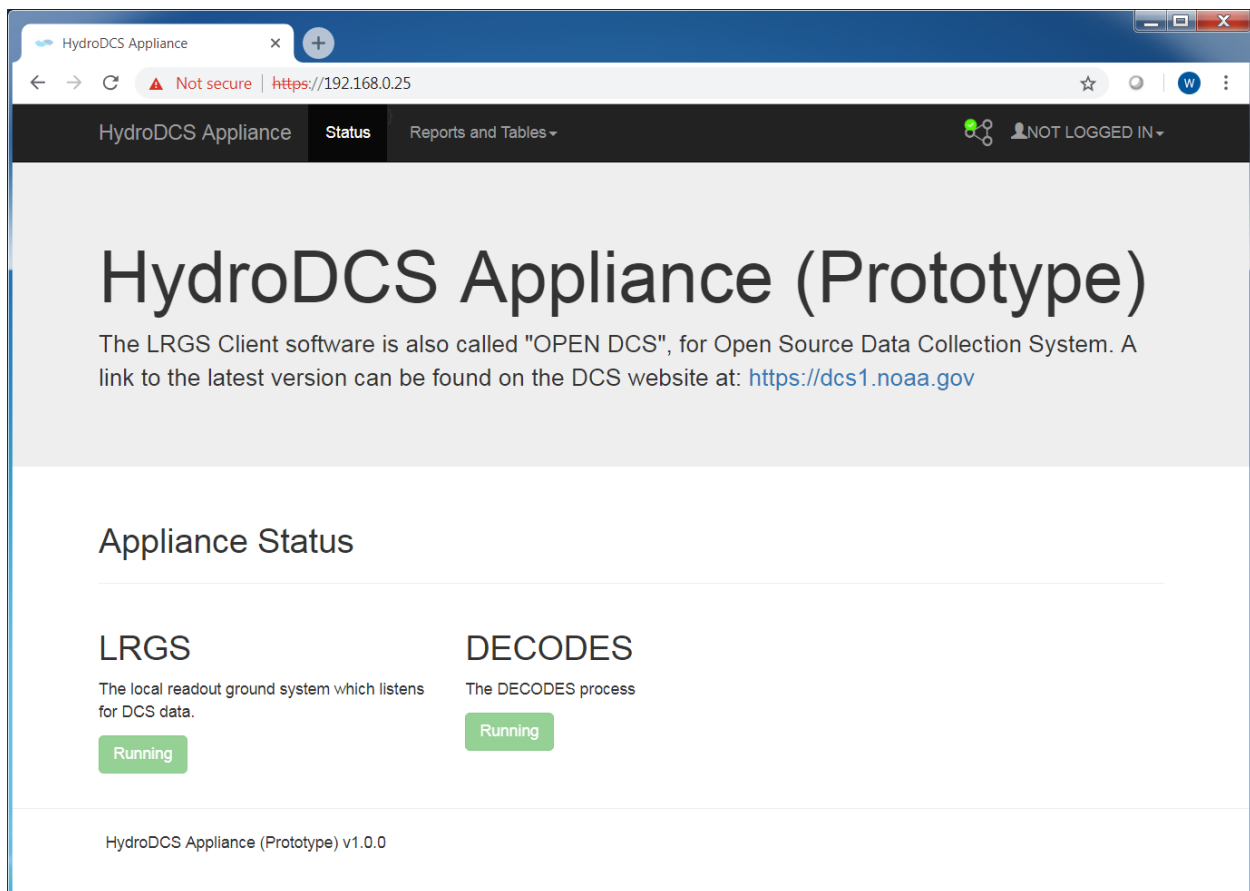


- User Levels
 - controller
 - This user can perform any function on HydroDCS. This user should have experience with OpenDCS, as it is required in configuring HydroDCS to receive and display data.
 - operator
 - This is a user with some privileges, but not maximum privileges.
 - not logged in
 - It is not required for users to login to perform many read-only actions.

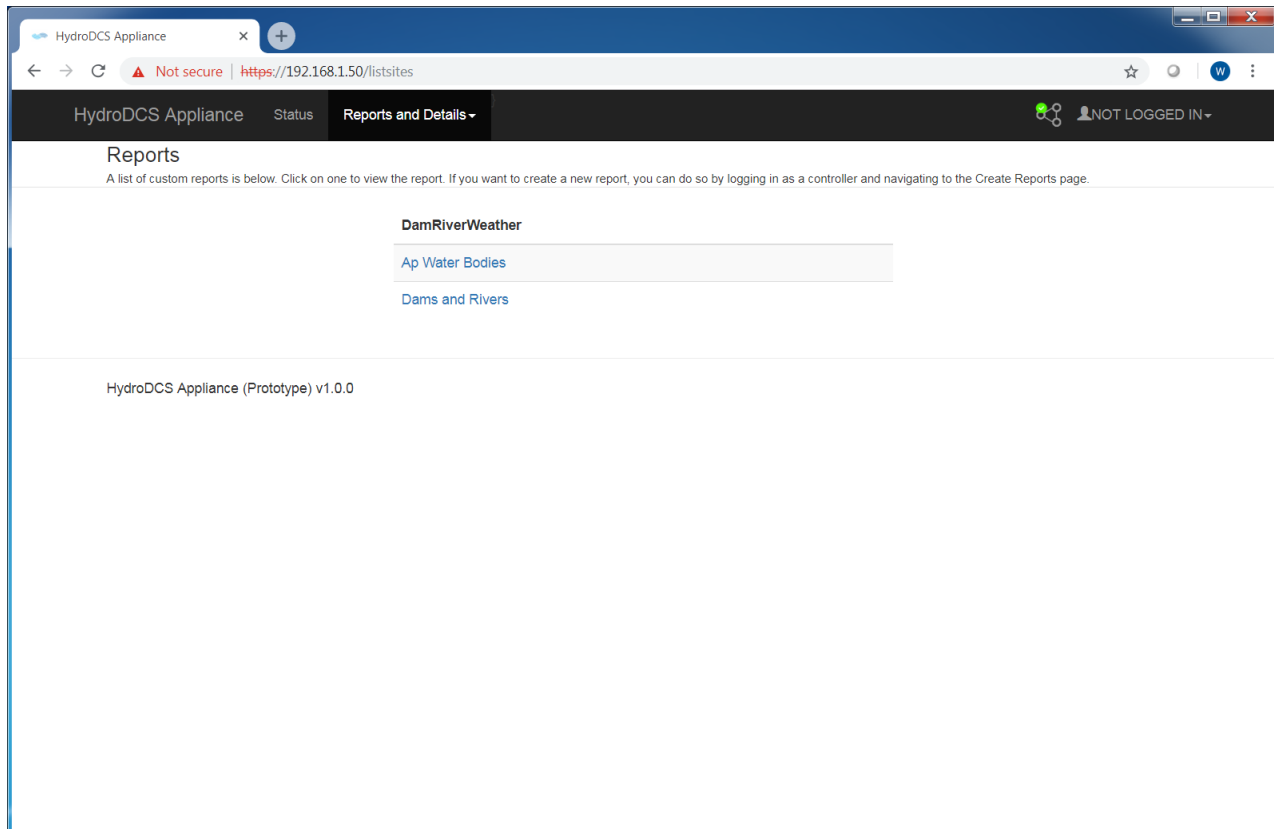
Homepage



- Function
 - Gives a description of the HydroDCS
 - Gives the status of the LRGS and DECODES processes.
- Navigation
 - To get to this page, click the "HydroDCS Appliance" section at the left of the main menu.
- Accessibility

