New Localization Workflows with Xcode 10

Session 404

Chris Hanson, Software Engineer
Sara Radi, Software Engineer
Vivian Robison, Software Engineer
Agenda

Localization process overview
Agenda

Localization process overview

Xcode localization catalog
Agenda

Localization process overview
Xcode localization catalog
Localizing intent definition files
Localization Process Overview
Overview

Project.xcodeproj
Overview

Project.xcodeproj

Base.lproj

ja.lproj

ar.lproj
Overview

Project.xcodeproj

Base.lproj
ja.lproj
ar.lproj

Resources

Localizable Files

Export

fr.xliff
ja.xliff
ar.xliff
Overview

- Project.xcodeproj
- Base.lproj
- ja.lproj
- ar.lproj

Localizable Files
- STRINGS
- STRINGSDICT
- PLIST
- SWIFT

Resources

Export ↓
Overview

- Project.xcodeproj
- Base.lproj
- ja.lproj
- ar.lproj
Overview

Project.xcodeproj

Base.lproj

ja.lproj

ar.lproj

Import

Localizable Files

Resources
XLIFF Benefits
XLIFF Benefits

Abstracts localization from code
XLIFF Benefits

Abstracts localization from code

Contains development-language and translated strings
XLIFF Benefits

Abstracts localization from code

Contains development-language and translated strings

Supports multiple file types in a single document
XLIFF Limitations
XLIFF Limitations

Visual context
XLIFF Limitations

Visual context

Resource data
XLIFF Limitations

Visual context

Resource data

Custom metadata
XLiff Limitations

Visual context

Resource data

Custom metadata

Size and length restrictions
Why is context important?
Travel Details

- Start: 6/10/18
- End: 6/25/18
- Travelers: 2

Price: $2,638.00
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>6/10/18</td>
</tr>
<tr>
<td>End</td>
<td>6/25/18</td>
</tr>
<tr>
<td>Travelers</td>
<td>2</td>
</tr>
<tr>
<td><strong>PRICE</strong></td>
<td>$2,638.00</td>
</tr>
</tbody>
</table>

**Book**
Start: 6/10/18
End: 6/25/18
Travelers: 2

Price: $2,638.00
<trans-unit id="ael-be-sbV.title">
  <source>Book</source>
  <target>Book</target>
  <note class="UIBarButtonItem" title="Book" objectID="ael-be-sbV"/>
</trans-unit>

<trans-unit id="SmN-BV-yxL.title">
  <source>Start</source>
  <target>Start</target>
  <note class="UILabel" text="Start" objectID="SmN-BV-yxL"/>
</trans-unit>

<trans-unit id="VST-ui-hqD.title">
  <source>Details</source>
  <target>Details</target>
  <note class="UILabel" text="Details" objectID="VST-ui-hqD"/>
</trans-unit>
Context

Book
Context
Réservation con...
Xcode Localization Catalog
Xcode Localization Catalog

Purpose
Xcode Localization Catalog

Purpose

New type of localization artifact with .xcloc extension
Xcode Localization Catalog

Purpose

New type of localization artifact with `.xcloc` extension

Support localization of assets beyond strings
Xcode Localization Catalog

Purpose

New type of localization artifact with .xcloc extension
Support localization of assets beyond strings
Provide additional contextual information
Xcode Localization Catalog

Structure

Project.xcodeproj

Base.lproj
ja.lproj
ar.lproj

Resources

Localizable Files

- STRINGS
- STRINGS.DICT
- PLIST
- SWIFT
- HTML
- JPEG
Xcode Localization Catalog

Structure

- Project.xcodeproj
- Base.lproj
- ja.lproj
- ar.lproj

Localizable Files

- STRINGS
- STRINGSDICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

- fr.xcloc
- ja.xcloc
- ar.xcloc
Xcode Localization Catalog
Structure

Localizable Files
- STRINGS
- STRINGSDICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc
Xcode Localization Catalog

Structure

Localizable Files:
- STRINGS
- STRINGS.DICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc

contents.json
Xcode Localization Catalog
Structure

**contents.json**
Metadata about the localization catalog
Xcode Localization Catalog

Structure

contents.json

Metadata about the localization catalog

- Development region
Xcode Localization Catalog

Structure

contents.json

Metadata about the localization catalog
• Development region
• Target locale
Xcode Localization Catalog
Structure

contents.json

Metadata about the localization catalog
• Development region
• Target locale
• Tool info

```
{
  "developmentRegion": "en",
  "targetLocale": "fr",
  "toolInfo": {
    "toolBuildNumber": "18M175d",
    "toolID": "com.apple.dt.xcode",
    "toolName": "Xcode",
    "toolVersion": "10.0"
  },
  "version": "1.0"
}
```
Xcode Localization Catalog

