Game Center Player Identifiers

Ben Harry, Game Center Engineering
Game Center

Leaderboards
Achievements
Challenges
Real-time multiplayer games
Turn-based multiplayer games
And more
GKPlayer

Unique nickname, or alias

Avatar Image

Unique, static identifier
• Identifier is always the same across all games
• Used to store per-player information
Team A

Game 1

Game 2

Team B

Game 3

Ben

playerID: P123
Team A

- Game 1
- Game 2

gamePlayerID: G12

gamePlayerID: G45

Team B

- Game 3

gamePlayerID: G89

Ben
Transferring a Game

Team A

Game 1

Team B

Game 2

Game 3

gamePlayerID: G12
teamPlayerID: T11

gamePlayerID: G45
teamPlayerID: T22

gamePlayerID: G89
Scoped Identifiers

teamPlayerID and gamePlayerID

- Properties on GKPlayer
- Increase player privacy
- Replace the playerID
- playerID has been deprecated

Start using new scoped identifiers today
Migrating to Scoped Identifiers

Replace playerID with scoped identifiers

- Save game data
- Backend services

Perform conversion upon next successful authentication
GKLocalPlayer and GKPlayer

GKLocalPlayer
- Represents authenticated player
- Persistent teamPlayerID and gamePlayerID

GKPlayer
- Provides information about other players
- Scoped identifiers will be instanced
Loading Players with Scoped Identifiers

loadPlayersForIdentifiers:withCompletionHandler:

Any of the persistent player identifiers may be used
• teamPlayerID
• gamePlayerID
Error Handling

Available after successful authentication

New API on GKPlayer

```swift
var scopedIDsArePersistent: Bool { get }
```
// Scoped identifiers will be available after successful player authentication.

GKLocalPlayer.local.authenticateHandler = {(viewController, error) -> Void in
    let localPlayer = GKLocalPlayer.local
    if let viewController = viewController {
        // Present viewController when reasonable.
    } else {
        if localPlayer.isAuthenticated {
            if localPlayerScopedIDsArePersistent {
                // Scoped identifiers available, convert if necessary.
                let teamPlayerID = localPlayer.teamPlayerID
                ...
            }
        }
    }
}
// Scoped identifiers will be available after successful player authentication.

GKLocalPlayer.local.authenticateHandler = {(viewController, error) -> Void in
    let localPlayer = GKLocalPlayer.local
    if let viewController = viewController {
        // Present viewController when reasonable.
    }
    else {
        if localPlayer.isAuthenticated {
            if localPlayer.scopedIDsArePersistent {
                // Scoped identifiers available, convert if necessary.
                let teamPlayerID = localPlayer.teamPlayerID
                ...
            }
        }
    }
}
// Scoped identifiers will be available after successful player authentication.

```swift
GKLocalPlayer.local.authenticateHandler = {(viewController, error) -> Void in
    let localPlayer = GKLocalPlayer.local
    if let viewController = viewController {
        // Present viewController when reasonable.
    }
    else {
        if localPlayer.isAuthenticated {
            if localPlayer.scopedIDsArePersistent {
                // Scoped identifiers available, convert if necessary.
                let teamPlayerID = localPlayer.teamPlayerID
                ...
            }
        }
    }
}
```
// Scoped identifiers will be available after successful player authentication.

GKLocalPlayer.local.authenticateHandler = {(viewController, error) -> Void in
    let localPlayer = GKLocalPlayer.local
    if let viewController = viewController {
        // Present viewController when reasonable.
    }
    else {
        if localPlayer.isAuthenticated {
            if localPlayer.scopedIDsArePersistent {
                // Scoped identifiers available, convert if necessary.
                let teamPlayerID = localPlayer.teamPlayerID
                ...
            }
        }
    }
}
Scoped identifiers enhance Game Center player privacy

teamPlayerID is scoped to your development team

gamePlayerID is scoped to a game

Available now