HTML Client Plugin Seed
Change Log

0.9.8 Changes - released on 8/3/2017

> We recommend to use the latest HTML Client SDK 6.5u1 released on 7/28/2017.

Highlights

- Added end to end tests for the plugin running in vSphere Client (see files `e2e/plugin` and documentation in section "End-to-end testing in Plugin mode")
- Large refactoring of Host and Chassis services and components:
  - Use observables as a better pattern for holding data displayed in view.
  - Use the Angular `async` pipe for unwrapping this data in HTML templates.
  - Better integration with RefreshService, no need to use `ChangeDetectorRef` anymore.
- The `webPlatform` initialization in `global.service.ts` was updated to take advantage of the new bootstrapping of Javascript APIs introduced in SDK 6.5u1 (see the `Globals` constructor).
- PhantomJS is no longer used for unit testing because it is not supported with newer npm packages. The Chrome browser is configured by default in `karma.conf.js`. For headless tests check out Headless Chrome once it is available for the standard Chrome on your platform.
- Clarity package updated to version 0.9.16. See Clarity's change log for details.
- Angular updated to ^4.2.6, Angular-CLI updated to ^1.2.7, Typescript updated to 2.3.4

Bug Fixes

- Fix in `global.service.ts` for `setGlobalRefreshHandler` API which was not available in 6.5 GA.
- Fix in `gulpfile.js` to make `gulp watch` work on Windows (uses `ng.cmd` instead of `ng`)
- Fix in `vSphereClientSdkType.ts`, where the ServerInfo type field is `sessionKey` and not `sessionId`.
- Also, if you get the error `gulp is not recognized as an internal or external command`, the easiest solution is to install gulp globally with `npm install gulp --global`

Other Changes

- Using Yarn (the faster alternative to "npm install") is possible again now that the error "AppModule is not an NgModule" no longer appears as it did with previous Angular-cli versions.
- `tools/plugin-package.xml` was updated to remove `scope="global"`. This attribute should not be used for production builds, but it is still required to hot-deploy bundler in `server/pickup` in SDK 6.5u1 (in addition to adding the flag `pickup.deployer=true` in webclient.properties)
- A plugin Icon was added for the default Home shortcut extension.
- Small UX improvements to the Settings view
- The global styles file `styles.css` was renamed `styles.scss`, and all shared styles from `app/app.component.sccs` were moved to that file.
- See the note on "Compilation issues caused by newer npm packages" in the doc Known Issues section.

0.9.7 Changes - released on 5/9/2017

Highlights

- [Protractor](#) e2e tests added in `seed-ui/e2e`.
- New `UserSettingService` service for saving preferences locally.
- New default `Home` tab in the main view.
- Clarity package updated to version 0.9.3. See Clarity's [change log](#) for details.
- Angular updated to [version 4.1.0](#).
- New script `tools/build-plugin-no-java.[sh, bat]` to build a plugin without any Java service.
- New script `tools/build-plugin-with-proxy.[sh, bat]` to replace the plugin service .jar with `http-proxy-servlet.jar`, a simple proxy for accessing back-end APIs!
- New script `tools/remove-chassis-code.sh` for removing all Chassis related code from the generated plugin. Useful for trimming it down if you are not going to use that feature!

Bug Fixes

- Fixed the DOM update after a RefreshService `refreshView` event (triggered by the user clicking on the *Refresh* button in the toolbar). In Plugin mode, calling `changeDetector.detectChanges()` is required to force an update, because of NgZone issues.

Other Changes

- The plugin-seed version number appears in the top right corner of the header (you can change it to your own plugin version, it is defined in `app-config.ts`)
- The `gulp watch` script to update UI files in Plugin mode is much faster! FYI, it uses the new `ng build --watch --output-path` options to watch changes and copy build output directly to the right location.
- You can invoke the `/tools` scripts from another directory, i.e. call `./tools/build-war.sh`
- The `build-plugin-package.[sh, bat]` script was updated to copy the plugin package folder to `vsphere-ui/plugin-packages/`.
- Some shared styles were moved in `app.component.scss` (see flag `encapsulation: ViewEncapsulation.None` in app.component.ts)

Doc improvements

- New section **Tips & Best Practices**
  - Online Tips
  - Refreshing a view with the latest data
  - Building a plugin without any Java service
  - Integrating http-proxy-servlet to access back-end APIs
- The doc explains more clearly that you need a newer [HTML Client SDK Fling](#) than HTML SDK 6.5 in order to see the Administration tab in HTML Client and configure the *Live Data* feature.

