)
- static operator ModId (long id)

Static Public Attributes

static readonly Modld Null = new Modld(0L)

Properties

• long id [get, set]

Private Attributes

long id

8.17.1 Detailed Description

A struct representing the globally unique identifier for a specific mod profile.

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/ModID.cs

8.18 ModIO.ModIOUnity Class Reference

Main interface for the mod.io Unity plugin. Every method within ModIOUnity.cs that has a callback can also be found in ModIOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks)

Static Public Member Functions

static bool IsInitialized ()

You can use this to quickly identify whether or not the plugin has been initialized.

• static void SetLoggingDelegate (LogMessageDelegate loggingDelegate)

Assigns the logging delegate the plugin uses to output log messages that otherwise go to UnityEngine.Debug.← Log(string)

static Result InitializeForUser (string userProfileIdentifier, ServerSettings serverSettings, BuildSettings buildSettings)

Initializes the Plugin using the provided settings for a specified user. Loads the local state of mods installed on the system as well as relevant mods to the user. Loads the state of mods installed on the system as well as the set of mods the specified user has installed on this device.

• static Result InitializeForUser (string userProfileIdentifier)

Initializes the Plugin using the provided settings for a specified user. Loads the local state of mods installed on the system as well as relevant mods to the user. Loads the state of mods installed on the system as well as the set of mods the specified user has installed on this device.

static void Shutdown (Action shutdownComplete)

Cancels any running public operations, frees plugin resources, and invokes any pending callbacks with a cancelled result code.

static void RequestAuthenticationEmail (string emailaddress, Action< Result > callback)

Sends an email with a security code to the specified Email Address. The security code is then used to Authenticate the user session using ModlOUnity.SubmitEmailSecurityCode()

• static void SubmitEmailSecurityCode (string securityCode, Action< Result > callback)

Attempts to Authenticate the current session by submitting a security code received by email from ModIOUnity. RequestAuthenticationEmail

static void GetTermsOfUse (Action < ResultAnd < TermsOfUse > > callback)

This retrieves the terms of use text to be shown to the user to accept/deny before authenticating their account via a third party provider, eg steam or google.

static void AuthenticateUserViaSteam (string steamToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the steam API.

static void AuthenticateUserViaEpic (string epicToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the epic API.

static void AuthenticateUserViaGOG (string gogToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the GOG API.

static void AuthenticateUserViaPlayStation (string authCode, string emailAddress, TermsHash? hash, Play
 —
 StationEnvironment environment, Action < Result > callback)

Attempts to authenticate a user via the GOG API.

static void AuthenticateUserVialtch (string itchioToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the Itch.io API.

static void AuthenticateUserViaXbox (string xboxToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the Xbox API.

static void AuthenticateUserViaSwitch (string SwitchNsald, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the switch API.

 static void AuthenticateUserViaDiscord (string discordToken, string emailAddress, TermsHash? hash, Action< Result > callback)

Attempts to authenticate a user via the Discord API.

static void AuthenticateUserViaGoogle (string googleToken, string emailAddress, TermsHash? hash, Action
 Result > callback)

Attempts to authenticate a user via the Google API.

• static void AuthenticateUserViaOculus (OculusDevice oculusDevice, string nonce, long userld, string oculusToken, string emailAddress, TermsHash? hash, Action< Result > callback)

Attempts to authenticate a user via the Oculus API.

static void IsAuthenticated (Action < Result > callback)

Informs you if the current user session is authenticated or not.

static Result LogOutCurrentUser ()

De-authenticates the current Mod.io user for the current session and clears all user-specific data stored on the current device. Installed mods that do not have other local users subscribed will be uninstalled if ModIOUnity.EnableModManagement() has been used to enable the mod management system. (If ModManagement is enabled).

static void GetTagCategories (Action < ResultAnd < TagCategory[] > > callback)

Gets the existing tags for the current game Id that can be used when searching/filtering mods.

static void GetMods (SearchFilter filter, Action < ResultAnd < ModPage > > callback)

Uses a SearchFilter to retrieve a specific Mod Page and returns the ModProfiles and total number of mods based on the Search Filter.

static void GetMod (ModId modId, Action < ResultAnd < ModProfile > > callback)

Requests a single ModProfile from the mod.io server by its Modld.

static void GetModComments (ModId modId, SearchFilter filter, Action< ResultAnd< CommentPage > > callback)

Get all comments posted in the mods profile. Successful request will return an array of Comment Objects. We recommended reading the filtering documentation to return only the records you want.

static void GetModDependencies (ModId modId, Action < ResultAnd < ModDependencies[] > > callback)

Retrieves a list of ModDependenciesObjects that represent mods that depend on a mod.

static void GetCurrentUserRatings (Action < ResultAnd < Rating[] > > callback)

Get all mod rating's submitted by the authenticated user. Successful request will return an array of Rating Objects.

static void GetCurrentUserRatingFor (ModId modId, Action < ResultAnd < ModRating > > callback)

Gets the rating that the current user has given for a specified mod. You must have an authenticated session for this to be successful.

static void RateMod (ModId modId, ModRating rating, Action < Result > callback)

Used to submit a rating for a specified mod.

static void SubscribeToMod (ModId modId, Action < Result > callback)

Adds the specified mod to the current user's subscriptions.

static void UnsubscribeFromMod (ModId modId, Action < Result > callback)

Removes the specified mod from the current user's subscriptions.

static SubscribedMod[] GetSubscribedMods (out Result result)

Retrieves all of the subscribed mods for the current user.

static void GetCurrentUser (Action < ResultAnd < UserProfile > > callback)

Gets the current user's UserProfile struct. Containing their mod.io username, user id, language, timezone and download references for their avatar.

static void MuteUser (long userId, Action < Result > callback)

Mutes a user which effectively hides any content from that specified user

static void UnmuteUser (long userId, Action < Result > callback)

Un-mutes a user which effectively reveals previously hidden content from that user

static void FetchUpdates (Action < Result > callback)

This retrieves the user's subscriptions from the mod.io server and synchronises it with our local instance of the user's subscription data. If mod management has been enabled via ModIOUnity.EnableModManagement() then it may begin to install/uninstall mods.

• static Result EnableModManagement (ModManagementEventDelegate modManagementEventDelegate)

Enables the mod management system. When enabled it will automatically download, install, update and delete mods according to the authenticated user's subscriptions.

• static Result DisableModManagement ()

Disables the mod management system and cancels any ongoing jobs for downloading or installing mods.

static ProgressHandle GetCurrentModManagementOperation ()

Returns a ProgressHandle with information on the current mod management operation.

• static InstalledMod[] GetSystemInstalledMods (out Result result)

Gets an array of mods that are installed on the current device.

• static UserInstalledMod[] GetInstalledModsForUser (out Result result, bool includeDisabledMods=false)

Gets an array of mods that are installed for the current user.

static Result ForceUninstallMod (ModId modId)

This informs the mod management system that this mod should be uninstalled if not subscribed by the current user. (such as a mod installed by a different user not currently active).

static bool IsModManagementBusy ()

Checks if the automatic management process is currently awake and performing a mod management operation, such as installing, downloading, uninstalling, updating.

- static bool EnableMod (ModId modId)
- static bool **DisableMod** (ModId modId)
- static void AddDependenciesToMod (ModId modId, ICollection < ModId > dependencies, Action < Result > callback)

Adds the specified mods as dependencies to an existing mod.

static void RemoveDependenciesFromMod (ModId modId, ICollection ModId > dependencies, Action Result > callback)

Removes the specified mods as dependencies for another existing mod.

• static CreationToken GenerateCreationToken ()

Gets a token that can be used to create a new mod profile on the mod.io server.

static void CreateModProfile (CreationToken token, ModProfileDetails modProfileDetails, Action
 ResultAnd< ModId >> callback)

Creates a new mod profile on the mod.io server based on the details provided from the ModProfileDetails object provided. Note that you must have a logo, name and summary assigned in ModProfileDetails in order for this to work.

static void EditModProfile (ModProfileDetails modProfile, Action < Result > callback)

This is used to edit or change data (except images) in an existing mod profile on the mod.io server. If you want to add or edit images, use UploadModMedia.

• static ProgressHandle GetCurrentUploadHandle ()

This will return null if no upload operation is currently being performed.

static void UploadModfile (ModfileDetails modfile, Action < Result > callback)

Used to upload a mod file to a mod profile on the mod.io server. A mod file is the actual archive of a mod. This method can be used to update a mod to a newer version (you can include changelog information in ModfileDetails).

static void UploadModMedia (ModProfileDetails modProfileDetails, Action < Result > callback)

This is used to update the logo of a mod or the gallery images. This works very similar to EditModProfile except it only affects the images.

static void ArchiveModProfile (ModId modId, Action < Result > callback)

Removes a mod from being visible on the mod.io server.

static void GetCurrentUserCreations (SearchFilter filter, Action < ResultAnd < ModPage > > callback)

Get all mods the authenticated user added or is a team member of. Successful request will return an array of Mod Objects. We recommended reading the filtering documentation to return only the records you want.

static void AddTags (ModId modId, string[] tags, Action < Result > callback)

Adds the provided tags to the specified mod id. In order for this to work the authenticated user must have permission to edit the specified mod. Only existing tags as part of the game Id will be added.

static void AddModComment (ModId modId, CommentDetails commentDetails, Action< ResultAnd
 ModComment >> callback)

Adds a comment to a mod profile. Successfully adding a comment returns the Mod Comment object back.

static void DeleteModComment (ModId modId, long commentId, Action < Result > callback)

Delete a comment from a mod profile. Successful request will return 204 No Content and fire a MOD_COMMENT← DELETED event.

static void UpdateModComment (ModId modId, string content, long commentId, Action
 ResultAnd
 ModComment >> callback)

Update a comment for the corresponding mod. Successful request will return the updated Comment Object.

static void DeleteTags (ModId modId, string[] tags, Action < Result > callback)

Deletes the specified tags from the mod. In order for this to work the authenticated user must have permission to edit the specified mod.

static void DownloadImage (DownloadReference downloadReference, Action< ResultAnd< byte[]> > callback)

Downloads a texture based on the specified download reference.

static void Report (Report report, Action < Result > callback)

Reports a specified mod to mod.io.

8.18.1 Detailed Description

Main interface for the mod.io Unity plugin. Every method within ModIOUnity.cs that has a callback can also be found in ModIOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks)

See also

ModIOUnityAsync

8.18.2 Member Function Documentation

8.18.2.1 AddDependenciesToMod()

Adds the specified mods as dependencies to an existing mod.

If the dependencies already exist they will be ignored and the result will return success

Parameters

modld	Modld of the mod you want to add dependencies to
dependencies	The Modlds that you want to add (max 5 at a time)
callback	callback with the result of the request

See also

Result, ModIO, ModIOUnity.RemoveDependenciesFromMod, ModIOUnityAsync.RemoveDependenciesFromMod, ModIOUnityAsync.AddDependenciesToMod

```
void Example()
{
    var dependencies = new List<ModId&#62;
    {
        (ModId)1001,
        (ModId)1002,
        (ModId)1003
    };
    ModIoUnity.AddDependenciesToMod(mod.id, dependencies, AddDependenciesCallback);
}
void AddDependenciesCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("Successfully added dependencies to mod");
    }
    else
    {
        Debug.Log("Failed to add dependencies to mod");
    }
}
```

8.18.2.2 AddModComment()

Adds a comment to a mod profile. Successfully adding a comment returns the Mod Comment object back.

Keep in mind you can use mentions in the comment content, such as "Hello there, @<john-doe>"

Parameters

modld	Id of the mod to add the comment to
commentDetails	the new comment to be added
callback	callback with the result of the operation

See also

Result, ResultAnd, ModComment, CommentDetails, GetModComments, DeleteModComment, EditMod ← Comment, ModIOUnityAsync.AddModComment

```
ModId modId;
void Example()
{
    CommentDetails comment = new CommentDetails(0, "Hello world!");
    ModIoUnity.AddModComment(modId, comment, AddCommentCallback);
}
void AddCommentCallback(ResultAnd<ModComment> response)
{
    if (response.result.Succeeded())
    {
        Debug.Log("added comment");
    }
    else
    {
        Debug.Log("failed to add comment");
    }
}
```

8.18.2.3 AddTags()

Adds the provided tags to the specified mod id. In order for this to work the authenticated user must have permission to edit the specified mod. Only existing tags as part of the game Id will be added.

Parameters

modld	ld of the mod to add tags to
tags	array of tags to be added
callback	callback with the result of the operation

See also

Result, DeleteTags, ModIOUnityAsync.AddTags

```
ModId modId;
string[] tags;
void Example()
{
    ModIoUnity.AddTags(modId, tags, AddTagsCallback);
}
void AddTagsCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("added tags");
    }
    else
    {
        Debug.Log("failed to add tags");
    }
}
```

8.18.2.4 ArchiveModProfile()

Removes a mod from being visible on the mod.io server.

If you want to delete a mod permanently you can do so from a web browser.

Parameters

modId	the id of the mod to delete
callback	callback with the result of the operation

See also

Result, CreateModProfile, EditModProfile, ModIOUnityAsync.ArchiveModProfile

```
ModId modId;
void Example()
{
    ModIoUnity.ArchiveModProfile(modId, ArchiveModCallback);
}
void ArchiveModCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("archived mod profile");
    }
    else
    {
        Debug.Log("failed to archive mod profile");
    }
}
```

8.18.2.5 AuthenticateUserViaDiscord()

```
static void ModIO.ModIOUnity.AuthenticateUserViaDiscord (
    string discordToken,
    string emailAddress,
    TermsHash? hash,
    Action< Result > callback ) [static]
```

Attempts to authenticate a user via the Discord API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

discordToken	the user's discord token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaDiscord

```
// First we get the Terms of Use to display to the user and cache the hash void GetTermsOfUse\_Example()
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
            Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
\ensuremath{//} Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
    ModIOUnity.AuthenticateUserViaDiscord(discordToken, "johndoe@gmail.com", modIOTermsOfUse.hash,
      AuthenticationCallback);
void AuthenticationCallback (Result result)
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
        Debug.Log("Failed to authenticate");
```

8.18.2.6 AuthenticateUserViaEpic()

Attempts to authenticate a user via the epic API.

