



Tagging in Niagara Introducing UxMedia

March 25, 2021

Q&A

1. How does this help Graphics on Supervisor?

UxMedia shifts the rendering work from the station to the user's device. If your supervisor is running on a strong PC and performance is already acceptable, there's no requirement to switch to UxMedia.

2. Will 4.10 graphic files be completely unviewable in older versions? Sounds like a no because of the rendering method. Will going to 4.10 be the end of doing anything in 4.8/4.9?

If a graphic has been converted to use UxMedia in 4.10, then it will not work in previous versions of Niagara (since this is a new feature). Px pages which utilize HxPx as the media type, however, will continue to work as expected in 4.10.

3. If UxMedia relies on external rendering, do we have access to all the newer capabilities of that engine as they become available? I've seen that Niagara's packaged Chromium engine for PxMedia is usually several versions behind.

Yes! Please see the user documentation on UxMedia for further information.

4. Is there a list of supported widgets? Will there be example widgets available for developers? Any new features coming with the new versions of the widgets?

A list of supported widgets is in the UxMedia documentation. As of right now, the UxMedia widgets share the same behavior as their bajoui counterparts, but feel free to make feature requests!

5. Will there be additional developer guides for developing widgets in UxMedia?

Yes! Please see the Developer Docs in 4.10 for further information on UxMedia.

6. Will you be able to hide the "force clear" on the alarm console?

UxMedia does not make any behavior changes to existing views like the alarm console.

7. Do you have Px views that show a VAV or AHU?

UxMedia supports all the graphics currently available in the kitPxGraphics modules, including the VAV/AHU graphics.

8. Will this function work with split panes and how does it work with virtuals and virtually imported PX files?

Yes, this will work with split panes and virtual Px graphics. Please invoke the Dry Run command on the PxMigrator to determine whether the widgets can be converted to UxMedia.

9. **Would downstream edge devices also need 4.10?**

Yes, 4.10 will be required on the station that is hosting the graphics.

10. **Does this bring Niagara user interfaces closer to PWA compliance? That would be a fantastic development.**

UxMedia itself is slightly orthogonal to a PWA experience. Individual widgets can, and do, make use of progressive techniques like feature detection to support a wide variety of browsers. UxMedia does not introduce service workers or any kind of offline support for BajaScript. If you would like to see specific features added in the future, please don't hesitate to reach out via your sales representative.

11. **Can you explain the 'Preserve Identities' property of the migration tool?**

'Preserve Identities' should be set to the same value your .px files originally saved them in. If you are unsure, leave it set to false. This option only applies when migrating actual .px files - you can always migrate just the views and leave the files alone.

12. **Will there be a new UX Media palette?**

No, UxMedia does not require any new components to be added to your station (except the UxMedia migration tool which is in the pxEditor palette).

13. **Is Box still the underlying structure for subscriptions?**

Yes, UxMedia bindings are implemented using BajaScript to retrieve and update data.

14. **Does 4.10 have better performance all around from 4.8 and 4.9? We have seen performance degradation since 4.7.**

4.9 included several performance improvements over 4.8, and UxMedia should make performance even better by taking additional rendering load off the JACE. Please give it a try and let us know your experiences.

15. **Once a Px file is converted, will it be able to be edited in the standard editor? Will field techs be required to have a knowledge of HTML to edit these files once converted?**

UxMedia Px files are edited using the Px Editor, the same as any other media type. No HTML knowledge is required to use the Px Editor. Only if you want to get into programming custom UxMedia widgets for use in the browser will you need to use HTML and JavaScript.

16. **If I have a supervisor running 4.10 but my Edge 10's are 4.7 and the graphics are being pushed up, can those 4.7 graphics be UX? Can the supervisor convert them to UX?**

UxMedia is not supported in version 4.7, and as such, any station would need to be running 4.10 to utilize this UI performance enhancement.

17. **Will the background of js widgets still be default white in the Px view even if defined transparent in css?**

Yes, WebWidgets will still have a white background by default.

18. Will UxMedia allow hooks into online APIs?

If you use HTML/JavaScript to write your own UxMedia widgets, you should be able to make AJAX calls to external services, provided those services are CORS-enabled and your station's Content-Security-Policy is configured to allow it.

19. Is there TabbedPane in 4.10?

Yes. TabbedPane is supported in UxMedia.

20. Will UxMedia benefit video rendering from Milestone/ Axis video driver?

Yes. Video feeds are supported in UxMedia.

21. Are PX files permanently "lost" after conversion to UX media or is still a way to recover them?

It depends. The only necessary change to migrate is to set the Media Type inside the file to UxMedia, and the same migrator tool can be used to change the Media Type back to Workbench Media or any other type. But if the 'Preserve Identities' setting is set to a value other than how it was originally saved, this is not reversible. If you migrate views only—not files—then the only change that will be made is the media type, and this can be changed back any time. We strongly recommend that you execute a Dry Run first to review exactly what changes will be made before committing, and make a full backup of your station before migration.

22. Will there be a replacement for PX Include?

PxIncludes will work as usual.

23. Will the history table load up in this new view?

Yes, the Ux History Table is supported.

24. When a view is converted as opposed to a file, does the JACE still have to do the conversion on the fly each time the page is viewed in the browser?

No. The JACE does not perform any significant conversion on the fly. It retrieves the raw Px data from the view, sends it to the browser, and then the browser does the work of converting that raw Px data into a graphic. See the UxMedia documentation for full details.

25. Can we include iframe?

Yes. The WebBrowser widget can be added to a Px page and the external site will be added in an iframe. You can also write a custom bajaux Widget that includes an iframe. You must ensure your Content-Security-Policy is correctly configured.

26. Is the long-term goal to eliminate PX/HX presentation completely?

There are no plans to get rid of Px itself. It's our hope that over time, HTML/JS solutions will become ubiquitous enough that Hx will no longer be necessary—JACEs should do what they're good at, which is managing building automation, and browsers should do what they're good at, which is displaying graphics. But we currently do not have any concrete plans to remove Hx—Hx will be supported for as long as it is needed.

27. Is there a changelog/bug fix report available yet for this version?

Yes, please see the Niagara 4.10 release docs on the Tridium Resource Center.

28. Will UxMedia have any effect on the functionality of VirtualPxOnDemand?

Virtual Px views, if compatible with UxMedia, should work as expected.

29. Presumably the specification of UxMedia forces the page to be rendered by whichever browser is considered default by the host? Else it won't know whether to use Edge/Chrome or whatever else?

The UxMedia views will be rendered using whatever browser you are using to access the station.

30. Will UxMedia improve performance of Charts?

UxMedia improves the performance of loading Px graphics. The work of retrieving the data to populate views on those Px graphics—e.g. resolving ORDs, running BQL queries, and retrieving histories—will be mostly unchanged.

31. will css overrides still work in ux rendered views?

Yes. If you have a custom Widget that uses its own CSS rules, those rules will work the same. Widgets on a UxMedia page will respect the user's selected theme.

32. Will chart widgets and with TableChartBindings have UX analogs?

ChartPanels are not currently supported in UxMedia, only WebCharts. To use ChartPanel, continue to use HxPxMedia.

33. Will there be Device Managers view on Web to discover Devices?

Yes, any existing Ux manager view should be supported in a UxMedia graphic.

34. Is there any additional feature for Niagara Analytic Graphic?

UxMedia itself does not introduce any new analytics features.