Structure

contents.json

Metadata about the localization catalog

- Development region
- Target locale
- Tool info
- Version

```json
{
  "developmentRegion" : "en",
  "targetLocale" : "fr",
  "toolInfo" : {
    "toolBuildNumber" : "10N175d",
    "toolID" : "com.apple.dt.xcode",
    "moduleName" : "Xcode",
    "toolVersion" : "10.9"
  },
  "version" : "1.0"
}
```
Xcode Localization Catalog

Structure

Localizable Files
- STRINGS
- STRINGSDICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc

contents.json
Xcode Localization Catalog

Structure

Localizable Files

- STRINGS
- STRINGS.DICT
- PLIST
- SWIFT

- HTML
- JPEG

Export

contents.json

Localized Contents

- fr.xliff
- fr.lproj

fr.xcloc
Xcode Localization Catalog

Structure

Localized Contents
Xcode Localization Catalog

Structure

Localized Contents

- XLIFF 1.2 document containing the project localized strings
Xcode Localization Catalog

Structure

Localized Contents

• XLIFF 1.2 document containing the project localized strings
• Non-strings localizable assets
Localized Contents

- XLIFF 1.2 document containing the project localized strings
- Non-strings localizable assets
- Organized into the same file system hierarchy as Xcode project
Xcode Localization Catalog

Structure

Localized Contents

- XLIFF 1.2 document containing the project localized strings
- Non-strings localizable assets
- Organized into the same file system hierarchy as Xcode project
- Override resources
Xcode Localization Catalog

Structure

Localizable Files

- STRINGS
- STRINGS_DICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc

contents.json

Localized Contents

- fr.xliff
- fr.lproj
Xcode Localization Catalog

Structure

Localizable Files:
- STRINGS
- STRINGS_DICT
- PLIST
- SWIFT
- HTML
- JPEG

fr.xcloc

Export

contents.json

Localized Contents:
- fr.xliff

Source Contents:
- Base.lproj
- en.lproj
- fr.lproj
Xcode Localization Catalog

Structure

Source Contents
Xcode Localization Catalog
Structure

Source Contents
• Assets used to produce the Localized Contents
Xcode Localization Catalog

Structure

Source Contents

- Assets used to produce the Localized Contents
- Organized into the same file system hierarchy as Xcode project
Xcode Localization Catalog

Structure

Source Contents

• Assets used to produce the Localized Contents
• Organized into the same file system hierarchy as Xcode project
• Provided for context
Xcode Localization Catalog

Structure

Localizable Files
- STRINGS
- STRINGS.DICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc

contents.json

Localized Contents
- fr.xliff
- fr.lproj

Source Contents
- Base.lproj
- en.lproj
Xcode Localization Catalog

Structure

Localizable Files
- STRINGS
- STRINGS.DICT
- PLIST
- SWIFT
- HTML
- JPEG

Export

fr.xcloc

- contents.json
- Localized Contents
  - fr.xliff
  - fr.xproj
- Source Contents
  - Base.xproj
  - en.xproj
- Notes
  - Screenshots
  - README

NEW
Xcode Localization Catalog

Structure

Notes
Notes

• Provide additional information to the localizers
Xcode Localization Catalog
Structure

Notes
• Provide additional information to the localizers
• Screenshots
Xcode Localization Catalog

Structure

Notes
- Provide additional information to the localizers
- Screenshots
- Readme file
Xcode Localization Catalog
Continuous integration—export

$ xcodebuild -exportLocalizations -project <projectname> -localizationPath <dirpath>
[[--exportLanguage <targetlanguage>]] ...
Xcode Localization Catalog
Continuous integration—import

Xcode Localization Catalog

$ xcodebuild -importLocalizations -project <projectname> -localizationPath </path/to/language.xcloc>

XLIFF file

$ xcodebuild -importLocalizations -project <projectname> -localizationPath </path/to/language.xliff>
$ xcodebuild -importLocalizations -project <projectname> -localizationPath </path/to/language.xcloc>