Parameters

epicToken	the user's epic token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaEpic

8.18.2.7 AuthenticateUserViaGOG()

Attempts to authenticate a user via the GOG API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

gogToken	the user's gog token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaGOG

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse); // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
    ModIOUnity.AuthenticateUserViaGOG(gogToken, "johndoe@gmail.com", modIOTermsOfUse.hash,
      AuthenticationCallback);
void AuthenticationCallback(Result result)
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    else
        Debug.Log("Failed to authenticate");
```

8.18.2.8 AuthenticateUserViaGoogle()

```
TermsHash? hash,
Action< Result > callback ) [static]
```

Attempts to authenticate a user via the Google API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

googleToken	the user's google token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaGoogle

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse); // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
        Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
    ModIOUnity.AuthenticateUserViaGoogle(googleToken, "johndoe@gmail.com", modIOTermsOfUse.hash,
      AuthenticationCallback);
void AuthenticationCallback(Result result)
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    }
    else
        Debug.Log("Failed to authenticate");
```

8.18.2.9 AuthenticateUserVialtch()

Attempts to authenticate a user via the Itch.io API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

itchioToken	the user's itch token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserVialtch

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse); // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
    {
        Debug.Log("Failed to retrieve the terms of use");
^{\prime} // Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
    ModIOUnity.AuthenticateUserViaItch(itchioToken, "johndoe@gmail.com", modIOTermsOfUse.hash,
   AuthenticationCallback);
void AuthenticationCallback(Result result)
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
        Debug.Log("Failed to authenticate");
```

8.18.2.10 AuthenticateUserViaOculus()

Attempts to authenticate a user via the Oculus API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

oculusDevice	the device your authenticating on

Parameters

nonce	the nonce
oculusToken	the user's oculus token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes
userld	

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaOculus

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
^{\prime\prime} Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
    ModIOUnity.AuthenticateUserViaOculus(oculusDevice.Quest,
                                          userId,
                                          oculusToken,
                                          "johndoe@gmail.com",
modIOTermsOfUse.hash, AuthenticationCallback);
void AuthenticationCallback(Result result)
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
        Debug.Log("Failed to authenticate");
```

8.18.2.11 AuthenticateUserViaPlayStation()

```
static void ModIO.ModIOUnity.AuthenticateUserViaPlayStation (
    string authCode,
    string emailAddress,
    TermsHash? hash,
    PlayStationEnvironment environment,
    Action< Result > callback ) [static]
```

Attempts to authenticate a user via the GOG API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

authCode	the user's auth code
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
environment	the PSN account environment
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaGOG

```
// First we get the Terms of Use to display to the user and cache the hash void GetTermsOfUse\_Example()
             ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
             if (response.result.Succeeded())
                          Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
                                        Cache the terms of use (which has the hash for when we attempt to authenticate)
                          modIOTermsOfUse = response.value;
             else
                          Debug.Log("Failed to retrieve the terms of use");
\ensuremath{//} Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
             {\tt ModIOUnity.AuthenticateUserViaPlaystation(authCode, "johndoe@gmail.com", modIOTermsOfUse.hash, and the control of the con
                    PlayStationEnvironment.np, AuthenticationCallback);
void AuthenticationCallback(Result result)
             if (result.Succeeded())
                          Debug.Log("Successfully authenticated user");
             else
             {
                          Debug.Log("Failed to authenticate");
```

8.18.2.12 AuthenticateUserViaSteam()

```
static void ModIO.ModIOUnity.AuthenticateUserViaSteam (
    string steamToken,
    string emailAddress,
    TermsHash? hash,
    Action< Result > callback ) [static]
```

Attempts to authenticate a user via the steam API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

steamToken	the user's steam token	
emailAddress	s the user's email address (Can be null)	
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse() (Can be null if submitted once	
	before)	
Generated by Doxyger Callback	Callback to be invoked when the operation completes	

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaSteam

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
   ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
   if (response.result.Succeeded())
       Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
            Cache the terms of use (which has the hash for when we attempt to authenticate)
       modIOTermsOfUse = response.value;
   else
       Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()
   ModIOUnity.AuthenticateUserViaSteam(steamToken, "johndoe@gmail.com", modIOTermsOfUse.hash,
     AuthenticationCallback);
void AuthenticationCallback (Result result)
   if (result.Succeeded())
       Debug.Log("Successfully authenticated user");
       Debug.Log("Failed to authenticate");
```

8.18.2.13 AuthenticateUserViaSwitch()

Attempts to authenticate a user via the switch API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

SwitchNsald	the user's switch NSA id token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

GetTermsOfUse, ModIOUnityAsync.AuthenticateUserViaSwitch

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
{
    ModIOUnity.GetTermsOfUse(GetTermsOfUseCallback);
```

8.18.2.14 AuthenticateUserViaXbox()

Attempts to authenticate a user via the Xbox API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

xboxToken	the user's xbl token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
callback	Callback to be invoked when the operation completes

See also

$Get Terms Of Use, \ ModIOUnity A sync. Authenticate User Via Xbox$

```
// First we get the Terms of Use to display to the user and cache the hash
void GetTermsOfUse_Example()
{
    ModIoUnity.GetTermsOfUse(GetTermsOfUseCallback);
}
void GetTermsOfUseCallback(ResultAnd<TermsOfUse&#62; response)
{
    if (response.result.Succeeded())
    {
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIoTermsOfUse = response.value;
```

```
else
{
    Debug.Log("Failed to retrieve the terms of use");
}

// Once we have the Terms of Use and hash we can attempt to authenticate
void Authenticate_Example()

{
    ModIoUnity.AuthenticateUserViaXbox(xboxToken, "johndoe@gmail.com", modIoTermsOfUse.hash,
    AuthenticationCallback);
}

void AuthenticationCallback(Result result)

{
    if (result.Succeeded())
    {
        Debug.Log("Successfully authenticated user");
    }
    else
    {
        Debug.Log("Failed to authenticate");
    }
}
```

8.18.2.15 CreateModProfile()

Creates a new mod profile on the mod.io server based on the details provided from the ModProfileDetails object provided. Note that you must have a logo, name and summary assigned in ModProfileDetails in order for this to work.

Note that this will create a new profile on the server and can be viewed online through a browser.

Parameters

token	the token allowing a new unique profile to be created from ModIOUnity.GenerateCreationToken()
modProfileDetails	the mod profile details to apply to the mod profile being created
callback	a callback with the Result of the operation and the Modld of the newly created mod profile (if successful)

See also

GenerateCreationToken, CreationToken, ModProfileDetails, Result, ModId, ModIOUnityAsync.CreateModProfile

```
ModId newMod;
Texture2D logo;
CreationToken token;
void Example()
{
    token = ModIoUnity.GenerateCreationToken();
    ModProfileDetails profile = new ModProfileDetails();
    profile.name = "mod name";
    profile.summary = "a brief summary about this mod being submitted"
    profile.logo = logo;
    ModIoUnity.CreateModProfile(token, profile, CreateProfileCallback);
}
void CreateProfileCallback(ResultAnd<ModId&#62; response)
{
    if (response.result.Succeeded())
    {
        newMod = response.value;
    }
}
```

```
Debug.Log("created new mod profile with id " + response.value.ToString());
}
else
{
    Debug.Log("failed to create new mod profile");
}
```

8.18.2.16 DeleteModComment()

Delete a comment from a mod profile. Successful request will return 204 No Content and fire a MOD_COMMENT ← _DELETED event.

Parameters

modld	ld of the mod to add the comment to
comment←	The id for the comment to be removed
ld	
callback	callback with the result of the operation

See also

Result, ModComment, CommentDetails, DeleteModComment, EditModComment, ModIOUnityAsync.DeleteModComment

```
private ModId modId;
private long commentId;
void Example()
{
    ModIoUnity.DeleteModComment(modId, commentId, DeleteCommentCallback);
}
void DeleteCommentCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("deleted comment");
    }
    else
    {
        Debug.Log("failed to delete comment");
    }
}
```

8.18.2.17 DeleteTags()

Deletes the specified tags from the mod. In order for this to work the authenticated user must have permission to edit the specified mod.

Parameters

modld	the id of the mod for deleting tags
tags	array of tags to be deleted
callback	callback with the result of the operation

See also

Result, AddTags, ModIOUnityAsync.DeleteTags

```
ModId modId;
string[] tags;
void Example()
{
    ModIoUnity.DeleteTags(modId, tags, DeleteTagsCallback);
}
void DeleteTagsCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("deleted tags");
    }
    else
    {
        Debug.Log("failed to delete tags");
    }
}
```

8.18.2.18 DisableModManagement()

```
static Result ModIO.ModIOUnity.DisableModManagement ( ) [static]
```

Disables the mod management system and cancels any ongoing jobs for downloading or installing mods.

```
void Example() { Result result = ModIoUnity.DisableModManagement();

if (result.Succeeded()) { Debug.Log("disabled mod management"); } else {
Debug.Log("failed to disable mod management"); } }
```

8.18.2.19 DownloadImage()

Downloads a texture based on the specified download reference.

You can get download references from UserProfiles and ModProfiles

Parameters

	downloadReference	download reference for the texture (eg UserObject.avatar_100x100)
ſ	callback	callback with the Result and Texture2D from the download

See also

Result, DownloadReference, Texture2D, ModIOUnityAsync.DownloadTexture

```
ModProfile mod;
void Example()
{
    ModIoUnity.DownloadTexture(mod.logoImage_320x180, DownloadTextureCallback);
}
void DownloadTextureCallback(ResultAnd<Texture2D&#62; response)
{
    if (response.result.Succeeded())
    {
        Debug.Log("downloaded the mod logo texture");
    }
    else
    {
        Debug.Log("failed to download the mod logo texture");
    }
}
```

8.18.2.20 EditModProfile()

This is used to edit or change data (except images) in an existing mod profile on the mod.io server. If you want to add or edit images, use UploadModMedia.

You need to assign the ModId of the mod you want to edit inside of the ModProfileDetails object included in the parameters

Parameters

modProfile	the mod profile details to apply to the mod profile being created
callback	a callback with the Result of the operation and the Modld of the newly created mod profile (if
	successful)

See also

ModProfileDetails, Result, ModIOUnityAsync.EditModProfile

```
ModId modId;
void Example()
{
    ModProfileDetails profile = new ModProfileDetails();
    profile.modId = modId;
    profile.summary = "a new brief summary about this mod being edited";
    ModIoUnity.EditModProfile(profile, EditProfileCallback);
}
void EditProfileCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("edited mod profile");
    }
    else
    {
        Debug.Log("failed to edit mod profile");
    }
}
```

8.18.2.21 EnableModManagement()

```
\label{thm:continuous} \mbox{static Result ModIO.ModIOUnity.EnableModManagement} \mbox{ (} \\ \mbox{ModManagementEventDelegate } \mbox{modManagementEventDelegate }) \mbox{ [static]}
```

Enables the mod management system. When enabled it will automatically download, install, update and delete mods according to the authenticated user's subscriptions.

This requires the current session to have an authenticated user, otherwise Result.IsAuthenticationError() from the Result will equal true.

Parameters

modManagementEventDelegate	A delegate that gets called everytime the ModManagement system runs an
	event (can be null)

Returns

A Result for whether or not mod management was enabled

See also

Result, DisableModManagement, IsAuthenticated

```
void Example()
{
    Result result = ModIoUnity.EnableModManagement(ModManagementDelegate);
}
void ModManagementDelegate(ModManagementEventType eventType, ModId modId)
{
    Debug.Log("a mod management event of type " + eventType.ToString() + " has been invoked");
}
```

8.18.2.22 FetchUpdates()

```
static void ModIO.ModIOUnity.FetchUpdates ( \label{eq:callback} \mbox{Action} < \mbox{Result} \ > \mbox{\it callback} \ ) \ \ [\mbox{static}]
```

This retrieves the user's subscriptions from the mod.io server and synchronises it with our local instance of the user's subscription data. If mod management has been enabled via ModIOUnity.EnableModManagement() then it may begin to install/uninstall mods.

This requires the current session to have an authenticated user, otherwise Result.IsAuthenticationError() from the Result will equal true.

Parameters

ack with the Result of the operation	callback
--------------------------------------	----------

See also

Result, EnableModManagement(ModIO.ModManagementEventDelegate), IsAuthenticated, RequestAuthenticationEmail, SubmitEmailSecurityCode, AuthenticateUserViaDiscord, AuthenticateUserViaGoogle, AuthenticateUserViaGOG,

AuthenticateUserViaItch, AuthenticateUserViaOculus, AuthenticateUserViaSteam, AuthenticateUserViaSwitch, AuthenticateUserViaXbox, ModIOUnityAsync.FetchUpdates

```
void Example()
{
    ModIoUnity.FetchUpdates(FetchUpdatesCallback);
}
void FetchUpdatesCallback(Result result)
{
    if (result.Succeeded())
     {
        Debug.Log("updated user subscriptions");
    }
    else
    {
        Debug.Log("failed to get user subscriptions");
}
```

8.18.2.23 ForceUninstallMod()

This informs the mod management system that this mod should be uninstalled if not subscribed by the current user. (such as a mod installed by a different user not currently active).

Normally if you wish to uninstall a mod you should unsubscribe and use ModIOUnity.EnableModManagement() and the process will be handled automatically. However, if you want to uninstall a mod that is subscribed to a different user session this method will mark the mod to be uninstalled to free up disk space. Alternatively you can use Mod UOUnity.RemoveUserData() to remove a user from the local registry. If no other users are subscribed to the same mod it will be uninstalled automatically.

Parameters

mod←	The ModId of the mod to uninstall
ld	

See also

Result, SubscribeToMod, UnsubscribeFromMod, EnableModManagement, LogOutCurrentUser

```
ModProfile mod;
void Example()
{
    Result result = ModIoUnity.ForceUninstallMod(mod.id);
    if (result.Succeeded())
    {
        Debug.Log("mod marked for uninstall");
    }
    else
    {
        Debug.Log("failed to mark mod for uninstall");
    }
}
```

8.18.2.24 GenerateCreationToken()

```
static CreationToken ModIO.ModIOUnity.GenerateCreationToken () [static]
```

Gets a token that can be used to create a new mod profile on the mod.io server.

Returns

a CreationToken used in ModIOUnity.CreateModProfile()

See also

CreationToken, ModProfileDetails, Result, ModId, CreateModProfile, EditModProfile

```
void Example()
{
    CreationToken token = ModIOUnity.GenerateCreationToken();
}
```

8.18.2.25 GetCurrentModManagementOperation()

```
static ProgressHandle ModIO.ModIOUnity.GetCurrentModManagementOperation ( ) [static]
```

Returns a ProgressHandle with information on the current mod management operation.

Returns

Optional ProgressHandle object containing information regarding the progress of the operation. Null if no operation is running

See also

ProgressHandle, EnableModManagement

8.18.2.26 GetCurrentUploadHandle()

```
static ProgressHandle ModIO.ModIOUnity.GetCurrentUploadHandle ( ) [static]
```

This will return null if no upload operation is currently being performed.

Uploads are not handled by the mod management system, these are handled separately.

Returns

A ProgressHandle informing the upload state and progress. Null if no upload operation is running.

See also

UploadModfile, ArchiveModProfile

8.18.2.27 GetCurrentUser()

```
static void ModIO.ModIOUnity.GetCurrentUser ( \label{eq:continuous} {\tt Action} < {\tt ResultAnd} < {\tt UserProfile} > > {\tt callback} \; ) \quad [{\tt static}]
```

Gets the current user's UserProfile struct. Containing their mod.io username, user id, language, timezone and download references for their avatar.

This requires the current session to have an authenticated user, otherwise Result.IsAuthenticationError() from the Result will equal true.

Parameters

See also

Result, UserProfile, IsAuthenticated, ModIOUnityAsync.GetCurrentUser

```
void Example()
{
    ModIoUnity.GetCurrentUser(GetUserCallback);
}
void GetUserCallback(ResultAnd<UserProfile&#62; response)
{
    if (response.result.Succeeded())
    {
        Debug.Log("Got user: " + response.value.username);
    }
    else
    {
        Debug.Log("failed to get user");
    }
}
```

8.18.2.28 GetCurrentUserRatingFor()

```
static void ModIO.ModIOUnity.GetCurrentUserRatingFor (  \frac{\text{ModId } modId,}{\text{Action} < \text{ResultAnd} < \text{ModRating} > > callback} \text{ ) [static]}
```

Gets the rating that the current user has given for a specified mod. You must have an authenticated session for this to be successful.

Note that the rating can be 'None'

Parameters

modld	the id of the mod to check for a rating
callback	callback with the result and rating of the specified mod

See also

ModRating, Modld, ResultAnd

```
void Example()
```

```
ModId modId = new ModId(1234);
ModIoUnity.GetCurrentUserRatingFor(modId, GetRatingCallback);

void GetRatingCallback(ResultAnd<ModRating> response)
{
    if (response.result.Succeeded())
    {
        Debug.Log($"retrieved rating: {response.value}");
    }
    else
    {
        Debug.Log("failed to get rating");
    }
}
```

8.18.2.29 GetCurrentUserRatings()

Get all mod rating's submitted by the authenticated user. Successful request will return an array of Rating Objects.

