Twilio Flex UI 2.0 Migration Guide

What you need to know

zing

EOL: 30th June 2024

Organisations need to start their migration to Flex UI 2.0 as soon as possible. Twilio has announced end-of-life (EOL) plans for Flex UI 1 at which point critical security features, fixes and new functionality will no longer be available for older versions.

Lots of updates have been made to Twilio's contact centre platform since launch in 2018, but this is the first major user interface (UI) overhaul. As such, it is more than a simply update and requires thorough consideration and planning.

The good news is Flex UI 2.0 comes with some big upgrades that makes the effort more than worth it.

The key differences between Flex 1 & 2

With the launch of Twilio Flex UI 2.0 and Twilio Conversations, organisations can now easily add digital channels and enable agents and end-users to have threaded conversations across those channels, with historical context at hand. From a developer perspective, configuring channels is much easier. From an end-user perspective, conversations can continue seamlessly cross-channel (SMS, WhatsApp, WebChat, etc) without the need to re-enter information.

Media messages are also supported across channels, allowing users to add photos, video and other file types to conversations. Achieving this in Flex UI 1 required a workaround whereas it is now made easy.

Flex UI 2.0 introduces Twilio Paste, an innovative design system that enables rapid prototyping and roll-out of customer experiences. Paste helps teams design and build faster (and makes UI upgrades simpler). It also enables efficient reuse of features and designs across products and workflows.

A major addition is 'accessibility by default,' meaning Flex UI v2 meets WCAG 2.1 AA requirements as standard. Web Content Accessibility Guidelines (WCAG) are the international standards for ensuring web content is accessible for those with disabilities. Meeting these requirements is law in some industries, including UK local and central government. This removes the need for deep subject matter expertise when designing and building accessible user experiences.

A smaller, but useful addition is that of configurable timers to automatically transition conversations between active and inactive as well as from inactive to closed states, enabling agents to focus on active (ongoing) conversations.
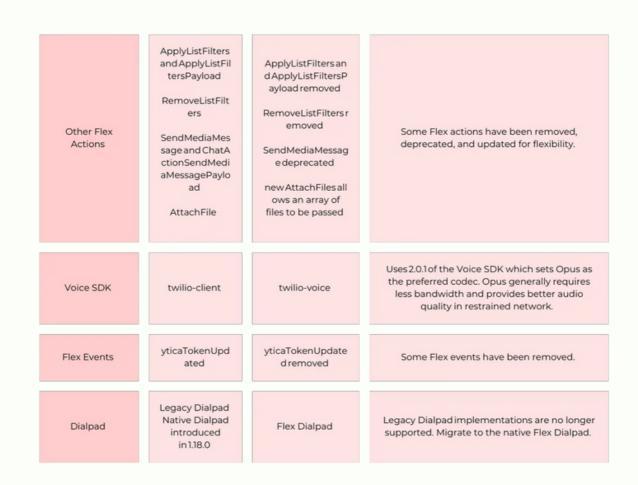
The key differences between Flex 1 & 2

Feature	Flex UI 1.0	Flex UI 2.0	Enhancements in UI 2.0
Component library	MaterialUI	Twilio Paste	Built using Twilio Paste tokens, primitives, components, and compositions that are completely composable. New tools provide some guardrails for state management, helping set up boilerplate code more easily and with better defaults.
State management	Redux	Redux Toolkit	New tools provide some guardrails for state management, helping set up boilerplate code more easily and with better defaults.
Theme and branding	Config.colorTheme config.colorTheme.overrides	config.theme config.theme.componentThemeOverride	New theming structure promotes consistency, customisation, and web accessibility.
Plugin development	Example Flex UI 1.x.xpackage.json Flex CLI 4.1.2 or lower React v16 or higher	Example Flex UI 2.x package.json Flex CLI 4.1.3 or higher React v17 or higher React & ReactDOM are now peer dependencies	Built on upgraded components and dependencies.
Messaging channels	Programmable Chat and Proxy Channel attachments (web chat only)	Conversations SDK Attachments configurable for each messaging channel WhatsApp as a native channel	While UI v2 supports Legacy Messaging, will need to use Flex Conversations and the new Interactions API. Issues with stale or 1-participant chats have been resolved by Flex Conversations.

Web accessibility	N/A	WCAG 2.1 AA	Enables customers to conform with Web Content Accessibility Guidelines (WCAG) 2.1 AA with limited development work.
Degraded mode	Introduced in 1.31.0	Enabled for all minor versions	Flex UI will initialise with limited capabilities, even if some of the components like SDKs (TaskRouter, Conversations, Voice or Sync) are down.
User and Activity Controls	Activity controls in the MainHeader component Theme for user activity controls Activity controls in the NoTaskCanvas	Programmable component Activity added to MainHeader Deprecated theme for user activity controls Removed Activity controls from the NoTaskCanvas	The User Controls component was split out into two components: user-controls now just refers to the little profile pic widget which opens up a popover with the Logout button, and activity displays the current activity and drops down to allow for selecting a different activity. These controls have been updated for easier access and improved programmability. As this is a potentially breaking change, see the migration guide for more detailed steps on working with UI v2.
Messaging UI	MessageInput	MessageInputV2	Moving to Flex Conversations offers more customisation options for the Messaging UI. There is a new dynamic Component structure and default props. See Flex Messaging UI v2 changes for more details.
TaskRouter SDK wrappers	N/A	New Actions and Flex Events TaskRouter SDK upgraded to ^0.5.9	In Flex UI v2, new Flex actions and events have been added to the Flex UI Actions Framework saving the need to access the TaskRouter SDK directly.
AppConfig	Notifications.browser warmTransfer colorTheme	Notifications.enabled warmTransfer is removed theme	Need to update AppConfig structure to utilise the new config structure's names and capabilities.
DownloadMedia Action	Requires a message object in the payload	Requires a media file as it uses Twilio Conversations	Uses Twilio Conversations under the hood.
InsightsPlayer Actions	Convention: InsightsPlayer: <action>	Convention: InsightsPlayer<action>	See Renamed actions for the full list of renamed Insights Player actions.