0.9.5.1 Changes - released on 4/20/2017

> The `yarn` tool is causing problems after upgrading to Angular 4, CLI 1.0 and Typescript 2.2.2. If you get `ERROR in AppModule is not an NgModule`, just revert to `npm install` instead of using `yarn`!

Highlights

- Upgraded to [Angular 4](#) and [Angular-CLI 1.0](#) that were just released in March. You should notice better performance, for instance in the time it takes to load your plugin views!
- Upgraded to [Typescript 2.2.2](#)
- Clarity package updated to 0.9.0. See Clarity's [change log](#) for details.
  - You will need to update your wizard template if you use a wizard.

Open the file `version-0.9.5.diff` to review all changes since 0.9.4.

As a reminder we also recommend to use the more recent Fling SDK available on the [HTML Client Fling page](#). The advantage is that you will be installing the latest version of the HTML Client for local development, while retaining compatibility with Web Client 6.0 and 6.5.

Notes on Angular 4, CLI 1.0 and Typescript 2.2.2 upgrades

In order to upgrade a plugin created with plugin-seed 0.9.4 please follow these steps:

- Run the new [Angular update guide](#) to see what you may need to change: select update *from 2.4 to 4.0* and *Advanced* app. FYI, the plugin-seed code didn't need any change specific to Angular 4.
- Update your `packages.json` the same way it was done in plugin-seed 0.9.5
- Follow the [Angular-CLI 1.0.0](#) migration guide to update CLI related files (or compare changes between 0.9.4 and 0.9.5 for all `.conf.js` files)
- Import `BrowserAnimationsModule` in your AppModule
- Change the way `APP_CONFIG` is imported in all source files. Instead of using the index.ts barrel, do:
  `import { APP_CONFIG } from "./app-config";`
- The `ng build --prod` build gives several additional errors that don't show up with the normal build because the AOT compiler is stricter than JIT, but they are easy to fix:
  - `private gs` should be `public gs` in component constructors, if gs is used in html templates.
  - In monitor.component.html the last two `*ngIf` test conditions were updated as
    `<... *ngIf="!gs.isPluginMode() && host !== null">`
  - In action2-wizard.component.html `[ngClass]="pluginFormClass"` and `(ngSubmit)="onSubmit()"` were removed because not used.
- Finally, remove your `node_modules` directory and rebuild it completely with `npm install`

Documentation updates and corrections

- The name *Angular 2+* was replaced by just *Angular*, which indicates all releases above or equal to 2.
- In 0.9.4 we were stating incorrectly that attribute `scope=global` in plugin-package.xml, introduced in Fling 9 for the OSGI sandboxing feature, was required to let you use the `server/pickup` folder and

hot-deploy your plugin bundles. The deployment in server/pickup is controlled instead by the flag `pickup.deployer=true` in webclient.properties.

Other Changes

- Fixed `tools/build-war.xml` to work on Windows
- Updated `tslint.json` with stricter lint rules. As a result the following code was changed:
    - No need to declare types "trivially inferred", like `private liveData = false;`
    - `const` should be used instead of `let` when the variable is not re-assigned.

0.9.4 Changes - released on 3/21/17

Version 0.9.4 includes two main features (Chassis components, and mock data in plugin mode) and many small changes. Open the file `version-0.9.4.diff` to review all changes that don't involve new files.

Highlights

- Added support for mock data in plugin mode:
    - The Settings view contains a new switch to turn on mock data while running you plugin in vSphere Client.
    - This requires to deploy the `http-proxy-tool-plugin` available under `/tools`
    - For details see "Using mock data in plugin mode" in the doc.
- New **Chassis** components and services to demonstrate custom inventory objects:
    - The main view includes a Chassis list using the [Clarity datagrid](#).
    - Chassis mock data is provided by [angular-in-memory-web-api](#), see `services/chassis/in-memory-data.service.ts`
    - Back-end support is provided by the same type of chassis-service as in the current SDK samples.
    - A new section under "Plugin-seed in Details" explains how to remove the chassis code if you are not interested in this feature.
- `app-config.ts` now contains your pluginName, bundleName and packageName constants, so that it is easier to change these values in one place after the code is generated. Note that a manual update will still be required in `webapp/plugin.xml, locales/*.properties` and `MANIFEST.MF`
- Added `src/app/views/not-implemented-yet/` as a reusable component for views that don't have any content yet. This is used in the Chassis monitor and configure views.