- not logged in
- controller
- operator

Reports Page



- Function
 - Users can view the list of reports that have been created for the appliance.
 - Users can navigate to any report by clicking the corresponding link.
- Navigation
 - To get to this page, using the menu, navigate to “Reports and Tables”>”Reports”
- Accessibility
 - not logged in
 - controller
 - operator

Report Page

HydroDCS Appliance

Not secure | <https://192.168.1.50/sitedetails?template=DamRiverWeather&title=Ap%20Water%20Bodies>

HydroDCS Appliance Status Reports and Details NOT LOGGED IN

DamRiverWeather - 119s (TTR)

Applegate Dam

AP's				
ISE Forebay Reading	Time Received (GMT)	Forebay	Storage	Battery
APP	2018-09-28T19:30:00	1910.51 ft	22895 ac-ft	12.7 volt

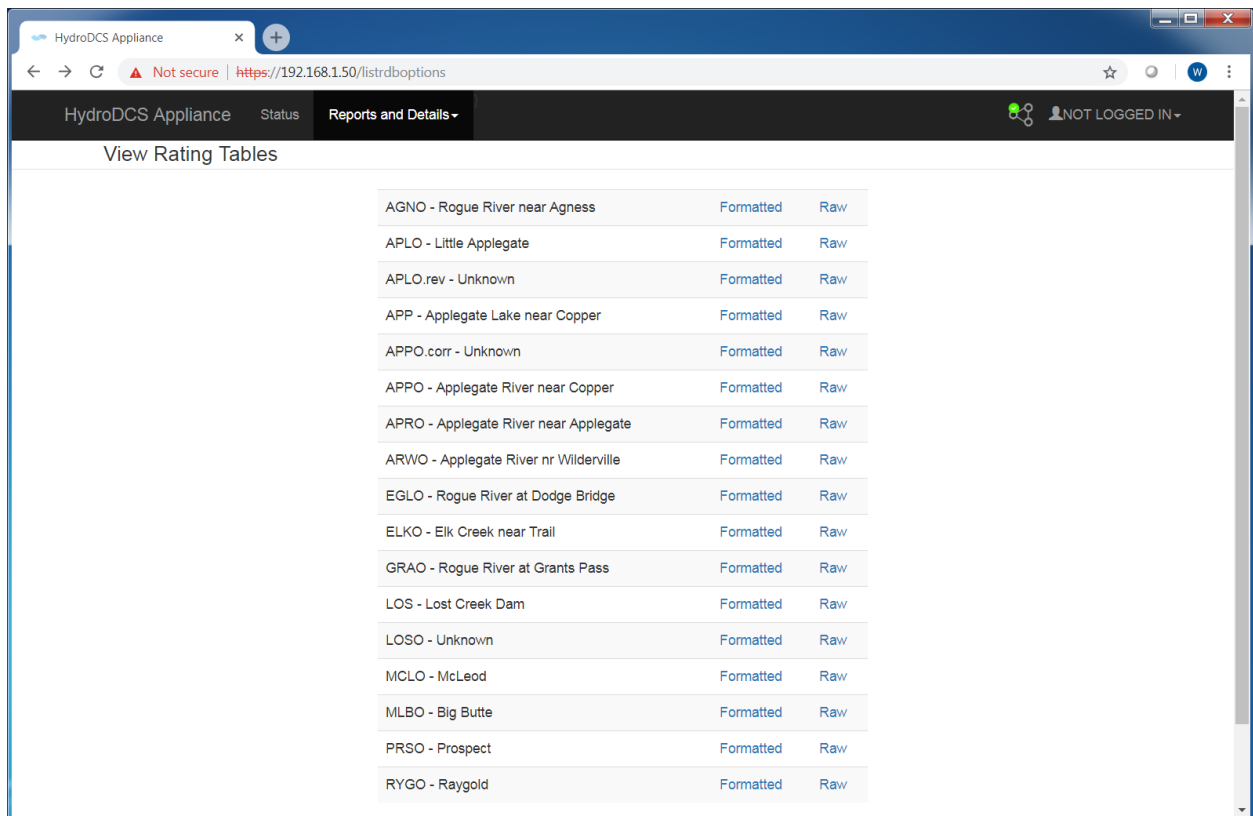
Ap Rivers

AP's					
Station	Time Received (GMT)	Stage	Flow	Wtr Temp	Battery
APPO - Applegate River near Copper	2018-09-28T19:30:00	1.86 ft	248 ft^3/s	13.1 C	--
APRO - Applegate River near Applegate	2018-09-28T19:30:00	1.56 ft	253 ft^3/s	14.0 C	14.1 volt
APLO - Little Applegate	2018-09-28T19:15:00	-0.45 ft	--	--	12.9 volt

HydroDCS Appliance (Prototype) v1.0.0

- Function
 - A user can create a report based on any of the provided templates.
 - NOTE – To create a report, you must be logged in as a controller or operator and navigate to “Create Report” in the user menu.
 - NOTE – The image above is just one of the reports. There are many different types of reports that the user can create.
- Navigation
 - To get to this page, using the menu, navigate to “Reports and Tables”>“Reports”
 - The “Reports” page will appear. Select the proper report under “DamRiverWeather”.
- Accessibility
 - not logged in
 - controller
 - operator

