

# Implementing CDMI for Developers

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- ❑ Cloud Clinic – get the CDMI RI installed on your laptop
- ❑ CDMI Getting Started
- ❑ Create a Container
- ❑ Populate it with a Data Object
- ❑ Explore the metadata
- ❑ Treasure Hunt!

- ❑ Got network connectivity?
- ❑ First install Netbeans from the USB stick
  - ❑ -> show on laptop
- ❑ Next copy over the .zip file and expand
  - ❑ -> show on laptop
- ❑ Now build and run the CDMI cloud
  - ❑ -> show on laptop
  - ❑ It should look like this...

- ❑ (Mac Users) Apple SDK – for running the iPad client
  - ❑ <http://developer.apple.com/technologies/xcode.html>
- ❑ Java Users – tcpmon tool, JavaFX client
  - ❑ tcpmon.jar
  - ❑ -> show on laptop
- ❑ Scott's browser based HTTP client
  - ❑ -> show on laptop

- ❑ The CDMI Cloud runs at <http://localhost:8080/cdmi-server>
- ❑ Containers are created below this “root”
- ❑ You can treat this root as a container and GET it
  - ❑ List of containers already created.
- ❑ You can also discovery the Cloud capabilities

# Exercise #1 - capabilities

- ❑ Format a GET request to /cdmi\_capabilities
  - ❑ What do you see?
  - ❑ -> show on laptop
- ❑ Format GET request to /cdmi\_capabilities/container
  - ❑ What do you see?
  - ❑ -> show on laptop
- ❑ Format GET request to /cdmi\_capabilities/container/default
- ❑ Format GET request to /cdmi\_capabilities/dataobject

# Exercise #2 - Containers

- ❑ Format PUT command to create /MyContainer
  - ❑ -> show on laptop
- ❑ Format GET request to see metadata on MyContainer
- ❑ Format PUT request to create dataobject to MyContainer/MyObject.txt
  - ❑ Insert text “This is my object”

# Exercise #3 – Data Objects

- ❑ Format PUT request to create dataobject to MyContainer/MyObject.txt
  - ❑ Using the text “This is my object”
- ❑ Format GET request from MyContainer/MyObject.txt
- ❑ Browser fetch of MyContainer/MyObject.txt
- ❑ Update MyContainer/MyObject.txt with new metadata and modify text
- ❑ Browser fetch of MyContainer/MyObject.txt



- ❑ Try out some other CDMI commands and see if they are implemented
- ❑ How would you do a Move Container?
- ❑ How would you snapshot a Container?
- ❑ What about Serialize/Deserialize?

# Now for some CDMI fun!

- ❑ There is a treasure hunt exercise that will take you through a series of containers and data objects on a search for the answer to a puzzle.
- ❑ Improve your CDMI hands on skills!

# Other fun stuff

- ❑ Modify the capabilities of your cloud
- ❑ Run the iPad client and explore
- ❑ Run the JavaFX client and explore
- ❑ Hack the CDMI reference implementation

# For More Information

- ❑ SNIA Cloud Storage Initiative (CSI) Home
  - ❑ <http://www.snia.org/forums/csi/>
- ❑ SNIA Cloud Google Group (Friendly Q&A! 😊 )
  - ❑ <http://groups.google.com/group/snia-cloud>
- ❑ SNIA Cloud Demo Google Group
  - ❑ <http://groups.google.com/group/cloud-demo>
- ❑ SNIA Cloud Storage (CS) TWG
  - ❑ <https://www.snia.org/apps/org/workgroup/cloudtwg/>