Kinoma Create Tool

1. Installation

Kinoma Create Tool (`kct`) is a command line tool to install, delete and run JavaScript applications on Kinoma Create.

`kct` requires `node` so, if you do not have it already, go to http://nodejs.org and install the current version of `node`.

`kct` is provided as JavaScript source code and must be transformed into an executable. To transform `kct.js` into an executable file, go to the directory where you downloaded `kct` and execute `make`

```
> cd ~/kct
> make
```

`kct` uses `kpr2js` to process KPR XML files into JavaScript files, and `xsc` to compile JavaScript files into byte code. Both `kpr2js` and `xsc` are included in Kinoma Studio. Install the current version of Kinoma Studio from http://kinoma.com/studio/. `kpr2js` and `xsc` are in `/Applications/Kinoma Studio /Plugins/com.marvell.kinoma.kpr.sdk.macosx_1.3.25.1 /sdk/frameworks/kpr/tools/`

The path may change in the future based on the Kinoma Studio version number (`1.3.25.1`).

Copy `kpr2js`, `xsc`, and `kct` to a directory that contains other tools (for instance `/usr/local/bin`) or add their directories to the `PATH` environment variable.

2. Host and Password

To access your Kinoma Create, `kct` needs its IP address and password. The IP address of your Kinoma Create is displayed on the Wi-Fi tile on the home screen. You can change the password in the Settings application using the Debugging item.

For `kct`, you can define environment variables with the IP address and the password:

```
> setenv KINOMA_CREATE_HOST 198.162.0.22
> setenv KINOMA_CREATE_PASSWORD wow
```

Or you can pass the IP address and the password to `kct` with the `-h` and `-p` options:

```
> kct ping -h 198.162.0.22 -p wow
```

The default IP address is the IP address of your computer, which is useful when testing with the Kinoma Create simulator. The default password is `kinoma`, which is the default password of the Kinoma Create shell.

3. Application

Kinoma Create sample applications are available on GitHub at https://github.com/Kinoma/KPR-examples

To execute `kct`, go to the directory of the application you want to install, delete or run.

```
> cd ~/KPR-examples/balls
```

The directory must contain a file named `application.xml` that defines the application id, the path to the program to execute when launching the application, and the title of the application.

```
> cat application.xml
<?xml version="1.0" encoding="utf-8"?>
<application xmlns=http://www.kinoma.com/kpr/application/1
     id="balls.example.kinoma.marvell.com"
     program="src/balls"
     title="Balls Example">
```

On your Kinoma Create, applications can be *cached* or *installed*:

- A cached application has no tile on the Kinoma Create home screen and will be automatically deleted when your Kinoma Create is rebooted.
- An installed application has a tile on the Kinoma Create home screen, persists across reboots, and can be deleted using the Settings application.

4. Actions

The first parameter of `kct` is the action. The following actions are supported by `kct`: `ping`, `close`, `install`, `delete`, and `run`.

```
> kct ping
```

Check if `kct` can access your Kinoma Create. All actions but `clean` do that first.

```
> kct close
```

Close the running application. All actions except `ping` and `clean` do that next.

```
> kct install
```

Install the application. Sources are processed, compiled and uploaded to your Kinoma Create. Assets are uploaded to your Kinoma Create. A tile is added to the Kinoma Create home screen.

```
> kct delete
```

Delete the application. Remove the tile from the Kinoma Create home screen. Delete all files and directories corresponding to the application on your Kinoma Create.

```
> kct run
```

Run the application. Modified sources are processed, compiled and uploaded to your Kinoma Create. Modified assets are uploaded to your Kinoma Create.

If you did not `install` the application, the application is cached on your Kinoma Create so the `run` action is always incremental.

```
> kct clean
```

To process and compile sources, `kct` uses temporary files and directories. The `clean` action deletes all temporary files and directories corresponding to the application.