View Rating Tables Page

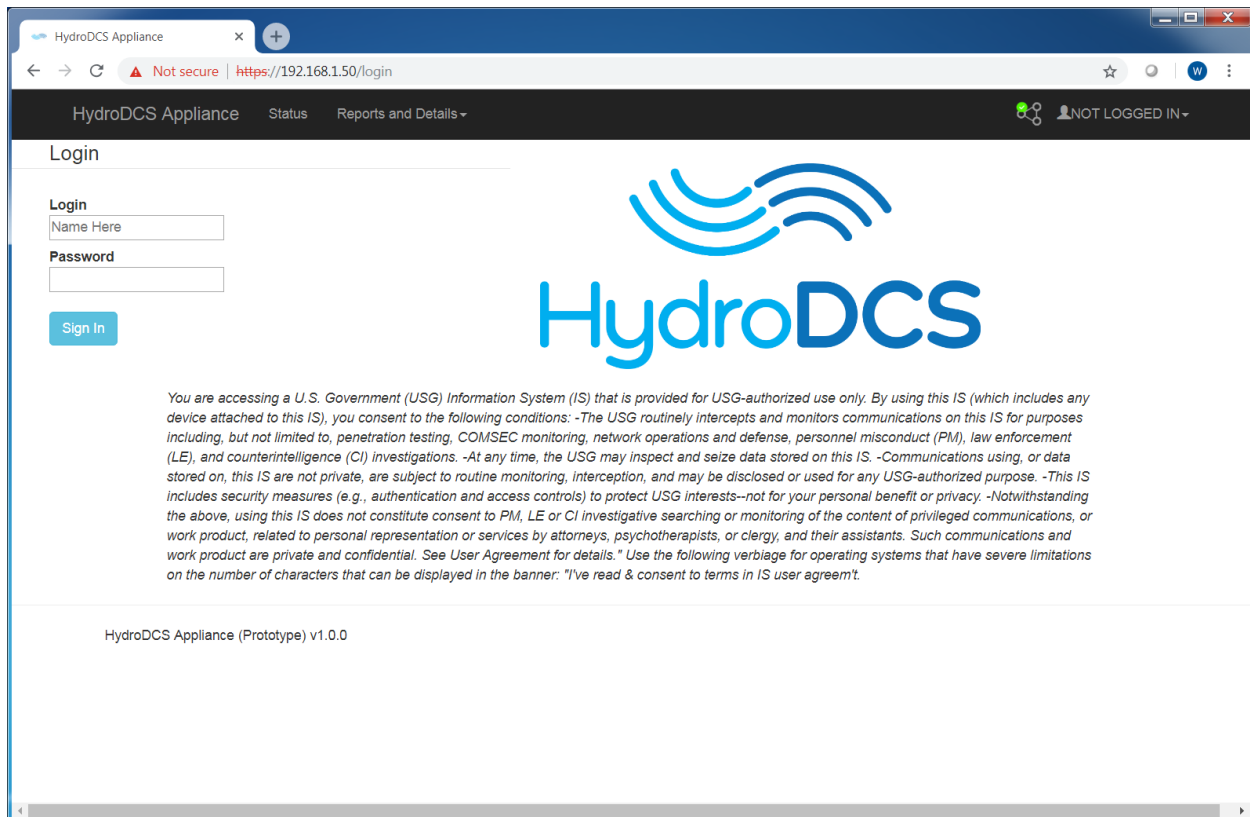


The screenshot shows a web browser window with the URL <https://192.168.1.50/listrdboptions>. The page title is 'View Rating Tables'. The interface includes a navigation bar with 'HydroDCS Appliance', 'Status', and 'Reports and Details' (selected). A user status indicator shows 'NOT LOGGED IN'. The main content area displays a table of 16 rating tables, each with a name and two links: 'Formatted' and 'Raw'.

Rating Table Name	Formatted	Raw
AGNO - Rogue River near Agness	Formatted	Raw
APLO - Little Applegate	Formatted	Raw
APLO.rev - Unknown	Formatted	Raw
APP - Applegate Lake near Copper	Formatted	Raw
APPO.corr - Unknown	Formatted	Raw
APPO - Applegate River near Copper	Formatted	Raw
APRO - Applegate River near Applegate	Formatted	Raw
ARWO - Applegate River nr Wilderville	Formatted	Raw
EGLO - Rogue River at Dodge Bridge	Formatted	Raw
ELKO - Elk Creek near Trail	Formatted	Raw
GRAO - Rogue River at Grants Pass	Formatted	Raw
LOS - Lost Creek Dam	Formatted	Raw
LOSO - Unknown	Formatted	Raw
MCLO - McLeod	Formatted	Raw
MLBO - Big Butte	Formatted	Raw
PRSO - Prospect	Formatted	Raw
RYGO - Raygold	Formatted	Raw

- Function
 - A user can view the installed rating tables here. A rating table can be viewed in a formatted version, or the raw text version.
- Navigation
 - To get to this page, using the menu, navigate to “Reports and Tables”>”Rating Tables”
- Accessibility
 - not logged in
 - controller
 - operator

Login Page



The screenshot shows a web browser window with the title "HydroDCS Appliance". The address bar shows "https://192.168.1.50/login" with a "Not secure" warning. The page has a dark header with "HydroDCS Appliance", "Status", and "Reports and Details" links. On the right of the header, there is a user status indicator showing a person icon and "NOT LOGGED IN". The main content area is titled "Login" and contains a login form with fields for "Name Here" and "Password", and a "Sign In" button. To the right of the form is the HydroDCS logo, which consists of three blue curved lines above the text "HydroDCS". Below the logo is a paragraph of legal disclaimer text. At the bottom of the page, it says "HydroDCS Appliance (Prototype) v1.0.0".

HydroDCS Appliance

Status Reports and Details

NOT LOGGED IN

Login

Login

Name Here

Password

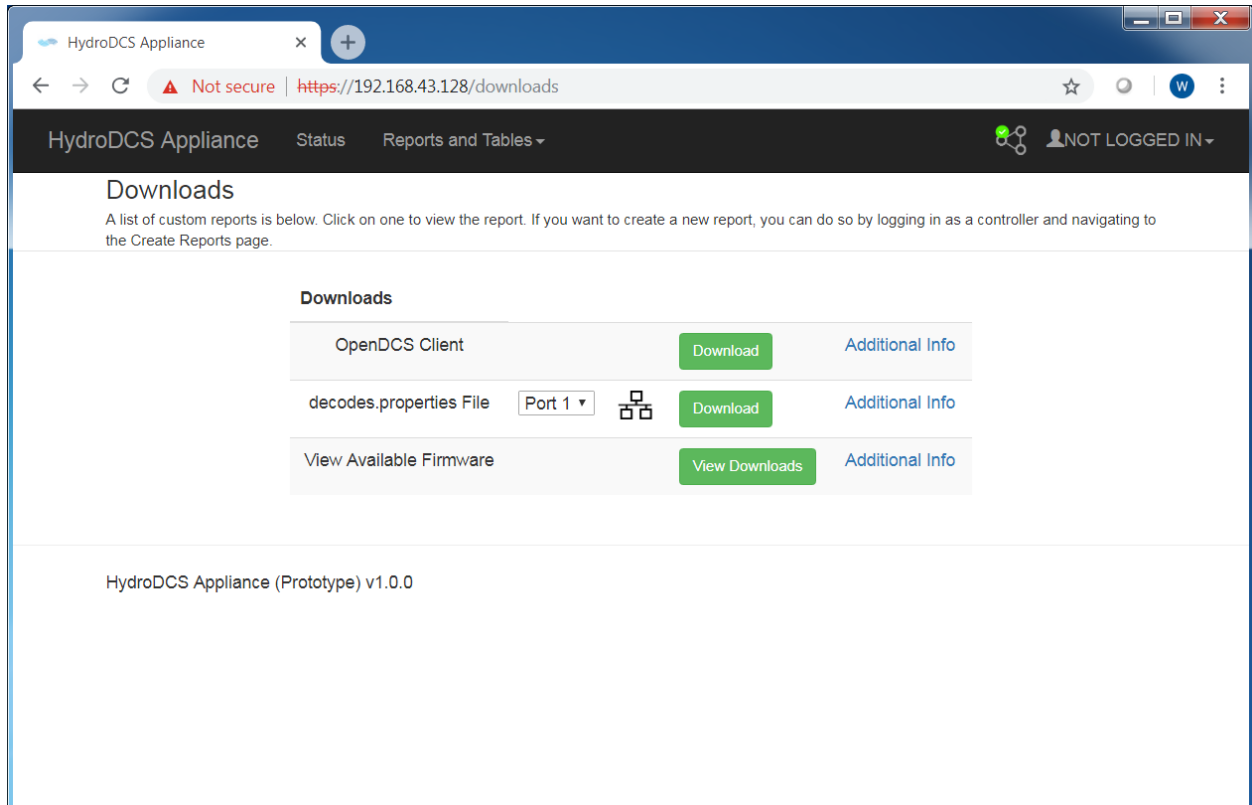
Sign In

You are accessing a U.S. Government (USG) Information System (IS) that is provided for USG-authorized use only. By using this IS (which includes any device attached to this IS), you consent to the following conditions: -The USG routinely intercepts and monitors communications on this IS for purposes including, but not limited to, penetration testing, COMSEC monitoring, network operations and defense, personnel misconduct (PM), law enforcement (LE), and counterintelligence (CI) investigations. -At any time, the USG may inspect and seize data stored on this IS. -Communications using, or data stored on, this IS are not private, are subject to routine monitoring, interception, and may be disclosed or used for any USG-authorized purpose. -This IS includes security measures (e.g., authentication and access controls) to protect USG interests--not for your personal benefit or privacy. -Notwithstanding the above, using this IS does not constitute consent to PM, LE or CI investigative searching or monitoring of the content of privileged communications, or work product, related to personal representation or services by attorneys, psychotherapists, or clergy, and their assistants. Such communications and work product are private and confidential. See User Agreement for details." Use the following verbiage for operating systems that have severe limitations on the number of characters that can be displayed in the banner: "I've read & consent to terms in IS user agreem't."

