The case for an "icon" protocol

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Who? Philipp Käser, Zurich, Switzerland

- Site Reliability Manager @ Google
- Day job: Run Google Cloud IAM
- Linux for half my life, didn't contribute .. so far 😳

Why?

- Wayland (finally) replacing X11.
- Coding is fun 😄
Icons in X11

X11 ICCM for Icon

- Name, Pixmap or Window
- XSetIconSizes / GetIconSizes
- Also FreeDesktop spec _NET_WM_ICON...
- Permits set icons for other windows (xseticon)

(Ab)Used for docked Apps (Afterstep, Window Maker, ...)

=> No equivalent for Wayland! :sadface:
Protocol extension: Associate an icon surface with a XDG toplevel

- Icon as a surface: Flexible use (static/dynamic), ...
- Use configure/ack_configure to negotiate dimensions

```xml
<request name="get_toplevel_icon">
  <description summary="Creates a new Toplevel Icon object."
      Creates a new icon object associated with the given XDG toplevel.
  </description>
  <arg name="id" type="new_id" interface="zwlmaker_toplevel_icon_v1"/>
  <arg name="toplevel" type="object" interface="xdg_toplevel" allow-null="true"/>
  <arg name="surface" type="object" interface="wl_surface"/>
</request>
```

- Github: [...]/protocols/wlmaker-icon-unstable-v1.xml
**Application**: Create the "icon" surface.

**Compositor**: Bind surface as icon, show accordingly.

https://github.com/phkaeser/wlmaker
Now what?

Challenges ahead

● Dock may be a separate binary/process: Need more protocol?
● How to associate with app (client? App ID? ...?)

Coming up

● Upstream the protocol extension (... wlroots? wayland?)
● Clean up demo compositor + app(s), release.
end.

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