$ xcodebuild -importLocalizations -project <projectname> -localizationPath </path/to/language.xliff>
Demo
Xcode Localization Catalog

Vivian Robison, Software Engineer
Xcode Localization Catalog
Xcode Localization Catalog

New standard for localization export and import
Xcode Localization Catalog

New standard for localization export and import

Provides more flexibility and context for localizers
Xcode Localization Catalog

New standard for localization export and import
Provides more flexibility and context for localizers
Increased file type support for nonstring resources
Xcode Localization Catalog

New standard for localization export and import

Provides more flexibility and context for localizers

Increased file type support for nonstring resources

Continuous integration support
Xcode Localization Catalog

New standard for localization export and import
Provides more flexibility and context for localizers
Increased file type support for nonstring resources
Continuous integration support
Backward compatible
Intent Definition Localization

Chris Hanson, Software Engineer
Intent Definition File

Used to define custom intents for shortcuts
Intent Definition File

Used to define custom intents for shortcuts

.intentdefinition extension
Intent Definition File

Used to define custom intents for shortcuts

.intentdefinition extension

Base localized
Intent Definition File

Used to define custom intents for shortcuts

.intentdefinition extension

Base localized

Localized using .strings files
Used to define custom intents for shortcuts

.intentdefinition extension

Base localized

Localized using .strings files

...and .stringsdict files too
Intent Definition File

Localizable content
Intent Definition File
Localizable content

Custom Intent

Category: Book
Title: Book a travel item
Description: You can use this action to book an item from our wide catalog.
Confirmation: User confirmation required

Parameter
- Type
- Destination: String
- Travelers: Integer

Shortcut Types

Parameter Combination
- Type, Travelers
- Type, Destination, Travelers

Title: Book a type for travelers people
Subtitle:
Background: Supports background execution
Watch: Primary shortcut type on watch
Intent Definition File

Localizable content
Intent Definition File

Localizable content

CUSTOM INTENTS

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Array</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>destination</td>
<td>String</td>
<td></td>
</tr>
</tbody>
</table>

**Response Templates**

<table>
<thead>
<tr>
<th>Code</th>
<th>Success</th>
<th>Template</th>
</tr>
</thead>
<tbody>
<tr>
<td>failure</td>
<td></td>
<td>We were unable to book the type to destination</td>
</tr>
<tr>
<td>success</td>
<td></td>
<td>Your (type) to destination has been booked</td>
</tr>
</tbody>
</table>

NEW
Intent Definition File

Localizable content

Intent

Parameter

Parameter

Parameter
Intent Definition File

Localizable content

Intent
  Parameter
  Parameter
  Parameter

Enum
  Value
  Value
  Value
Intent Definition File

Localizable content

Intent

Parameter
Parameter
Parameter
Shortcut Type
Shortcut Type

Enum
Value
Value
Value
Intent Definition File
Localizable content

![Diagram showing the structure of an intent definition file with nodes for Intent, Parameter, Shortcut Type, and Value.](image)
Intent Definition File

Localizable content

- Parameter
- Parameter
- Parameter
- Shortcut Type
- Shortcut Type
- Enum
- Value
- Value
- Value
- Response
- Properties
- Properties
- Template
Intent Definition File

Localizable content

Intent

- Parameter
- Parameter
- Parameter
- Shortcut Type
- Shortcut Type

Response

- Properties
- Template

Enum

- Value
- Value
- Value
Intent Definition File

Localizable content

Shortcut Type
“Book a ${type}”

Enum
- flight
- cruise
- vacation package

Intents.strings
“Book a flight”
“Book a cruise”
“Book a vacation package”
Intent Definition File
Localizable content

Shortcut Type
"Book a ${type}"
Intent Definition File
Localizable content—strings

Shortcut Type

“Book a ${type}”

Enum

flight

expedition

Intents.strings

“Book a flight”

“Book a cruise”

“Book a vacation package”
Intent Definition File
Localizable content—strings

Shortcut Type
“Book a ${type}”

Enum
- flight
- cruise
- vacation package
- expedition

Intents.strings
“Book a flight”
“Book a cruise”
“Book a vacation package”
“Book a expedition”
Intent Definition File
Localizable content—strings

Shortcut Type

“Book a ${type}”