HydroDCS Appliance (Prototype) v1.0.0

- Function
 - A user can login here. The two logins are "operator" and "controller".
 - operator has all the privileges that a "NOT LOGGED IN" user has, in addition to privileges that a "NOT LOGGED IN" user does not have.
 - controller has all the privileges that operator has, in addition to privileges that operator does not have.
- Navigation
 - To get to this page, using the menu, navigate to "NOT LOGGED IN">"Login"
- Accessibility
 - not logged in

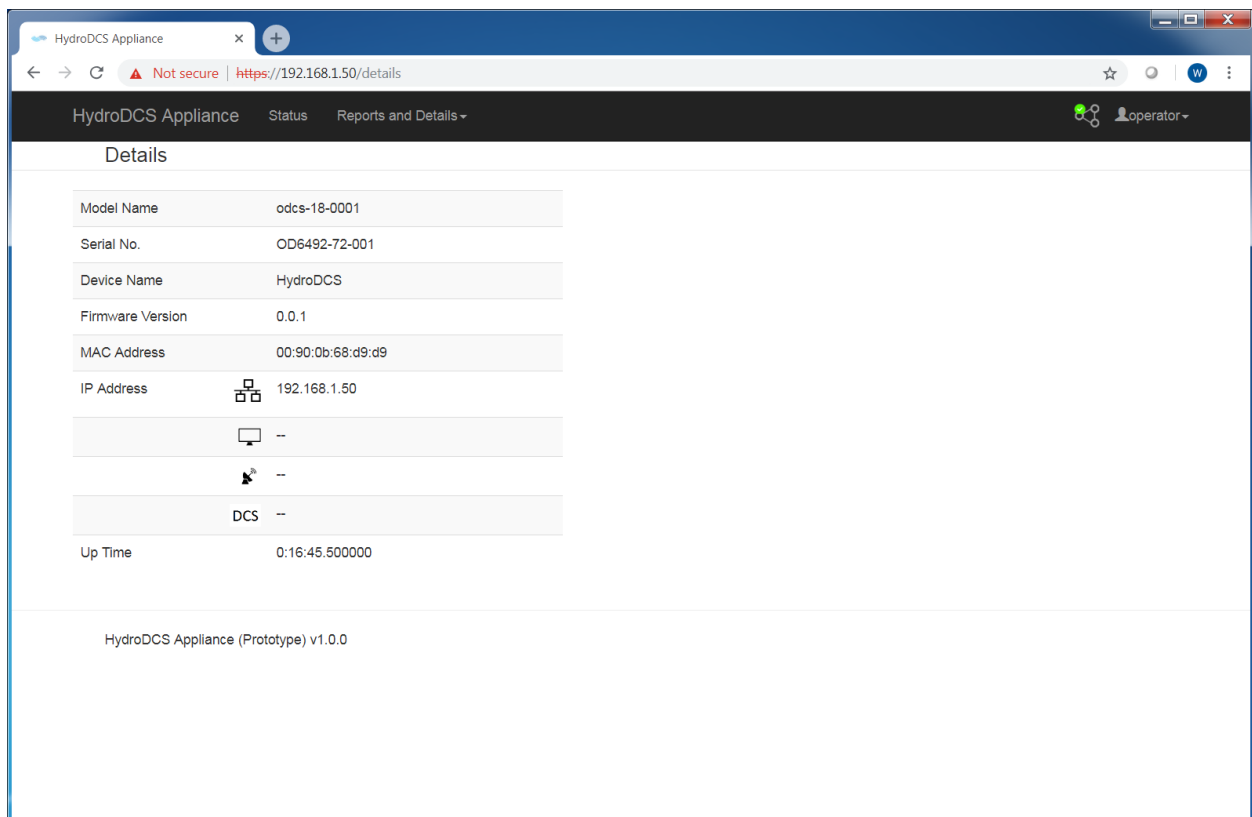
Downloads Page



- Function
 - A user can find useful and necessary downloads here for the functioning of HydroDCS.
- Navigation
 - To get to this page
 - If the user is not logged in, using the menu, navigate to “NOT LOGGED IN”>“Downloads”
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Downloads”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“Downloads”
- Accessibility
 - not logged in
 - operator

- controller

Details Page



- Function
 - A user can view useful information on the appliance here. This includes, but is not limited to
 - Model Name
 - Serial Number
 - Device Name
 - Firmware Version
 - MAC Address
 - IP Address
 - Up Time
- Navigation
 - To get to this page

- If the user is logged in as “operator”, using the menu, navigate to “operator”>“Details”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“Details”
- Accessibility
 - operator
 - controller

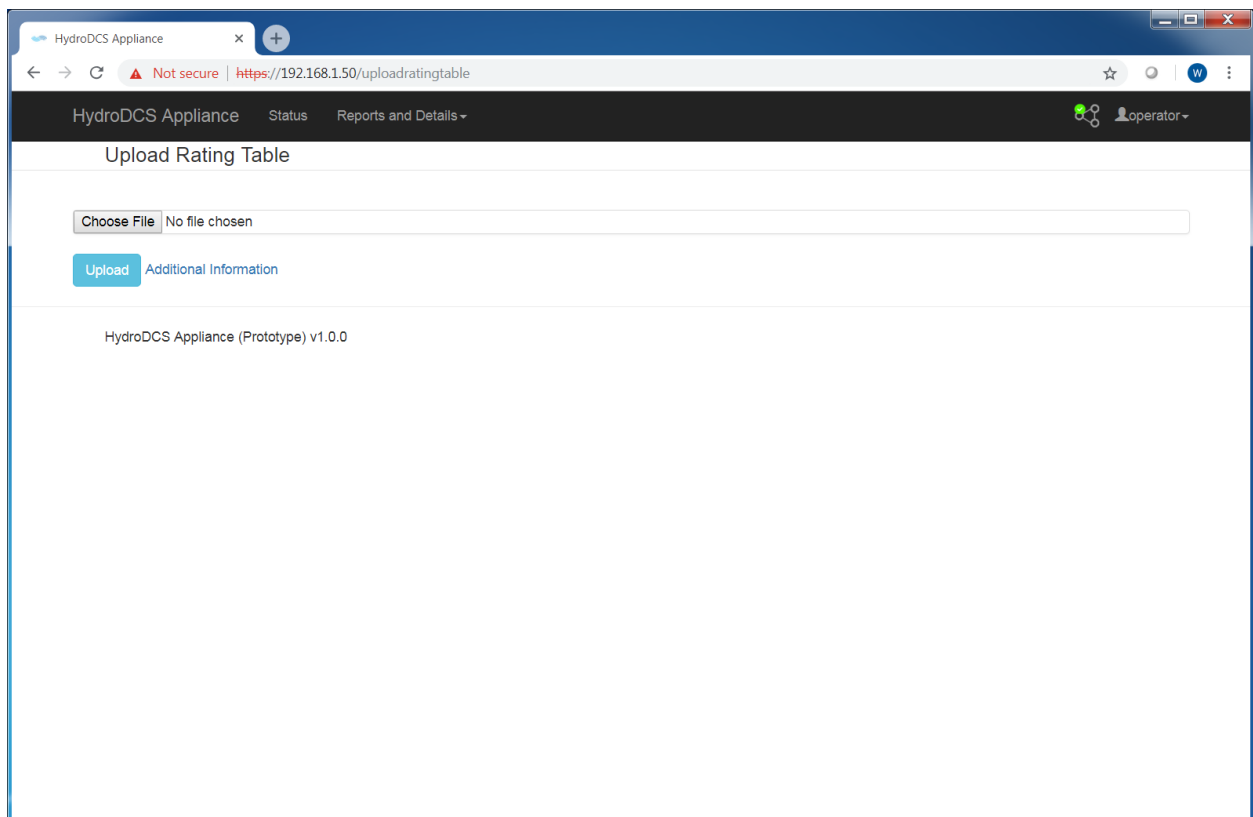
Change Password Page

The screenshot shows a web browser window with the title 'HydroDCS Appliance'. The address bar displays 'https://192.168.1.50/changepw'. The page has a dark header with 'HydroDCS Appliance' and navigation links 'Status' and 'Reports and Details'. A user profile 'operator' is visible in the top right. The main content area is titled 'Change Password Form' and contains three text input fields labeled 'Old Password', 'New Password', and 'Confirm Password'. A green 'Change Password' button is positioned below the 'Confirm Password' field. The footer of the page indicates 'HydroDCS Appliance (Prototype) v1.0.0'.