Bug Fixes

- Fixed the compile-resources script that generates .swf properties files in `build-war.xml` (otherwise string resources do not appear when the plugin runs in the Flex client).
- Fixed browser Back button navigation when coming from a plugin view (use `this.router.navigate(commands, { replaceUrl : true })` in app-routing.component.ts)
- Fixed *View Info* on the Settings page
- Updated `tools/generate-plugin.sh` to handle directories starting with ~

Other Changes

- Added a json-server script in package.json, you can do `npm run json-server`
- Clarity package updated to 0.8.11. See Clarity's [change log](#) for details.
- Updated `@angular` packages from 2.4.1 to 2.4.6 in `package.json`. In particular this fixes the TODO to replace the timeout work-around that was left at the bottom of `app-routing.component.ts`. See Angular's [change log](#) for their list of bug fixes.
- Updated `@angular/cli` to `^1.0.0-rc.2`. You may need to re-install Angular/CLI globally as shown in the [note for 0.9.1](#) below.
- Updated `typescript` to `~2.1.0`

0.9.3 Changes - released on 3/14/2017

Bug Fixes

- Fixed the compile-resources script that generates .swf properties files in `build-war.xml` (otherwise string resources do not appear when the plugin runs in the Flex client).
- Fixed browser Back button navigation when coming from a plugin view (use `this.router.navigate(commands, { replaceUrl : true })` in app-routing.component.ts)
- Updated `tools/generate-plugin.sh` to handle directories starting with ~

Other Changes

- `.gitignore` is included
- Updated documentation to use variable `VSPHERE_SDK_HOME` instead of `VSPHERE_CLIENT_SDK`.

0.9.2 Changes - released on 2/27/2017

Highlights

- Added doc on *Production optimizations* and on *Developing without standalone dev mode*.
- Changed the Settings view into a lazy loaded module. See new files under `app/views/settings` and new section on AOT and Lazy loading.
- Added `app/shared/shared.module.ts` to contain shared UI components.
- New `gulpfile.js` script to watch file changes. Type `gulp watch` in the UI folder.
- New `main.component.spec.ts` to unit test for `MainComponent`. Note that the constructor has to use `@Inject(forwardRef(() => EchoService))` to avoid circular dependencies in the test code.

Bug Fixes

- The Refresh handler wasn't installed correctly in app.component.ts, the correct code is:
  `this.gs.getWebPlatform().setGlobalRefreshHandler(`**`this.refresh.bind(this),`** `document);`

Other Changes

- `packages.json` updated to support new gulp script.
- Clarity package updated to 0.8.8. See Clarity's [change log](#) for details.

0.9.1 Changes - released on 2/16/2017

> **Important**: this update requires *Node 6.9.0* (or higher) and uses *Angular CLI 1.0.0-beta.31*, packaged as `@angular/cli`. If you have an old angular-cli installed please remove it and install the latest one:
> ```
> npm remove -g angular-cli
> npm install -g @angular/cli
> ```

If you get the error *You have to be inside an angular-cli project in order to use the build command*, make sure you are using node.js 6.9, delete `/node_modules` and rebuild it with `npm install` or `yarn`.

Highlights

- New Summary and Configure views
- New subnav component to switch between views in dev mode.
- New sample action2 using a Clarity [wizard](#)
- New i18n support
  - New `I18nService` in src/app/shared.
  - Properties files are under `webapp/locales`. A script converts them to .json files.
  - App header has 2 flags on the right to switch between English and French.
  - See the *Internationalization* section of the doc for details.
- Json-server must be started with `json-server --watch db.json --static ./src/webapp`
- New APIs in `GlobalsService`
  - `showDevUI` allows to show/hide all dev UI elements
  - `showViewInfo` allows to show/hide the view info component under the header
- New (+) icon in the top left corner for hiding all dev UI elements.
- New *View info* toggle button in the app header, to display the view extension information
- New NavService in app/services for navigating between views
- `APP_CONFIG` in `app-config.ts` now includes the pluginName, bundleName and packageName and it used everywhere in source code to avoid hard-coding names there (only exception is plugin.xml)

Bug Fixes

- `Globals.getOldVersionPlatform()` was fixed to handle IE 11
- Broken images in `src/assets/images`

Other Changes

- Clarity package updated to 0.8.6. You can take advantage of the new [Tree](#) component. See Clarity's [change log](#) for details.
- Angular-CLI package bumped to 1.0.0-beta.31. [Node.js](#) version 6.9 is now required.
- `app-routing.component.ts` was split to move the main routing logic in `app-routing.module.ts`
- Other changes in `package.json` and `tsconfig.json`