Enum

- flight
- cruise
- vacation package
- expedition

Intents.strings

“Book a flight”
“Book a cruise”
“Book a vacation package”
“Book a expedition”
Intent Definition File
Localizable content—strings

Shortcut Type
“Book a ${type}”

Enum
flight

cruise

vacation package

expedition

Intents.strings
“Book a flight”

“Book a cruise”

“Book a vacation package”

“Book an expedition”
Intent Definition File

Localizable content—strings

Shortcut Type

“Book a \${type}”

Enum

- flight
- cruise
- vacation package
- expedition

Intents.strings

“Réservez un vol”

“Réservez une croisière”

“Réservez un séjour”

“Réservez une expédition”
Intent Definition File
Localizable content—strings

"Book a ${type} for ${travelers} people"

Shortcut Type

Enum
- flight
- cruise
- vacation package

Integer

Intents.strings

"Book a flight for ${travelers} people"
"Book a cruise for ${travelers} people"
"Book a vacation package for ${travelers} people"
Intent Definition File
Localizable content—strings

Shortcut Type

“Book a ${type} for ${travelers} people”

<table>
<thead>
<tr>
<th>Enum</th>
<th>Integer</th>
</tr>
</thead>
<tbody>
<tr>
<td>flight</td>
<td>cruise</td>
</tr>
<tr>
<td>vacation package</td>
<td></td>
</tr>
</tbody>
</table>

Intents.strings

“Book a flight for ${travelers} people”
“Book a cruise for ${travelers} people”
“Book a vacation package for ${travelers} people”
Intent Definition File
Localizable content—strings

"KMTgo-kH4Tq" = "Your flight to {destination} has been booked";

"n8LXBO" = "Book a travel item";

"eRI1Xk-KvU34" = "Book a vacation package for {travelers} people";

"eR1Xk-kH4Tq" = "Book a flight for {travelers} people";

"KMTgo-YTjLMB" = "Your expedition to {destination} has been booked";

"eRI1Xk-IWwRPh" = "Book a cruise for {travelers} people";

"jTwUc-IWwRPh" = "Book a cruise to {destination} for {travelers} people";

"eRI1Xk-YTjLMB" = "Book a expedition for {travelers} people";

"1wT5a-IWwRPh" = "We were unable to book the cruise to {destination}";

"jTwUc-KvU34" = "Book a vacation package to {destination} for {travelers} people";

"jTwUc-kH4Tq" = "Book a flight to {destination} for {travelers} people";

"1wT5a-KvU34" = "We were unable to book the vacation package to {destination}";

"1wT5a-kH4Tq" = "We were unable to book the flight to {destination}";

"KMTgo-IWwRPh" = "Your cruise to {destination} has been booked";

"jTwUc-YTjLMB" = "Book a expedition to {destination} for {travelers} people";

"7un7a" = "You can use this action to book an item from our wide catalog of travel options";

"1wT5a-YTjLMB" = "We were unable to book the expedition to {destination}";
"KMTgo-kHt4Xq" = "Your flight to $(destination) has been booked";
"nBLXBO" = "Book a travel item";
"eR1MXC-KvUV34" = "Book a vacation package for $(travelers) people";
"eR1MXC-kHt4Xq" = "Book a flight for $(travelers) people";
"KMTgo-YTjLM8" = "Your expedition to $(destination) has been booked";

"eR1MXC-IWwrFh" = "Book a cruise for $(travelers) people";

"jTwUnf-IWwrFh" = "Book a cruise to $(destination) for $(travelers) people";
"eR1MXC-YTjLM8" = "Book an expedition for $(travelers) people";
"1wT5A-IWwrFh" = "We were unable to book the cruise to $(destination)";
"jTwUnf-KvUV34" = "Book a vacation package to $(destination) for $(travelers) people";
"jTwUnf-kHt4Xq" = "Book a flight to $(destination) for $(travelers) people";
"1wT5A-KvUV34" = "We were unable to book the vacation package to $(destination)";
"1wT5A-kHt4Xq" = "We were unable to book the flight to $(destination)";
"KMTgo-IWwrFh" = "Your cruise to $(destination) has been booked";
"jTwUnf-YTjLM8" = "Book an expedition to $(destination) for $(travelers) people";
"7u1n7a" = "You can use this action to book an item from our wide catalog of travel options";
"1wT5A-YTjLM8" = "We were unable to book the expedition to $(destination)";
Add to Siri
Book a cruise for 1 people
VacationPlanet