- Function
 - A user can change the password of “operator” or “controller”.
 - There are several rules on the password, which will be explained when an incorrect password is submitted.
- Navigation
 - To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Change Password”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“ Change Password”
- Accessibility
 - operator

- controller

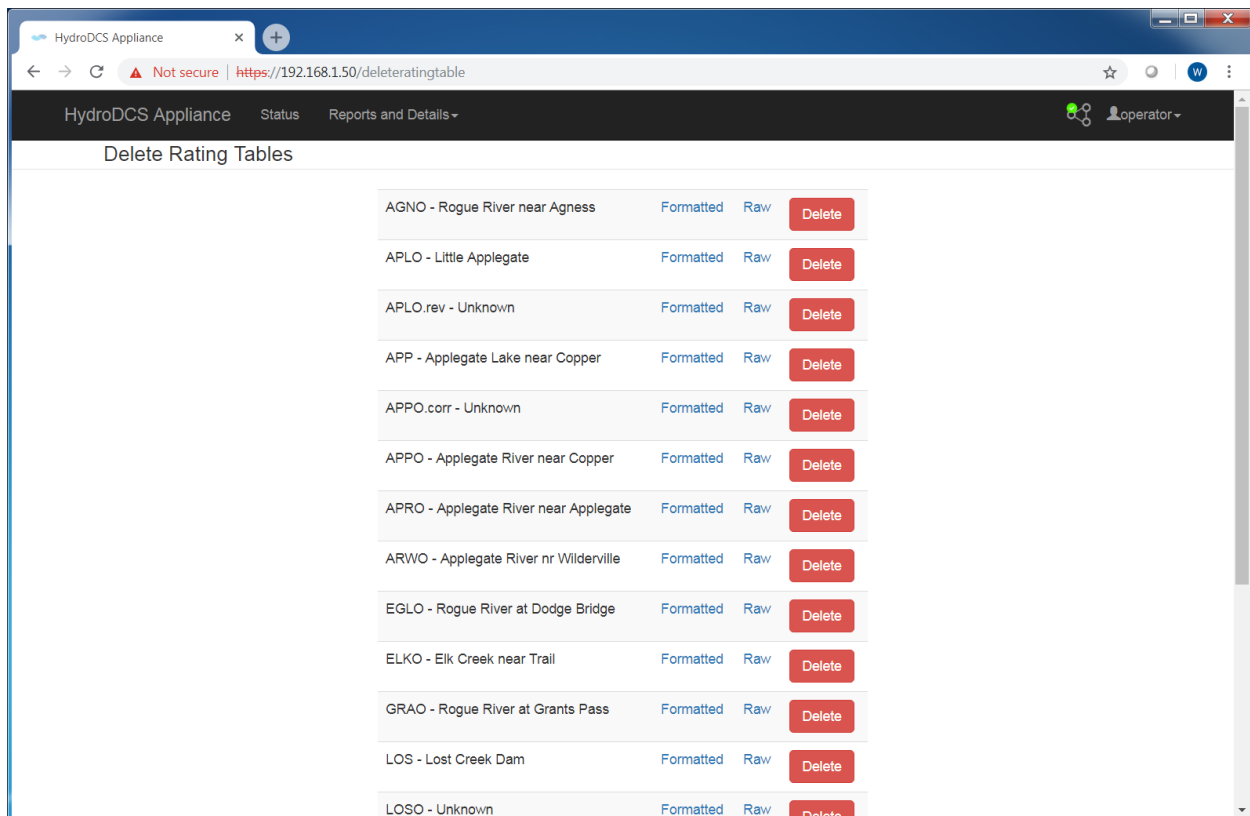
Upload Rating Table Page



- Function
 - A user can manually upload a rating table with this page.
 - NOTE – Simply uploading the rating table does not mean that the rating table will automatically be used. You still need to perform the proper steps in OpenDCS to utilize the rating table for the site.
- Navigation
 - To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Upload Rating Table”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“ Upload Rating Table”
- Accessibility

- operator
- controller

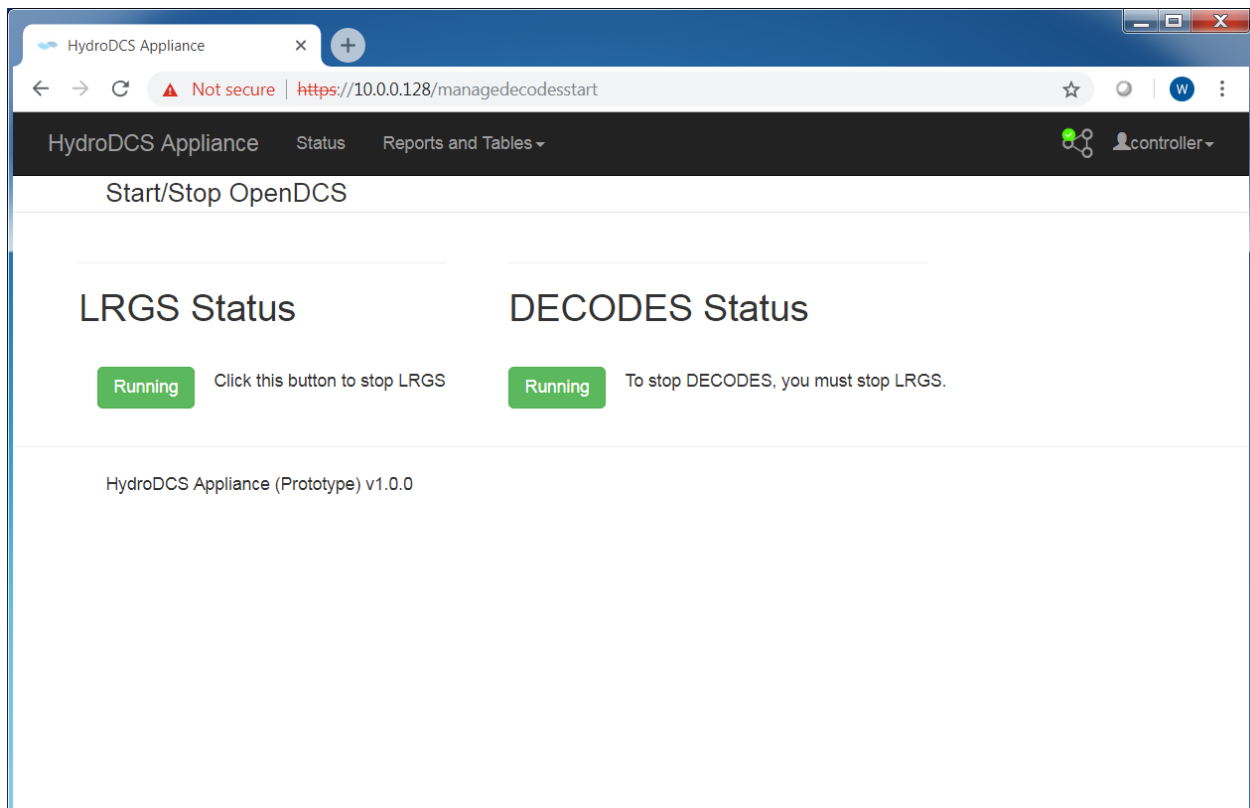
Delete Rating Table Page



- Function
 - A user can delete the installed rating tables here.
 - In addition, rating tables can be viewed in a formatted version, or the raw text version.
- Navigation
 - To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Delete Rating Table”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“Delete Rating Table”
- Accessibility
 - operator

