

Built-in Screen Recording

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What if...

- › You could spend less time figuring out what bug reports mean, so you have more time to improve your application?
- › There was an easy way to let your users create and submit video recordings, without ever leaving your application?



What if...

- › In the next 20 minutes, you'll discover how to integrate screen or video recording into your application, using nothing but DataFlex!



Use Case: Bug reporting

Bug reports...

“I keep getting an error when I click ‘OK’.

“Nothing happens when I press Enter!

“Did you change something? It’s not working anymore!

Bug reports...

- › Effective bug reporting is crucial for software development, enabling developers to understand issues quickly and implement fixes efficiently.
- › Accurate reports can significantly reduce debugging time and improve software quality.



Use Case: Video-based incident reporting

Video-based incident reporting...

- › Enabling employees, field agents or customers to record and submit video reports directly from their browser.
- › Especially useful in sectors like insurance, logistics, or workplace safety.
- › E.g. an enterprise asset management system, where field workers inspecting equipment could record and submit short video reports, to be tagged, stored in a database and linked to maintenance records for tracking and analysis.

Demo

› Let's take a look...





MediaStream Recording API

MediaStream Recording API

- › The MediaStream Recording API enables developers to **capture audio and video** content directly from the browser, facilitating **enhanced bug reporting, audio commentary** and/or **video recording** capabilities in applications.
- › By integrating this feature, DataFlex applications can significantly improve the quality of feedback collected during troubleshooting, include voice memo features, and allow video recording.

MediaStream Recording API

- › Included in the [WebAPIs library](#) for DataFlex, a collection of custom components for Web APIs.
- › Get it with the DataFlex Package Manager (more about that after lunch).
- › ... soon! For now, download from GitHub.



SCAN ME

MediaStream Recording API

› How to get it...

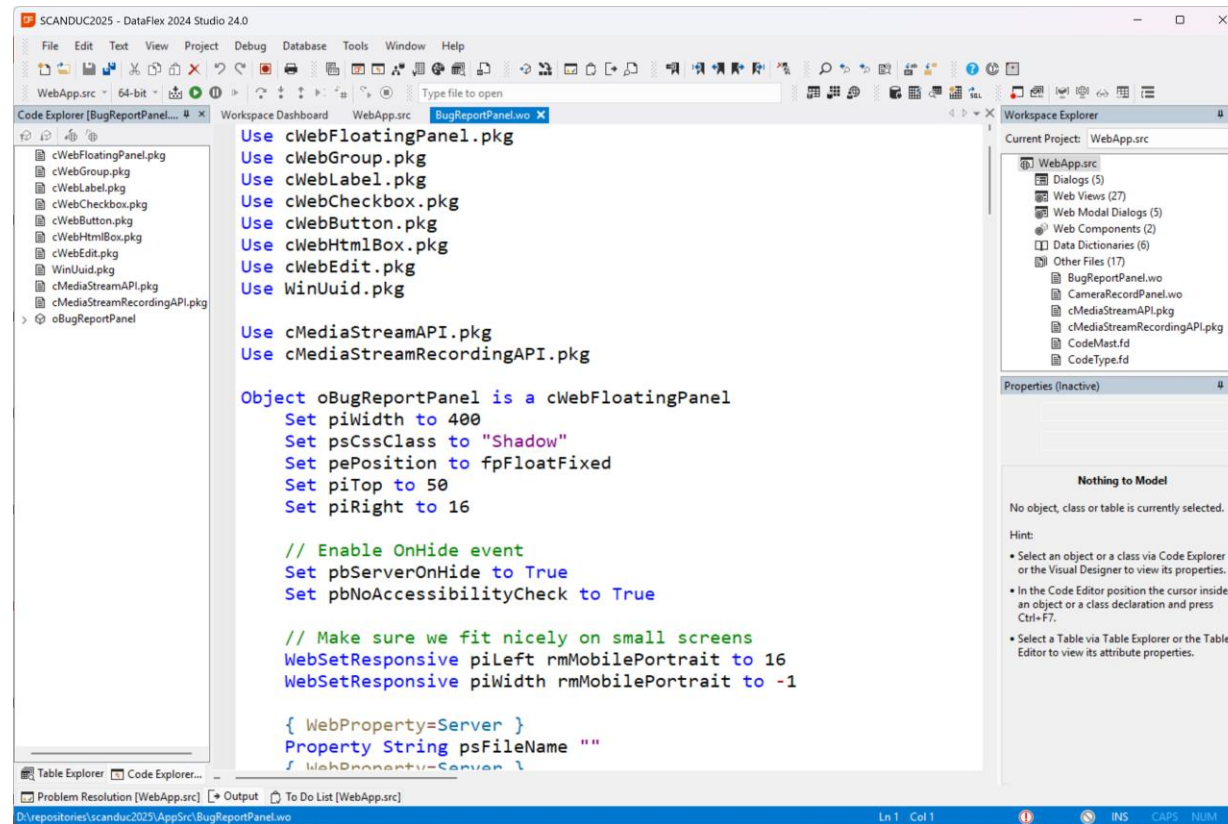
The screenshot shows the GitHub repository page for `jkruse/dataflex-webapis`. The repository is public and has 4 stars, 0 forks, and 6 issues. The main branch is selected, and there are 2 branches and 12 tags. The repository description is "DataFlex Custom Components for Web APIs". The file list includes:

File/Folder	Commit Message	Time
<code>.github</code>	Update node.js.yml	3 years ago
<code>AppHtml</code>	chore: Update dependencies	last month
<code>AppSrc</code>	feat: Battery Status API (closes #31)	last month
<code>DDSrc</code>	feat: Contact Picker API	4 years ago
<code>Data</code>	feat: Contact Picker API	4 years ago
<code>Programs</code>	feat: Contact Picker API	4 years ago
<code>src</code>	feat: Battery Status API (closes #31)	last month
<code>.browserslistrc</code>	feat: Clipboard API (#15)	3 years ago
<code>.gitattributes</code>	Initial commit	4 years ago
<code>.gitignore</code>	chore: Update dependencies	last month

The right sidebar shows the repository's about section, including the URL `www.kruse-net.dk/WebAPIs/`, tags for `dataflex`, `custom-component`, and `webapis`, and a list of repository features like Readme, MIT license, Activity, 4 stars, 1 watching, and 0 forks.

MediaStream Recording API

› And how to use it...



MediaStream Recording API

- › The custom components used support recording audio and video from user media (microphones, cameras), and audio and video from display media (speaker, screen).
- › The browser API also supports recording from media elements on page (<audio>, <video>, <canvas>), but this is not currently implemented in the custom components.
- › The [WebAPIs demo application](#) shows all the options.

MediaStream Recording API

› All the options...

MediaStream Recording Demo

DashboardMediaStream Recording Demo

MediaStream Recording API is supported
[See browser compatibility](#)

The MediaStream Recording API lets you capture data generated by a MediaStream or HTMLMediaElement, meaning you can record from devices, screen or media elements on page. Select your capture sources below, and click 'Connect' to create a stream, then 'Start recording' to record. Recording will only include the first audio and video stream you select.

Note that Firefox does not support querying device permissions, so in Firefox permissions will always show as unknown, and you won't know if enumerating devices will work.

☐ Record from user device

☐ Record from display

☐ Audio

☐ Video

Request permissionEnumerate devices

Select audio device: Default

Select video device: Default

And/or: Choose other ideals

☐ Include audio

☒ Include system audio

☐ Allow current tab

☐ Prefer current tab

☐ Include controls to switch shared tab

☒ Allow sharing entire screens

Suggested surface: Default



Set advanced recording parameters

ConnectStart recordingPause recordingResume recordingStop recordingDisconnect



Only Web Applications?

But what about...

- › “I’m still shipping desktop applications. Can I use this?”
- › While this API is browser-based, DataFlex gives you options:
 - ›  Build a browser-based desktop app (FlexTron)
 - ›  Embed a browser inside a desktop app (cLocalWebControlHost)

But what about...

- › In non-web applications, just be aware that:
 - › Error dialogs and other dialogs show in separate windows, and will only be included in your recording, if you're recording the entire screen, so configure your `oDisplayMediaStream` object with (other properties at defaults):
`Set peDisplaySurface to MSAPI_DISPLAY_SURFACE_MONITOR`
 - › You will need to upload the recording (and other information) to your server when the user submits the bug report.

Try it yourself!

- › Download the demo workspace, including webapp, Flextron and desktop application:



Thank you!

Are there any questions?