Parameters

See also

Modld, RatingObject, ResultAnd

```
void Example()
{
    ModIoUnity.GetCurrentUserRatings(GetCurrentUserRatingsCallback);
}
void GetCurrentUserRatingsCallback(ResultAnd<Rating[]> response)
{
    if (response.result.Succeeded())
    {
        foreach(var ratingObject in response.value)
        {
            Debug.Log($"retrieved rating '{ratingObject.rating}' for {ratingObject.modId}");
        }
    else
    {
            Debug.Log("failed to get ratings");
    }
}
```

8.18.2.30 GetInstalledModsForUser()

Gets an array of mods that are installed for the current user.

Parameters

result	an out Result to inform whether or not it was able to get installed mods	
includeDisabledMods	optional parameter. When true it will include mods that have been marked as disabled	
	via the DisableMod method	Generated by Doxygen

See also

UserInstalledMod, GetSubscribedMods, ModIOUnity.DisableMod, ModIOUnity.EnableMod

Returns

an array of InstalledModUser for each existing mod installed for the user

```
void Example()
{
    InstalledModUser[] mods = ModIoUnity.GetSystemInstalledModsUser(out Result result);
    if (result.Succeeded())
    {
        Debug.Log("found " + mods.Length.ToString() + " mods installed");
    }
    else
    {
        Debug.Log("failed to get installed mods");
    }
}
```

8.18.2.31 GetMod()

Requests a single ModProfile from the mod.io server by its Modld.

If there is a specific mod that you want to retrieve from the mod.io database you can use this method to get it.

Parameters

modld	the ModId of the ModProfile to get
callback	callback with the Result and ModProfile

See also

ModId, ModProfile, Result, ModIOUnityAsync.GetMod

```
void Example()
{
    ModId modId = new ModId(1234);
    ModIoUnity.GetMod(modId, GetModCallback);
}
void GetModCallback(ResultAnd<ModProfile&#62; response)
{
    if (response.result.Succeeded())
    {
        Debug.Log("retrieved mod " + response.value.name);
    }
    else
    {
        Debug.Log("failed to get mod");
    }
}
```

8.18.2.32 GetModComments()

```
SearchFilter filter,
Action< ResultAnd< CommentPage > > callback ) [static]
```

Get all comments posted in the mods profile. Successful request will return an array of Comment Objects. We recommended reading the filtering documentation to return only the records you want.

Parameters

filter	The filter to apply when searching through comments (can only apply pagination parameters, Eg. page size and page index)
callback	callback invoked with the Result and CommentPage

See also

CommentPage, ModComment, SearchFilter, ModId, Result, ResultAnd, ModIOUnityAsync.GetModComments

8.18.2.33 GetModDependencies()

Retrieves a list of ModDependenciesObjects that represent mods that depend on a mod.

This function returns only immediate mod dependencies, meaning that if you need the dependencies for the dependent mods, you will have to make multiple calls and watch for circular dependencies.

Parameters

modld	the Modld of the mod to get dependencies]
callback	callback with the Result and an array of ModDependenciesObjects]

See also

ModId, Result, ResultAnd, ModDependenciesObject, ModIOUnityAsync.GetModDependencies

```
void Example()
{
    ModId modId = new ModId(1234);
    ModIoUnity.GetModDependencies(modId, GetModCallback);
}
void GetModCallback(ResultAnd<ModDependenciesObject[]> response)
{
    if (response.result.Succeeded())
    {
        ModDependenciesObject[] modDependenciesObjects = response.value;
        Debug.Log("retrieved mods dependencies");
    }
    else
    {
        Debug.Log("failed to get mod dependencies");
    }
}
```

8.18.2.34 GetMods()

Uses a SearchFilter to retrieve a specific Mod Page and returns the ModProfiles and total number of mods based on the Search Filter.

A ModPage contains a group of mods based on the pagination filters in SearchFilter. eg, if you use SearchFilter. ⇔ SetPageIndex(0) and SearchFilter.SetPageSize(100) then ModPage.mods will contain mods from 1 to 100. But if you set SearchFilter.SetPageIndex(1) then it will have mods from 101 to 200, if that many exist. (note that 100 is the maximum page size).

Parameters

filter	The filter to apply when searching through mods (also contains pagination parameters)
callback	callback invoked with the Result and ModPage

See also

SearchFilter, ModPage, Result, ModIOUnityAsync.GetMods

```
void Example()
{
    SearchFilter filter = new SearchFilter();
    filter.SetPageIndex(0);
    filter.SetPageSize(10);
    ModIoUnity.GetMods(filter, GetModsCallback);
}
void GetModsCallback(Result result, ModPage modPage)
{
    if (result.Succeeded())
    {
        Debug.Log("ModPage has " + modPage.modProfiles.Length + " mods");
    }
    else
    {
        Debug.Log("failed to get mods");
    }
}
```

8.18.2.35 GetSubscribedMods()

Retrieves all of the subscribed mods for the current user.

Note that these are not installed mods only mods the user has opted as 'subscribed'. Also, ensure you have called ModIOUnity.FetchUpdates() at least once during this session in order to have an accurate collection of the user's subscriptions.

Parameters

result	an out parameter for whether or not the method succeeded

See also

Result, SubscribedMod, FetchUpdates

Returns

an array of the user's subscribed mods

```
void Example()
{
    SubscribedMod[] mods = ModIoUnity.GetSubscribedMods(out Result result);
    if (result.Succeeded())
    {
        Debug.Log("use has " + mods.Length + " subscribed mods");
    }
    else
    {
        Debug.Log("failed to get user mods");
    }
}
```

8.18.2.36 GetSystemInstalledMods()

Gets an array of mods that are installed on the current device.

Note that these will not be subscribed by the current user. If you wish to get all of the current user's installed mods use ModIOUnity.GetSubscribedMods() and check the SubscribedMod.status equals SubscribedModStatus. Unstalled.

Parameters

result an out Result to inform whether or not it was able to get installed mods

See also

InstalledMod, GetSubscribedMods

Returns

an array of InstalledMod for each existing mod installed on the current device (and not subscribed by the current user)

```
void Example()
{
    InstalledMod[] mods = ModIOUnity.GetSystemInstalledMods(out Result result);
    if (result.Succeeded())
    {
        Debug.Log("found " + mods.Length.ToString() + " mods installed");
    }
    else
    {
        Debug.Log("failed to get installed mods");
    }
}
```

8.18.2.37 GetTagCategories()

```
static void ModIO.ModIOUnity.GetTagCategories ( Action < \  \  \, \mbox{ResultAnd} < \  \, \mbox{TagCategory[]} > \  \, \mbox{\it callback }) \quad [\mbox{static}]
```

Gets the existing tags for the current game Id that can be used when searching/filtering mods.

Tags come in category groups, eg "Color" could be the name of the category and the tags themselves could be { "Red", "Blue", "Green" }

Parameters

the result and tags retrieved	callback the callback wi
-------------------------------	--------------------------

See also

SearchFilter, TagCategory, Result, ModIOUnityAsync.GetTagCategories

```
void Example()
{
    ModIOUnity.GetTagCategories(GetTagsCallback);
}
void GetTagsCallback(ResultAnd<TagCategory[]&#62; response)
{
    if (response.result.Succeeded())
    {
        foreach(TagCategory category in response.value)
        {
            foreach(Tag tag in category.tags)
            {
                 Debug.Log(tag.name + " tag is in the " + category.name + "category");
            }
        }
        else
        {
            Debug.Log("failed to get game tags");
        }
}
```

8.18.2.38 GetTermsOfUse()

```
static void ModIO.ModIOUnity.GetTermsOfUse ( \label{eq:condition} Action < \mbox{ResultAnd} < \mbox{TermsOfUse} \ > \ callback \ ) \quad [static]
```

This retrieves the terms of use text to be shown to the user to accept/deny before authenticating their account via a third party provider, eg steam or google.

If the callback succeeds it will also provide a TermsOfUse struct that contains a TermsHash struct which you will need to provide when calling a third party authentication method such as ModIOUnity.AuthenticateUserViaSteam()

Parameters

callback Callback to invoke once the operation is complete containing a result and a hash code to use for authentication via third party providers.

See also

TermsOfUse, AuthenticateUserViaDiscord, AuthenticateUserViaGoogle, AuthenticateUserViaGOG, AuthenticateUserViaItch, AuthenticateUserViaOculus, AuthenticateUserViaSteam, AuthenticateUserViaSwitch, AuthenticateUserViaXbox, AuthenticateUserViaPlayStation, ModIOUnityAsync.GetTermsOfUse

8.18.2.39 InitializeForUser() [1/2]

Initializes the Plugin using the provided settings for a specified user. Loads the local state of mods installed on the system as well as relevant mods to the user. Loads the state of mods installed on the system as well as the set of mods the specified user has installed on this device.

Parameters

userProfileIdentifier	Name of the director	y to store the user's data in.
accii i ciniciaciitinoi	rianio oi ino anobion	, to otoro the acor o data in

See also

Result, Shutdown

```
void Example()
{
    ModIoUnity.InitializeForUser("ExampleUser", InitializationCallback);
}
void InitializationCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("Initialized plugin");
    }
    else
    {
        Debug.Log("Failed to initialize plugin");
}
```

8.18.2.40 InitializeForUser() [2/2]

Initializes the Plugin using the provided settings for a specified user. Loads the local state of mods installed on the system as well as relevant mods to the user. Loads the state of mods installed on the system as well as the set of mods the specified user has installed on this device.

Parameters

userProfileIdentifier	Name of the directory to store the local profile's data (unrelated to the authenticated user)
serverSettings	Data used by the plugin to connect with the mod.io service.
buildSettings Data used by the plugin to interact with the platform.	

See also

FetchUpdates, ServerSettings, BuildSettings, Result, Shutdown

```
void Example()
    // Setup a ServerSettings struct
    ServerSettings serverSettings = new ServerSettings();
    serverSettings.serverURL = "https://api.test.mod.io/v1";
    serverSettings.gameId = 1234;
    serverSettings.gameKey = "1234567890abcdefghijklmnop";
    // Setup a BuildSettings struct
    BuildSettings buildSettings = new BuildSettings();
    buildSettings.logLevel = LogLevel.Verbose;
    buildSettings.userPortal = UserPortal.None;
    buildSettings.requestCacheLimitKB = 0; // No limit
    ModIOUnity.InitializeForUser("ExampleUser", serverSettings, buildSettings, InitializationCallback);
void InitializationCallback(Result result)
    if (result.Succeeded())
        Debug.Log("Initialized plugin");
    else
        Debug.Log("Failed to initialize plugin");
```

8.18.2.41 IsAuthenticated()

Informs you if the current user session is authenticated or not.

Parameters

callback

See also

Result, ModIOUnityAsync.IsAuthenticated

```
void Example()
{
     ModIOUnity.IsAuthenticated(IsAuthenticatedCallback);
}
void IsAuthenticatedCallback(Result result)
{
     if (result.Succeeded())
```

```
Debug.Log("current session is authenticated");
}
else
{
    Debug.Log("current session is not authenticated");
}
```

8.18.2.42 Islnitialized()

```
static bool ModIO.ModIOUnity.IsInitialized ( ) [static]
```

You can use this to quickly identify whether or not the plugin has been initialized.

Returns

true if the plugin is initialized

```
void Example()
{
    if (ModIoUnity.IsInitialized())
    {
        Debug.Log("The plugin is initialized");
    }
    else
    {
        Debug.Log("The plugin is not initialized");
    }
}
```

8.18.2.43 IsModManagementBusy()

```
static bool ModIO.ModIOUnity.IsModManagementBusy ( ) [static]
```

Checks if the automatic management process is currently awake and performing a mod management operation, such as installing, downloading, uninstalling, updating.

Returns

True if automatic mod management is currently performing an operation.

See also

EnableModManagement, DisableModManagement, GetCurrentModManagementOperation

```
void Example()
{
    if (ModIOUnity.IsModManagementBusy())
    {
        Debug.Log("mod management is busy");
    }
    else
    {
        Debug.Log("mod management is not busy");
    }
}
```

8.18.2.44 LogOutCurrentUser()

```
static Result ModIO.ModIOUnity.LogOutCurrentUser ( ) [static]
```

De-authenticates the current Mod.io user for the current session and clears all user-specific data stored on the current device. Installed mods that do not have other local users subscribed will be uninstalled if ModIOUnity. Enable ModManagement() has been used to enable the mod management system. (If ModManagement is enabled).

If you dont want to erase a user be sure to use ModIOUnity.Shutdown() instead. If you re-initialize the plugin after a shutdown the user will still be authenticated.

See also

EnableModManagement(ModIO.ModManagementEventDelegate), Result

```
//static async void Example()

Result result = await ModIoUnity.LogOutCurrentUser();
if(result.Succeeded())
{
    Debug.Log("The current user has been logged and their local data removed");
}
else
{
    Debug.Log("Failed to log out the current user");
}
```

8.18.2.45 MuteUser()

Mutes a user which effectively hides any content from that specified user

The userId can be found from the UserProfile. Such as ModProfile.creator.userId

Parameters

userld	The id of the user to be muted
callback	callback with the Result of the request

See also

UserProfile

8.18.2.46 RateMod()

```
ModRating rating,
Action< Result > callback ) [static]
```

Used to submit a rating for a specified mod.

This can be used to change/overwrite previous ratings of the current user.

Parameters

modld	the m=ModId of the mod being rated
rating	the rating to give the mod. Allowed values include ModRating.Positive, ModRating.Negative, ModRating.None
callback	callback with the result of the request

See also

ModRating, Result, ModId, ModIOUnityAsync.RateMod

```
ModProfile mod;
void Example()
{
    ModIoUnity.RateMod(mod.id, ModRating.Positive, RateModCallback);
}
void RateModCallback(Result result)
{
    if (result.Succeeded())
     {
        Debug.Log("Successfully rated mod");
    }
    else
    {
        Debug.Log("Failed to rate mod");
    }
}
```

8.18.2.47 RemoveDependenciesFromMod()

Removes the specified mods as dependencies for another existing mod.

If the dependencies dont exist they will be ignored and the result will return success

Parameters

modld	ModId of the mod you want to remove dependencies from
dependencies The Modlds that you want to remove (max 5 at a time	
callback	callback with the result of the request

See also

Result, ModId, dependencies, ModIOUnity.AddDependenciesToMod, ModIOUnityAsync.RemoveDependenciesFromMod, ModIOUnityAsync.AddDependenciesToMod

```
void Example()
{
    var dependencies = new List<ModId&#62;
    {
        (ModId)1001,
        (ModId)1002,
        (ModId)1003
    };
    ModIoUnity.RemoveDependenciesFromMod(mod.id, dependencies, RemoveDependenciesCallback);
}
void RemoveDependenciesCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("Successfully removed dependencies from mod");
    }
    else
    {
        Debug.Log("Failed to removed dependencies from mod");
    }
}
```

8.18.2.48 Report()

Reports a specified mod to mod.io.

Parameters

report	the object containing all of the details of the report you are sending
callback	callback with the Result of the report

See also

Report, Result, ModIOUnityAsync.Report

8.18.2.49 RequestAuthenticationEmail()

```
static void ModIO.ModIOUnity.RequestAuthenticationEmail ( string\ emailaddress, Action<\ Result\ >\ callback\ ) \ [static]
```

Sends an email with a security code to the specified Email Address. The security code is then used to Authenticate the user session using ModIOUnity.SubmitEmailSecurityCode()

The callback will return a Result object. If the email is successfully sent Result.Succeeded() will equal true. If you haven't Initialized the plugin then Result.IsInitializationError() will equal true. If the string provided for the emailaddress is not .NET compliant Result.IsAuthenticationError() will equal true.