- controller

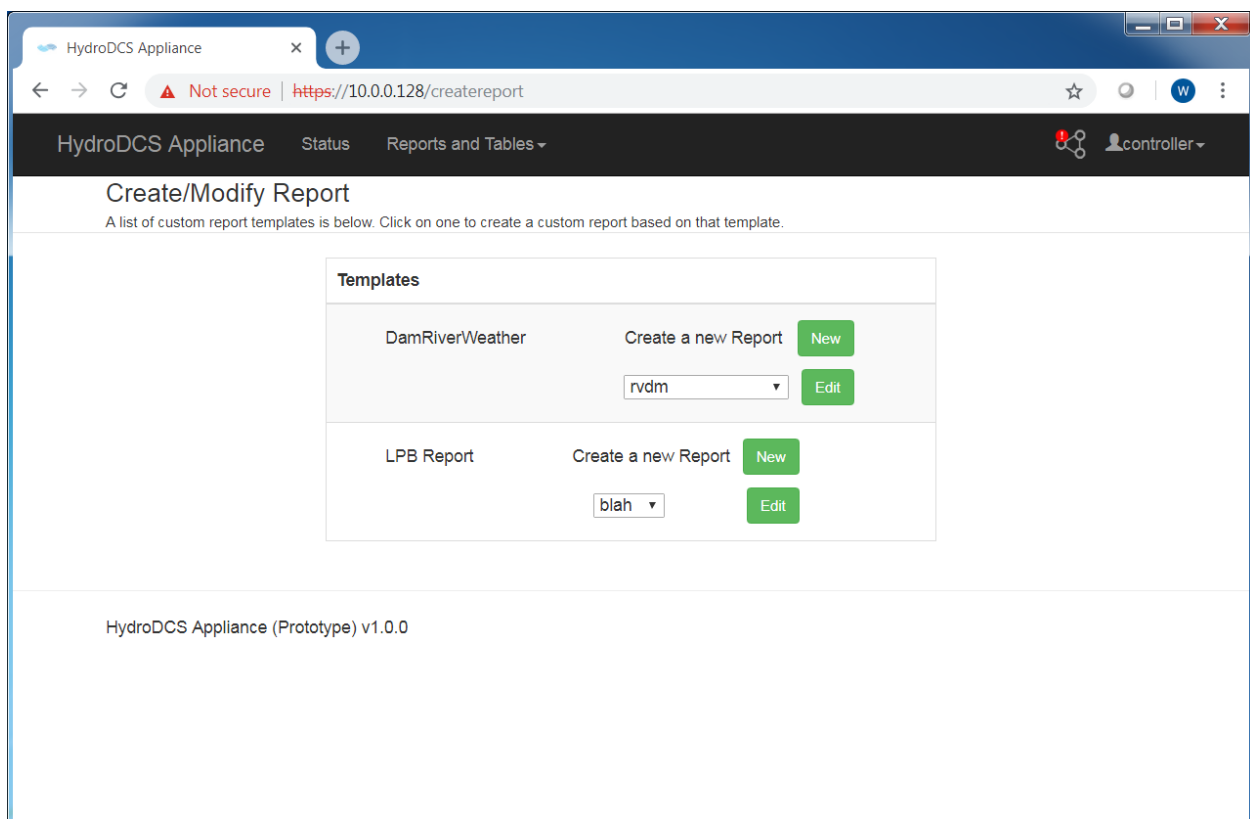
Start/Stop OpenDCS Page



- Function
 - Here a user can see the status of LRGS and DECODES respectively.
 - Here a user can also perform the following functions
 - Start or StopLRGS
 - Start or Stop DECODES
 - NOTE – When you start DECODES, it will initially show up as green. You must wait at least 1 minute to make sure all the processes started properly. If they did not, DECODES will show up as red after the minute.
 - NOTE – DECODES will constantly fail if there is no connection to either the internet or a receiver. As noted above, this will take at least 1 minute to fail after a DECODES startup.
- Navigation

- To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Start/Stop OpenDCS”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“ Start/Stop OpenDCS”
- Accessibility
 - operator
 - controller

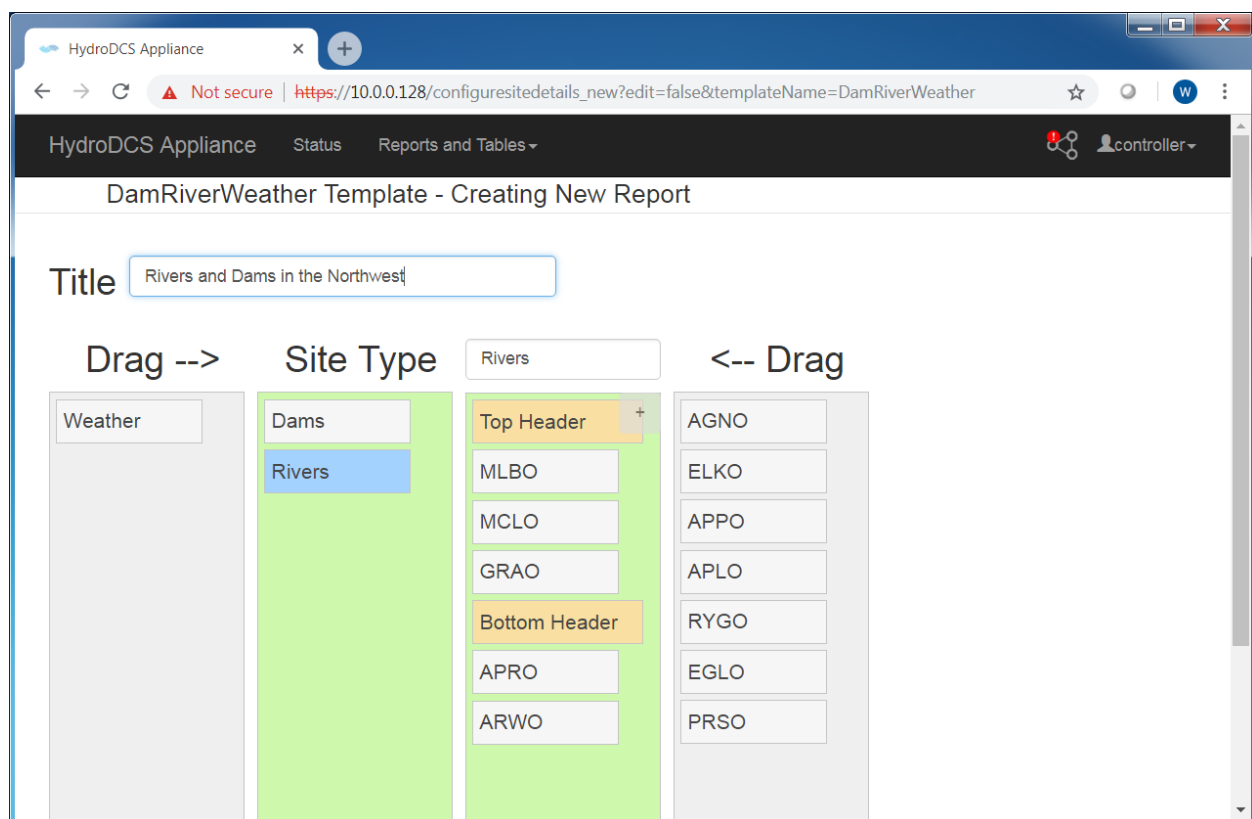
Create/Modify Report Page



- Function
 - Here, a user can create a new report based on any provided template.
 - In addition, a user can modify an existing report that has already been created.
- Navigation
 - To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Start/Stop OpenDCS”
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“ Start/Stop OpenDCS”
- Accessibility