After you record your personalized phrase, Siri can use it to tell "VacationPlanet" to run this shortcut.
Book a cruise for 1 people
## Intent Definition File

Localizable content—stringsdict

<table>
<thead>
<tr>
<th>▼ Strings Dictionary</th>
<th>Dictionary</th>
<th>(8 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>▼ Book a cruise for ${travelers}$ people</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>▼ Book a flight for ${travelers}$ people</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>▼ Book an expedition for ${travelers}$ people</td>
<td>Dictionary</td>
<td>(4 items)</td>
</tr>
<tr>
<td>▼ Book a vacation package for ${travelers}$ people</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>▼ Book a cruise to ${destination}$ for ${travelers}$ people</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
</tbody>
</table>
## Intent Definition File

Localizable content—stringsdict

<table>
<thead>
<tr>
<th>▼ Strings Dictionary</th>
<th>Dictionary</th>
<th>(8 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>▼ Book a cruise for ${travelers} people 🔄</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>NSStringLocalizedFormatKey</td>
<td>String</td>
<td>Book a cruise for %#@travelers@</td>
</tr>
<tr>
<td>▼ travelers</td>
<td>Dictionary</td>
<td>(4 items)</td>
</tr>
<tr>
<td>NSStringFormatSpecTypeKey</td>
<td>String</td>
<td>NSStringPluralRuleType</td>
</tr>
<tr>
<td>NSStringFormatValueTypeKey</td>
<td>String</td>
<td>d</td>
</tr>
<tr>
<td>one</td>
<td>String</td>
<td>%d person</td>
</tr>
<tr>
<td>other</td>
<td>String</td>
<td>%d people</td>
</tr>
<tr>
<td>▶ Book a flight for ${travelers} people 🔄</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>▼ Book a expedition for ${travelers} people 🔄</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>NSStringLocalizedFormatKey</td>
<td>String</td>
<td>Book an expedition for %#@travelers@</td>
</tr>
<tr>
<td>▶ travelers</td>
<td>Dictionary</td>
<td>(4 items)</td>
</tr>
<tr>
<td>▶ Book a vacation package for ${travelers} people 🔄</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
<tr>
<td>▶ Book a cruise to ${destination} for ${travelers} people 🔄</td>
<td>Dictionary</td>
<td>(2 items)</td>
</tr>
</tbody>
</table>
## Intent Definition File

**Localizable content—stringsddict**

<table>
<thead>
<tr>
<th>NSStringLocalizedFormatKey</th>
<th>String</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>travelers</td>
<td>String</td>
<td>%d person</td>
</tr>
<tr>
<td>one</td>
<td>String</td>
<td>%d people</td>
</tr>
<tr>
<td>other</td>
<td>String</td>
<td>%d people</td>
</tr>
</tbody>
</table>

**Book a cruise for $\{travelers\} people**

| Dictionary                  | (8 items)                       |

**Book a flight for $\{travelers\} people**

| Dictionary                  | (4 items)                       |

**Book a expedition for $\{travelers\} people**

| Dictionary                  | (4 items)                       |

**Book a vacation package for $\{travelers\} people**

| Dictionary                  | (2 items)                       |

**Book a cruise to $\{destination\} for $\{travelers\} people**

| Dictionary                  | (2 items)                       |
**Intent Definition File**

Localizable content—stringsdict

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSStringLocalizedFormatKey</td>
<td>String</td>
<td>Book a cruise for %#@travelers@</td>
</tr>
<tr>
<td>Travelers</td>
<td>Dictionary</td>
<td>(4 items)</td>
</tr>
<tr>
<td>NSStringFormatSpecTypeKey</td>
<td>String</td>
<td>NSStringPluralRuleType</td>
</tr>
<tr>
<td>NSStringFormatValueTypeKey</td>
<td>String</td>
<td>d</td>
</tr>
</tbody>
</table>

| One                             | String   | %d person                                  |
| Other                           | String   | %d people                                  |

- Book a flight for $\{travelers\} people
- Book an expedition for $\{travelers\} people
- Book a vacation package for $\{travelers\} people
- Book a cruise to $\{destination\} for $\{travelers\} people

<table>
<thead>
<tr>
<th>Key</th>
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<td>(4 items)</td>
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<td>NSStringFormatSpecTypeKey</td>
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<td>String</td>
<td>d</td>
</tr>
</tbody>
</table>