Parameters

emailaddress	the Email Address to send the security code to, eg "JohnDoe@gmail.com"
callback	Callback to invoke once the operation is complete

See also

SubmitEmailSecurityCode, Result, ModIOUnityAsync.RequestAuthenticationEmail

```
void Example()
{
    ModIoUnity.RequestAuthenticationEmail("johndoe@gmail.com", RequestAuthenticationCallback);
}
void RequestAuthenticationCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("Succeeded to send security code");
    }
    else
    {
        Debug.Log("Failed to send security code to that email address");
    }
}
```

8.18.2.50 SetLoggingDelegate()

Assigns the logging delegate the plugin uses to output log messages that otherwise go to UnityEngine.Debug. ← Log(string)

If you don't wish to see [mod.io] logs appearing in the Unity console you can set your own delegate for handling logs and ignore them or display them elsewhere.

Parameters

loggingDelegate	The delegate for receiving log messages
-----------------	---

See also

LogMessageDelegate, LogLevel

```
void Example()
{
    // Send logs to MyLoggingDelegate instead of Debug.Log
    ModIoUnity.SetLoggingDelegate(MyLoggingDelegate);
}
public void MyLoggingDelegate(LogLevel logLevel, string logMessage)
{
    // Handle the log entry
    if (logLevel == LogLevel.Error)
```

```
{
     Debug.Log("We received an error with message: " + logMessage);
}
```

8.18.2.51 Shutdown()

Cancels any running public operations, frees plugin resources, and invokes any pending callbacks with a cancelled result code.

Callback results invoked during a shutdown operation can be checked with Result.IsCancelled()

See also

Result

```
void Example()
{
    ModIOUnity.Shutdown(ShutdownCallback);
}
void ShutdownCallback()
{
    Debug.Log("Finished shutting down the ModIO Plugin");
}
```

8.18.2.52 SubmitEmailSecurityCode()

```
static void ModIO.ModIOUnity.SubmitEmailSecurityCode ( string \ securityCode, Action < Result > callback \ ) \quad [static]
```

Attempts to Authenticate the current session by submitting a security code received by email from ModIOUnity.RequestAuthenticationEmail()

It is intended that this function is used after ModIOUnity.RequestAuthenticationEmail() is performed successfully.

Parameters

securityCode	The security code received from an authentication email
callback	Callback to invoke once the operation is complete

See also

Request Authentication Email, Result, ModIOUnity Async. Submit Email Security Code

```
void Example(string userSecurityCode)
{
    ModIOUnity.SubmitEmailSecurityCode(userSecurityCode, SubmitCodeCallback);
}
void SubmitCodeCallback(Result result)
{
    if (result.Succeeded())
```

```
{
    Debug.Log("You have successfully authenticated the user");
}
else
{
    Debug.Log("Failed to authenticate the user");
}
```

8.18.2.53 SubscribeToMod()

```
static void ModIO.ModIOUnity.SubscribeToMod ( {\tt ModId} \ modId, {\tt Action} < {\tt Result} \ > \ callback \ ) \quad [{\tt static}]
```

Adds the specified mod to the current user's subscriptions.

If mod management has been enabled via ModIOUnity. EnableModManagement() then the mod will be downloaded and installed.

Parameters

modld	Modld of the mod you want to subscribe to
callback	callback with the result of the request

See also

Result, ModId, Enable ModManagement (ModIO. ModManagement Event Delegate), GetCurrent ModManagement Operation, ModIOUnity Async. Subscribe To ModIOUnity

```
ModProfile mod;
void Example()
{
          ModIoUnity.SubscribeToMod(mod.id, SubscribeCallback);
}
void SubscribeCallback(Result result)
{
          if (result.Succeeded())
          {
                Debug.Log("Successfully subscribed to mod");
          }
          else
          {
                Debug.Log("Failed to subscribe to mod");
        }
}
```

8.18.2.54 UnmuteUser()

```
static void ModIO.ModIOUnity.UnmuteUser ( long \ userId, Action < Result > callback \ ) \ [static]
```

Un-mutes a user which effectively reveals previously hidden content from that user

The userId can be found from the UserProfile. Such as ModProfile.creator.userId

Parameters

userld	The id of the user to be muted
callback	callback with the Result of the request

See also

UserProfile

8.18.2.55 UnsubscribeFromMod()

```
static void ModIO.ModIOUnity.UnsubscribeFromMod ( {\tt ModId} \ modId, {\tt Action} < {\tt Result} \ > \ callback \ ) \ \ [{\tt static}]
```

Removes the specified mod from the current user's subscriptions.

If mod management has been enabled via ModIOUnity. EnableModManagement() then the mod will be uninstalled at the next opportunity.

Parameters

modld	Modld of the mod you want to unsubscribe from
callback	callback with the result of the request

See also

Result, ModId, Enable ModManagement (ModIO.ModManagement Event Delegate), Get Current ModManagement Operation, ModIOUnity Async. Unsubscribe From ModIOUni

```
ModProfile mod;
void Example()
{
    ModIoUnity.UnsubscribeFromMod(mod.id, UnsubscribeCallback);
}
void UnsubscribeCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("Successfully unsubscribed from mod");
    }
    else
    {
        Debug.Log("Failed to unsubscribe from mod");
    }
}
```

8.18.2.56 UpdateModComment()

```
long commentId,
Action< ResultAnd< ModComment > > callback ) [static]
```

Update a comment for the corresponding mod. Successful request will return the updated Comment Object.

Parameters

modld	Id of the mod the comment is on
content	Updated contents of the comment.
comment <i>←</i> Id	The id for the comment you wish to edit
callback	callback with the result of the operation

See also

ResultAnd, ModComment, ModIOUnityAsync.UpdateModComment

```
private string content = "This is a Comment";
long commentId = 12345;
ModId modId = (ModId)1234;
void UpdateMod()
{
    ModIoUnity.UpdateModComment(modId, content, commentId, UpdateCallback);
}
void UpdateCallback(ResultAnd<ModComment&#62; resultAnd)
{
    if(resultAnd.result.Succeeded())
    {
        Debug.Log("Successfully Updated Comment!");
    }
    else
    {
        Debug.Log("Failed to Update Comment!");
    }
}
```

8.18.2.57 UploadModfile()

Used to upload a mod file to a mod profile on the mod.io server. A mod file is the actual archive of a mod. This method can be used to update a mod to a newer version (you can include changelog information in ModfileDetails).

If you want to upload images such as a new logo or gallery images, you can use UploadModMedia instead.

Parameters

modfile	the mod file and details to upload
callback	callback with the Result of the upload when the operation finishes

See also

Result, ModfileDetails, ArchiveModProfile, GetCurrentUploadHandle, ModIOUnityAsync.UploadModfile, UploadModMedia

```
ModId modId;
void Example()
{
    ModfileDetails modfile = new ModfileDetails();
    modfile.modId = modId;
    modfile.directory = "files/mods/mod_123";
    ModIoUnity.UploadModfile(modfile, UploadModCallback);
```

```
void UploadModCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("uploaded mod file");
    }
    else
    {
        Debug.Log("failed to upload mod file");
    }
}
```

8.18.2.58 UploadModMedia()

This is used to update the logo of a mod or the gallery images. This works very similar to EditModProfile except it only affects the images.

Parameters

modProfileDetails	this holds the reference to the images you wish to upload
callback	a callback with the Result of the operation

See also

ModProfileDetails, Result, EditModProfile, ModIOUnityAsync.UploadModMedia

```
ModId modId;
Texture2D newTexture;
void Example()
{
    ModProfileDetails profile = new ModProfileDetails();
    profile.modId = modId;
    profile.logo = newTexture;
    ModIoUnity.UploadModMedia(profile, UploadProfileCallback);
}
void UploadProfileCallback(Result result)
{
    if (result.Succeeded())
    {
        Debug.Log("uploaded new mod logo");
    }
    else
    {
        Debug.Log("failed to uploaded mod logo");
    }
}
```

The documentation for this class was generated from the following file:

Assets/Plugins/mod.io/Runtime/ModIOUnity.cs

8.19 ModIO.ModIOUnityAsync Class Reference

Main async interface for the mod.io Unity plugin. Every method within ModIOUnity.cs that has a callback can also be found in ModIOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks).

Static Public Member Functions

static async Task Shutdown ()

Cancels any running public operations, frees plugin resources, and invokes any pending callbacks with a cancelled result code.

static async Task< Result > RequestAuthenticationEmail (string emailaddress)

Sends an email with a security code to the specified Email Address. The security code is then used to Authenticate the user session using ModlOUnity.SubmitEmailSecurityCode()

static async Task< Result > SubmitEmailSecurityCode (string securityCode)

Attempts to Authenticate the current session by submitting a security code received by email from ModIOUnity. RequestAuthenticationEmail

- static async Task< ResultAnd< TermsOfUse >> GetTermsOfUse ()
- static async Task
 Result > AuthenticateUserViaSteam (string steamToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the steam API.

static async Task< Result > AuthenticateUserViaEpic (string epicToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the epic API.

 static async Task
 Result > AuthenticateUserViaPlayStation (string authCode, string emailAddress, TermsHash? hash, PlayStationEnvironment environment)

Attempts to authenticate a user via the steam API.

static async Task< Result > AuthenticateUserViaGOG (string gogToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the GOG API.

static async Task< Result > AuthenticateUserVialtch (string itchioToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the Itch.io API.

static async Task< Result > AuthenticateUserViaXbox (string xboxToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the Xbox API.

• static async Task< Result > AuthenticateUserViaSwitch (string switchToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the switch API.

• static async Task< Result > AuthenticateUserViaDiscord (string discordToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the discord API.

 static async Task
 Result > AuthenticateUserViaGoogle (string googleToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the google API.

static async Task< Result > AuthenticateUserViaOculus (OculusDevice oculusDevice, string nonce, long userId, string oculusToken, string emailAddress, TermsHash? hash)

Attempts to authenticate a user via the oculus API.

static async Task< Result > IsAuthenticated ()

Informs you if the current user session is authenticated or not.

static async Task< ResultAnd< TagCategory[]> > GetTagCategories ()

Gets the existing tags for the current game Id that can be used when searching/filtering mods.

static async Task< ResultAnd< ModPage > > GetMods (SearchFilter filter)

Uses a SearchFilter to retrieve a specific Mod Page and returns the ModProfiles and total number of mods based on the Search Filter.

static async Task< ResultAnd< ModProfile > > GetMod (ModId modId)

Requests a single ModProfile from the mod.io server by its Modld.

static async Task< ResultAnd< CommentPage >> GetModComments (ModId modId, SearchFilter)

Get all comments posted in the mods profile. Successful request will return an array of Comment Objects. We recommended reading the filtering documentation to return only the records you want.

static async Task
 ResultAnd
 ModComment > > AddModComment (ModId modId, CommentDetails commentDetails)

Retrieves a list of ModDependenciesObjects that represent mods that depend on a mod.

static async Task< Result > DeleteModComment (ModId modId, long commentId)

Delete a comment from a mod profile. Successful request will return 204 No Content and fire a MOD_COMMENT← DELETED event.

static async Task< ResultAnd< ModComment > > UpdateModComment (ModId modId, string content, long commentId)

Update a comment for the corresponding mod. Successful request will return the updated Comment Object.

- static async Task< ResultAnd< ModDependencies[]> > GetModDependencies (ModId modId)
- static async Task< ResultAnd< Rating[]> > GetCurrentUserRatings ()

Get all mod rating's submitted by the authenticated user. Successful request will return an array of Rating Objects.

static async Task< ResultAnd< ModRating > > GetCurrentUserRatingFor (ModId modId)

Gets the rating that the current user has given for a specified mod. You must have an authenticated session for this to be successful.

static async Task< Result > RateMod (ModId modId, ModRating rating)

Used to submit a rating for a specified mod.

static async Task< Result > SubscribeToMod (ModId modId)

Adds the specified mod to the current user's subscriptions.

static async Task< Result > UnsubscribeFromMod (ModId modId)

Removes the specified mod from the current user's subscriptions.

static async Task< ResultAnd< UserProfile > > GetCurrentUser ()

Gets the current user's UserProfile struct. Containing their mod.io username, user id, language, timezone and download references for their avatar.

• static void MuteUser (long userId)

Mutes a user which effectively hides any content from that specified user

static void UnmuteUser (long userId)

Un-mutes a user which effectively reveals previously hidden content from that user

static async Task< Result > FetchUpdates ()

This retrieves the user's subscriptions from the mod.io server and synchronises it with our local instance of the user's subscription data. If mod management has been enabled via ModIOUnity.EnableModManagement() then it may begin to install/uninstall mods.

- static async Task < Result > AddDependenciesToMod (ModId modId, ICollection < ModId > dependencies)
 Adds the specified mods as dependencies to an existing mod.
- static async Task< Result > RemoveDependenciesFromMod (ModId modId, ICollection< ModId > dependencies)

Removes the specified mods as dependencies for another existing mod.

static async Task
 ResultAnd
 ModId > > CreateModProfile (CreationToken token, ModProfileDetails modProfileDetails)

Creates a new mod profile on the mod.io server based on the details provided from the ModProfileDetails object provided. Note that you must have a logo, name and summary assigned in ModProfileDetails in order for this to work.

static async Task< Result > EditModProfile (ModProfileDetails modprofile)

This is used to edit or change data in an existing mod profile on the mod.io server.

static async Task< Result > UploadModfile (ModfileDetails modfile)

Used to upload a mod file to a mod profile on the mod.io server. A mod file is the actual archive of a mod. This method can be used to update a mod to a newer version (you can include changelog information in ModfileDetails).

• static async Task< Result > UploadModMedia (ModProfileDetails modProfileDetails)

This is used to update the logo of a mod or the gallery images. This works very similar to EditModProfile except it only affects the images.

static async Task< Result > ArchiveModProfile (ModId modId)

Removes a mod from being visible on the mod.io server.

static async Task< ResultAnd< ModPage >> GetCurrentUserCreations (SearchFilter)

Get all mods the authenticated user added or is a team member of. Successful request will return an array of Mod Objects. We recommended reading the filtering documentation to return only the records you want.

static async Task< Result > AddTags (ModId modId, string[] tags)

Adds the provided tags to the specified mod id. In order for this to work the authenticated user must have permission to edit the specified mod. Only existing tags as part of the game Id will be added.

static async Task< Result > DeleteTags (ModId modId, string[] tags)

Deletes the specified tags from the mod. In order for this to work the authenticated user must have permission to edit the specified mod.

- static async Task< ResultAnd< byte[]> > DownloadImage (DownloadReference downloadReference)
 Downloads a texture based on the specified download reference.
- static async Task< Result > Report (Report report)

Reports a specified mod to mod.io.

8.19.1 Detailed Description

Main async interface for the mod.io Unity plugin. Every method within ModIOUnity.cs that has a callback can also be found in ModIOUnityAsync with an asynchronous alternative method (if you'd rather not use callbacks).

See also

ModIOUnity

8.19.2 Member Function Documentation

8.19.2.1 AddDependenciesToMod()

Adds the specified mods as dependencies to an existing mod.