- operator
- controller

DamRiverWeather Template Page



- Function
 - This is a customizable report that displays data for dams, rivers, and weather stations.
 - To create or edit the report
 - Drag Weather, Dams, and/or Rivers from the left side into "Site Type" for each type of station you want to display on the report.
 - Click on either Dams, Rivers, or Weather.
 - The appropriate list of stations will appear on the right side.
 - For each station you want to display, drag the station from the right side to the section just to the left (with the text box above it).

- If you want to create headers, you can do so by clicking the “+” button in the upper right corner of the active station section.
 - The title for the section is in the text box above the active station section.
 - The title for the report can be entered by filling out the textbox to the right of Title.
- Navigation
 - To get to this page
 - If the user is logged in as “operator”, using the menu, navigate to “operator”>“Create/Modify Report”. The “Create/Modify Report” page will appear.
 - If the user is logged in as “controller”, using the menu, navigate to “controller”>“Create/Modify Report”. The “Create/Modify Report” page will appear.
 - The user can click “New” in the “DamRiverWeather” section to create a new report.
 - The user can click “Edit” in the “DamRiverWeather” section to edit a report that has already been created.
- Accessibility
 - operator
 - controller

LPB Report Page

HydroDCS Appliance

Status Reports and Details

operator

Configure Site Details

Title: Bodies of water

Drag --> Site Type: Dams <-- Drag

Rivers

Weather

Submit

LOS

APP

HydroDCS Appliance (Prototype) v1.0.0

??????????????

Do we need something for this? Still TBD, as this one might not be editable???

??????????????

Edit Settings Page

The screenshot shows a web browser window with the title 'HydroDCS Appliance'. The address bar shows 'https://10.0.0.128/editsettings'. The page has a dark blue header with 'HydroDCS Appliance', 'Status', and 'Reports and Tables' menu. A user profile 'controller' is logged in. The main content area is titled 'Edit Settings' and contains a form with the following fields:

Current Timezone	America/New_York
Timezone	GMT
Reset Decodes Every Day	☐
Restart Decodes if Down every	Never

Below the form is a green 'Submit' button. At the bottom of the page, it says 'HydroDCS Appliance (Prototype) v1.0.0'.

- Function
 - On this page, a user can edit certain settings on the box. These settings include, but are not limited to
 - Timezone
 - Decodes reset options
- Navigation
 - To get to this page
 - When the user is logged in as “controller”, using the menu, navigate to “controller”>“Edit Settings”.

- Accessibility
 - controller

Upload Site Metadata Page

HydroDCS Appliance

Status Reports and Tables

controller

Update Site Metadata

Here you can update the metadata for the sites. Generally, the metadata is data that either cannot be obtained remotely, or is difficult to obtain under certain circumstances.

Site MetaData			
Site	Type	Minimum Conservation Pool	Maximum Conservation Pool
MLBO	stage	20.57	3001.
ARWO	stage	1.0	99.0
APRO	stage	200.0	400.0
MCLO	stage	11.0	20.0
AGNO	stage	21.0	32.0

Update Metadata

HydroDCS Appliance (Prototype) v1.0.0

- Function
 - There is certain metadata that either cannot be obtained remotely, or might require access to a network that is not available. In those cases, the user can manually enter this data, or choose to obtain it automatically. The user can select the best method for each piece of metadata.
- Navigation
 - To get to this page

- When the user is logged in as “controller”, using the menu, navigate to “controller”>“Update Site Metadata”.
- Accessibility
 - controller

Set IP Address Page

The screenshot shows a web browser window with the title "HydroDCS Appliance". The address bar shows "https://10.0.0.128/setipaddress" with a "Not secure" warning. The page has a dark blue header with "HydroDCS Appliance", "Status", and "Reports and Tables" links. A user profile icon labeled "controller" is in the top right. The main content area is titled "Set IP Address" and contains the following form fields:

- Device Name: Text input with "HydroDCS" entered.
- Interface: Dropdown menu with "Port 1" selected, next to a network diagram icon.
- IP Configuration: Dropdown menu with "Static" selected.
- IP Address: Four empty text input boxes for octets.
- Netmask: Four empty text input boxes for octets.
- Gateway: Four empty text input boxes for octets.
- DNS Server 1: Four empty text input boxes for octets.
- DNS Server 2: Four empty text input boxes for octets.

A green "Change IP Address" button is located below the form fields. At the bottom of the page, it says "HydroDCS Appliance (Prototype) v1.0.0".

- Function
 - A user can set the IP Address for any of the ports on the HydroDCS.
 - NOTE – Be careful setting the IP Address, as an incorrectly set IP Address can result in loss of access to the HydroDCS.
- Navigation
 - To get to this page

- When the user is logged in as “controller”, using the menu, navigate to “controller”>“Set IP Address”.
- Accessibility
 - controller