- Book a flight for $\{travelers\} people
- Book an expedition for $\{travelers\} people
- Book a vacation package for $\{travelers\} people
- Book a cruise to $\{destination\} for $\{travelers\} people

<table>
<thead>
<tr>
<th>Key</th>
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<th>Value</th>
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</thead>
<tbody>
<tr>
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<td>String</td>
<td>Book a cruise for %#@travelers@</td>
</tr>
<tr>
<td>Travelers</td>
<td>Dictionary</td>
<td>(4 items)</td>
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<tr>
<td>NSStringFormatSpecTypeKey</td>
<td>String</td>
<td>NSStringPluralRuleType</td>
</tr>
<tr>
<td>NSStringFormatValueTypeKey</td>
<td>String</td>
<td>d</td>
</tr>
</tbody>
</table>

- Book a flight for $\{travelers\} people
- Book an expedition for $\{travelers\} people
- Book a vacation package for $\{travelers\} people
- Book a cruise to $\{destination\} for $\{travelers\} people
## Intent Definition File

### Localizable content—stringsdict

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSStringLocalizedFormatKey</td>
<td>String</td>
<td>Book a cruise for %#@travelers@</td>
</tr>
<tr>
<td>travelers</td>
<td>Dictionary</td>
<td>(4 items)</td>
</tr>
<tr>
<td>NSStringFormatSpecTypeKey</td>
<td>String</td>
<td>NSStringPluralRuleType</td>
</tr>
<tr>
<td>NSStringFormatValueTypeKey</td>
<td>String</td>
<td>d</td>
</tr>
</tbody>
</table>

| one                                | String     | %d person                                           |
| other                              | String     | %d people                                           |

- Book a flight for ${travelers} people
- Book an expedition for ${travelers} people
- Book a vacation package for ${travelers} people
- Book a cruise to ${destination} for ${travelers} people
Add to Siri
Book a cruise for 1 person
VacationPlanet

After you record your personalized phrase, Siri can use it to tell "VacationPlanet" to run this shortcut.
Book a cruise for 1 person
Add to Siri
Book a cruise for 3 people
VacationPlanet

After you record your personalized phrase, Siri can use it to tell "VacationPlanet" to run this shortcut.
Add to Siri

Book a cruise for 3 people
Deferred Localized Intents String

Localization happens when the string is presented to the user
Deferred Localized Intents String

Localization happens when the string is presented to the user

Used when preparing the intent for donation
Deferred Localized Intents String

Localization happens when the string is presented to the user

Used when preparing the intent for donation

```swift
intent.suggestedInvocationPhrase = NSString.deferredLocalizedIntentsString(with: "Go to Mars!")
```
Xcode combines Shortcut types and enums when generating `.strings` file.
Siri Shortcuts Localization

Xcode combines Shortcut types and enums when generating `.strings` file. `.strings` and/or `.stringsdict` are used to localize Shortcuts.
Siri Shortcuts Localization

Xcode combines Shortcut types and enums when generating .strings file. .strings and/or .stringsdict are used to localize Shortcuts.

Use `deferredLocalizedIntentsString` API for donated intents.
Siri Shortcuts Localization

Strings defined in `.stringsdict` file are preferred at runtime
Siri Shortcuts Localization

Strings defined in `.stringsdict` file are preferred at runtime

Use strings or strings IDs as Localized String Key
Demo

Intent definition

Vivian Robison, Software Engineer
Summary

Chris Hanson, Software Engineer
Summary

Xcode Localization Catalogs are our new standard for localization
Summary

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• Support for all localizable resources
Xcode Localization Catalogs are our new standard for localization

- Support for all localizable resources
- Flexibility to provide context for localizers
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Siri Shortcuts are easy to localize
• Base localization with .strings files
Summary

Xcode Localization Catalogs are our new standard for localization
- Support for all localizable resources
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Siri Shortcuts are easy to localize
- Base localization with .strings files
- Use .stringsdict files where appropriate
Summary

Xcode Localization Catalogs are our new standard for localization

• Support for all localizable resources
• Flexibility to provide context for localizers

Siri Shortcuts are easy to localize

• Base localization with `.strings` files
• Use `.stringsdict` files where appropriate
• Use deferred localized strings in code
More Information

https://developer.apple.com/wwdc18/404