If the dependencies already exist they will be ignored and the result will return success

Parameters

modld	Modld of the mod you want to add dependencies to
dependencies	The Modlds that you want to add (max 5 at a time)

See also

Result, ModIO, ModIOUnity.AddDependenciesToMod, ModIOUnity.RemoveDependenciesFromMod, ModIOUnityAsync.RemoveDependenciesFromMod

```
async void Example()
{
   var dependencies = new List<ModId&#62;
   (
        (ModId)1001,
```

```
(ModId)1002,
    (ModId)1003
);
Result result = await ModIoUnityAsync.AddDependenciesToMod(mod.id, dependencies);
if (result.Succeeded())
{
    Debug.Log("Successfully added dependencies to mod");
}
else
{
    Debug.Log("Failed to add dependencies to mod");
}
```

8.19.2.2 AddModComment()

Retrieves a list of ModDependenciesObjects that represent mods that depend on a mod.

This function returns only immediate mod dependencies, meaning that if you need the dependencies for the dependent mods, you will have to make multiple calls and watch for circular dependencies.

See also

ModId, Result, ResultAnd, ModDependenciesObject, ModIOUnity.GetModDependencies

```
async void Example()
{
    ModId modId = new ModId(1234);
    var resultAnd = await ModIoUnityAsync.GetModDependencies(modId);
    if (resultAnd.result.Succeeded())
    {
        ModDependenciesObject[] modDependenciesObjects = resultAnd.value;
        Debug.Log("retrieved mods dependencies");
    }
    else
    {
        Debug.Log("failed to get mod dependencies");
    }
}
```

Parameters

```
modId
commentDetails
```

Returns

8.19.2.3 AddTags()

8.19 ModIO.ModIOUnityAsync Class Reference 85 Adds the provided tags to the specified mod id. In order for this to work the authenticated user must have permission to edit the specified mod. Only existing tags as part of the game Id will be added.

Parameters

mod←	ld of the mod to add tags to
ld	
tags	array of tags to be added

See also

Result, DeleteTags, ModIOUnityAsync.AddTags

```
ModId modId;
string[] tags;
async void Example()
{
    Result result = await ModIoUnity.AddTags(modId, tags);
    if (result.Succeeded())
    {
        Debug.Log("added tags");
    }
    else
    {
        Debug.Log("failed to add tags");
    }
}
```

8.19.2.4 ArchiveModProfile()

Removes a mod from being visible on the mod.io server.

If you want to delete a mod permanently you can do so from a web browser.

Parameters

mod←	the id of the mod to delete
ld	

See also

Result, CreateModProfile, EditModProfile

```
ModId modId;
async void Example()
{
   Result result = await ModIoUnityAsync.ArchiveModProfile(modId);
   if (result.Succeeded())
   {
        Debug.Log("archived mod profile");
   }
   else
   {
        Debug.Log("failed to archive mod profile");
   }
}
```

8.19.2.5 AuthenticateUserViaDiscord()

Attempts to authenticate a user via the discord API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

discordToken	the user's steam token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

GetTermsOfUse

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIoUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate async void Authenticate_Example() \,
    Result result = await ModIOUnityAsync.AuthenticateUserViaDiscord(discordToken, "johndoe@gmail.com",
      modIOTermsOfUse.hash);
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    }
        Debug.Log("Failed to authenticate");
```

8.19.2.6 AuthenticateUserViaEpic()

Attempts to authenticate a user via the epic API.

Parameters

epicToken	the user's epic token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

GetTermsOfUse, ModIOUnity.AuthenticateUserViaEpic

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
            Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
^{\prime\prime} Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaEpic(epicToken, "johndoe@gmail.com",
     modIOTermsOfUse.hash);
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    else
        Debug.Log("Failed to authenticate");
```

8.19.2.7 AuthenticateUserViaGOG()

Attempts to authenticate a user via the GOG API.

You will first need to get the terms of use and hash from the ModlOUnity.GetTermsOfUse() method.

Parameters

gogToken	the user's steam token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
            Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
       Debug.Log("Failed to retrieve the terms of use");
\ensuremath{//} Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaGOG(gogToken, "johndoe@gmail.com",
     modIOTermsOfUse.hash);
    if (result.Succeeded())
       Debug.Log("Successfully authenticated user");
    else
    {
       Debug.Log("Failed to authenticate");
```

8.19.2.8 AuthenticateUserViaGoogle()

Attempts to authenticate a user via the google API.

You will first need to get the terms of use and hash from the ModlOUnity.GetTermsOfUse() method.

Parameters

googleToken	the user's steam token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
{
    ResultAnd<TermsOfUser&#62; response = await ModIoUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
    {
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIoTermsOfUse = response.value;
    }
    else
    {
        Debug.Log("Failed to retrieve the terms of use");
    }
}
// Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
```

```
Result result = await ModIOUnityAsync.AuthenticateUserViaGoogle(googleToken, "johndoe@gmail.com",
    modIOTermsOfUse.hash);
if (result.Succeeded())
{
    Debug.Log("Successfully authenticated user");
}
else
{
    Debug.Log("Failed to authenticate");
}
```

8.19.2.9 AuthenticateUserVialtch()

Attempts to authenticate a user via the Itch.io API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

	itchioToken	the user's steam token
	emailAddress	the user's email address
	hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIoUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse); // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
\ensuremath{//} Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaItch(itchioToken, "johndoe@gmail.com",
      modIOTermsOfUse.hash);
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    else
    {
        Debug.Log("Failed to authenticate");
```

8.19.2.10 AuthenticateUserViaOculus()

Attempts to authenticate a user via the oculus API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

oculusToken	the user's oculus token
oculusDevice	the device you're authenticating on
nonce	the nonce
userld	the user id
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

GetTermsOfUse

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd< TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIOTermsOfUse = response.value;
    else
        Debug.Log("Failed to retrieve the terms of use");
\ensuremath{//} Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaOculus(OculusDevice.Ouest,
                                                                     nonce,
                                                                     oculusToken,
                                                                     "johndoe@gmail.com",
                                                                     modIOTermsOfUse.hash);
    if (result.Succeeded())
        Debug.Log("Successfully authenticated user");
    else
        Debug.Log("Failed to authenticate");
```

8.19.2.11 AuthenticateUserViaPlayStation()

```
static async Task< Result > ModIO.ModIOUnityAsync.AuthenticateUserViaPlayStation ( string authCode,
```

```
string emailAddress,
TermsHash? hash,
PlayStationEnvironment environment ) [static]
```

Attempts to authenticate a user via the steam API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

authCode	the user's authcode token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()
environment	the PSN account environment

See also

GetTermsOfUse

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
       Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
            Cache the terms of use (which has the hash for when we attempt to authenticate)
       modIOTermsOfUse = response.value;
    else
       Debug.Log("Failed to retrieve the terms of use");
^{\prime} // Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaPlayStation(authCode, "johndoe@gmail.com",
     modIOTermsOfUse.hash, PlayStationEnvironment.np);
    if (result.Succeeded())
       Debug.Log("Successfully authenticated user");
    }
    else
    {
       Debug.Log("Failed to authenticate");
```

8.19.2.12 AuthenticateUserViaSteam()

Attempts to authenticate a user via the steam API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

steamToken	the user's steam token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

GetTermsOfUse

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
       {\tt Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);}
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
       modIOTermsOfUse = response.value;
    else
       Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaSteam(steamToken, "johndoe@gmail.com",
     modIOTermsOfUse.hash);
    if (result.Succeeded())
       Debug.Log("Successfully authenticated user");
    {
       Debug.Log("Failed to authenticate");
```

8.19.2.13 AuthenticateUserViaSwitch()

Attempts to authenticate a user via the switch API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

	switchToken	the user's steam token
	emailAddress	the user's email address
	hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
{
    ResultAnd<TermsOfUser&#62; response = await ModIoUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
    {
        Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
        // Cache the terms of use (which has the hash for when we attempt to authenticate)
        modIoTermsOfUse = response.value;
    }
    else
    {
        Debug.Log("Failed to retrieve the terms of use");
    }
}
```

8.19.2.14 AuthenticateUserViaXbox()

Attempts to authenticate a user via the Xbox API.

You will first need to get the terms of use and hash from the ModIOUnity.GetTermsOfUse() method.

Parameters

xboxToken	the user's steam token
emailAddress	the user's email address
hash	the TermsHash retrieved from ModIOUnity.GetTermsOfUse()

See also

```
// First we get the Terms of Use to display to the user and cache the hash
async void GetTermsOfUse_Example()
    ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
    if (response.result.Succeeded())
       Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
           Cache the terms of use (which has the hash for when we attempt to authenticate)
       modIOTermsOfUse = response.value;
    else
    {
       Debug.Log("Failed to retrieve the terms of use");
// Once we have the Terms of Use and hash we can attempt to authenticate
async void Authenticate_Example()
    Result result = await ModIOUnityAsync.AuthenticateUserViaItch(xboxToken, "johndoe@gmail.com",
     modIOTermsOfUse.hash);
    if (result.Succeeded())
       Debug.Log("Successfully authenticated user");
    else
    {
       Debug.Log("Failed to authenticate");
```

8.19.2.15 CreateModProfile()

Creates a new mod profile on the mod.io server based on the details provided from the ModProfileDetails object provided. Note that you must have a logo, name and summary assigned in ModProfileDetails in order for this to work.

Note that this will create a new profile on the server and can be viewed online through a browser.

Parameters

token	the token allowing a new unique profile to be created from ModIOUnity.GenerateCreationToken()
modProfileDetails	the mod profile details to apply to the mod profile being created

See also

ModIOUnity.GenerateCreationToken, CreationToken, ModProfileDetails, Result, ModId

```
ModId newMod;
Texture2D logo;
CreationToken token;
async void Example()
{
    token = ModIoUnity.GenerateCreationToken();
    ModProfileDetails profile = new ModProfileDetails();
    profile.name = "mod name";
    profile.summary = "a brief summary about this mod being submitted"
    profile.logo = logo;
    ResultAnd<ModId&#62; response = await ModIoUnityAsync.CreateModProfile(token, profile);
    if (response.result.Succeeded())
    {
        newMod = response.value;
        Debug.Log("created new mod profile with id " + response.value.ToString());
    }
    else
    {
        Debug.Log("failed to create new mod profile");
    }
}
```

8.19.2.16 DeleteModComment()

Delete a comment from a mod profile. Successful request will return 204 No Content and fire a MOD_COMMENT → DELETED event.

Parameters

modld	Id of the mod to add the comment to
comment⊷	The id for the comment to be removed
ld	

See also

Result, ModComment, CommentDetails, DeleteModComment, ModIOUnity.DeleteModComment, EditMod ← Comment

```
private ModId modId;
private long commentId;
void Example()
{
    var result = await ModIoUnityAsync.DeleteModComment(modId, commentId);
    if (result.Succeeded())
    {
        Debug.Log("deleted comment");
    }
    else
    {
        Debug.Log("failed to delete comment");
    }
}
```

8.19.2.17 DeleteTags()

Deletes the specified tags from the mod. In order for this to work the authenticated user must have permission to edit the specified mod.

Parameters

mod←	the id of the mod for deleting tags
ld	
tags	array of tags to be deleted

See also

Result, AddTags, ModIOUnityAsync.DeleteTags

```
ModId modId;
string[] tags;
async void Example()
{
    Result result = await ModIoUnity.DeleteTags(modId, tags);
    if (result.Succeeded())
    {
        Debug.Log("deleted tags");
    }
    else
    {
        Debug.Log("failed to delete tags");
    }
}
```

8.19.2.18 DownloadImage()

Downloads a texture based on the specified download reference.

You can get download references from UserProfiles and ModProfiles

Parameters

downloadReference	download reference for the texture (eg UserObject.avatar_100x100)	l
		н

See also

Result, DownloadReference, Texture2D

```
ModProfile mod;
async void Example()
{
    ResultAnd<Texture2D&#62; response = await ModIOUnityAsync.DownloadTexture(mod.logoImage_320x180);
    if (response.result.Succeeded())
    {
        Debug.Log("downloaded the mod logo texture");
    }
    else
    {
        Debug.Log("failed to download the mod logo texture");
    }
}
```

8.19.2.19 EditModProfile()

This is used to edit or change data in an existing mod profile on the mod.io server.

You need to assign the ModId of the mod you want to edit inside of the ModProfileDetails object included in the parameters

Parameters

modprofile the mod profile details to apply to the mod profile being created

See also

ModProfileDetails, Result

```
ModId modId;
async void Example()
{
    ModProfileDetails profile = new ModProfileDetails();
    profile.modId = modId;
    profile.summary = "a new brief summary about this mod being edited"
    Result result = await ModIoUnityAsync.EditModProfile(profile);
    if (result.Succeeded())
    {
        Debug.Log("edited mod profile");
    }
    else
    {
        Debug.Log("failed to edit mod profile");
    }
}
```

8.19.2.20 FetchUpdates()

```
\verb|static| async Task<| Result| > \verb|ModIO.ModIOUnityAsync.FetchUpdates| ( ) [static] \\
```

This retrieves the user's subscriptions from the mod.io server and synchronises it with our local instance of the user's subscription data. If mod management has been enabled via ModIOUnity. EnableModManagement() then it may begin to install/uninstall mods.

This requires the current session to have an authenticated user, otherwise Result.IsAuthenticationError() from the Result will equal true.

See also

Result, ModIOUnity.EnableModManagement(ModIO.ModManagementEventDelegate), IsAuthenticated, RequestAuthenticationEmail, SubmitEmailSecurityCode, AuthenticateUserViaDiscord, AuthenticateUserViaGoogle, AuthenticateUserViaGOG, AuthenticateUserViaItch, AuthenticateUserViaOculus, AuthenticateUserViaSteam, AuthenticateUserViaSwitch, AuthenticateUserViaXbox

```
async void Example()
{
   Result result = await ModIOUnityAsync.FetchUpdates();
   if (result.Succeeded())
   {
       Debug.Log("updated user subscriptions");
   }
   else
   {
       Debug.Log("failed to get user subscriptions");
   }
}
```

8.19.2.21 GetCurrentUser()

Gets the current user's UserProfile struct. Containing their mod.io username, user id, language, timezone and download references for their avatar.

This requires the current session to have an authenticated user, otherwise Result.IsAuthenticationError() from the Result will equal true.

See also

Result, UserProfile, IsAuthenticated

```
async void Example()
{
   ResultAnd<UserProfile&#62; response = await ModIOUnityAsync.GetCurrentUser();
   if (response.result.Succeeded())
   {
      Debug.Log("Got user: " + response.value.username);
   }
   else
   {
      Debug.Log("failed to get user");
   }
}
```

8.19.2.22 GetCurrentUserRatingFor()

```
\label{eq:modIOModIOUnityAsync.GetCurrentUserRatingFor (ModId modId modId)} $$\operatorname{ModIOModIOUnityAsync.GetCurrentUserRatingFor}$$ ( \mbox{ModId modId} ) [static]
```

Gets the rating that the current user has given for a specified mod. You must have an authenticated session for this to be successful.

Note that the rating can be 'None'

Parameters

mod⊷	the id of the mod to check for a rating
ld	

See also

ModRating, ModId, ResultAnd

```
async void Example()
{
    ModId modId = new ModId(1234);
    ResultAnd<ModRating> response = await ModIoUnityAsync.GetCurrentUserRatingFor(modId);
    if (response.result.Succeeded())
    {
        Debug.Log($"retrieved rating: {response.value}");
    }
    else
    {
        Debug.Log("failed to get rating");
    }
}
```

8.19.2.23 GetCurrentUserRatings()

Get all mod rating's submitted by the authenticated user. Successful request will return an array of Rating Objects.

See also

Modld, Rating, ResultAnd