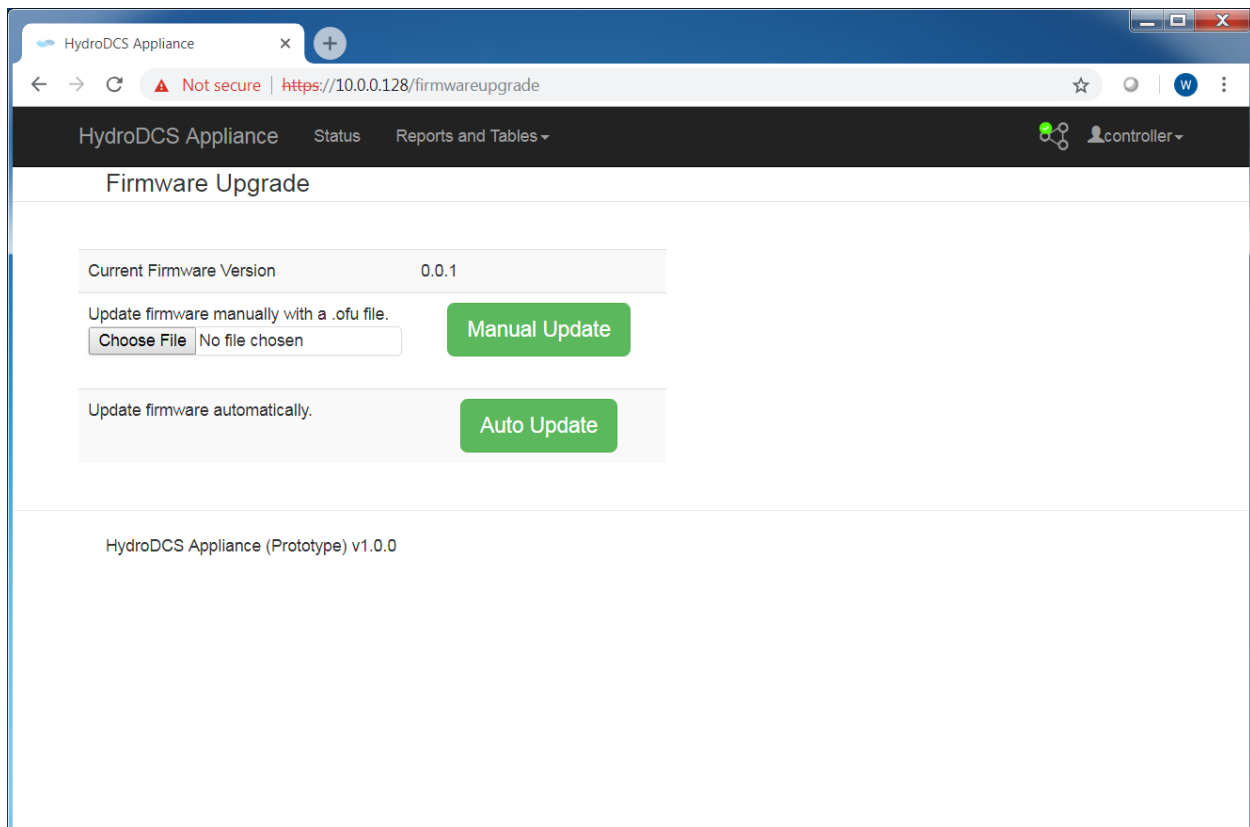
Configure Email Page

The screenshot shows a web browser window titled 'HydroDCS Appliance'. The address bar shows the URL 'https://10.0.0.128/configureemail'. The page has a dark blue header with the text 'HydroDCS Appliance' and a navigation menu with 'Status' and 'Reports and Tables'. A user profile icon labeled 'controller' is in the top right. The main content area is titled 'Configure Email' and contains five input fields: 'To Email', 'From Email', 'From Password', 'SMTP Server', and 'SMTP Port'. Below these fields is a green button labeled 'Configure Email'. The footer text reads 'HydroDCS Appliance (Prototype) v1.0.0'.

- Function
 - A user can set up the HydroDCS to send emails to a user when certain events occur. Currently, these events are set and not configurable by the user.
 - NOTE – This has only been tested with a gmail account and SMTP server.
- Navigation
 - To get to this page

- When the user is logged in as “controller”, using the menu, navigate to “controller”>“Configure Email”.
- Accessibility
 - controller

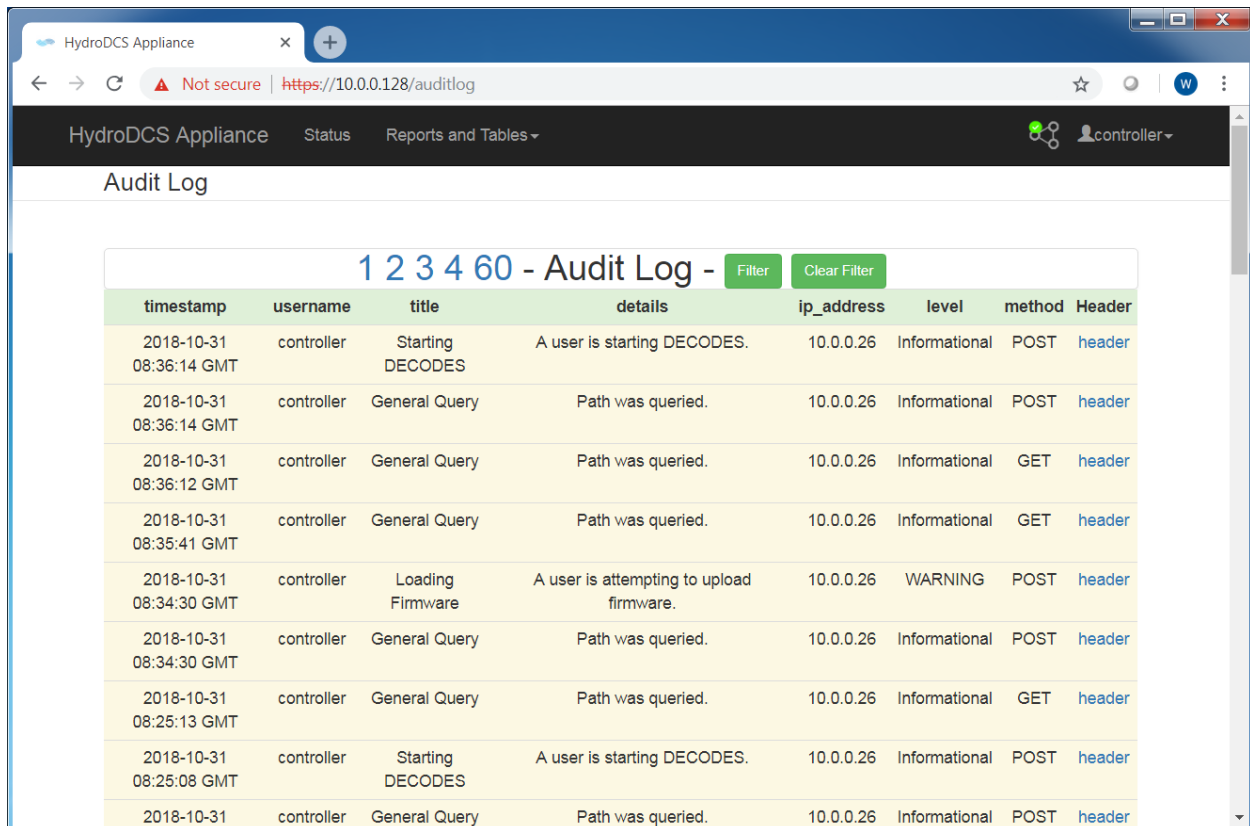
Firmware Upgrade Page



- Function
 - A user can date the firmware from this page.
 - There are two types of firmware updates
 - Manual Update

- This firmware can be downloaded from the olav website – www.olav.com. This page is also referenced in the Downloads section of HydroDCS.
- Automatic Update
 - Some updates require an automatic update. If this is the case, clicking this button will perform an automatic update of the firmware.
- Navigation
 - To get to this page
 - When the user is logged in as “controller”, using the menu, navigate to “controller”>“Upgrade Firmware”.
- Accessibility
 - controller

Audit Log Page



timestamp	username	title	details	ip_address	level	method	Header
2018-10-31 08:36:14 GMT	controller	Starting DECODES	A user is starting DECODES.	10.0.0.26	Informational	POST	header
2018-10-31 08:36:14 GMT	controller	General Query	Path was queried.	10.0.0.26	Informational	POST	header
2018-10-31 08:36:12 GMT	controller	General Query	Path was queried.	10.0.0.26	Informational	GET	header
2018-10-31 08:35:41 GMT	controller	General Query	Path was queried.	10.0.0.26	Informational	GET	header
2018-10-31 08:34:30 GMT	controller	Loading Firmware	A user is attempting to upload firmware.	10.0.0.26	WARNING	POST	header
2018-10-31 08:34:30 GMT	controller	General Query	Path was queried.	10.0.0.26	Informational	POST	header
2018-10-31 08:25:13 GMT	controller	General Query	Path was queried.	10.0.0.26	Informational	GET	header
2018-10-31 08:25:08 GMT	controller	Starting DECODES	A user is starting DECODES.	10.0.0.26	Informational	POST	header
2018-10-31	controller	General Query	Path was queried.	10.0.0.26	Informational	POST	header

- Function
 - A user can view the user actions that have been performed on the HydroDCS on this page.
- Navigation

- To get to this page
 - When the user is logged in as “controller”, using the menu, navigate to “controller”>“Audit Log”.
- Accessibility
 - controller