

Name: mcp-376-cswg-workshop-virtual-desktops

Title: virtual desktops

Status: Draft -- anyone can edit.

See the [MCP index](#) to create or find documents, or [mcp-0-readme](#) for an overview.

The headers above are machine-readable; please preserve format.

Text checkins (10 mins)

- Steve
 - Finally remembered how I landed on the 501(c)(6) topic -- [Linux Foundation](#) is a 501(c)(6) itself, and hosts 900 other foundations and projects.
 - Our own options for CSWG/PromiseGrid, then, include Linux Foundation, [Open Source Collective](#), remaining under CDINT, and filing 501 paperwork ourselves.
 - Added more to [mcp-374](#) -- sections on infrastructure, open source
- Donaldo
 - IoP community forum was down last week, messaged yesterday, now it's back up; their meeting today was canceled
 - Possibly funding issue? Hopefully situation improves
 - Reviewed Bill Aulet MIT courseware "Disciplined Entrepreneurship"
 - Collecting thoughts on open source biz models
 - Download worksheets, seems better doing exercises together
- JJ
 - GoogleDocs to Markdown project
 - The project is going really well.
 - Given a folder link, it will copy all documents with revisions and comments are included along with who and when the comments were made into a local directory. Each document has the name of the document and then the MD file with the revisions and comments are in the file. Not where I want it yet.
 - Steve thinking the way gitdriver worked: For each document, for each revision, save and commit. Pull down the next revision. Repeat to create the git history.

virtual desktops (40 mins)

- Assumptions:
 - the long-term arc in computing so far is toward virtualization
 - virtual machines
 - software-defined networking

- containers
 - desktops
 - pods or clusters of machines (e.g. kubernetes is an early implementation)
 - VM hosts become virtualized, distributed, decentralized
 - e.g. a process might be running on multiple CPUs on different physical locations
 - old prior art, pre-WASM: [mosix](#), [SSI](#)
 - Hardware becomes interchangeable such that a single process might be running on multiple physical pieces of hardware in different locations, possibly redundantly, resilient, etc.
 - data centers 10 years from now likely to become mostly replicated storage and relay between clients; everything else virtualized, most data replicated to edge, most physical CPU is at or near [edge](#)
 -
- Organizational/Execution Plan:
 - see 501(c)(6) thoughts above -- options include join existing 501(c)(6) and then form own later versus just operate under cdint/t7a
 - What's the threshold for joining Linux or Open Collective? Could an org join both? Would it matter much one or the other?
 - Open Governance, Assets cleaned up, Open Support, Org support (ex. 5 organizations depend on this project)
 - Steve thinks there is likely a revenue model for the virtual desktops
 - e.g. async workshops/tutorials -> desktop rental -> hosting production workloads
 - essentially a mashup of AWS/GCP and EdX/Udemy/Coursera
 - the idea is to let people build on what they learned without having to change platforms to get to production
 - Steve pulled together a Decision Tree using [godecide](#) to figure out hosting & tech options path forward (outcome below)
- Migration path to PromiseGrid
 - Research prior art:
 - [Apache Guacamole](#)
 - <https://webvm.io/>
 - [webtops](#)
 - much more, still looking
 - Short-term plan:
 - select existing components
 - Write Go code to glue existing components together, write new components as needed
 - roughly follow the "bootstrapping checklist" at <http://www.infrastructures.org/bootstrap/checklist.shtml>, though most of that list is virtualized these days (and we're virtualizing more)

- Medium and long-term plan:
 - continue virtualizing
 - components until:
 - most CPU is client-side or edge
 - most storage is client-side, replicated server-side

After talk:

- July - Aug Steve RV travel
 - For next two months, thinking ahead on how to run stuff more asynchronously w/o Steve
 - Everyone already has access to T7a Gitea
 - Get in practice of creating a repo for projects
 - Mattermost for better async convo tracking
 - DevOps & project tracking built-in
 - Opportunity to build AI agent plugin
- https://en.wikipedia.org/wiki/Unix_philosophy
 - Make each program do one thing well
 - Expect the output of every program to become the input to another, as yet unknown program
 - [pipes and filters](#)

Plan next workshop (10 mins)

- go to workshop proposals ([mcp-369](#)), follow the instructions there, replace this bullet point with the link to the new doc