Other Flex Actions	ApplyListFilters and ApplyListFiltersPayload RemoveListFilters SendMediaMessage and ChatActionSendMediaMessagePayload AttachFile	ApplyListFilters and ApplyListFiltersPayload removed RemoveListFilters removed SendMediaMessage deprecated new AttachFiles allows an array of files to be passed	Some Flex actions have been removed, deprecated, and updated for flexibility.
Voice SDK	twilio-client	twilio-voice	Uses 2.0.1 of the Voice SDK which sets Opus as the preferred codec. Opus generally requires less bandwidth and provides better audio quality in restrained network.
Flex Events	yticaTokenUpdated	yticaTokenUpdated removed	Some Flex events have been removed.
Dialpad	Legacy Dialpad Native Dialpad introduced in 1.18.0	Flex Dialpad	Legacy Dialpad implementations are no longer supported. Migrate to the native Flex Dialpad.

When do we need to migrate to Flex 2.0?

Twilio has announced that latest version of Twilio Flex UI 1 (1.34) will end-of-life (EOL) on 30th June 2024.

As detailed in Twilio's end of life policy:

- Flex UI 1.32 and below will EOL 31st July 2023
- Flex UI 1.33 will EOL 30th November 2023
- Flex UI 1.34 will EOL 30th June 2024

Migration

Factors to consider when planning the move to Flex UI 2.0

There are several key factors when ensuring a successful migration, including:

1 **Development** (Paste vs Material UI): Organisations must be prepared to transition from Material UI to the Paste UI framework and understand what it means for their existing Flex instance. Flex plugins that require migration may have platform components that are not be immediately available within the Paste UI framework and require additional development effort and expertise to implement. At Zing, we've built a Library of commonly used components to help simplify each migration project.

2 **Differences**: Certain services may operate with specific differences. One example is that, with increased capabilities and ease of new channel onboarding, the Conversation API handles contact history in a different manner to that of the incumbent Chat History. Such nuances are small and easily overcome but must be factored into the scope and timeline of any migration project.

3 **Downtime**: Given the magnitude of the changes, a full migration to Flex UI 2.0 may sometimes require some downtime to complete the transition (in most cases there is no / little downtime). If this is the case, it will need to be factored into migration plans, scheduled as an out-of-hours deployment or, in the case of a 24/7 operation, will need to have suitable failover / continuity plans in place ahead of launch, to ensure no loss of service.

Migration options

1 **In-house development:** Organisations that have in-house development teams with plenty of availability may wish to tackle migration themselves. Getting started is straight forward and a matter of heading to the 'Versioning and Updates' page within the Flex Admin Dashboard and selecting version 2.0.X

Before continuing with a live profile migration, it's important to run a test migration by taking a copy of the Flex profile onto a staging / QA environment and running through the steps. This helps teams understand the impact of the changes and figure out the work involved in performing the migration.

Profiles should be reviewed following the migration and any plugin UI changes or Conversations amendments should be actioned where applicable.

Once happy with the outcome on Staging, these steps can be replicated on the Live profile.

Taking an in-house keeps complete control but can be time-consuming and resource intensive.

2   **Using a trusted Gold Partner** such as Zing removes the risk and helps ensure a smooth, prompt migration. The impact on in-house resource is minimal and organisations are set-up the get the best out of the new Flex UI 2.0 platform. If you're looking for a Twilio partner, it's worth downloading our newest eBook - The complete guide to working with a Twilio partner - to help you with your search.

Are you ready to migrate to Twilio Flex UI 2.0?

conversations@zing.dev

We offer a free Migration Diagnosis, where we evaluate your existing set-up and identify the parts that will be affected by the migration. The process helps organisations understand the scope and potentials challenges of their migration. This is a great starting point regardless of whether you decide to migrate in-house or with the help of a partner.

Reviews can be undertaken in several ways. Organisations can either grant us access to a staging or development account that mirrors production, or they can run us through their platform via a show and tell. The length of time needed depends on the customisation level of the system but is generally achievable within a few hours.

Book your FREE Migration Readiness Review

With big new features and enhancements, this major upgrade promises to deliver improved accessibility and reliability, driving direct results for organisations around the world. With an effective migration, you can maintain a seamless experience for customers while get the most out of Twilio Flex's biggest ever upgrade.