```
async void Example()
{
   ResultAnd<Rating[]> response = await ModIoUnityAsync.GetCurrentUserRatings();
   if (response.result.Succeeded())
   {
      foreach(var ratingObject in response.value)
      {
            Debug.Log($"retrieved rating {ratingObject.rating} for {ratingObject.modId}");
      }
   else
   {
            Debug.Log("failed to get ratings");
   }
}
```

8.19.2.24 GetMod()

```
static async Task< ResultAnd< ModProfile > > ModIO.ModIOUnityAsync.GetMod ( ModId modId ) [static]
```

Requests a single ModProfile from the mod.io server by its Modld.

If there is a specific mod that you want to retrieve from the mod.io database you can use this method to get it.

Parameters

mod⊷	the ModId of the ModProfile to get
ld	-

See also

ModId, ModProfile, Result

```
async void Example()
{
    ModId modId = new ModId(1234);
    ResultAnd<ModProfile&#62; response = await ModIoUnityAsync.GetMod(modId);
    if (response.result.Succeeded())
    {
        Debug.Log("retrieved mod " + response.value.name);
    }
    else
    {
        Debug.Log("failed to get mod");
    }
}
```

8.19.2.25 GetModComments()

```
static async Task<br/> ResultAnd<br/> CommentPage > ModIO.ModIOUnityAsync.GetModComments ( ModId modId, SearchFilter filter ) [static]
```

Get all comments posted in the mods profile. Successful request will return an array of Comment Objects. We recommended reading the filtering documentation to return only the records you want.

Parameters

filter The filter to apply when searching through comments (can only apply pagination parameters, Eg. page size and page index)

See also

CommentPage, ModComment, SearchFilter, ModId, Result, ResultAnd, ModIOUnity.GetModComments

8.19.2.26 GetModDependencies()

```
\label{local_static} \mbox{static async Task} < \mbox{ResultAnd} < \mbox{ModDependencies[]} > \mbox{ModIO.ModIOUnityAsync.GetModDependencies (} \\ \mbox{ModId $modId$ } \mbox{[static]}
```

8.19.2.27 GetMods()

```
static async Task< ResultAnd< ModPage >> ModIO.ModIOUnityAsync.GetMods ( SearchFilter filter ) [static]
```

Uses a SearchFilter to retrieve a specific Mod Page and returns the ModProfiles and total number of mods based on the Search Filter.

A ModPage contains a group of mods based on the pagination filters in SearchFilter. eg, if you use SearchFilter. \leftarrow SetPageIndex(0) and SearchFilter.SetPageSize(100) then ModPage.mods will contain mods from 1 to 100. But if you set SearchFilter.SetPageIndex(1) then it will have mods from 101 to 200, if that many exist. (note that 100 is the maximum page size).

Parameters

filter

The filter to apply when searching through mods (also contains pagination parameters)

See also

SearchFilter, ModPage, Result

```
async void Example()
{
    SearchFilter filter = new SearchFilter();
    filter.SetPageIndex(0);
    filter.SetPageSize(10);
    ResultAnd<ModPage&#62; response = await ModIoUnityAsync.GetMods(filter);
    if (response.result.Succeeded())
    {
        Debug.Log("ModPage has " + response.value.modProfiles.Length + " mods");
    }
    else
    {
        Debug.Log("failed to get mods");
    }
}
```

8.19.2.28 GetTagCategories()

```
static async Task< ResultAnd< TagCategory[]> > ModIO.ModIOUnityAsync.GetTagCategories ( )
[static]
```

Gets the existing tags for the current game Id that can be used when searching/filtering mods.

Tags come in category groups, eg "Color" could be the name of the category and the tags themselves could be { "Red", "Blue", "Green" }

See also

SearchFilter, TagCategory, Result

8.19.2.29 GetTermsOfUse()

```
static async Task< ResultAnd< TermsOfUse > > ModIO.ModIOUnityAsync.GetTermsOfUse ( ) [static]
```

This retrieves the terms of use text to be shown to the user to accept/deny before authenticating their account via a third party provider, eg steam or google.

If the operation succeeds it will also provide a TermsOfUse struct that contains a TermsHash struct which you will need to provide when calling a third party authentication method such as ModIOUnity.AuthenticateUserViaSteam()

See also

TermsOfUse, AuthenticateUserViaDiscord, AuthenticateUserViaGoogle, AuthenticateUserViaGOG, AuthenticateUserViaItch, AuthenticateUserViaOculus, AuthenticateUserViaSteam, AuthenticateUserViaSwitch, AuthenticateUserViaXbox, AuthenticateUserViaPlayStation

```
async void Example()
{
   ResultAnd<TermsOfUser&#62; response = await ModIOUnityAsync.GetTermsOfUse();
   if (response.result.Succeeded())
   {
       Debug.Log("Successfully retrieved the terms of use: " + response.value.termsOfUse);
   }
   else
   {
       Debug.Log("Failed to retrieve the terms of use");
   }
}
```

8.19.2.30 IsAuthenticated()

```
static async Task< Result > ModIO.ModIOUnityAsync.IsAuthenticated ( ) [static]
```

Informs you if the current user session is authenticated or not.

See also

Result

```
async void Example()
{
   Result result = await ModIOUnityAsync.IsAuthenticated();
   if (result.Succeeded())
   {
        Debug.Log("current session is authenticated");
   }
   else
   {
        Debug.Log("current session is not authenticated");
   }
}
```

8.19.2.31 MuteUser()

Mutes a user which effectively hides any content from that specified user

The userId can be found from the UserProfile. Such as ModProfile.creator.userId

Parameters

user⊷	The id of the user to be muted
ld	

See also

UserProfile

8.19.2.32 RateMod()

```
static async Task<br/>< Result > ModIO.ModIOUnityAsync.RateMod ( {\tt ModId} \ modId, {\tt ModRating} \ rating \ ) \ [static]
```

Used to submit a rating for a specified mod.

This can be used to change/overwrite previous ratings of the current user.

Parameters

mod⊷	the m=ModId of the mod being rated
ld	
rating	the rating to give the mod. Allowed values include ModRating.Positive, ModRating.Negative,
	ModRating.None

See also

ModRating, Result, Modld

8.19.2.33 RemoveDependenciesFromMod()

Removes the specified mods as dependencies for another existing mod.

If the dependencies dont exist they will be ignored and the result will return success

Parameters

modld	Modld of the mod you want to remove dependencies from
dependencies	The Modlds that you want to remove (max 5 at a time)

See also

Result, ModId, dependencies, ModIOUnity.AddDependenciesToMod, ModIOUnity.RemoveDependenciesFromMod, ModIOUnityAsync.AddDependenciesToMod

```
void Example()
{
    var dependencies = new List<ModId&#62;
    {
        (ModId)1001,
        (ModId)1002,
        (ModId)1003
    };
    Result result = await ModIoUnityAsync.RemoveDependenciesFromMod(mod.id, dependencies);
    if (result.Succeeded())
    {
        Debug.Log("Successfully removed dependencies from mod");
    }
    else
    {
        Debug.Log("Failed to removed dependencies from mod");
    }
}
```

8.19.2.34 Report()

Reports a specified mod to mod.io.

Parameters

report the object containing all of the details of the report you are sending

See also

Report, Result

8.19.2.35 RequestAuthenticationEmail()

Sends an email with a security code to the specified Email Address. The security code is then used to Authenticate the user session using ModIOUnity.SubmitEmailSecurityCode()

The operation will return a Result object. If the email is successfully sent Result.Succeeded() will equal true. If you haven't Initialized the plugin then Result.IsInitializationError() will equal true. If the string provided for the emailaddress is not .NET compliant Result.IsAuthenticationError() will equal true.

Parameters

emailaddress the Email Address to send the security code to, eg "JohnDoe@gmail.com"

See also

SubmitEmailSecurityCode, Result

```
async void Example()
{
   Result result = await ModIOUnityAsync.RequestAuthenticationEmail("johndoe@gmail.com");
   if (result.Succeeded())
   {
      Debug.Log("Succeeded to send security code");
   }
   else
   {
      Debug.Log("Failed to send security code to that email address");
   }
}
```

8.19.2.36 Shutdown()

```
static async Task ModIO.ModIOUnityAsync.Shutdown ( ) [static]
```

Cancels any running public operations, frees plugin resources, and invokes any pending callbacks with a cancelled result code.

pending operations during a shutdown can be checked with Result.IsCancelled()

See also

Result

```
async void Example()
{
    await ModIOUnityAsync.Shutdown();
    Debug.Log("Finished shutting down the ModIO Plugin");
}
```

8.19.2.37 SubmitEmailSecurityCode()

Attempts to Authenticate the current session by submitting a security code received by email from ModIOUnity.RequestAuthenticationEmail()

It is intended that this function is used after ModIOUnity.RequestAuthenticationEmail() is performed successfully.

Parameters

securityCode	The security code received from an authentication email

See also

RequestAuthenticationEmail, Result

```
async void Example(string userSecurityCode)
{
   Result result = await ModIOUnityAsync.SubmitEmailSecurityCode(userSecurityCode);
   if (result.Succeeded())
   {
        Debug.Log("You have successfully authenticated the user");
   }
   else
   {
        Debug.Log("Failed to authenticate the user");
   }
}
```

8.19.2.38 SubscribeToMod()

Adds the specified mod to the current user's subscriptions.

If mod management has been enabled via ModIOUnity. EnableModManagement() then the mod will be downloaded and installed.

Parameters

```
mod ← ModId of the mod you want to subscribe to Id
```

See also

Result, ModIO, ModIOUnity. EnableModManagement(ModIO.ModManagementEventDelegate), ModIOUnity. GetCurrentModManagementEventDelegate), ModIOUnity. GetCurrentModManagementEventDelegate(), ModIOUnity. GetCurrentModIOUnity. GetCurrentMo

```
ModProfile mod;
async void Example()
{
   Result result = await ModIOUnityAsync.SubscribeToMod(mod.id);
   if (result.Succeeded())
   {
        Debug.Log("Successfully subscribed to mod");
   }
   else
   {
        Debug.Log("Failed to subscribe to mod");
   }
}
```

8.19.2.39 UnmuteUser()

Un-mutes a user which effectively reveals previously hidden content from that user

The userId can be found from the UserProfile. Such as ModProfile.creator.userId

Parameters

```
user← The id of the user to be muted Id
```

See also

UserProfile

8.19.2.40 UnsubscribeFromMod()

Removes the specified mod from the current user's subscriptions.

If mod management has been enabled via ModIOUnity. Enable ModManagement() then the mod will be uninstalled at the next opportunity.

Parameters

mod⊷	Modld of the mod you want to unsubscribe from	ĺ
ld		

See also

 $Result, ModIO, ModIOUnity. Enable ModManagement (ModIO. ModManagement EventDelegate), \\ ModIOUnity. GetCurrent (ModIO. ModIO. ModIO.$

```
ModProfile mod;
async void Example()
{
    Result result = await ModIoUnityAsync.UnsubscribeFromMod(mod.id);
    if (result.Succeeded())
    {
        Debug.Log("Successfully unsubscribed from mod");
    }
    else
    {
        Debug.Log("Failed to unsubscribe from mod");
    }
}
```

8.19.2.41 UpdateModComment()

Update a comment for the corresponding mod. Successful request will return the updated Comment Object.

Parameters

modld	ld of the mod the comment is on
content	Updated contents of the comment.
comment←	The id for the comment you wish to edit
ld	

See also

ResultAnd, ModComment, ModIOUnity.UpdateModComment

```
private string content = "This is a Comment";
long commentId = 12345;
ModId modId = (ModId)1234;
async void UpdateMod()
{
    var response = await ModIoUnityAsync.UpdateModComment(modId, content, commentId);
    if(response.result.Succeeded())
    {
        Debug.Log("Successfully Updated Comment!");
    }
    else
    {
        Debug.Log("Failed to Update Comment!");
    }
}
```

8.19.2.42 UploadModfile()

Used to upload a mod file to a mod profile on the mod.io server. A mod file is the actual archive of a mod. This method can be used to update a mod to a newer version (you can include changelog information in ModfileDetails).

Parameters

modfile	the mod file and details to upload
mounic	the mod file and details to aplead

See also

Result, ModfileDetails, ArchiveModProfile, ModIOUnity.GetCurrentUploadHandle

```
ModId modId;
async void Example()
{
    ModfileDetails modfile = new ModfileDetails();
    modfile.modId = modId;
    modfile.directory = "files/mods/mod_123";
    Result result = await ModIoUnityAsync.UploadModfile(modfile);
    if (result.Succeeded())
    {
        Debug.Log("uploaded mod file");
    }
    else
    {
        Debug.Log("failed to upload mod file");
    }
}
```

8.19.2.43 UploadModMedia()

This is used to update the logo of a mod or the gallery images. This works very similar to EditModProfile except it only affects the images.

Parameters

	modProfileDetails	this holds the reference to the images you wish to upload	
--	-------------------	---	--

See also

ModProfileDetails, Result, EditModProfile

```
ModId modId;
Texture2D newTexture;
async void Example()
{
    ModProfileDetails profile = new ModProfileDetails();
    profile.modId = modId;
    profile.logo = newTexture;
    Result result = await ModIoUnityAsync.UploadModMedia(profile);
    if (result.Succeeded()) {
        Debug.Log("uploaded new mod logo");
    }
    else
    {
        Debug.Log("failed to uploaded mod logo");
    }
}
```

The documentation for this class was generated from the following file:

· Assets/Plugins/mod.io/Runtime/ModIOUnityAsync.cs

8.20 ModIO.ModIoWebRequest Class Reference

Inheritance diagram for ModIO.ModIoWebRequest:



Public Member Functions

- ModloWebRequest (UnityWebRequest unityWebRequest)
- string GetResponseHeader (string name)

Public Attributes

UnityWebRequest unityWebRequest

Properties

```
• boolisDone [get]
```

- ulong downloadedBytes [get]
- float downloadProgress [get]
- float uploadProgress [get]
- ulong uploadedBytes [get]

8.20.1 Member Function Documentation

8.20.1.1 GetResponseHeader()

```
string ModIO.ModIoWebRequest.GetResponseHeader ( string \ \textit{name} \ )
```

Implements ModIO.IModIoWebRequest.

8.20.2 Property Documentation

8.20.2.1 downloadedBytes

```
ulong ModIO.ModIoWebRequest.downloadedBytes [get]
```

Implements ModIO.IModIoWebRequest.

8.20.2.2 downloadProgress

```
float ModIO.ModIoWebRequest.downloadProgress [get]
```

Implements ModIO.IModIoWebRequest.

8.20.2.3 isDone

```
bool ModIO.ModIoWebRequest.isDone [get]
```

Implements ModIO.IModIoWebRequest.

8.20.2.4 uploadedBytes

ulong ModIO.ModIoWebRequest.uploadedBytes [get]

Implements ModIO.IModIoWebRequest.

8.20.2.5 uploadProgress

float ModIO.ModIoWebRequest.uploadProgress [get]

Implements ModIO.IModIoWebRequest.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Classes/ModloWebRequest.cs

8.21 ModIO.ModPage Struct Reference

A struct containing the ModProfiles and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

Public Attributes

• ModProfile[] modProfiles

The mod profiles retrieved from this pagination request

· long totalSearchResultsFound

the total results that could be found. eg there may be a total of 1,000 mod profiles but this ModPage may only contain the first 100, depending on the SearchFilter pagination settings.

8.21.1 Detailed Description

A struct containing the ModProfiles and total number of remaining results that can be acquired with the SearchFilter used in the GetMods request.

See also

ModIOUnity.GetMods, ModIOUnityAsync.GetMods

8.21.2 Member Data Documentation

8.21.2.1 modProfiles

