

#WWDC19

Game Center Player Identifiers

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Game Center

Leaderboards

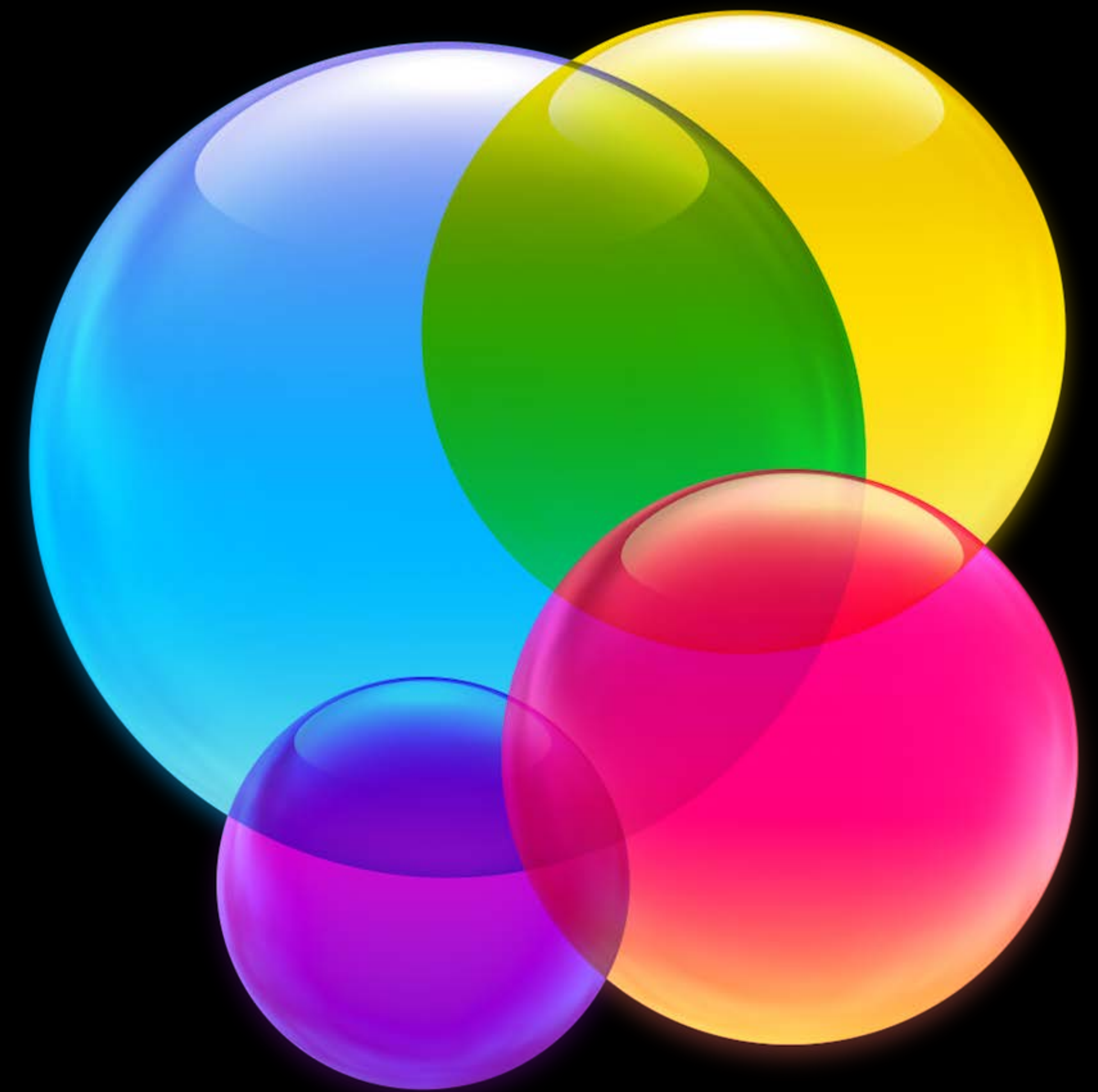
Achievements

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

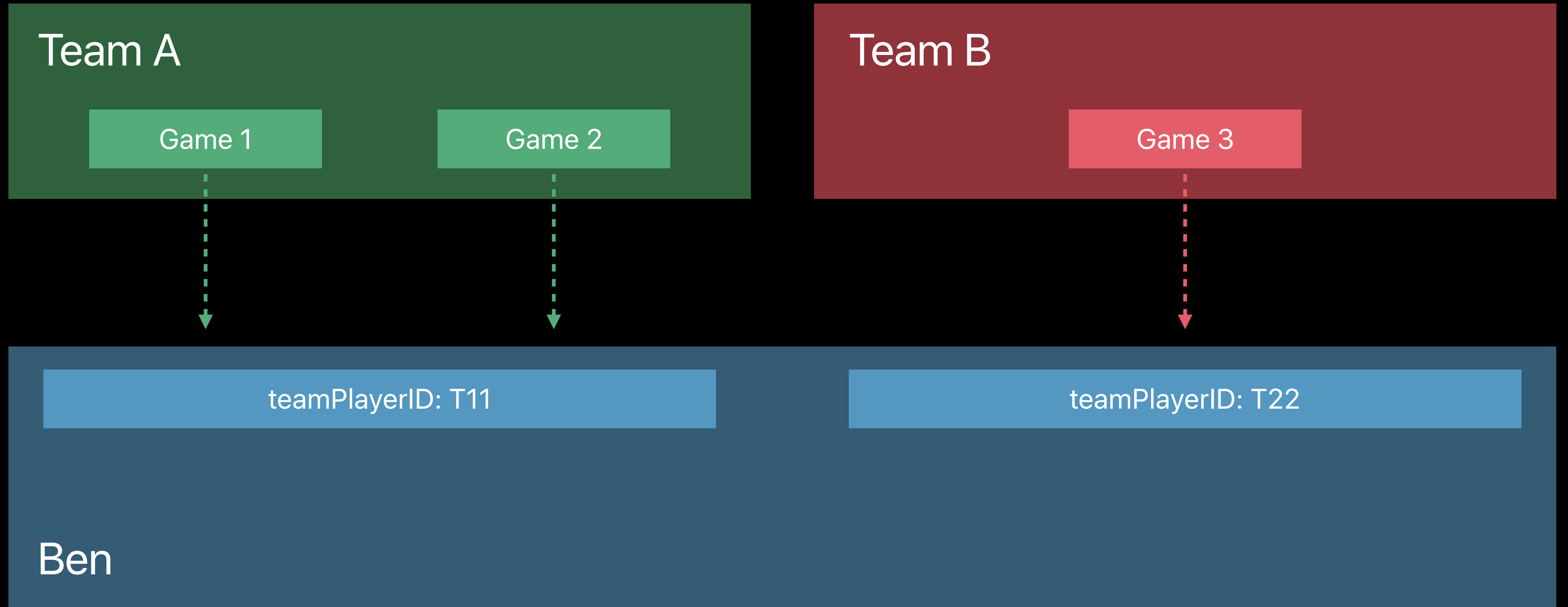
Team B

Game 3

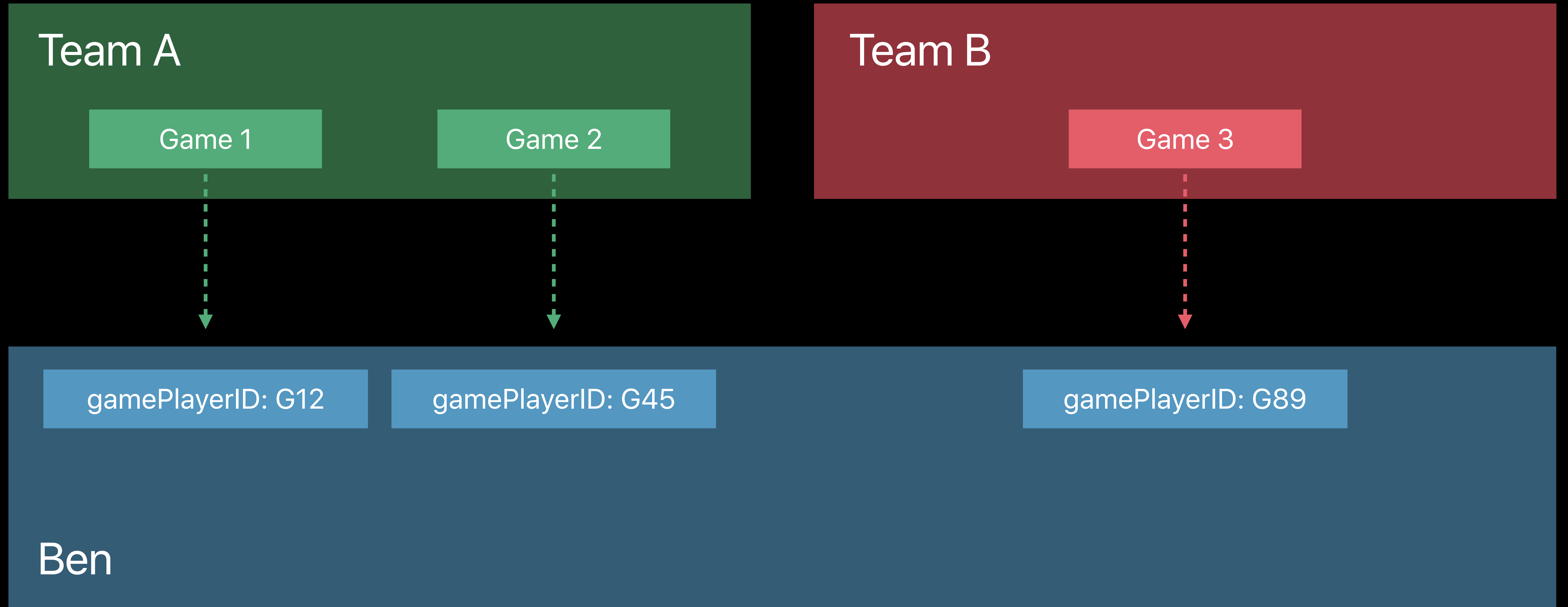
playerID: P123

Ben

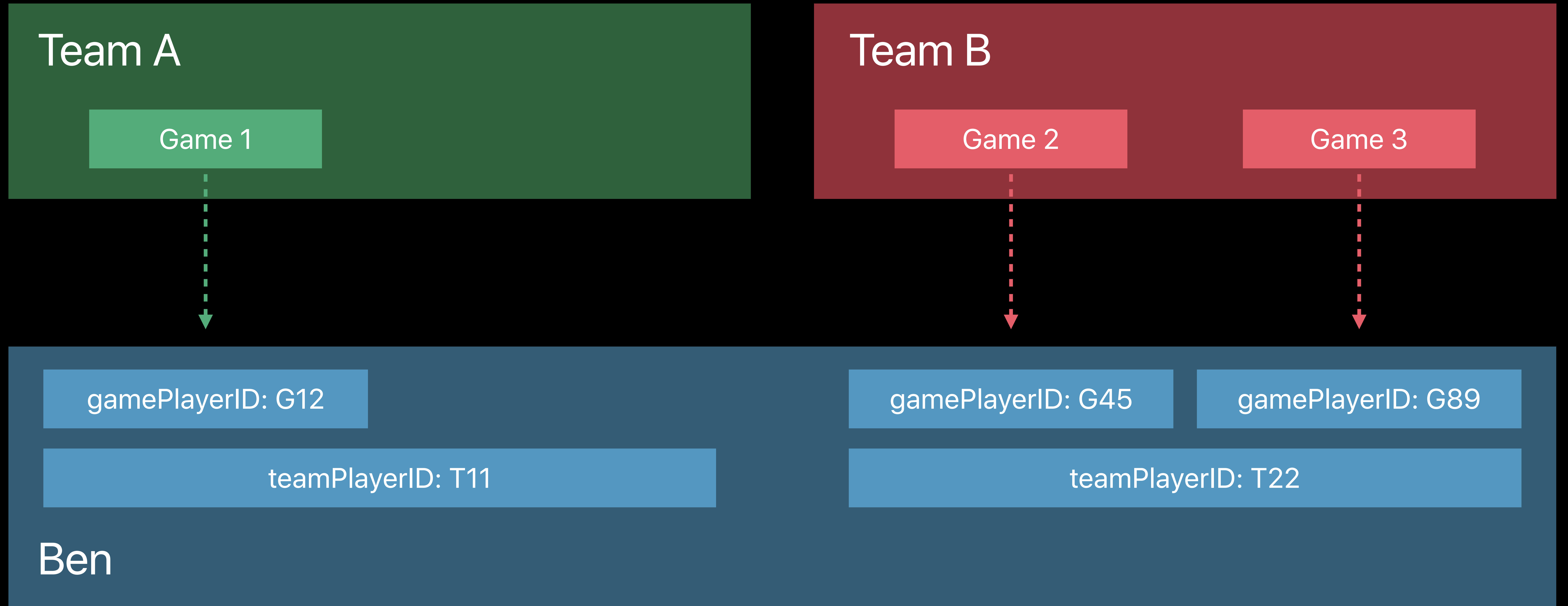
teamPlayerID



gamePlayerID



Transferring a Game



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

```
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 localPlayer.scopedIDsArePersistent {
                // Scoped identifiers available, convert if necessary.
                let teamPlayerID = localPlayer.teamPlayerID
                ...
            }
        }
    }
}
}
```

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// 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
```

```
            ...
```

```
        }
```

```
    }
```

```
}
```

```
}
```

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// Scoped identifiers will be available after successful player authentication.

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    let localPlayer = GKLocalPlayer.local
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    if let viewController = viewController {
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        if localPlayer.scopedIDsArePersistent {
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```
            // Scoped identifiers available, convert if necessary.
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```
            let teamPlayerID = localPlayer.teamPlayerID
```

```
            ...
```

```
        }
```

```
    }
```

```
}
```

```
}
```


Summary

Scoped identifiers enhance Game Center player privacy

`teamPlayerID` is scoped to your development team

`gamePlayerID` is scoped to a game

Available now

More Information

developer.apple.com/wwdc19/615

 WWDC19