```
ModProfile [] ModIO.ModPage.modProfiles
```

The mod profiles retrieved from this pagination request

See also

ModIOUnity.GetMods, ModIOUnityAsync.GetMods

8.21.2.2 totalSearchResultsFound

long ModIO.ModPage.totalSearchResultsFound

the total results that could be found. eg there may be a total of 1,000 mod profiles but this ModPage may only contain the first 100, depending on the SearchFilter pagination settings.

See also

SearchFilter, SearchFilter.SetPageIndex, SearchFilter.SetPageSize, ModIOUnity.GetMods, ModIOUnityAsync.GetMods

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/ModPage.cs

8.22 ModIO.ModProfile Struct Reference

A struct representing all of the information available for a ModProfile.

Public Attributes

- · Modld id
- string[] tags
- · ModStatus status
- bool visible
- · string name
- string summary
- string description
- · string homePageUrl
- · ContentWarnings contentWarnings
- · DateTime dateAdded
- · DateTime dateUpdated
- · DateTime dateLive
- DownloadReference[] galleryImages_Original
- DownloadReference[] galleryImages_320x180
- DownloadReference[] galleryImages 640x360
- DownloadReference logoImage_320x180

- DownloadReference logoImage_640x360
- DownloadReference logolmage_1280x720
- DownloadReference logolmage_Original
- UserProfile creator
- DownloadReference creatorAvatar_50x50
- DownloadReference creatorAvatar_100x100
- DownloadReference creatorAvatar_Original
- · string metadata

The meta data for this mod, not to be confused with the meta data of the specific version

string latestVersion

The most recent version of the mod that exists

string latestChangelog

the change log for the most recent version of this mod

DateTime latestDateFileAdded

the date for when the most recent mod file was uploaded

KeyValuePair< string, string >[] metadataKeyValuePairs

the KVP meta data for this mod profile. Not to be confused with the meta data blob or the meta data for the installed version of the mod

- · ModStats stats
- · long archiveFileSize

8.22.1 Detailed Description

A struct representing all of the information available for a ModProfile.

See also

ModIOUnity.GetMod, ModIOUnityAsync.GetMod

8.22.2 Member Data Documentation

8.22.2.1 metadata

string ModIO.ModProfile.metadata

The meta data for this mod, not to be confused with the meta data of the specific version

See also

InstalledMod

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/ModProfile.cs

8.23 ModIO.ModProfileDetails Class Reference

Use this class to fill out the details of a Mod Profile that you'd like to create or edit. If you're submitting this via CreateModProfile you must assign values to logo, name and summary, otherwise the submission will be rejected (All fields except modId are optional if submitting this via EditModProfile)

Public Attributes

· Modld? modld

Make sure to set this field when submitting a request to Edit a Mod Profile

· bool? visible

Whether this mod will appear as public or hidden.

• byte[] logo

Image file which will represent your mods logo. Must be gif, jpg or png format and cannot exceed 8MB in filesize. Dimensions must be at least 512x288 and we recommend you supply a high resolution image with a 16 / 9 ratio. mod.io will use this image to make three thumbnails for the dimensions 320x180, 640x360 and 1280x720

List< byte[]> images

Image files that will be included in the mod profile details.

· string name

Name of your mod

· string name_id

Path for the mod on mod.io. For example: https://gamename.mod.io/mod-name-id-here. If no name_id is specified the name will be used. For example: 'Stellaris Shader Mod' will become 'stellaris-shader-mod'. Cannot exceed 80 characters

· string summary

Summary for your mod, giving a brief overview of what it's about. Cannot exceed 250 characters.

string description

Detailed description for your mod, which can include details such as 'About', 'Features', 'Install Instructions', 'FAQ', etc. HTML supported and encouraged

· string homepage url

Official homepage for your mod. Must be a valid URL

• int? maxSubscribers

This will create a cap on the number of subscribers for this mod. Set to 0 to allow for infinite subscribers.

ContentWarnings? contentWarning

This is a Bitwise enum so you can assign multiple values

string metadata

Your own custom metadata that can be uploaded with the mod profile. (This is for the entire mod profile, a unique metadata field can be assigned to each modfile as well)

· string[] tags

The tags this mod profile has. Only tags that are supported by the parent game can be applied. (Invalid tags will be ignored)

• CommunityOptions? communityOptions = CommunityOptions.AllowCommenting

Select which interactions players can have with your mod. 0 = None 1 = Ability to comment (default) ? = Add the options you want together, to enable multiple options

8.23.1 Detailed Description

Use this class to fill out the details of a Mod Profile that you'd like to create or edit. If you're submitting this via CreateModProfile you must assign values to logo, name and summary, otherwise the submission will be rejected (All fields except modId are optional if submitting this via EditModProfile)

See also

ModIOUnity.CreateModProfile, ModIOUnity.EditModProfile

8.23.2 Member Data Documentation

8.23.2.1 communityOptions

 ${\tt CommunityOptions?} \quad {\tt ModIO.ModProfileDetails.communityOptions = CommunityOptions.AllowCommenting} \\$

Select which interactions players can have with your mod. 0 = None 1 = Ability to comment (default) ? = Add the options you want together, to enable multiple options

Can be null

8.23.2.2 contentWarning

ContentWarnings? ModIO.ModProfileDetails.contentWarning

This is a Bitwise enum so you can assign multiple values

See also

ContentWarnings

Can be null

8.23.2.3 description

string ModIO.ModProfileDetails.description

Detailed description for your mod, which can include details such as 'About', 'Features', 'Install Instructions', 'FAQ', etc. HTML supported and encouraged

Can be null

8.23.2.4 homepage_url

string ModIO.ModProfileDetails.homepage_url

Official homepage for your mod. Must be a valid URL

Can be null

8.23.2.5 images

List<byte[]> ModIO.ModProfileDetails.images

Image files that will be included in the mod profile details.

Can be null

8.23.2.6 logo

```
byte [] ModIO.ModProfileDetails.logo
```

Image file which will represent your mods logo. Must be gif, jpg or png format and cannot exceed 8MB in filesize. Dimensions must be at least 512x288 and we recommend you supply a high resolution image with a 16 / 9 ratio. mod.io will use this image to make three thumbnails for the dimensions 320x180, 640x360 and 1280x720

Can be null if using EditModProfile

See also

ModIOUnity.EditModProfile

8.23.2.7 maxSubscribers

```
int? ModIO.ModProfileDetails.maxSubscribers
```

This will create a cap on the number of subscribers for this mod. Set to 0 to allow for infinite subscribers.

Can be null

8.23.2.8 metadata

```
string ModIO.ModProfileDetails.metadata
```

Your own custom metadata that can be uploaded with the mod profile. (This is for the entire mod profile, a unique metadata field can be assigned to each modfile as well)

See also

ModfileDetails

the metadata has a maximum size of 50,000 characters.

Can be null

8.23.2.9 modld

```
ModId? ModIO.ModProfileDetails.modId
```

Make sure to set this field when submitting a request to Edit a Mod Profile

Can be null

8.23.2.10 name

string ModIO.ModProfileDetails.name

Name of your mod

Can be null if using EditModProfile

See also

ModIOUnity.EditModProfile

8.23.2.11 name_id

string ModIO.ModProfileDetails.name_id

Path for the mod on mod.io. For example: https://gamename.mod.io/mod-name-id-here. If no name_id is specified the name will be used. For example: 'Stellaris Shader Mod' will become 'stellaris-shader-mod'. Cannot exceed 80 characters

Can be null

8.23.2.12 summary

string ModIO.ModProfileDetails.summary

Summary for your mod, giving a brief overview of what it's about. Cannot exceed 250 characters.

This field must be assigned when submitting a new Mod Profile

Can be null if using EditModProfile

See also

ModIOUnity.EditModProfile

8.23.2.13 tags

```
string [] ModIO.ModProfileDetails.tags
```

The tags this mod profile has. Only tags that are supported by the parent game can be applied. (Invalid tags will be ignored)

Can be null

8.23.2.14 visible

bool? ModIO.ModProfileDetails.visible

Whether this mod will appear as public or hidden.

Can be null

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Classes/ModProfileDetails.cs

8.24 ModIO.ModStats Struct Reference

Detailed stats about a Mod's ratings, downloads, subscribers, popularity etc

Public Attributes

- ModId modId
- long popularityRankPosition
- long popularityRankTotalMods
- long downloadsToday
- long downloadsTotal
- long subscriberTotal
- long ratingsTotal
- long ratingsPositive
- · long ratingsNegative
- long ratingsPercentagePositive
- · float ratingsWeightedAggregate
- string ratingsDisplayText

8.24.1 Detailed Description

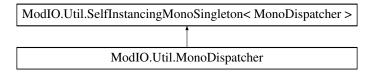
Detailed stats about a Mod's ratings, downloads, subscribers, popularity etc

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/ModStats.cs

8.25 ModIO.Util.MonoDispatcher Class Reference

Inheritance diagram for ModIO.Util.MonoDispatcher:



Public Member Functions

- bool MainThread ()
- · void Run (Action action)
- Task EnqueueAsync (Action action)

Protected Member Functions

• override void Awake ()

Private Member Functions

• void Update ()

Private Attributes

- Thread mainThread
- readonly ConcurrentQueue < Action > actions = new ConcurrentQueue < Action > ()

Additional Inherited Members

8.25.1 Member Function Documentation

8.25.1.1 Awake()

```
override void ModIO.Util.MonoDispatcher.Awake ( ) [protected], [virtual]
```

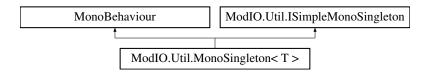
Reimplemented from ModIO.Util.SelfInstancingMonoSingleton < MonoDispatcher >.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/MonoDispatcher.cs

8.26 ModIO.Util.MonoSingleton < T > Class Template Reference

Inheritance diagram for ModIO.Util.MonoSingleton< T >:



Public Member Functions

• void SetupSingleton ()

Static Public Member Functions

• static bool SingletonIsInstantiated ()

Protected Member Functions

- virtual void Awake ()
- virtual void OnDestroy ()
- virtual void OnApplicationQuit ()

Static Protected Attributes

static T _instance

Properties

• static T? Instance [get, private set]

8.26.1 Member Function Documentation

8.26.1.1 SetupSingleton()

```
void ModIO.Util.MonoSingleton< T >.SetupSingleton ( )
```

Implements ModIO.Util.ISimpleMonoSingleton.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/MonoSingleton.cs

8.27 ModIO.Util.Mutex Class Reference

This serves only as an abstract handle for using lock(mutex) to synchronize IO operations

8.27.1 Detailed Description

This serves only as an abstract handle for using lock(mutex) to synchronize IO operations

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/Mutex.cs

8.28 ModIO.ProgressHandle Class Reference

A ProgressHandle can only be used to monitor the progress of an operation and cannot be used to cancel or suspend ongoing operations. The OperationType enum field specifies what type of operation this handle is for. The Progress field can be used to get the percentage (0.0 - 1.0) of the progress. The Completed and Failed fields can be used to determine if the operation is complete and whether or not it failed.

Properties

• Modld modld [get, set]

The Modld of the mod that this operation pertains to.

• ModManagementOperationType OperationType [get, set]

The type of operation being performed, eg. Download, Upload, Install

float Progress [get, set]

The progress of the operation being performed, float range from 0.0f - 1.0f

long BytesPerSecond [get, set]

The average number of bytes being processed per second by the operation (Updated every 10 milliseconds)

• bool Completed [get, set]

Is set to True when the operation has finished

bool Failed [get, set]

Is set to True if the operation encounters an error or is cancelled before completion

8.28.1 Detailed Description

A ProgressHandle can only be used to monitor the progress of an operation and cannot be used to cancel or suspend ongoing operations. The OperationType enum field specifies what type of operation this handle is for. The Progress field can be used to get the percentage (0.0 - 1.0) of the progress. The Completed and Failed fields can be used to determine if the operation is complete and whether or not it failed.

8.28.2 Property Documentation

8.28.2.1 BytesPerSecond

```
long ModIO.ProgressHandle.BytesPerSecond [get], [set]
```

The average number of bytes being processed per second by the operation (Updated every 10 milliseconds)

Only applicable to Download and Upload operations

8.28.2.2 Completed

```
bool ModIO.ProgressHandle.Completed [get], [set]
```

Is set to True when the operation has finished

If an operation fails then Completed will still be True, therefore it is recommended to check Failed as well

The documentation for this class was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Classes/ProgressHandle.cs

8.29 ModIO.Implementation.API.Objects.Rating Struct Reference

A struct representing all of the information available for a Rating.

Public Attributes

- ModId modId
- · ModRating rating
- · DateTime dateAdded

8.29.1 Detailed Description

A struct representing all of the information available for a Rating.

See also

ModIOUnity.GetCurrentUserRatings, ModIOUnityAsync.GetCurrentUserRatings, RatingObject

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/Rating.cs

8.30 ModIO.Implementation.API.Objects.RatingObject Struct Reference

A struct representing all of the information available for a ${\sf ModDependenciesObject}$.

Public Attributes

- uint game id
- long mod_id
- int rating
- · long date_added

8.30.1 Detailed Description

A struct representing all of the information available for a ModDependenciesObject.

See also

ModIOUnity.GetCurrentUserRatings, ModIOUnityAsync.GetCurrentUserRatings

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/RatingObject.cs

8.31 ModIO.Report Class Reference

Used in conjunction with ModIOUnity.Report() to send a report to the mod.io server for a specific mod.

Public Member Functions

- Report (ModId modId, ReportType type, string summary, string user, string contactEmail)
 convenience constructor for making a report. All of the parameters are mandatory to make a successful report.
- · bool CanSend ()

Public Attributes

- · long? id
- string summary
- ReportType? type
- ReportResourceType? resourceType
- string user
- string contactEmail

8.31.1 Detailed Description

Used in conjunction with ModIOUnity.Report() to send a report to the mod.io server for a specific mod.

8.31.2 Constructor & Destructor Documentation

8.31.2.1 Report()

convenience constructor for making a report. All of the parameters are mandatory to make a successful report.

Parameters

modld	the id of the mod being reported
type	the type of report
summary	CANNOT BE NULL explanation of the issue being reported
user	CANNOT BE NULL user reporting the issue
contactEmail	CANNOT BE NULL user email address

The documentation for this class was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Classes/Report.cs

8.32 ModIO.Result Struct Reference

Struct returned from ModIO callbacks to inform the caller if the operation succeeded.

Public Member Functions

- bool Succeeded ()
- bool IsCancelled ()
- bool IsInitializationError ()
- bool IsAuthenticationError ()
- $\bullet \ \ \mathsf{bool} \ \textbf{IsInvalidSecurityCode} \ ()$
- bool IsInvalidEmailAddress ()
- bool IsPermissionError ()
- bool IsNetworkError ()

Checks if the result failed due to no internet connection

• bool IsStorageSpaceInsufficient ()

Properties

• string message [get]

A string message explaining the result error code in more detail (If one exists).

• uint errorCode [get]

The error code for the result. 0 = Success

8.32.1 Detailed Description

Struct returned from ModIO callbacks to inform the caller if the operation succeeded.

8.32.2 Member Function Documentation

8.32.2.1 IsNetworkError()

```
bool ModIO.Result.IsNetworkError ( )
```

Checks if the result failed due to no internet connection

Returns

true if the result failed due to no internet connection

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/Result.cs

8.33 ModIO.ResultAnd< T > Class Template Reference

Convenience wrapper for essentially a Tuple.

Public Attributes

- · Result result
- T value

8.33.1 Detailed Description

Convenience wrapper for essentially a Tuple.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Classes/ResultAnd.cs

8.34 ModIO.SearchFilter Class Reference

Used to build a filter that is sent with requests for retrieving mods.

Public Member Functions

void AddSearchPhrase (string phrase)

Adds a phrase into the filter to be used when filtering mods in a request.

void AddTag (string tag)

Adds a tag to be used in filtering mods for a request.

void SortBy (SortModsBy category)

Determines what category mods should be sorted and returned by. eg if the category SortModsBy.Downloads was used, then the results would be returned by the number of downloads. Depending on the Ascending or Descending setting, it will start or end with mods that have the highest or lowest number of downloads.

void SetToAscending (bool isAscending)

Determines the order of the results being returned. eg should results be filtered from highest to lowest, or lowest to highest.

void SetPageIndex (int pageIndex)

Sets the zero based index of the page. eg if there are 1,000 results based on the filter settings provided, and the page size is 100. Setting this to 1 will return the mods from 100-200. Whereas setting this to 0 will return the first 100 results.

void SetPageSize (int pageSize)

Sets the maximum page size of the request. eg if there are 50 results and the index is set to 0. If the page size is set to 10 you will receive the first 10 results. If the page size is set to 100 you will only receive the total 50 results, because there are no more to be got.

void AddUser (long userId)

Adds a specific user to the filter, so that mods that were not created by the user (or other users added to the filter) will not be returned.

bool IsSearchFilterValid (out Result result)

You can use this method to check if a search filter is setup correctly before using it in a GetMods request.

Private Attributes

- bool hasPageIndexBeenSet = false
- bool hasPageSizeBeenSet = false

8.34.1 Detailed Description

Used to build a filter that is sent with requests for retrieving mods.

See also

ModIOUnity.GetMods, ModIOUnityAsync.GetMods

8.34.2 Member Function Documentation

8.34.2.1 AddSearchPhrase()

```
void ModIO.SearchFilter.AddSearchPhrase ( string\ phrase\ )
```

Adds a phrase into the filter to be used when filtering mods in a request.

Parameters

-	ohrase	the string to be added to the filter
---	--------	--------------------------------------

8.34.2.2 AddTag()

Adds a tag to be used in filtering mods for a request.

Parameters

tag	the tag to be added to the filter
-----	-----------------------------------

See also

Tag, TagCategory

8.34.2.3 AddUser()

```
void ModIO.SearchFilter.AddUser ( long\ userId\ )
```

Adds a specific user to the filter, so that mods that were not created by the user (or other users added to the filter) will not be returned.

Parameters

user⇔	ld of the user to add			
Id				

See also

UserProfile

8.34.2.4 IsSearchFilterValid()

You can use this method to check if a search filter is setup correctly before using it in a GetMods request.

Da			_ 1		
Pа	ra	m	eı	re	rs

result

Returns

true if the filter is valid

See also

ModIOUnity.GetMods, ModIOUnityAsync.GetMods

8.34.2.5 SetPageIndex()

Sets the zero based index of the page. eg if there are 1,000 results based on the filter settings provided, and the page size is 100. Setting this to 1 will return the mods from 100-200. Whereas setting this to 0 will return the first 100 results.

Parameters

pageIndex

See also

SetPageSize

8.34.2.6 SetPageSize()

Sets the maximum page size of the request. eg if there are 50 results and the index is set to 0. If the page size is set to 10 you will receive the first 10 results. If the page size is set to 100 you will only receive the total 50 results, because there are no more to be got.

Parameters

pageSize

See also

SetPageIndex

8.34.2.7 SetToAscending()

```
\begin{tabular}{ll} \beg
```

Determines the order of the results being returned. eg should results be filtered from highest to lowest, or lowest to highest.

Parameters

isAscending

8.34.2.8 SortBy()

Determines what category mods should be sorted and returned by. eg if the category SortModsBy.Downloads was used, then the results would be returned by the number of downloads. Depending on the Ascending or Descending setting, it will start or end with mods that have the highest or lowest number of downloads.

Parameters

category	the category to sort the request
----------	----------------------------------

See also

SetToAscending

The documentation for this class was generated from the following file:

 $\bullet \ \, Assets/Plugins/mod.io/Runtime/Classes/SearchFilter.cs$

8.35 ModIO.Util.SelfInstancingMonoSingleton< T> Class Template Reference

Inheritance diagram for ModIO.Util.SelfInstancingMonoSingleton< T >:



Public Member Functions

• void SetupSingleton ()

Static Public Member Functions

• static bool SingletonIsInstantiated ()

Protected Member Functions

- virtual void Awake ()
- virtual void OnDestroy ()
- virtual void OnApplicationQuit ()

Static Protected Attributes

• static T _instance

Properties

• static T Instance [get, private set]

8.35.1 Member Function Documentation

8.35.1.1 SetupSingleton()

```
void ModIO.Util.SelfInstancingMonoSingleton< T >.SetupSingleton ( )
```

Implements ModIO.Util.ISimpleMonoSingleton.

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/SelfInstancingMonoSingleton.cs

8.36 ModIO.ServerSettings Struct Reference

Describes the server settings to use for the ModIO Plugin. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

Public Member Functions

• ServerSettings (ServerSettings serverSettings)

Public Attributes

· string serverURL

URL for the mod.io server to connect to.

· uint gameld

Game Id as can be found on mod.io Web UI.

· string gameKey

mod.io Service API Key used by your game to connect.

string languageCode

Language code for the localizing message responses. See $\ https://docs.mod.io/\#localization for possible values.$

· bool disableUploads

Disables uploading mods and modfiles for this build.

8.36.1 Detailed Description

Describes the server settings to use for the ModIO Plugin. This can be setup directly from the inspector when editing the config settings file, or you can instantiate and use this at runtime with the Initialize method

See also

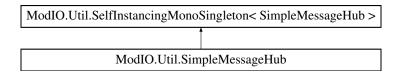
BuildSettings, ModIOUnity.InitializeForUser, ModIOUnityAsync.InitializeForUser

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/ServerSettings.cs

8.37 ModIO.Util.SimpleMessageHub Class Reference

Inheritance diagram for ModIO.Util.SimpleMessageHub:



Public Member Functions

- SimpleMessageUnsubscribeToken Subscribe< T > (Action< T > subscription)
- void Publish< T > (T message)
- void PublishThreadSafe< T > (T message)
- void ClearTypeSubscriptions< T > ()

Protected Member Functions

• override void OnDestroy ()

Private Member Functions

· void Update ()

Private Attributes

- readonly Dictionary
 Type, List< Action
 ISimpleMessage
 > > dictionary
- List< |SimpleMessage > threadSafeMessages = new List<|SimpleMessage>()

Additional Inherited Members

8.37.1 Member Function Documentation

8.37.1.1 OnDestroy()

```
override void ModIO.Util.SimpleMessageHub.OnDestroy ( ) [protected], [virtual]
```

 $Reimplemented \ from \ ModIO. Util. SelfInstancing Mono Singleton < Simple Message Hub>.$

8.37.1.2 Publish < T >()

Type Constraints

T: class

T: ISimpleMessage

8.37.1.3 PublishThreadSafe< T >()

```
void ModIO.Util.SimpleMessageHub.PublishThreadSafe< T > (  \mbox{T message} \ ) \label{eq:total_publish}
```

Type Constraints

T: class

T: ISimpleMessage

8.37.1.4 Subscribe < T >()

```
\label{eq:simpleMessageHub.Subscribe} SimpleMessageHub.Subscribe< T > ( \\ Action< T > subscription )
```

Type Constraints

T: class

T: ISimpleMessage

8.37.2 Member Data Documentation

8.37.2.1 dictionary

```
readonly Dictionary<Type, List<Action<ISimpleMessage> >> ModIO.Util.SimpleMessageHub. \leftarrow dictionary [private]
```

Initial value:

```
new Dictionary<Type, List<Action<ISimpleMessage>>()
```

The documentation for this class was generated from the following file:

Assets/Plugins/mod.io/Runtime/Utility/SimpleMessageHub.cs

8.38 ModIO.Util.SimpleMessageUnsubscribeToken Class Reference

Public Member Functions

- SimpleMessageUnsubscribeToken (Action unsub)
- void Unsubscribe ()

Private Attributes

· Action unsubAction

The documentation for this class was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Utility/SimpleMessageUnsubscribeToken.cs

8.39 ModIO.Util.SimpleSingleton < T > Class Template Reference

Properties

• static T Instance [get, set]

Static Private Attributes

· static T_instance

The documentation for this class was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Utility/SimpleSingleton.cs

8.40 ModIO.SubscribedMod Struct Reference

Represents the ModProfile of a mod the current user has subscribed to. Contains the status and a directory (if installed) and the associated ModProfile.

Public Attributes

- SubscribedModStatus status
- string directory
- ModProfile modProfile
- bool enabled

Whether the mod has been marked as enabled or disabled by the user

8.40.1 Detailed Description

Represents the ModProfile of a mod the current user has subscribed to. Contains the status and a directory (if installed) and the associated ModProfile.

Note this is not necessarily an installed mod. You will need to check the status to see whether or not it is installed.

See also

 $status, \, Subscribed Mod Status, \, Mod Profile, \, Mod IOU nity. Get Subscribed Mod status, \, S$

8.40.2 Member Data Documentation

8.40.2.1 enabled

bool ModIO.SubscribedMod.enabled

Whether the mod has been marked as enabled or disabled by the user

See also

ModIOUnity.EnableMod, ModIOUnity.DisableMod

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/SubscribedMod.cs

8.41 ModIO.Tag Struct Reference

Represents a Tag that can be assigned to a mod.

Public Attributes

- string name
- · int totalUses

8.41.1 Detailed Description

Represents a Tag that can be assigned to a mod.

See also

TagCategory, ModIOUnity.GetTagCategories, ModIOUnityAsync.GetTagCategories

The documentation for this struct was generated from the following file:

 $\bullet \ \, Assets/Plugins/mod.io/Runtime/Structs/Tag.cs$

8.42 ModIO.TagCategory Struct Reference

Represents a particular category of tags.

Public Attributes

- · string name
- Tag[] tags
- · bool multiSelect
- · bool hidden
- · bool locked

8.42.1 Detailed Description

Represents a particular category of tags.

See also

ModIOUnity.GetTagCategories, ModIOUnityAsync.GetTagCategories, Tag

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/TagCategory.cs

8.43 ModIO.TermsHash Struct Reference

This is the hash that identifies the TOS. Used to validate the TOS requirement when attempting to authenticate a user.

Public Attributes

· string md5hash

8.43.1 Detailed Description

This is the hash that identifies the TOS. Used to validate the TOS requirement when attempting to authenticate a user.

See also

TermsOfUse, ModIOUnity.GetTermsOfUse, ModIOUnityAsync.GetTermsOfUse

The documentation for this struct was generated from the following file:

· Assets/Plugins/mod.io/Runtime/Structs/TermsHash.cs

8.44 ModIO.TermsOfUse Struct Reference

TOS object received from a successful use of ModIOUnity.GetTermsOfUse This is used when attempting to authenticate via a third party. You must retrieve the TOS and input it along with an authentication request.

Public Attributes

- string termsOfUse
- TermsOfUseLink[] links
- · TermsHash hash

8.44.1 Detailed Description

TOS object received from a successful use of ModIOUnity.GetTermsOfUse This is used when attempting to authenticate via a third party. You must retrieve the TOS and input it along with an authentication request.

See also

ModIOUnity.GetTermsOfUse, ModIOUnityAsync.GetTermsOfUse, ModIOUnity.AuthenticateUserViaDiscord, ModIOUnity.AuthenticateUserViaGoogle, ModIOUnity.AuthenticateUserViaGOG, ModIOUnity.AuthenticateUserViaItch, ModIOUnity.AuthenticateUserViaOculus, ModIOUnity.AuthenticateUserViaSteam, ModIOUnity.AuthenticateUserViaSwitch, ModIOUnity.AuthenticateUserViaXbox

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/TermsOfUse.cs

8.45 ModIO.TermsOfUseLink Struct Reference

Represents a url as part of the TOS. The 'required' field can be used to determine whether or not it is a TOS requirement to be displayed to the end user when viewing the TOS text.

Public Attributes

- · string name
- string url
- · bool required

8.45.1 Detailed Description

Represents a url as part of the TOS. The 'required' field can be used to determine whether or not it is a TOS requirement to be displayed to the end user when viewing the TOS text.

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/TermsOfUseLink.cs

8.46 ModIO.UserInstalledMod Struct Reference

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

Public Attributes

bool updatePending

Whether or not the mod has been marked for an update

· string directory

the directory of where this mod is installed

· string metadata

The metadata for the version of the mod that is currently installed (Not to be mistaken with the metadata located inside of ModProfile.cs)

string version

the version of this installed mod

string changeLog

the change log for this version of the installed mod

· DateTime dateAdded

The date that this version of the mod was submitted to mod.io

ModProfile modProfile

The profile of this mod, including the summary and name

bool enabled

Whether the mod has been marked as enabled or disabled by the user

8.46.1 Detailed Description

Struct used to represent a mod that already exists on the current device. You can view the subscribed users to this mod as well as the directory and modprofile associated to it.

8.46.2 Member Data Documentation

8.46.2.1 enabled

bool ModIO.UserInstalledMod.enabled

Whether the mod has been marked as enabled or disabled by the user

See also

ModIOUnity.EnableMod, ModIOUnity.DisableMod

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/UserInstalledMod.cs

8.47 ModIO.UserProfile Struct Reference

Represents a particular mod.io user with their username, DownloadReferences for getting their avatar, as well as their language and timezone.

Public Attributes

· string username

The display name of the user's mod.io account

· long userId

This is the unique Id of the user.

string portal_username

The display name of the user's account they authenticated with. Eg if they authenticated with Steam it would be their Steam username.

- · DownloadReference avatar_original
- DownloadReference avatar_50x50
- DownloadReference avatar_100x100
- · string timezone
- · string language

8.47.1 Detailed Description

Represents a particular mod.io user with their username, DownloadReferences for getting their avatar, as well as their language and timezone.

The documentation for this struct was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Structs/UserProfile.cs

8.48 ModIO.Util.Utility Class Reference

Static Public Member Functions

• static string GenerateHumanReadableNumber (long number)

changes an int64 number into something more human readable such as "12.6K"

- static string GenerateHumanReadableTimeStringFromSeconds (int seconds)
- static string GenerateHumanReadableStringForBytes (long bytes)
- static string GetModStatusAsString (ProgressHandle handle)
- · static string GetModStatusAsString (SubscribedMod mod)
- static string EncodeEncryptedSteamAppTicket (byte[] ticketData, uint ticketSize)

You can use this to convert your byte[] steam app ticket into a trimmed base64 encoded string to be used for the steam authentication.

• static List< T > FindEverythingInScene< T > ()

Finds everything in a loaded scene. Slow.

8.48.1 Member Function Documentation

8.48.1.1 EncodeEncryptedSteamAppTicket()

You can use this to convert your byte[] steam app ticket into a trimmed base64 encoded string to be used for the steam authentication.

Parameters

ticketData	the byte[] steam app ticket data
ticketSize	the desired length of the ticket to be trimmed to

See also

SetupSteamAuthenticationOption

Returns

base 64 encoded string from the provided steam app ticket

8.48.1.2 FindEverythingInScene< T >()

```
static List< T > ModIO.Util.Utility.FindEverythingInScene< T > ( ) [static]
```

Finds everything in a loaded scene. Slow.

Type Constraints

T: Component

8.48.1.3 GenerateHumanReadableNumber()

changes an int64 number into something more human readable such as "12.6K"

Parameters

number the long to d	onvert to readable string
----------------------	---------------------------

Returns

The documentation for this class was generated from the following file:

• Assets/Plugins/mod.io/Runtime/Utility/Utility.cs

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